Associate in Applied Science (A.A.S.) Curricula

21st Century Life Skills

Certificate

21st Century Life Skills - 3201073019

(Offered at HZC,WKC)

The 21st Century Life Skills Certificate is designed to prepare students with the necessary skills for career, college, and life. Those skills include critical thinking, communication, reading, technology usage, global awareness, problem solving, self-directional learning, career basics, leadership, and civic engagement. Students will experience active learning components that lend themselves to overall well-grounded skills necessary to function more effectively as members of an increasingly interconnected world.

IT	125	Technology in a Global World OR Computer Literacy Course	3
GEN	125	Applied Meta-Thinking	3
GEN	175	Career and Life Skills Development	3
GEN	225	Lifelong Learning Applications	3
GEN	100	Introduction to College Course OR	1
GEN	101	Strategies For Academic Success	(3)
		Cross Cultural Elective	3
		Total	**16-18**

Advanced Industrial Integrated Technology

The Advanced Industrial Integrated Technology (AIIT) program is a program of study that employs the principle of technology integration within three highly sought degree areas: Multi-skilled Industrial Technician, Mechatronic Power Plant Technician, and Medical Equipment & Instrumentation. Within each degree area, a systems approach is employed that is in line with the expectations of current day employers. In addition to these three degree areas, certificates are also available. The AIIT program offers both online coursework and flexible lab hours.

The A.I.I.T. Multi-Skilled Technician option graduate will have acquired a high level of mechanical and electrical skill sets that can provide them with opportunities to work in today's technically advanced industrial settings (both in manufacturing and value-added 2nd tier support roles). These skill sets include robotics and PLC programming, drive configuration, advanced electric motor control, hydraulics/pneumatics, and mechanical drive systems used in modern industry. The curriculum addresses mechanical and electrical theory and its application in today's industrial environment. Critical thinking objectives are also incorporated that will expose the student to problem solving strategies and techniques for troubleshooting the latest generation of high tech equipment.

The Mechatronic Power Plant Technician option is designed for entry level positions in the Power Plant Industry as a multi-skilled technician. These industries include, but are not limited to positions in fossil fuel, hydro, nuclear, and alternative energy power plants. Also included are any industries where steam and electricity is generated. Imbedded within the curriculum is an Edison Electrical Institute Exam prep course to help graduates be better prepared to take the power plant entrance exam.

The Medical Equipment and Instrumentation option trains in-demand technicians to repair, maintain, and manage a wide variety of medical devices, equipment, and systems employed throughout various healthcare sectors. Such technologies include but are not limited to: electrocardiographs, electroencephalographs, both noninvasive and invasive blood pressure monitors, defibrillators, electrosurgical units, video endoscopy systems, medical lasers, dialysis machines, mechanical ventilators, anesthesia machines, automated clinical laboratory analyzers, and diagnostic imaging equipment. Graduates of this program can obtain employment with a wide variety of employers such as hospitals, clinics, home health companies, independent service organizations, and medical equipment manufactures.

Associate in Applied Science

Advanced Industrial Integrated Technology - 1504997019

(Offered at MDC)

Required General Education:

MAT	126	Technical Algebra and Trigonometry OR	3
MAT	150	College Algebra OR	(3)
		Higher MAT course	(3)
PHY	171	Applied Physics	4
ENG	101	Writing I	3
		Social Interaction course	3
		Heritage/Humanities/Foreign Language course	3
		Subtotal	**16**

Technical Core:

AIT	100	Power Generation & Utilization	4
AIT	110	Power Distribution Systems	3
AIT	120	Equipment Installation	3
AIT	130	Measurement and Instrumentation OR	4
BMT	140	Biomedical Instrumentation and Biophysical Measurements	(4)
AIT	140	Industrial Controls I OR	4
BMT	20	Essentials of Analog and Digital Electronics for BMET's: Level I	(4)
AIT	150	Industrial Controls II OR	4
BMT	130	Essentials of Analog and Digital Electronics for BMET's: Level II	(4)
AIT	160	Workplace Safety OR	1
BMT	100	Hazardous Risks Encountered by BMET's and Methods of Prevention	(1)
AIT	210	Equipment Maintenance OR	4
BMT	215	Principles and Practices of Medical Equipment Maintenance and Management	(4)
CIS	100	Introduction to Computers	3
		Subtotal	**30**

Option: AIIT: Multi-skilled Industrial Technician - 150499701

(Offered at MDC)

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
EET	276	Programmable Logic Controls	2
EET	277	Programmable Logic Controls Lab	2
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
MTT	110	Fundamentals of Machining	3
AIT	200	Integrated Process Control	4
		Option Subtotal	**21`**
		Total	**67**

*Multi-skilled Industrial Technician Option students will complete the AIT courses in the Technical Core classes when given an option of an "OR" statement.

Option: AIIT: Medical Equipment and Instrumentation Technician – 150499702

(Offered at MDC)

BMT	110	BMET Career Perspectives and Field Practices	2
BMT	230	Understanding, Maintaining, and Servicing Medical Equipment	3
BMT	240	Understanding, Maintaining, and Servicing Specialized Medical Equipment	3
BMT	210	Fundamental Engineering Design Principles Encountered in Medical Technology	1
BMT	209	Clinical	2
IT	105	Computer Maintenance Essentials	3
IT	205	Advanced Computer Maintenance	3
BIO	135	Basic Anatomy and Physiology with Laboratory	4
		Option Subtotal	**21**
		Total	**67**

*Medical Equipment & Instrumentation Technician Option students will complete the BMT courses in the Technical Core classes when given an option of an "OR" statement.

Option: AIIT: Mechatronic Power Plant Technician – 150499710

(Offered at MDC)

AIT	190	Integrated Power Plant Operations	3
AIT	220	The Integrated Power Grid	3
EET	276	Programmable Logic Controls	2
EET	277	Programmable Logic Controls Lab	2
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
MTT	110	Fundamentals of Machining	3
AIT	230	Mechatronic Power Plant Capstone	3
		Option Subtotal	**21**
		Total	**67**

*Mechatronic Power Plant Technician Option students will complete the AIT courses in the Technical Core classes when given an option of an "OR" statement.

Electives:

AIT	290	Selected Topics in Advanced Industrial Integrated Technology	1-5.0

Certificate

Mechatronic Power Plant Operator

(Offered at MDC)

AIT	190	Integrated Power Plant Operations	3
AIT	220	The Integrated Power Grid	3
AIT	230	Mechatronic Power Plant Capstone	3
		Total	**9**

Integrated Systems Electrical Specialist

(Offered at MDC)

AIT	1001	Basic Electrical Knowledge	2
AIT	1101	Electrical Power Distribution	1
AIT	1201	Electrical Installation	1
AIT	1401	Basic Electrical Controls	2
AIT	1501	Intermediate Electrical Controls	2
EET	276	Programmable Logic Controllers	2
EET	277	Programmable Logic Controllers Lab	2
AIT	240	Analysis of National Electrical Code Development and Structure	4
AIT	250	Application of the National Electrical Code (NEC) for Residential	5
AIT	260	Application of the National Electrical Code (NEC) f or Special Circuits	4
		Total	**25**

Electrical License Trainee

(Offered at MDC)

AIT	240	Analysis of National Electrical Code Development and Structure	4
AIT	250	Application of the National Electrical Code for Residential	5
AIT	260	Application of the National Electrical Code for Special Circuits	4
		Total	**13**

Mechatronics Operator

(Offered at MDC)

AIT	100	Power Generation and Utilization	4
AIT	110	Power Distribution Systems	3
AIT	1203	Mechanical Installation	1
		Total	**8**

African American Studies

The African American Studies Certificate Program provides an interdisciplinary approach to identify and engage the historical and contemporary issues confronting Africans and African Americans. Core courses include African American history, literature, and music. Additional courses in communication, humanities, and social sciences complete the program.

Certificate

African American Studies - 0501013019

(Offered at ECTC, JFC)

ENG	101	Writing I	3
HUM	120	Introduction to Humanities	3
HIS	260	African American History I	3
HIS	261	African American History II	3
MUS	207	African American Music History	3
ENG	264	Major Black Writers	3
		Electives*	6
		Total Credits	**24**

***African American Studies Electives: (Required: 6 credits)**

COM	299	African American Communication	3
ANT	160	Cultural Diversity in the Modern World	3
FLK	280	Cultural Diversity in the United States	3
SOC	235	Inequality in Society	3
MUS	104	Introduction to Jazz	3
HUM	150	Introduction to African Literature	3
REL	101	Introduction to Religious Studies	3
REL	130	Introduction to Comparative Religion	3
ART	104	Introduction to African Art	3
TA	299	Special Topics in Theatre	3

Agricultural Technology

The Agricultural Technology program prepares students for occupations in a wide variety of jobs in agriculture (both production and value-added) with a range of skills and knowledge.

The curriculum addresses concepts in theory, skills and techniques that are required by the agriculture industry. It will use hands-on strategies, which require an integrated practicum across a variety of settings. Graduates will seek job opportunities in the agriculture industry on commercial farms and businesses related to the agriculture industry.

Associate in Applied Science

Agriculture Technology - 103017019

(Offered at HEC, HPC, OWC)

AGR	140	Issues in Agriculture	3
AGR	150	Agriculture Power	3
AGR	180	Agricultural Internship I	2
CIS	100	Introduction to Computers	3
COM	252	Introduction to Interpersonal Communications	3
AGR	170	Introduction to Equipment, Machines, and Engines	3
AGR	130	Field Applications in Agriculture	2
AGR	125	Introduction to Fertilizers and Soils	3
AGR	190	Agricultural Internship II	2
AGR	220	Computers in the Agricultural Environment	3
AGR	200	Agricultural Internship III	2
AGR	230	Career Development in Agriculture	3
AGR	250	Introduction to Plants/Crop Production	3
ENG	101	Writing I	3
ENG	102	Writing II	3
AGR	240	Introduction to Animal Science OR	3
ASC	106	Agriculture Animal Science	(3)
BIO	112	Introduction to Biology AND	3
BIO	113	Introduction to Biology Lab OR	1
BIO	114	Biology I* AND	(3)
BIO	115	Biology I Lab* OR	(1)
BIO	116	Biology II* AND	(3)
BIO	117	Biology II Lab* OR	(1)
BIO	143	Zoology with Laboratory* OR	(4)
BIO	141	Botany with Laboratory* OR	(4)
BIO	150	Principles of Biology I* AND	(3)
BIO	151	Principles of Biology Lab I*	(2)
CHE	130	Introductory General and Biological Chemistry OR	4
CHE	140	Introductory General Chemistry AND	(3)
CHE	145	Introductory General Chemistry Lab OR	(1)
CHE	170	General College Chemistry I AND	(3)
CHE	175	General College Chemistry Lab I	(1)
AGR	101	The Economics of Food and Agriculture	3
MAT	150	College Algebra OR	3
MAT	110	Applied Mathematics OR	(3)
MAT	105	Mathematics for Business	(3)
		Heritage/Humanities	3
		Electives	5
		Total Credits	**66-67**

Diploma

Agricultural Technology -103014019

(Offered at HEC, OWC)

		General Education Courses:	
		Writing/Accessing Information, Oral Communication, Humanities, Heritage, or Foreign Language	3
AGR	101	The Economics of Food and Agriculture	3
CIS	100	Introduction to Computers	3
		Subtotal	**9**

Technical Courses:

AGR	125	Introduction to Fertilizers and Soils	3
AGR	130	Field Applications in Agriculture	2
AGR	140	Issues in Agriculture	3
AGR	150	Agricultural Power	3
AGR	170	Introduction to Equipment, Machines, and Engines	3
AGR	180	Agricultural Internship I	2
AGR	190	Agricultural Internship II	2
AGR	200	Agricultural Internship III	2
AGR	220	Computers in the Agricultural Environment	3
AGR	230	Career Development in Agriculture	3
AGR	240	Animal Science	3
AGR	250	Introduction to Plants/Crop Production	3
		Subtotal	**32**
		Total Credits	**41**

Certificate

Agricultural Technician - 103013009

(Offered at ASC, HEC, HPC, MYC, OWC)

AGR	140	Issues in Agriculture	3
AGR	150	Agricultural Power	3
CIS	100	Introduction to Computers	3
AGR	230	Career Development in Agriculture	3
AGR	180	Agricultural Internship I	2
AGR	125	Introduction to Fertilizers and Soils	3
AGR	190	Agricultural Internship II	2
AGR	170	Introduction to Equipment, Machines, and Engines	3
AGR	130	Field Applications in Agriculture	2
		Total Credits	**24**

Air Conditioning Technology

Installing and servicing heating, air conditioning and refrigeration equipment is the focus of this program. Academic courses, theory courses, and laboratory experiences are designed to promote success in the air conditioning field.

Students enrolled in the Air Conditioning Technology program must achieve a minimum grade of "C" in each technical course.

Associate in Applied Science

Air Conditioning Technology - 4702017019

(Offered at BGT, BLC, BSC, MDC)

General Education:

Mathematics	3 credit hours
Science	3 credit hours
Social Interaction	3 credit hours
Heritage/Humanities/Foreign Language	3 credit hours
Writing	3 credit hours
Oral Communication	3 credit hours
Computer Literacy	0-3 credit hours

Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

		Subtotal Credits	**18-21**

Technical Courses:

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
		Comparable Electrical Course*	(4-5)
ACR	130	Electrical Components	3
ACR	131	Electrical Components Lab	2
ACR	170	Heat Load/Duct Design	3
ACR	250	Cooling and Dehumidification	3
ACR	251	Cooling and Dehumidification Lab	2
ACR	260	Heating and Humidification	3
ACR	261	Heating and Humidification Lab	3
ACR	270	Heat Pump Application	3
ACR	271	Heat Pump Application Lab	2
		Electives**	9-11
		Subtotal Credits	**42-45**
		Total Credits	**60-66**

Diploma

Heating, Ventilation, and Air Conditioning Mechanic - 4702014009

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

General Education:

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities/Heritage/ Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Natural/ Applied Science or Mathematics	3
Area 3 =	Computer Literacy course Or demonstrated competency	0-3
	Subtotal Credits	**6-9**

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
		Comparable Electrical Course*	(4-5)
ACR	130	Electrical Components	3
ACR	131	Electrical Components Lab	2
ACR	170	Heat Load/Duct Design	3
ACR	250	Cooling and Dehumidification	3
ACR	251	Cooling and Dehumidification Lab	2
ACR	260	Heating and Humidification	3
ACR	261	Heating and Humidification Lab	3
ACR	270	Heat Pump Application	3
ACR	271	Heat Pump Application Lab	2
		Electives**	8-11
		Subtotal Credits	**41-45**
		Total Credits	**47-54**

***Comparable Electrical Courses:**

EET	154	Electrical Construction I AND	(2)
EET	155	Electrical Construction I Lab OR	(2)
ETT	112	Basic Electrical Theory: Telenetworking AND	(3)
ETT	113	Basic Electrical Theory Lab OR	(1)
ELT	110	Circuits I OR	(5)
IMT	110	Industrial Maintenance Electrical Principles AND	(3)
IMT	111	Industrial Maintenance Electrical Principles Lab	(2)

Certificates

Environmental Control System Servicer - 4702013039

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
		Comparable Electrical Course*	(4-5)
ACR	130	Electrical Components	3
ACR	131	Electrical Components Lab	2
ACR	250	Cooling and Dehumidification	3
ACR	251	Cooling and Dehumidification Lab	2
ACR	260	Heating and Humidification	3
ACR	261	Heating and Humidification Lab	3
		Total Credits	**25-26**

Environmental System Repair Helper - 4702013049

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
ACR	130	Electrical Components AND	(3)
ACR	131	Electrical Components Lab OR	(2)
		Comparable Electrical Course*	(4-5)
		Total Credits	**9-10**

Domestic Air Conditioner and Furnace Installer- 4702013029

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
		Comparable Electrical Course*	(4-5)
ACR	130	Electrical Components	3
ACR	131	Electrical Components Lab	2
ACR	170	Heat Load/Duct Design	3
ACR	250	Cooling and Dehumidification	3
ACR	251	Cooling and Dehumidification Lab	2
ACR	260	Heating and Humidification	3
ACR	261	Heating and Humidification Lab	3
ACR	270	Heat Pump Application	3
ACR	271	Heat Pump Application Lab	2
ACR	290	Journeyman Preparation	3
		Total Credits	**36-37**

Refrigeration Mechanic - 4702013059

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

ACR	100	Refrigeration Fundamentals	3
ACR	101	Refrigeration Fundamentals Lab	2
ACR	102	HVAC Electricity AND	3
ACR	103	HVAC Electricity Lab OR	2
		Comparable Electrical Course*	(4-5)
ACR	130	Electrical Components	3
ACR	131	Electrical Components Lab	2
ACR	200	Commercial Refrigeration	3
ACR	201	Commercial Refrigeration Lab	2
ACR	210	Ice Machines	3
ACR	250	Cooling and Dehumidification	3
ACR	251	Cooling and Dehumidification Lab	2
		Total Credits	**27-28**

Appalachian Studies

The Appalachian Studies certificate will provide students a wide variety of academic directions to follow. The key components for each option, Humanities 202, 203, and 204, will form the core for the Appalachian Studies certificate and will provide a basic overview of all aspects of Appalachian studies. Given this core, students can then select a more focused aspect of Appalachian culture to study.

Certificate

Appalachian Studies - 0501223069

(Offered at ASC, HZC, SEC)

Core:

HUM	202	Survey of Appalachian Studies I	3
HUM	203	Survey of Appalachian Studies II	3
HUM	204	Appalachian Seminar	3
		Subtotal	**9**

Communication Option - 0501023019

(Offered at ASC, HZC, SEC)

COM	254	Introduction to Intercultural Communication OR	3
		Elective approved by Appalachian Studies Committee or its designee	(3)
		Total	**12**

Creative Writing Option - 0501223029

(Offered at ASC, HZC, SEC)

ENG	207	Beginning Workshop in Imaginative Writing OR	3
		Elective approved by Appalachian Studies Committee or its designee	(3)
		Total	**12**

Music Option - 0501223039

(Offered at ASC, SEC)

MU	101	Folk and Traditional Music of the Western Continents	3
		Total	**12**

Science Option - 0501223049

(Offered at ASC, SEC)

BIO	120	Human Ecology OR	3
		Elective approved by Appalachian Studies Committee or its designee	(3)
GLY	101	Physical Geology	3
GLY	111	Laboratory for Physical Geology	1
		Total	**16**

Social Science Option - 0501223059

(Offered at ASC, SEC)

SWK	275	The Family OR	3
		Elective approved by Appalachian Studies Committee or its designee	(3)
ANT	220	Intro to Cultural Anthropology	3
		Total	**15**

Applied Engineering Technology

The Applied Engineering Technology curriculum (AET) introduces students to basic experimental engineering principles and concepts by applying contemporary skills and knowledge in a variety of employment positions based on industry needs. It provides students with a strong foundation of engineering practices to stimulate their interest by using a problem-solving approach in state-of-the-art laboratories. It builds leadership, management, communication skills, and professional ethics, which serve as a foundation for future development and career success. The program contains core technical courses and advanced courses in each specialization to address the employment needs of a global market. The degree consists of seven Associate in Applied Science degree specializations: 1) Automated Manufacturing, which emphasizes rapid manufacturing and computer numerical control programming; 2) Electromechanical, which is a multi-disciplinary program combining information technology and electro-mechanical systems (maintenance, electricity, computers, hydraulics/pneumatics, machining or fabrication, diagnostics and repair, etc.); 3) Mechatronics Systems, which is a multi-disciplinary program emphasizing cross-functional knowledge skills in both mechanical and electrical systems; 4) Electronics Engineering, which emphasizes advanced concepts in electronics as it applies to electronic control circuitry and high frequency applications in the digital and microwave communication industry, particularly those driven by military and government contracts; 5) PLC Programmer, which introduces advanced concepts in PLC programming including networking of PLC's and the writing, debugging, documenting, and implementing of PLC programs utilizing both ladder logic and more advanced languages such as Instruction List, Structured Text, etc.; 6) Instrumentation, which emphasizes process monitoring, control and industrial automation using analog and digital control systems for chemical and manufacturing industries; and 7) Alternative Energy, which emphasizes the practical study and implementation of solar, wind, geo-thermal and bio-fuel technologies.

Associate in Applied Science

Applied Engineering Technology – 1504997029

(Offered at WKC)

General Education (required for all specialization options):

CIS	100	Introduction to Computers OR demonstrated competency	0-3
ENG	101	Writing I	3
MAT	126	Technical Algebra and Trigonometry OR	
MAT	150	OR higher level Mathematics course	3
PHY	171	Applied Physics OR higher level Physics course	4
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		Subtotal	**16-19**

Technical Core (required for all specialization options):

AET	110	Introduction to Circuit Analysis OR electrical course approved by Program Coordinator	4
AET	140	Industrial Equipment Maintenance	4
BRX	120	Basic Blueprint Reading	3
CAD	100	Introduction to Computer Aided Design	3
COM	252	Interpersonal Communications OR	3
COM	181	Basic Public Speaking	(3)
FPX	100	Fluid Power	3
FPX	101	Fluid Power Lab	2
IS	100	Introduction to Industrial Safety OR safety course approved by Program Coordinator	3
		Subtotal	**25**

Automated Manufacturing Specialization Option - 150499703

(Offered at WKC)

CAD	201	Advanced 3D Modeling	4
MTT	110	Fundamentals of Machine Tool – A	3
MTT	130	Manual Programming	3
MTT	132	CAD/CAM/CNC	3
MTT	240	Introduction to 3-D Programming	6
		Option Subtotal	**19**
		Option Total	**60-63**

Electromechanical Systems Specialization Option - 150499704

(Offered at WKC)

AET	160	Industrial Controls Electronics	4
EET	268	Rotating Machinery Electrical Motor Controls I	3
EET	269	Rotating Machinery Electrical Motor Controls I Lab	4
EET	276	Programmable Logic Controllers	2
EET	277	Programmable Logic Controllers Lab	2
ISM	210	Fundamentals of Process Control	4
		Option Subtotal	**19**
		Option Total	**60-63**

Mechatronic Systems Specialization Option - 150499705

(Offered at WKC)

EET	276	Programmable Logic Controllers	2
EET	277	Programmable Logic Controllers Lab	2
MS	110	Mechatronic Systems Electrical Components	4
MS	120	Mechatronic Systems Mechanical Components	4
MS	130	Mechatronic Systems Hydraulic/Pneumatic Components	4
MS	150	Mechatronic Systems Programmable Logic Controllers	4
		Option Subtotal	**20**
		Option Total	**61-64**

Electronics Engineering Specialization Option - 150499706

(Offered at WKC)

AET	150	Advanced Circuit Analysis	4
AET	160	Industrial Controls Electronics	4
AET	170	Digital Circuits and Concepts	4
AET	200	Integrated Circuits	4
AET	220	Modulation Techniques and Applications	4
		Option Subtotal	**20**
		Option Total	**66-64**

PLC Programmer Specialization Option - 150499707

(Offered at WKC)

AET	190	Industrial Computer Programming Concepts	4
AET	250	PLC Networking	4
AET	260	Robotics and Programmable Controllers	4
AET	270	Advanced PLC Programming	4
EET	276	Programmable Logic Controllers	2
EET	277	Programmable Logic Controllers Lab	2
		Option Subtotal	**20**
		Option Total	**61-64**

Instrumentation Specialization Option - 150499708

(Offered at WKC)

AET	150	Advanced Circuit Analysis	4
AET	170	Digital Circuits and Concepts	4
AET	200	Integrated Circuits	4
ISM	102	Fundamentals of Instrumentation	4
ISM	210	Fundamentals of Process Control	4
		Option Subtotal	**20**
		Option Total	**61-64**

Alternative Energy Specialization Option - 150499709

(Offered at WKC)

AET	102	Introduction to Energy, Environment and Society	4
AET	114	Solar and Wind Energy Generation	4
AET	120	Power Electronics	4
AET	210	Alternative Energy Independent Studies	4
CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Lab	1
		Option Subtotal	**20**
		Option Total	**61-64**

Certificate

Alternative Energy – 1504993099

(Offered at BSC, WKC)

AET	102	Introduction to Energy, Environment and Society	4
AET	110	Introduction to Circuit Analysis OR electrical course approved by Program Coordinator	4
AET	114	Solar and Wind Energy Generation	4
MAT	126	Technical Algebra and Trigonometry OR MAT 150 OR higher level Mathematics course	3
		Approved Technical Elective	3-5
		Total	**18-20**

CAD/CAM Technician – 1504993049

(Offered at WKC)

BRX	120	Basic Blueprint Reading	3
CAD	100	Introduction to Computer Aided Design	3
CAD	201	Advanced 3D Modeling	4
IS	100	Introduction to Industrial Safety OR safety course approved by Program Coordinator	3
MAT	126	Technical Algebra and Trigonometry OR MAT 150 OR higher level Mathematics course	3
MTT	130	Manual Programming	3
MTT	132	CAD/CAM/CNC	3
MTT	240	Introduction to 3D Programming	6
		Total	**28**

Robotics Sensor Technician – 1504993039

(Offered at WKC)

AET	110	Introduction to Circuit Analysis OR electrical course approved by Program Coordinator	4
AET	130	Industrial Sensors	3
AET	260	Robotics and Programmable Controllers	4
IS	100	Introduction to Industrial Safety OR safety course approved by Program Coordinator	3
MAT	126	Technical Algebra and Trigonometry OR MAT 150 OR higher level Mathematics course	3
		Total	**17**

Applied Process Technologies

Prepares the graduate for entry-level operations in the power plant, lineman, chemical, petro-chemical, refining, and general industries. Teaches students about automated and semi-automated systems used in various industries. Prepares students in the safe start-up, operation and shutdown of various system components and units. Offers a choice of AAS degree with chemical/refinery operator, power plant operator, and lineman technology, as well as certificate options.

Students selecting the certificate options must test at the MAT126 ready level. Progression in the program is contingent upon achievement of a grade of "C" or higher in the Math, Physics, Chemistry and technical courses and maintenance of a 2.0 cumulative grade point average or better on a 4.0 scale.

Associate in Applied Science

Applied Process Technologies - 4103017029

(Offered at ASC, JFC)

General Education Courses

MAT	126	Technical Algebra & Trigonometry (Recommended) OR	3
MAT	116	Technical Mathematics	(3)
CHE	130	Introductory General & Biological Chemistry OR	4
CHE	140/145	Introduction to General Chemistry with Lab	(4)
ENG	101	Writing I	3
		Social Interaction	3
ECO	101	Contemporary Economic Issues (Recommended)	(3)
		Computer Literacy Course	3
		Heritage/Humanities/Foreign Language	3
COM	252	Introduction to Interpersonal Communication	3
		Subtotal	**22**

Technical Core Courses

PHS	175	Applied Physics (Recommended) OR	6
PHY	171	Applied Physics	(4)
SFA	101	OSHA, Health, and Environmental Safety	3
APT	102	Process Fundamentals	4
APT	104	Rotating & Reciprocating Equipment	3
APT	106	Process Chemistry	2
APT	108	Stationary Equipment	2
APT	202	Federally Mandated Training	3
APT	204	Safety Skills Training	1
APT	251	Application of Process Operations OR	2
APT	291	Special Problems in APT	(2-3)
EES	101	Basic Electronics	2
		Subtotal	**26-29**

Chemical/Refinery Operator Option - 410301701

(Offered at ASC, JFC)

APT	142	Instrumentation	4
APT	144	Process Operations	4
APT	146	Process Applications	2
APT	148	Process Operations Safety	2
		Subtotal	**12**
		Total	**60-63**

Power Plant Operator Option - 410301702

(Offered at ASC, JFC)

APT	142	Instrumentation	4
APT	154	Power Plant Practice	6
APT	156	Power Plant Protection	2
		Subtotal	**12**
		Total	**60-63**

Lineman Technology Option - 410301703

(Offered at ASC, JFC)

APT	158	Lineman Technology I	3
APT	159	Lineman Technology I Lab	4
EET	150	Transformers	2
EET	151	Transformer Lab	1
APT	258	Lineman Technology II	3
APT	259	Lineman Technology II Lab	4
		Subtotal	**17**
		Total	**65-68**

Electives

APT	299	Cooperative Education Program	(1-6)
COE	299	Co-op	(1-8)
QMS	101	Introduction to Quality Systems	(3)
EX	196	Experiential Education	(1-6)

Certificate

Chemical/Refinery Operator - 4103013039

SFA	101	OSHA, Health and Environmental Safety	3
COM	252	Introduction to Interpersonal Communication	3
CHE	130	Introductory General & Biological Chemistry OR	4
CHE	140/145	Introduction to General Chemistry with Lab	(4)
APT	102	Process Fundamentals	4
APT	104	Rotating & Reciprocating Equipment	3
APT	108	Stationary Equipment	2
APT	142	Instrumentation	4
APT	144	Process Operations	4
APT	146	Process Applications	2
EES	101	Basic Electronics	2
		Total	**31**

Industrial Worker - 1507013019

(Offered at ASC, JFC)

SFA	101	OSHA, Health, and Environmental Safety	3
		Total	**3**

Lineman - 4103013049

SFA	101	OSHA, Health and Environmental Safety	3
APT	158	Lineman Technology I	3
APT	159	Lineman Technology I Lab	4
EET	150	Transformers	2
EET	151	Transformers Lab	1
APT	258	Lineman Technology II	3
APT	259	Lineman Technology II Lab	4
APT	202	Federally Mandated Training	3
APT	204	Safety Skills Training	1
APT	251	Application of Process Operations	2
EES	101	Basic Electronics	2
		Total	**28**

Power Plant Operator - 4103013029

SFA	101	OSHA, Health and Environmental Safety	3
COM	252	Introduction to Interpersonal Communication	3
CHE	130	Introductory General & Biological Chemistry OR	4
CHE	140/145	Introduction to General Chemistry with Lab	(4)
APT	102	Process Fundamentals	4
APT	104	Rotating & Reciprocating Equipment	3
APT	108	Stationary Equipment	2
APT	142	Instrumentation	4
APT	154	Power Plant Practice	6
APT	156	Power Plant Protection	2
EES	101	Basic Electronics	2
		Total	**33**

Apprenticeship Studies

This program is designed to provide specialized study in a national or state approved apprenticeship curriculum (i.e. 8000 hours on the job in a supervised work environment and at least 576 hours of related classroom instruction). Prerequisite: Completion of national/state certified apprenticeship program.

Associate in Applied Science

Apprenticeship Studies - 4799997010

(Offered at GTW, JFC)

Required:

ENG	101	Writing I	3
ENG	102	Writing II OR	3
CMS	152	Writing for Business & Industry OR	(3)
ENG	204	Technical Writing	(3)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Comm. OR	(3)
COM	281	Communication in Small Group	(3)
PHY	171	Applied Physics OR	4
PHY	201	General Physics	(4)
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology OR	(3)
GEN	140	Development of Leadership OR	(3)
ECO	101	Contemporary Economic Issues OR	(3)
ECO	201	Principles of Economics I	(3)
		Heritage/Humanities	3
		Subtotal	**19**

Required:

CAD	100	Introduction To Computer-Aided Design# OR	3
ELT	107	Computer App. For Computer Tech.# OR	(3)
CIS	100	Introduction to Computers OR	(3)
GEN	150	Computer Literacy# OR	(1)
OST	240	Software Integration	(3)
		Program Electives**	0-15
		Apprenticeship Credit***	24-50
		Total Credits	**61**

**Program Electives will be required if the number of credit hours accepted from the apprenticeship program is less than 40. Program electives will be taken from the following areas: Economics, Quality Tech, Accounting, Business, Computer Information Systems, or other related courses approved by the coordinator.

Coursework that duplicates apprenticeship competencies will not be approved.

***The amount of credit accepted will depend on the number of credit hours in the apprenticeship program or will be the 24 credit hours awarded for the APS 201 Apprenticeship Studies course.

As of 7-08, this course does not meet computer literacy requirements.

Architectural Technology

The Architectural Technology program provides instruction in the concepts and skills required for careers in architectural and related professions involved in designing for the built environment. At the core of the curriculum are a series of architectural studios where students prepare construction documents. The series begins with a study of residential construction and culminates with commercial. Emphasis is placed on quality graphic communication, the development of design skills and a thorough understanding of a variety of construction types. Complementing the studio sequence are courses designed to provide instruction in building materials, structures, mechanical/electrical systems, professional practices, and architectural theory and history. Electives in the program allow students to customize their education to fit their interests. Given the wide range of topics covered in the curriculum, graduates are prepared to find employment in architectural and related professional offices including positions in construction estimating, civil engineering, structural engineering, mechanical/electrical engineering, construction management, computer-aided drafting, building code enforcement, specification writing, urban planning, historic preservation, contracting, sub-contracting, and building material sales and marketing.

Associate in Applied Science

Architectural Technology - 1513037019

(Offered at BLC)

ACH	100	Construction Documents I	3
ACH	110	Survey of the Architectural Profession	1
ACH	120	Theory and History of Architecture I	3
ACH	150	Construction Documents II	3
ACH	160	Building Materials and Construction I	3
ACH	161	Building Materials and Construction II	3
ACH	170	Theory and History of Architecture II	3
ACH	175	Introduction to Systems	3
ACH	195	Computer Aided Drafting I	3
ACH	200	Construction Documents III	3
ACH	225	Structures	3
ACH	250	Construction Documents IV	3
ACH	260	Office Practice	3
ACH	275	Mechanical and Electrical Systems	3
		Technical Courses ** (see list below)	10
ENG	101	Writing I	3
MAT	116	Technical Mathematics OR	3
MAT	150	College Algebra OR	(3)
MA	109	College Algebra OR	(3)
		Other math course approved by program coordinator	(3)
		Heritage/Humanities/Foreign Language Course	3
		Science Course	3
		Social Interaction Course	3
		Computer Literacy	0-3
		Total	**65-68**

****Technical Courses**

ACH	180	Selected Topics in Architectural Technology: (Topic)	1-3
ACH	194	Visual Composition	3
ACH	290	Building Codes I	3
ACH	291	Construction Management	3
ACH	292	Building Codes II	3
ACH	293	Presentation Techniques	3
ACH	294	Specification Writing	3
ACH	295	Computer Aided Drafting II	3
ACH	297	Estimating Techniques	3
ACH	298	Computer 3D Modeling	3
COE	199	Cooperative Education: Arch Tech	1-3

Additional Suggested General Education Courses (Not Required)

ENG	102	Writing II	3
COM	181	Oral Communication	3

Arts Administration

The Certificate in Arts Administration prepares students for entry-level management and service positions in local arts institutions, such as museums, cultural centers, orchestras, operas and galleries. This certificate will provide students new to the arts administration field, and individuals already working in the arts, with the needed training and appropriate experience to work in a variety of arts and cultural institutions. Students participating in the Arts Administration Certificate will take core courses in Arts Administration plus a series of English, business and communication courses and choose an arts emphasis in studio art, art history, music, music technology or theatre.

Certificate

Arts Administration - 5007043019

(Offered at JFC)

AAD	100	Introduction to Arts Administration	3
AAD	200	Fundamentals of Arts Administration	3
BAS	160	Introduction to Business	3
BAS	282	Principles of Marketing	3
COM	181	Basic Public Speaking	3
ENG	101	Writing I	3
ENG	102	Writing II	3
		Subtotal	**21**

Studio Art Specialization - 5007043029

(Offered at JFC)

ART	110	Drawing I	3
ART	120	2-D Design OR	3
ART	130	3-D Design	(3)
		Subtotal	**6**
		Total Credits	**27**

Art History Specialization - 5007043039

(Offered at JFC)

ART	105	Ancient through Medieval Art History	3
ART	106	Renaissance through Modern Art History	3
		Subtotal	**6**
		Total Credits	**27**

Music Specialization - 5007043049

(Offered at JFC)

MUS	100	Introduction to Music	3
MUS	222	History and Sociology of Rock and Roll	3
		Subtotal	**6**
		Total Credits	**27**

Music Technology Specialization - 5007043059

(Offered at JFC)

MUS	174	Theory for Non- Music Majors – prerequisite for all Music Tech	3
MUS	120	Music Technology I	3
MUS	121	Music Technology II	3
		Subtotal	**9**
		Total Credits	**30**

Theatre Specialization - 5007043069

(Offered at JFC)

THA	101	Introduction to Theatre	3
THA	126	Fundamentals of Acting	3
		Subtotal	**6**
		Total Credits	**27**

Automotive Technology

Instruction in systems such as engines, fuel, on-board computers, transmissions, steering, suspension, and brakes is the basis for this program.

The Automotive Technician option provides knowledge of the various systems used to develop skills in troubleshooting, performing preventative maintenance, servicing and repairing automobiles. The program, which is designed to be completed in two years, prepares graduates for entry-level service technician jobs in the auto repair industry. The student may be provided a work-study experience alternating between periods of work on-site and work in a classroom-laboratory setting.

The Parts/Service Writer option provides knowledge of the various systems and components and how they relate. This knowledge enables the student to more accurately interpret their customers' automotive complaints, identify and sell automotive parts, and provide efficient customer service within the automotive service and repair industry. The student may take the ASE exams in these areas when they have completed the requirements for these tests.

Note: Hours Exception (69-72 for the A.A.S. and 61-64 for the Diploma) approved by the KCTCS Board of Regents in March 2011

Associate in Applied Science

Automotive Technology - 4706047019

(Offered at BGT, BLC, BSC, ELC, HZC, JFC,WKC)

General Education:

Mathematics	3
Science	3
Behavioral Science/Social Interaction	3
Heritage/ Humanities/ Foreign Language	3
Writing/Accessing Information	3
Computer Literacy course Or demonstrated competency	0-3
General Education Total Credit Hours:	**15-18**

Technical Core:

ADX	120	Basic Automotive Electricity	3
ADX	150	Engine Repair	3
ADX	170	Climate Control	3
ADX	260	Electrical Systems	3
AUT	110	Brake Systems	3
AUT	130	Manual Transmissions	3
AUT	140	Basic Fuel and Ignition Systems	3
AUT	142	Emission Systems	3
AUT	160	Suspension and Steering	3
AUT	180	Automatic Transmission/Transaxle	3
AUT	240	Computer Control Systems and Diagnosis	3
		Total Technical core credits	**33**

Automotive Technician Option - 470604701

(Offered at BGT, BLC, BSC, ELC, HZC, JFC,WKC)

ADX	121	Basic Automotive Electricity Lab	2
ADX	151	Engine Repair Lab	2
ADX	171	Climate Control Lab	1
ADX	261	Electrical Systems Lab	2
AUT	111	Brake Systems Lab	2
AUT	131	Manual Transmissions Lab	2
AUT	141	Basic Fuel and Ignition Systems Lab	2
AUT	143	Emission Systems Lab	2
AUT	161	Suspension and Steering Lab	2
AUT	181	Automatic Transmission/Transaxle Lab	2
AUT	241	Computer Control Systems and Diagnosis Lab	2
		Subtotal Credits:	**21**
		Total Credits:	**69-72**

Automotive Parts/Service Writer Option - 470604702

(Offered at JFC)

ISX	100	Industrial Safety	3
TQX	110	Total Quality Management	3
B&E	100	Introduction to Business and Economics	1
ACT	101	Fundamentals of Accounting I	3
TEC	100	Communication for Business and Industry OR	3
CMS	152	Writing for Business and Industry	3
		Subtotal Credits:	**13**
		Total Credits:	**61-64**

Diploma

Automotive Technician - 4706044019

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

General Education:

Area 1= Writing/Accessing Information, Oral Communications, Humanities/Heritage	3
Area 2= Social Science, Behavior Science, Natural/Applied Science or Mathematics	3
Area 3= Computer Literacy course or demonstrated competency	0-3
General Education Total Credit Hours	**6-9**

Technical Core:

ADX	120	Basic Automotive Electricity	3
ADX	121	Basic Automotive Electricity Lab	2
ADX	150	Engine Repair	3
ADX	151	Engine Repair Lab	2
ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
ADX	260	Electrical Systems	3
ADX	261	Electrical Systems Lab	2
AUT	110	Brake Systems	3
AUT	111	Brake Systems Lab	2
AUT	130	Manual Transmissions	3
AUT	131	Manual Transmissions Lab	2
AUT	140	Basic Fuel and Ignition Systems	3
AUT	141	Basic Fuel and Ignition Systems Lab	2
AUT	142	Emission Systems	3
AUT	143	Emission Systems Lab	2
AUT	160	Suspension and Steering	3
AUT	161	Suspension and Steering Lab	2
AUT	180	Automatic Transmission/Transaxle	3
AUT	181	Automatic Transmission/Transaxle Lab	2
AUT	240	Computer Control Systems and Diagnosis	3
AUT	241	Computer Control Systems and Diagnosis	2
		Any approved work experience component	1
		Subtotal Credits:	**55**
		Total Credits:	**61-64**

Automotive Parts/Service Writer - 4706044029

(Offered at JFC)

General Education:

Area 1= Writing/Accessing Information, Oral Communications, Humanities/Heritage	3
Area 2= Social Science, Behavior Science, Natural/Applied Science or Mathematics	3
Area 3= Computer Literacy course Or demonstrated competency	0-3
General Education Total Credit Hours	**6-9**

Technical or Support Courses:

ADX	120	Basic Automotive Electricity	3
ADX	150	Engine Repair	3
ADX	170	Climate Control	3
ADX	260	Electrical Systems	3
AUT	110	Brake Systems	3
AUT	130	Manual Transmissions	3
AUT	140	Basic Fuel and Ignition Systems	3
AUT	142	Emission Systems	3
AUT	160	Suspension and Steering	3
AUT	180	Automatic Transmission/Transaxle	3
AUT	240	Computer Control Systems and Diagnosis	3
ISX	100	Industrial Safety	3
TQX	110	Total Quality Management	3
B&E	100	Introduction to Business and Economics	1
TEC	100	Communication for Business and Industry OR	3
CMS	152	Writing for Business and Industry	3
ACT	101	Fundamentals of Accounting I	3
Any approved work experience component			1
		Technical or Support Courses Total Credit Hours:	**47 credits**
		Total Credits:	**53-56 credits**

Certificates

Automotive Air Conditioning Mechanic - 4706043019

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
		Total Credits	**4**

Automotive Electrician - 4706043039

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ADX	120	Basic Automotive Electricity AND	3
ADX	121	Basic Automotive Electricity Lab	2
ADX	260	Electrical Systems	3
ADX	261	Electrical Systems Lab	2
		Total Credits	**10**

Manual Transmission/Drive Train Technician - 4706043059

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

AUT	130	Manual Transmissions	3
AUT	131	Manual Transmissions Lab	2
		Total Credits	**5**

Automatic Transmission/Transaxle Technician - 4706043079

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

AUT	180	Automatic Transmission/Transaxle	3
AUT	181	Automatic Transmission/Transaxle Lab	2
		Total Credits	**5**

Brake Repairer- 4706043069

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

AUT	110	Brake Systems	3
AUT	111	Brake Systems Lab	2
		Total Credits	**5**

Engine Repairer - 4706043089

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ADX	150	Engine Repair	3
ADX	151	Engine Repairer	2
		Total Credits	**5**

Front End Mechanic - 4706043099

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

AUT	160	Suspension and Steering	3
AUT	161	Suspension and Steering Lab	2
		Total Credits	**5**

Tune-up Mechanic - 4706043109

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ADX	120	Basic Automotive Electricity	3
ADX	121	Basic Automotive Electricity Lab	2
ADX	260	Electrical Systems	3
ADX	261	Electrical Systems Lab	2
AUT	140	Basic Fuel and Ignition Systems	3
AUT	141	Basic Fuel and Ignition Systems Lab	2
AUT	142	Emissions Systems	3
AUT	143	Emissions Systems Lab	2
AUT	240	Computer Control Systems and Diagnosis	3
AUT	241	Computer Control Systems and Diagnosis Lab	2
		Total Credits	**25**

Aviation Electronics

Certificates

Aviation Electronics – 4706083059

ATE	292	Aviation Electronics	3
ATE	293	GROL+Radar Exam Prep	3
		Total Credits	**6**

Aviation Maintenance Technology

Expertise in the inspection, repair, service and overhaul of aircraft and engines is the goal of this program certified by the Federal Aviation Agency (FAA). Interpreting specifications from service and technical manuals, using testing procedures and equipment, diagnosing problems and making necessary repairs are the skills taught in aircraft maintenance. To work in the aircraft industry, the FAA must certify students completing this program.

Students enrolled in the Aviation Maintenance Technology program must achieve a minimum grade of "C" in each AMT course.

Note: Hours Exception (75-76 for the A.A.S. and 66-67 for the diploma) pending approval by the KCTCS Board of Regents in June 2011.

* Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course prior to admission to the AMT courses.

Associate in Applied Science

Aviation Maintenance Technology - 4706087019

(Offered at JFC, SMC)

General Education:

ENG	101	Writing I	3
		Mathematics	3
		Science	3
		Heritage/Humanities/Foreign Language	3
		Social Interaction	3
		Subtotal	**15**

Technical Courses:

AMT	100	Mathematics	1
AMT	101	Theory of Flight*	0-1
AMT	102	Aircraft Weight & Balance	1
AMT	103	Cleaning and Corrosion Control	1
AMT	104	Basic Electricity	1
AMT	105	Fluid Lines & Fittings	1
AMT	106	Aircraft Drawing & Blueprint Reading	1
AMT	107	Physics	1
AMT	108	Ground Handling & Service	1
AMT	109	Maintenance Publications	1
AMT	111	Mechanic Privileges & Limitations	1
AMT	112	Maintenance Forms & Records	1
AMT	113	Materials & Processes	1
AMT	201	Wood Structures	1
AMT	203	Aircraft Welding	3
AMT	205	Non-Metallic Structures	1
AMT	207	Sheet Metal Structures	3
AMT	209	Aircraft Covering	1
AMT	211	Aircraft Finishes	1
AMT	213	Assembly & Rigging	1
AMT	215	Airframe Inspection	1
AMT	221	Hydraulic & Pneumatic Power Systems	2
AMT	223	Aircraft Landing Gear Systems	1
AMT	225	Aircraft Electrical Systems	2
AMT	227	Communication & Navigation Systems	1
AMT	229	Aircraft Fuel Systems	1
AMT	231	Cabin Atmospheric Control Systems	1
AMT	233	Ice & Rain Control Systems	1
AMT	235	Fire Protection Systems	1
AMT	237	Position & Warning Systems	1
AMT	239	Aircraft Instrument Systems	1
AMT	241	Turbine Engines	4
AMT	243	Reciprocating Engine Theory & Operation	3
AMT	245	Engine Inspection	1
AMT	247	Reciprocating Engine Overhaul	4
AMT	251	Engine Fuel System Components	1
AMT	253	Engine Fuel Metering System	1
AMT	255	Induction Systems	1
AMT	257	Engine Cooling Systems	1
AMT	259	Engine Exhaust Systems	1
AMT	261	Engine Instrument Systems	1
AMT	263	Fire Protection System	1
AMT	265	Engine Electrical Systems	2
AMT	267	Engine Ignition Systems	1
AMT	269	Lubrication Systems	1
AMT	271	Propellers	1
		Subtotal	**60-61**
		Total Credits	**75-76**

NOTE: Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course prior to admission to the AMT courses.

*AMT 101 – Theory of Flight is not required at JCTC but is a requirement at Somerset CC.

Diploma

Airframe and Power Plant Maintenance Technician - 4706084009

(Offered at SMC)

General Education: 6 credit hour requirement for diploma

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Science, or Mathematics	3
	Subtotal	**6**

NOTE: Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course prior to admission to the AMT courses.

Technical Courses

AMT	100	Mathematics	1
AMT	101	Theory of Flight*	0-1
AMT	102	Aircraft Weight & Balance	1
AMT	103	Cleaning and Corrosion Control	1
AMT	104	Basic Electricity	1
AMT	105	Fluid Lines & Fittings	1
AMT	106	Aircraft Drawing & Blueprint Reading	1
AMT	107	Physics	1
AMT	108	Ground Handling & Service	1
AMT	109	Maintenance Publications	1
AMT	111	Mechanic Privileges & Limitations	1
AMT	112	Maintenance Forms & Records	1
AMT	113	Materials & Processes	1
AMT	201	Wood Structures	1
AMT	203	Aircraft Welding	3
AMT	205	Non-Metallic Structures	1
AMT	207	Sheet Metal Structures	3
AMT	209	Aircraft Covering	1
AMT	211	Aircraft Finishes	1
AMT	213	Assembly & Rigging	1
AMT	215	Airframe Inspection	1
AMT	221	Hydraulic & Pneumatic Power Systems	2
AMT	223	Aircraft Landing Gear Systems	1
AMT	225	Aircraft Electrical Systems	2
AMT	227	Communication & Navigation Systems	1
AMT	229	Aircraft Fuel Systems	1
AMT	231	Cabin Atmospheric Control Systems	1
AMT	233	Ice & Rain Control Systems	1
AMT	235	Fire Protection Systems	1
AMT	237	Position & Warning Systems	1
AMT	239	Aircraft Instrument Systems	1
AMT	241	Turbine Engines	4
AMT	243	Reciprocating Engine Theory & Operation	3
AMT	245	Engine Inspection	1
AMT	247	Reciprocating Engine Overhaul	4
AMT	251	Engine Fuel System Components	1
AMT	253	Engine Fuel Metering System	1
AMT	255	Induction Systems	1
AMT	257	Engine Cooling Systems	1
AMT	259	Engine Exhaust Systems	1
AMT	261	Engine Instrument Systems	1
AMT	263	Fire Protection System	1
AMT	265	Engine Electrical Systems	2
AMT	267	Engine Ignition Systems	1
AMT	269	Lubrication Systems	1
AMT	271	Propellers	1
		Subtotal	**60-61**
		Total Credits	**66-67**

*AMT 101 – Theory of Flight is not required at JCTC but is a requirement at Somerset CC.

Certificates

Power Plant Maintenance Technician - 4706083019

(Offered at JFC, SMC)

AMT	100	Mathematics	1
AMT	101	Theory of Flight*	0-1
AMT	102	Aircraft Weight & Balance	1
AMT	103	Cleaning and Corrosion Control	1
AMT	104	Basic Electricity	1
AMT	105	Fluid Lines & Fittings	1
AMT	106	Aircraft Drawing & Blueprint Reading	1
AMT	107	Physics	1
AMT	108	Ground Handling and Service	1
AMT	109	Maintenance Publications	1
AMT	111	Mechanic Privileges & Limitations	1
AMT	112	Maintenance Forms & Records	1
AMT	113	Materials and Processes	1
AMT	241	Turbine Engines	4
AMT	243	Reciprocating Engine Theory & Operation	3
AMT	245	Engine Inspection	1
AMT	247	Reciprocating Engine Overhaul	4
AMT	251	Engine Fuel System Components	1
AMT	253	Engine Fuel Metering System	1
AMT	255	Induction Systems	1
AMT	257	Engine Cooling Systems	1
AMT	259	Engine Exhaust Systems	1
AMT	261	Engine Instrument Systems	1
AMT	263	Fire Protection Systems	1
AMT	265	Engine Electrical Systems	2
AMT	267	Engine Ignition Systems	1
AMT	269	Lubrication Systems	1
AMT	271	Propellers	1
		Total Credits	**36-37**

*AMT 101 – Theory of Flight is not required at JCTC but is a requirement at Somerset CC.

Airframe Maintenance Technician - 4706083029

(Offered at JFC, SMC)

AMT	100	Mathematics	1
AMT	101	Theory of Flight*	0-1
AMT	102	Aircraft Weight & Balance	1
AMT	103	Cleaning & Corrosion Control	1
AMT	104	Basic Electricity	1
AMT	105	Fluid Lines & Fittings	1
AMT	106	Aircraft Drawing & Blueprint Reading	1
AMT	107	Physics	1
AMT	108	Ground Handling & Service	1
AMT	109	Maintenance Publications	1
AMT	111	Mechanic Privileges & Limitations	1
AMT	112	Maintenance Forms & Records	1
AMT	113	Materials and Processes	1
AMT	201	Wood Structures	1
AMT	203	Aircraft Welding	3
AMT	205	Non-Metallic Structures	1
AMT	207	Sheet Metal Structures	3
AMT	209	Aircraft Covering	1
AMT	211	Aircraft Finishes	1
AMT	213	Assembly & Rigging	1
AMT	215	Airframe Inspection	1
AMT	221	Hydraulic & Pneumatic Power Systems	2
AMT	223	Aircraft Landing Gear Systems	1
AMT	225	Aircraft Electrical Systems	2
AMT	227	Communication & Navigation System	1
AMT	229	Aircraft Fuel Systems	1
AMT	231	Cabin Atmospheric Control Systems	1
AMT	233	Ice & Rain Control Systems	1
AMT	235	Fire Protection Systems	1
AMT	237	Position & Warning Systems	1
AMT	239	Aircraft Instrument Systems	1
		Total Credits	**36-37**

*AMT 101 – Theory of Flight is not required at JCTC but is a requirement at Somerset CC.

Biotechnology

The biotechnology program provides students with the necessary skills and knowledge for entry into a biotechnology career. Graduates will be well versed in the theories and principles of biological systems, field and laboratory techniques, and good manufacturing principles of the biotechnology industry. The industry provides a wide array of job opportunities, including bio-manufacturing and laboratory technicians, quality assurance technicians, and regulatory personnel.

Associate in Applied Science

Biotechnology - 4101017019

(Offered at OWC)

BIO	143	Zoology with Laboratory OR	4
BIO	150	Principles of Biology I AND	(3)
BIO	151	Principles of Biology I Lab	(2)
CHE	140	Introductory General Chemistry AND	3
CHE	145	Introductory General Chemistry Lab OR	1
CHE	170	General College Chemistry I AND	(3)
CHE	175	General College Chemistry Lab I	(2)
CIS	100	Introduction to Computers	3
QMS	101	Introduction to Quality Systems	3
BTN	101	Introduction to Biotechnology	1
BIO	141	Botany with Laboratory OR	4
BIO	152	Principles of Biology II AND	(3)
BIO	153	Principles of Biology II Lab	(2)
CHE	150	Introduction to Organic and Biological Chemistry OR	4
CHE	180	General College Chemistry II AND	(3)
CHE	185	General College Chemistry Lab II	(1)
AGR	250	Introduction to Plants/Crop Production	3
BIO	224	Introduction to Molecular and Cell Biology	4
ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking	3
MAT	150	College Algebra	3
BIO	227	Principles of Microbiology with Laboratory	5
		Heritage	3
		Humanities	3
		Social Interaction	3
		Electives	6
		Total Credits	**61-65**

Certificate

Biotechnology - 4101013010

(Offered at OWC)

Required:

AGR	250	Introduction to Plants/Crop Production	3
BIO	143	Zoology with Laboratory	4
BIO	141	Botany with Laboratory	4
BIO	224	Introduction to Molecular and Cell Biology	4
BTN	101	Introduction to Biotechnology	1
CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Laboratory	1
CHE	150	Introduction to Organic and Biological Chemistry	4
CIS	100	Introduction to Computers	3
QMS	101	Introduction to Quality Systems	3
		Total Credits	**30**

Biotechnology Laboratory Technician

The Biotechnology Laboratory Technician AAS program provides the basic knowledge and laboratory skills needed to prepare for entry level jobs in university, government, pharmaceutical or industrial biotechnology laboratories. Graduates of the program will be able to seek employment in biotechnology laboratories such as biomanufacturing, quality control, quality assurance, research and development, and regulatory bioscience. The program has been designed to develop skills in basic analysis of biological molecules (DNA and proteins), use of bioreactors, recombinant DNA technology, generation of cell cultures, immunological method applications, regulatory compliance (GMPs and GLPs), accurate documentation, and laboratory safety skills. The Basic Biotechnician certificate introduces hands-on laboratory training needed for entry-level employment in a biotechnological laboratory. The Advanced Biotechnician certificate provides practical laboratory skills to supplement theoretical knowledge to improve employability in the biotechnology industry. Some courses are dual credit and college credit can be earned while students are enrolled in secondary school.

Associate in Applied Science

Biotechnology Laboratory Technician – 4101017029

(Offered at BLC)*

Required General Education Courses

		Heritage/Humanities/Foreign Language	3
		Behavioral Science/Social Interaction	3
		Science with Laboratory[1]	4 – 5
		Computer Literacy[2]	0-3
MAT	110	Applied Mathematics or higher (excluding MAT 120)	3
ENG	101	Writing I	3
		Subtotal: General Education Requirements	**16-20**

[1] May not count general education course as one of the technical courses.

[2] Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.

Required Technical Core Courses

BTN	101	Introduction to Biotechnology	1
BTN	110	Nucleic Acids	4
BTN	201	Biotechnology Techniques I	4
BTN	202	Biotechnology Techniques II	4
BTN	210	Cell Culture and Function	4
BTN	220	Immunological Methods	4
		Subtotal: Technical Core Requirements	**21**

Required Technical Elective Courses

Must choose one of either COE, BIO, CHE or EST:

COE	199	Cooperative Education OR	1-3
BIO	295	Independent Investigation in Biology OR	(1-3)
BIO	299	Selected Topics in Biology OR	(1-3)
CHE	295	Selected Topics in Chemistry Laboratory OR	(1-3)
CHE	299	Laboratory Research in Chemistry OR	(1-3)
EST	299	Selected Topics in Environmental Science Technology	(1-3)
		Subtotal: Technical Elective Requirements	**1-3**

Technical Support Courses

Must choose at least 15 hours of technical support courses.

BIO	112	Introduction to Biology	3
BIO	113	Introduction to Biology Lab	1
BIO	120	Human Ecology	3
BIO	121	Introduction to Ecology Laboratory	1
BIO	135	Basic Anatomy and Physiology with Laboratory	4
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
BIO	150	Principles of Biology I	3
BIO	151	Principles of Biology Laboratory I	2
BIO	152	Principles of Biology II	3
BIO	153	Principles of Biology Laboratory II	2
BIO	209	Introductory Microbiology Laboratory	2
BIO	226	Principles of Microbiology	3
CHE	120	The Joy of Chemistry	3
CHE	125	The Joy of Chemistry Lab	1
CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Laboratory	1
CHE	170	General College Chemistry I	3
CHE	173	General College Chemistry I Workshop	1
CHE	175	General College Chemistry Laboratory I	1
CHE	180	General College Chemistry II	3
CHE	183	General College Chemistry II Workshop	1
CHE	185	General College Chemistry Laboratory II	1
CHE	220	Analytical Chemistry	5
CHE	270	Organic Chemistry I	3
CHE	275	Organic Chemistry Laboratory I	2
CHE	280	Organic Chemistry II	3
CHE	285	Organic Chemistry Laboratory II	2
EST	150	Introductory Ecology	4
EST	160	Hydrological Geology	3
EST	220	Pollution of Aquatic Ecosystems	3
EST	230	Aquatic Chemistry Laboratory	2
EST	240	Sources and Effects of Air Pollution	4
EST	260	Environmental Analysis Laboratory	2
EST	270	Environmental Law and Regulation	3
MA	109	College Algebra	3
MA	111	Contemporary Mathematics	3
MA	113	Calculus I	4
MA	114	Calculus II	4
MA	123	Elemental Calculus and its Applications	3
MAT	155	Trigonometry	3
MA	201	Math for Elementary Teachers	3
MA	213	Calculus III	4
MA	214	Calculus IV	3
PHL	110	Bioethics	3
PHY	151	Introductory Physics I	3
PHY	152	Introductory Physics II	3
PHY	161	Introductory Physics Lab I	1
PHY	162	Introductory Physics Lab II	1
PHY	172	Physics for Health Sciences	2
PHY	201	College Physics I	4
PHY	202	College Physics I Laboratory	1
PHY	203	College Physics II	4
PHY	204	College Physics II Laboratory	1
PHY	231	General University Physics I	4
PHY	232	General University Physics II	4
PHY	241	General University Physics I Laboratory	1
PHY	242	General University Physics II Laboratory	1
STA	200	Statistics	3
STA	291	Statistical Methods	3

OR any course approved by the program coordinator.

Subtotal: Required General Education and Technical Courses	**53-59**
Electives	**7**
TOTAL	**60 - 66**

Certificate

Basic Biotechnician Certificate - 4101013020

(Offered at BLC)*

BTN	101	Introduction to Biotechnology	1
BTN	201	Biotechnology Techniques I	4
BTN	202	Biotechnology Techniques II	4
MAT	110	Applied Mathematics or higher (excluding MAT 120)	3
		Science[3]	4-5
		TOTAL	**16-17**

[3] One semester of college biology with lab, or college chemistry with lab, or course approved by the program coordinator.

Advanced Biotechnician Certificate - 4101013030

(Offered at BLC)*

BTN	101	Introduction to Biotechnology	1
BTN	201	Biotechnology Techniques I	4
BTN	202	Biotechnology Techniques II	4
BTN	110	Nucleic Acids	4
BTN	210	Cell Culture and Function OR	4
BTN	220	Immunological Methods OR	(4)
		Course approved by the program coordinator	(4-5)
COE	199	Cooperative Education OR	1-3
BIO	295	Independent Investigation in Biology OR	(1-3)
BIO	299	Selected Topics in Biology OR	(1-3)
CHE	295	Selected Topics in Chemistry Laboratory OR	(1-3)
CHE	299	Laboratory Research in Chemistry OR	(1-3)
EST	299	Selected Topics in Environmental Science Technology	(1-3)
		TOTAL	**18 – 21**

Note: Prerequisites for the Advanced Biotechnician Certificate

- At least one semester of college level chemistry
- At least one semester of college level biology
- Or consent of program coordinator

Recommended Prerequisites for the Advanced Biotechnician Certificate

- Earned Associates Degree or higher in a science discipline.
- Microbiology with laboratory.
- Genetics within the past 10 years.

*Pending KCTCS Board of Regents approval 06-11

Broadcast Television Production

The Broadcast Television Production Certificate program provides students with a hands-on introduction to the practice of video production and a comprehensive understanding of professional broadcasting in the United States. The students will be required to read, write, and reflect about concepts such as the role of the media in our society, history of broadcasting in the United States, and different job positions available in the field of broadcasting. Students will also learn all aspects of the television production process from conception to the completed program. Students will develop skills in a range of areas including script preparation, camera operation, directing, lighting, and editing. In addition to an understanding of the elements of television production, graduates will have a greater understanding of the collaborative process through creative problem solving, and critical thinking. Students will need to achieve a "C" or better in each class to remain in the program.

Certificate

Broadcast Television Production – 1001053189

(Offered at OWC)

CMS	105	Multi-Media Production I	3
CMS	141	Communications Practicum	4
CMS	155	Introduction to Broadcasting	3
CMS	266	Basic Television Production	3
COM	249	Mass Media and Mass Culture	3
		Total	**16**

Business Studies

Four programs are offered under the broader heading of Business Studies. They are Accounting Technology, Business Administration Systems, Medical Information Technology, and Office Systems Technology.

Accounting Technology

Prepares the student for entry-level positions in the accounting field and related occupations.

Associate in Applied Science

Accounting Technology - 5203027019

General education courses

CIS	100	Introduction to Computers OR	3
CS	101	Introduction to Computing I	(3)
CIS	*130	Microcomputer Applications	3
ENG	101	Writing I	3
ENG	102	Writing II	3
ENG	203	Business Writing	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
		Economics Course	3
		Mathematics Course (Excluding MT 205, 206; STA 200)	3
		Heritage/Humanities Course	3
		Science Course	3
ACC	*201	Financial Accounting OR	3
ACT	*101	Fundamentals of Accounting I AND	(3)
ACT	*102	Fundamentals of Accounting II	(3)
ACC	*202	Managerial Accounting	3

Technical courses

BAS	283	Principles of Management	3
ACT	279	Computerized Accounting Systems	3
ACT	277	Managerial Accounting Topics	3
ACT	281	Individual Taxation	3
ACT	286	Financial Accounting Topics	3
		Subtotal	**51 – 54**

*Not General Education Courses

Choose twelve hours from the following list of technical courses – at least six of these hours must be from the accounting course list:

Accounting Courses

ACT	151	The Accounting Cycle	3
ACT	177	Entrepreneurial Accounting	3
ACT	196	Payroll Accounting	3
ACT	290	Selected Topics in Accounting	1 - 3
ACT	295	Corporate and Partnership Taxation	3

Related Courses

BAS	120	Personal Finance	3
BAS	267	Introduction to Business Law	3
COE	199	Cooperative Education	1 – 8
BAS	200	Small Business Management	3
BAS	260	Professional Development and Protocol	2
BAS	280	Business Internship	1 - 3
		A second economics course	3
		A second mathematics course (Excluding MT 205, 206, STA 200)	3
		Total	**63 – 66**

Diploma

Accounting - 5203024019

(Offered at SMC,WKC)

General education courses

		Writing courses	6
		Computer courses	6
		Mathematics course (Excluding all MT under 100 level; MT 205, 206: STA 200)	3
		Oral Communications	3
ACC	*201	Financial Accounting OR	3

Technical courses

ACT	101	Fundamentals of Accounting I AND	
ACT	102	Fundamentals of Accounting II	(6)
ACT	279	Computerized Accounting Systems	3
		Additional accounting hours (Including Coop/Internship)	9

Choose 9 hours from the list of related courses

Related Courses

BAS	120	Personal Finance	3
BAS	267	Introduction to Business Law	3
BAS	283	Principles of Management	3
COE	199	Cooperative Educations	1–8
BAS	200	Small Business Management	3
BAS	260	Professional Development and Protocol	2
BAS	280	Business Internship	1-3
		Economics course	3
		A second mathematics course	3
		Total	**42 – 45**

* Not General Education Courses

Certificates

Accounting Trainee II - 5203023049

(Offered at SMC,WKC)

Available Completely Online

General education courses

		Writing course	3
		Computer courses	6
		Mathematics course (Excluding all MT under 100 level; MT 205, 206: STA 200)	3
ACC	*201	Financial Accounting OR	3

Technical courses

ACT	101	Fundamentals of Accounting I AND	
ACT	102	Fundamentals of Accounting II	(6)
ACT	279	Computerized Accounting Systems	3
		Additional accounting hours (Including Coop/Internship)	6
		Total	**24–27**

*Not General Education Courses

Accounting Trainee I - 5203023039

(Offered at SMC,WKC)

Available Completely Online

General education courses

		Writing course	3
		Computer course	3
		Mathematics course (Excluding all MT under 100 level; MT 205, 206: STA 200)	3

Technical courses

ACT	101	Fundamentals of Accounting I OR	
ACC	201	Financial Accounting	3
		Total	**12**

Business Administration Systems

The Business Administration Systems Program prepares students for a variety of careers in business. A core curriculum provides students with a foundation of knowledge applicable to any business career. The Business Administration Systems Program offers an Associate in Applied Science degree, diplomas and a variety of certificates in the areas of Accounting, Entrepreneurship, Finance, Financial Perspective, General Business, Hospitality Management, Human Resource Management, Industrial Supervisor, Information Systems Management, Leadership, Management, Office Systems, Operations Management, Real Estate Management, Sales, Small Business Management, Team Leadership, Telecommunications Systems Management and Turf Grass / Landscaping Management.

The curriculum is designed for those who seek entry level jobs as well as for currently employed individuals wishing to enhance their skills. A student specializes by choosing from the following Options, Diplomas and Certificates:

The Accounting Option/Certificate leads to careers in accounting including bookkeeper, accounting clerk, cost payroll clerk and any positions using microcomputer-based systems.

The Finance Option/Certificate leads to careers in the financial services industry, government lending agencies, and credit companies.

The Hospitality Management Option/Certificate prepares students for careers directing specific aspects of hospitality operations and for overall hospitality management.

The Human Resource Management Option/Certificate prepares students for entry-level positions in the human resource field and related occupations.

The Information Systems Management Option/Certificate prepares students for a variety of computer related positions in business.

The Management Option/Certificate prepares the student with broad-based management knowledge and skills which lead to a variety of positions in organizations.

The Office Systems Option/Diploma/Certificate prepares the student with a broad base of knowledge and skills needed for a variety of positions in an office.

The Real Estate Management Option/Certificates leads to a career in real estate which may include sales, finance, counseling, development, marketing analysis, valuation, and/or property management.

The Telecommunication Systems Management Option/Certificate leads to careers in the management and operation of television, radio, teleconferencing facilities, and information systems.

The Turf Grass / Landscaping Management Option/Certificate prepares the student for careers turf grass management and landscaping operations.

Other Diplomas and Certificates

The Organization Leadership Diploma curriculum is designed to prepare students to manage a department or to become team leaders in team-based or self-managed organizations.

The Small Business Management Diploma/Certificate curricula is designed to prepare students for the position of entrepreneur and business

owner and offers the prospective business owner the fundamentals of starting and operating a business.

The Basic and Advanced Business Administration Certificates are designed to be building blocks to complete the Associate in Applied Science Degree, Business Administration Core courses.

The Business Transfer Certificate is designed to provide the business transfer student an exit point by offering business preparation courses that will transfer to a four year institution.

The Entrepreneurship Certificate is focused on providing foundational business knowledge necessary to turn a project, idea, product or service into a business venture. Certificate graduates will learn how to prepare a business plan, identify sources of venture and operating capital, gain product development knowledge, learn methods of marketing their idea or business, learn how to read and understand financial statements, and gain personal and organization leadership qualities that will provide business tools to new or current entrepreneurs.

The Financial Perspective Certificate prepares the student for entry level positions in accounting, financial services and small business management.

The Industrial Supervisor certificate prepares the students in the field of industrial front-line supervision

The General Business Certificate prepares the students for a variety positions in supervision, management and general business.

The Leadership Certificate enables the student to qualify for leadership positions, work effectively in teams, lead problem solving work groups, understand the conflict resolution processes and plan effectively.

The Operations Management Certificate provides students with the knowledge and skills needed to effectively function as first-line supervisors in an operations environment whether in distribution, services, or manufacturing. Also it will increase the understanding of the operations function for non-operations students who will be working in a distribution, services or manufacturing organization.

The Quality Management Certificate prepares the student to analyze and implement systems for continuous improvement of functions and processes in production or service organizations.

The Sales Certificate prepares the student for a career in sales.

The Supervisory Management Certificate prepares the students in the field of front-line supervision.

The Team Leadership Certificate leads to a career in team leadership, supervision and / or management in a variety of different organizations. Modules are available.

Associate in Applied Science

Business Administration Systems - 5202017129

(Offered at ASC, BGT, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

General Education:

ENG	101	Writing I	3
CIS	100	Introduction to Computers OR	3
OST	105	Introduction to Information Systems	(3)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
ECO	101	Contemporary Economic Issues OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)
MAT	105	Business Mathematics OR	3
MAT	110	Applied Mathematics OR Higher Math	(3)
		Heritage/Humanities/Foreign Language	3
		Natural or Applied Science Course	3
		Subtotal	**21**

Technical Courses:

ENG	102	Writing II OR	3
OST	235	Business Communications Technology	(3)
CIS	130	Microcomputer Applications and Development OR	3
OST	240	Software Integration	(3)
BAS	160	Introduction to Business	3
BAS	250	Business Employability Seminar	1
BAS	267	Introduction to Business Law	3
BAS	282	Principles of Marketing	3
BAS	283	Principles of Management	3
ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
ACC	202	Managerial Accounting	3
		Technical	**25-28**
		Core Subtotal	**46-49**

Business Administration Systems Options

Accounting Option - 520201701

(Offered at ASC, BGT, BSC, ELC, GTW, HEC, HPC, MDC, MYC, OWC, SMC,WKC)
Available Completely Online

Required:

ACT	279	Computerized Accounting Systems	3
ACT	281	Individual Taxation	3
ACT	286	Financial Accounting Topics	3

Choose 6 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

ACT	196	Payroll Accounting	3
ACT	277	Managerial Accounting Topics	3
BAS	212	Introduction to Financial Management	3
ACT	290	Selected Topics in Accounting (Topic)	1-3
ACT	295	Corporate and Partnership Taxation	3
BAS	120	Personal Finance	3
CIS	230	Advanced Microcomputer Applications	3
COE	199	Cooperative Education: (Business Administration) OR	1-3
BAS	280	Business Internship	(1-3)
		Subtotal	**15**
		Total Credits	**61-64**

Finance Option - 520201714

(Offered at ASC, HPC, SEC, SMC,WKC)

Required:

BAS	293	Principles of Finance	3
BAS	212	Introduction to Financial Management	3

Choose 9 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	120	Personal Finance	3
BAS	294	Money and Financial Institutions	3
BAS	295	International Finance	3
BAS	299	Selected Topics in Management: (Option Topic)	3
BAS	280	Business Internship OR	1-4
COE	199	Cooperative Education	(1-4)
		Subtotal	**15**
		Total Credit Hours	**61-64**

Hospitality Management Option - 520201703

(Offered at BSC, SMC,WKC)

Required:

HOS	100	Introduction to Hospitality	3
CUL	100	Culinary Arts Profession	2
HOS	282	Tourism Marketing	3

Choose 9 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses (HOS, CUL, & BAS) as approved by the Business Administration Systems Program Coordinator.

BAS	200	Small Business Management	3
BAS	274	Human Resource Management	3
BAS	290	Management, Ethics & Society	3
COE	199	Cooperative Education: Business Administration OR	1-3
BAS	280	Business Internship	(1-3)
CUL	200	Sanitation & Safety	2
CUL	105	Applied Fundamental of the Culinary Arts Profession	2
CUL	280	Cost & Control	3
HOS	160	Security for the Hospitality Industry	3
HOS	200	Cultural Heritage Tourism	3
HOS	210	Front Office Management	3
HOS	220	Housekeeping & Maintenance Management	3
CUL	270	Human Relations Management	3
		Subtotal Credits	**17**
		Total	**63-66**

Human Resource Management Option - 520201715

(Offered at ELC, HEC, MDC,WKC)

Available Completely Online

Required:

BAS	274	Human Resource Management	3
BAS	287	Supervisory Management	3
ACT	196	Payroll Accounting	3

Choose 9 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	280	Business Internship OR	(1-3)
COE	199	Cooperative Education	(1-3)
BAS	284	Applied Management Skills	3
BAS	288	Person & Organizational Leadership	3
BAS	290	Management, Ethics & Society	3
BAS	299	Selected Topics in Management: (Option Topic)	.1-3
ISX	100	Industrial Safety	3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
QMS	202	Performance Management	3
PSY	180	Human Relations	3
		Subtotal	**18**
		Total Credits	**64-67**

Management Option - 520201708

(Offered at ASC, BSC, BGT, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

BAS	212	Introduction to Financial Management OR	3
QMS	101	Introduction to Quality Systems OR	(3)
		Second Mathematics Course*	(3)
BAS	284	Applied Management Skills	3

*Must be a General Education Math that is different from core math selection.

Choose 11-12 hours (not duplicated from the core) from the following Management and/or Technical Courses with no more than 3 hours selected from Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

Management Courses

ACT	277	Managerial Accounting Topics	3
BAS	170	Entrepreneurship	3
BAS	200	Small Business Management	3
BAS	212***	Introduction to Financial Management	3
BAS	289	Operations Management	3
BAS	290	Management, Ethics & Society	3
BAS	256	International Business	3
BAS	260	Professional Development and Protocol	2
BAS	274	Human Resource Management	3
BAS	285	Problems in Marketing and Management	3
BAS	287	Supervisory Management	3
BAS	288	Personal and Organizational Leadership	3
BAS	291	Retail Management	3
BAS	299	Selected Topics in Management: (Option Topic)	1-3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
QMS	202	Performance Management	3

Technical Courses:

BAS	120	Personal Finance	3
CIS	150	Doing Business on the Internet	1
CIS	151	Introduction to Electronic Commerce	(3)
CIS	230	Advanced Microcomputer Applications	3
ENG	203	Business Writing OR	(3)
OST	235	Business Communications Technology	(3)
COE	199	Cooperative Education: (Business Administration)	1-4
		OR	
BAS	280	Business Internship	(1-4)
ECO	150	Introduction to Global Economics	3
ECO	201	Principles of Microeconomics OR	3
ECO	202	Principles of Macroeconomics	(3)
IT	132	Web Page Development	3
IT	237	Help Desk I	3
OST	110	Document Formatting and Word Processing	3
QMS	101	Introduction to Quality Systems	3
QMS	201	Customer Service Improvement Skills	3
		Subtotal	**17-18**
		Total Credit	**63-67**

***Not allowed as an Approved Management Course if course has been taken as an option required course.

Office Systems Option - 520201705

(Offered at BSC, GTW, HEC, HZC, MDC, MYC, SMC)

Available Completely Online

Required:

OST	110	Document Formatting and Word Processing	3
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures	3
OST	220	Administrative Office Simulations	3

Choose 6 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Office Systems Program Coordinator.

OST	150	Transcription and Office Technology	3
OST	160	Records and Database Management	3
OST	216	Selected Topics in Office Systems: (Topic)	1-3
OST	235	Business Communications Technology	3
OST	295	Office Systems Technology Internship OR	1-3
COE	199	Cooperative Education: (Business Technology) OR	(1-3)
BAS	280	Business Internship	(1-3)
OST	275	Office Management	3
		Subtotal	**18**
		Total Credits	**64-67**

Real Estate Management Option - 520201706

(Offered at ASC, BSC, ELC,WKC)

Required:

REA	100	Real Estate Principles I	3
REA	121	Appraising	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3

Choose 6 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Real Estate Program Coordinator.

REA	120	Real Estate Marketing	3
REA	122	Construction and Blueprints	3
REA	200	Real Estate Principles II	3
REA	201	Property Management	3
REA	202	Real Estate Investments I	3
REA	203	Commercial and Industrial Property	3
REA	204	Land Planning and Development	3
REA	205	Farm Brokerage	3
REA	212	Real Estate Investments II	3
REA	220	Real Estate Brokerage Management	3
COE	199**	Cooperative Education: (Business Administration)	1-4
		OR	
BAS	280	Business Internship	(1-4)
		Subtotal	**18**
		Total Credits	**64-67**

**Maximum of 4 hours.

Telecommunication Systems Management Option – 520201709

Required:

CMS	105	Multimedia Production and Applications I	3
CMS	205	Multimedia Production and Applications II	3
CMS	269	Media Advertising	3
COM	249	Mass Media/Mass Culture	3
JAT	101	Introduction to Communication Media	3

Choose 3-4 hours (not duplicated from the core) from the following Courses.

		Students may select other courses (JAT, COM, or CMS) as approved by the Business Administration Program Coordinator	
CIS	150	Doing Business on the Internet	1
CIS	151	Introduction to Electronic Commerce	3
CIS	152	Introduction to Web Page Design	1
CIS	153	Intermediate Web Page Design OR	2
BAS	284	Applied Management Skills	3
BAS	287	Supervisory Management	3
BAS	299	Selected Topics in Management: (Option Topic)	1-3
OST	235	Business Communications Technology OR	3
ENG	203	Business Writing OR	(3)
JOU	204	Writing for Mass Media	(3)
COE	199	Cooperative Education: (Business Administration)	1-4
		OR	
BAS	280	Business Internship	(1-4)
		Subtotal	**18-19**
		Total Credits	**64-68**

Turf Grass/Landscaping Management Option - 520201707

(Offered at OWC)

Required:

TGM	140	Turf Grass for Golf and Landscaping	3
AGR	125	Introduction to Soils & Fertilizers	3
TGM	210	Turf Grass Science	3
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
		Technical Course*	3

Choose 3 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

TGM	160	Golf Course Maintenance Systems	3
TGM	220	Golf Course Irrigation	3
TGM	230	Golf Course Operations	3
AGR	140	Issues in Agriculture	3
AGR	160	Agriculture Seminar	3
AGR	170	Introduction to Equipment, Machines, & Engines	3
HRT	104	Herbaceous Plant Identification	4
HRT	108	Woody Plant Identification	4
HRT	120	Turf Management	3
COE	199	Cooperative Education OR	3
BAS	280	Business Internship	(3)
		Subtotal	**17**
		Total Credits	**63-66**

Diplomas

Office Systems - 5202014019

(Offered at BSC, GTW, MDC, SMC)

General Education:

Area 1 =

ENG	101	Writing I OR	3
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

OST	213	Business Calculations for the Office Professional OR	3
ECO	101	Contemporary Economics OR	(3)
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)

Area 3 =

CIS	100	Introduction to Computers OR	3
OST	105	Introduction to Information Systems	(3)
		General Education Subtotal	**9**

Required Technical:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
BAS	160	Introduction to Business	3
OST	110	Document Formatting and Word Processing	3
OST	210	Advanced Word Processing Applications	3
OST	213	Business Calculations for the Office Professional	3
OST	215	Office Procedures	3
OST	220	Administrative Office Simulations	3
CIS	130	Microcomputer Applications and Development OR	3
OST	240	Software Integration	(3)
		Required Technical Subtotal	**24-27**

Choose 6 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Office Systems Program Coordinator.

OST	150	Transcription and Office Technology	3
OST	160	Records and Database Management	3
OST	216	Selected Topics in Office Systems: (Topic)	1-3
OST	235	Business Communications Technology	3
OST	295	Office Systems Technology Internship OR	1-3
COE	199	Cooperative Education: (Business Administration)	(1-3)
		OR	
BAS	280	Business Internship	(1-3)
OST	275	Office Management	3
		Approved Technical Courses	6
		Total Credits	**39-42**

Organizational Leadership - 5202014029

(Offered at ASC, BGT, BSC, ELC, JFC, MDC, OWC, SMC,WKC)
Available Completely Online

General Education:

Area 1 =

ENG	101	Writing I OR	3
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

ECO	101	Contemporary Economics OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)

Area 3 =

CIS	100	Introduction to Computers OR	3
OST	105	Introduction to Information Systems	(3)
		General Education Subtotal	**9**

Required Technical:

BAS	160	Introduction to Business	3
BAS	283	Principles of Management	3
BAS	284	Applied Management Skills	3
BAS	287	Supervisory Management	3
BAS	288	Personal and Organizational Leadership	3
ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
		Required Technical Subtotal	**18-21**

Choose 11-12 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	212	Introduction to Financial Management	3
BAS	260	Professional Development and Protocol	2
BAS	267	Introduction to Business Law	3
BAS	274	Human Resource Management	3
BAS	282	Principles of Marketing	3
BAS	290	Management, Ethics & Society	3
OST	275	Office Management	3
ACC	202	Managerial Accounting	3
CIS	130	Microcomputer Applications and Development OR	3
OST	235	Business Communications Technology	3
QMS	101	Introduction to Quality Systems	3
		Mathematics Course	3
		Approved Technical Courses	**11-12**
		Total Credits	**38-42**

*Students may select other courses approved by the Business Administration Program Coordinator.

Small Business Management - 5202014039

(Offered ASC, BGT, BSC, ELC, HZC, JFC, MDC, SMC,WKC)
Available Completely Online

General Education:

Area 1 =

ENG	101	Writing I OR	3
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

ECO	101	Contemporary Economics OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)

Area 3 =

CIS	100	Introduction to Computers OR	3
OST	105	Introduction to Information Systems	(3)
		General Education Subtotal	**9**

Required Technical:

BAS	160	Introduction to Business OR	3
BAS	170	Entrepreneurship*	(3)
BAS	200	Small Business Management	3
BAS	212	Introduction to Financial Management * OR	3
		Second Mathematics Course*	(3)
BAS	267	Introduction to Business Law	3
BAS	282	Principles of Marketing	3
BAS	283	Principles of Management	3
ACC	201	Financial Accounting OR	3
ACT	177	Entrepreneurial Accounting OR	(3)
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
		Required Technical Subtotal	**21-24**

Choose 6 hours (not duplicated from the core) from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

CIS	150	Doing Business On The Internet	1
BAS	212	Introduction to Financial Management *	3
BAS	170	Entrepreneurship*	3
BAS	274	Human Resource Management	3
BAS	284	Applied Management Skills	3
BAS	287	Supervisory Management	3
BAS	288	Personal and Organizational Leadership	3
BAS	290	Management, Ethics & Society	3
ACT	196	Payroll Accounting	3
ACC	202	Managerial Accounting	3
CIS	130	Microcomputer Applications & Development OR	3
CIS	230	Advanced Computer Applications OR	(3)
OST	240	Software Integration	(3)
QMS	101	Introduction to Quality Systems	(3)
		Approved Technical Courses	**6**
		Total Credits	**36-39**

*Not allowed as an Approved Technical Course if course has been taken as a required course.

Certificates

Accounting - 5202013119

(Offered at BGT, BSC, ELC, GTW, HEC, HPC, HZC, MDC, MYC, OWC, SEC, SMC, WKC)
Available Completely Online

Required:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
ACC	202	Managerial Accounting	3

Choose 12 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator

ACT	196	Payroll Accounting	3
ACT	277	Managerial Accounting Topics	3
ACT	279	Computerized Accounting Systems	3
ACT	281	Individual Taxation	3
ACT	286	Financial Accounting Topics	3
ACT	290	Selected Topics in Accounting (Topic)	1-3
ACT	295	Corporate and Partnership Taxation	3
BAS	120	Personal Finance	3
BAS	212	Introduction to Financial Management	3
CIS	230	Advanced Microcomputer Applications	3
COE	199	Cooperative Education: (Business Administration) OR	3
BAS	280	Business Internship	(3)
		Total Credits	**18-21**

Accounting Recordkeeping Specialist - 5202013429

(Offered at ASC, BGT, BSC, MDC, SEC, OWC,WKC)

Required:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
ACT	196	Payroll Accounting	3
ACT	279	Computerized Accounting Systems	3
ACT	281	Individual Taxation	3
ACT	286	Financial Accounting Topics	3
IT	100	Computer Literacy OR	3
CIS	100	Introduction to Computers OR	(3)
OST	105	Introduction to Information Systems	(3)
		Total Credits	**18-21**

Advanced Business Administration - 5202013129

(Offered at ASC, BSC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC, WKC)

Available Completely Online

Required:

BAS	282	Principles of Marketing	3
BAS	283	Principles of Management	3
BAS	267	Introduction to Business Law	3
QMS	101	Introduction to Quality Systems	3
CIS	130	Microcomputer Applications & Development	3
		Total Credits	**15**

Basic Business Administration - 5202013139

(Offered at ASC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC, WKC)

Available Completely Online

Required:

BAS	160	Introduction to Business	3
ENG	101	Writing I	3
CIS	100	Introduction to Computers OR	3
OST	105	Introduction to Information Systems	(3)
ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
ECO	101	Contemporary Economic Issues OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)
		Total Credits	**15-18**

Business Transfer - 5202013149

(Offered at ASC, BSC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC, WKC)

Available Completely Online

Required:

ACC	201	Financial Accounting	3
ACC	202	Managerial Accounting	3
ECO	201	Principles of Microeconomics	3
ECO	202	Principles of Macroeconomics	3
STA	220	Statistics	3
		Total Credits	**15**

Entrepreneurship - 5202013379

Required:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
BAS	170	Entrepreneurship	3
BAS	282	Principles of Marketing	3
BAS	288	Personal and Organizational Leadership	3
		Total Credits	**12-15**

Finance - 5202013329

(Offered at ASC, SEC, SMC)

Required:

BAS	293	Principles of Finance	3
BAS	212	Introduction to Financial Management	3

Choose 9 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	120	Personal Finance	3
BAS	294	Money and Financial Institutions	3
BAS	295	International Finance	3
BAS	299	Selected Topics in Management: (Option Topic)	3
BAS	280	Business Internship OR	1-4
COE	199	Cooperative Education	(1-4)
		Total Credits	**15**

Financial Perspectives - 5202013159

(Offered at ASC, BSC, ELC, GTW, HPC, HZC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I *	(3)
ACT	102	Fundamentals of Accounting II*	(3)
BAS	160	Introductions to Business	3
BAS	120	Personal Finance	3

* ACC 201 & ACC 202 may be substituted

		Total Credits	**9-12**

General Business - 5202013169

(Offered at ASC, BGT, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

BAS	160	Introduction to Business	3
CIS	100	Introduction to Computers	3
ACT	101	Fundamentals of Accounting I*	3
ECO	101	Contemporary Economic Issues OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)
		Total Credits	**12**

* ACC 201 may be substituted

Hospitality Management - 5202013179

(Offered at BSC, SEC, SMC,WKC)

Required:

HOS	100	Introduction to Hospitality	3
CUL	100	Culinary Arts Profession	2
HOS	282	Tourism Marketing	3

Choose 9 hours from the following Technical Courses. Students may select other courses (HOS or CUL) as approved by the Business Administration Systems Program Coordinator.

BAS	200	Small Business Management	3
BAS	274	Human Resource Management	3
COE	199	Cooperative Education: Business Administration OR	1-3
BAS	280	Business Internship	(1-3)
BAS	290	Management, Ethics & Society	3
CUL	200	Sanitation & Safety	2
CUL	105	Applied Fundamentals of the Culinary Arts Profession	2
CUL	280	Cost & Control	3
HOS	160	Security for the Hospitality Industry	3
HOS	200	Cultural Heritage Tourism	3
HOS	210	Front Office Operations & Management	3
HOS	220	Housekeeping & Maintenance Management	3
CUL	270	Human Relations Management	3
		Total Credits	**17**

Human Resource Management - 5202013359

(Offered at BSC, ELC, GTW, HEC, MDC, MYC, SEC,WKC)

Required:

BAS	274	Human Resource Management	3
BAS	287	Supervisory Management	3
ACT	196	Payroll Accounting	3

Choose 9 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	280	Business Internship OR	(1-3)
COE	199	Cooperative Education	(1-3)
ISX	100	Introduction to Industrial Safety	3
BAS	284	Applied Management Skills	3
BAS	288	Person & Organizational Leadership	3
BAS	290	Management, Ethics & Society	3
BAS	299	Selected Topics in Management: (Option Topic)	.1-3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
QMS	202	Performance Management	3
PSY	180	Human Relations	3
		Total Credits	**18**

*Students may select other courses approved by the Business Administration Program Coordinator.

Industrial Supervisor - 5202013339

(Offered at ASC, SEC)

General Education:

ENG	101	Writing I	3
MAT	150	College Algebra	3
COM	181	Basic Public Speaking OR	3
COM	252	Interpersonal Communications OR	(3)
PSY	110	General Psychology	(3)

Required Technical:

BAS	287	Supervisory Management	3
INDT	120	Industrial Safety	3
INDT	233	Statistical Process Control	3
BAS	274	Human Resource Management	3
CIS	100	Introduction to Computers	3

Choose 6 hours from the approved Technical Courses:

BAS	160	Introduction to Business	3
INDT	220	Introduction to Industrial Psychology	3
ENV	101	Fundamentals of Environment Science	1
ENV	131	Environment Management	2
INDT	250	Team Dynamics & Problem – Solving	3
		Total Credits	**30**

Leadership - 5202013199

(Offered at ASC, BGT, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

BAS	288	Personal and Organizational Leadership	3
BAS	160	Introduction to Business	3
ECO	101	Contemporary Economic Issues OR	3
ECO	201	Principles of Microeconomics OR	(3)
ECO	202	Principles of Macroeconomics	(3)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
		Total Credits	**12**

Management - 5202013209

(Offered at ASC, BGT, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

BAS	283	Principles of Management	3
BAS	212	Introduction to Financial Management OR	3
QMS	101	Introduction to Quality Systems OR	(3)
		Second Mathematics Course from General Education not Duplicative of core math	(3)
BAS	284	Applied Management Skills	3

Choose 6 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator Management Course:

ACT	277	Managerial Accounting Topics	3
BAS	200	Small Business Management	3
BAS	256	International Business	3
BAS	260	Professional Development & Protocol	2
BAS	274	Human Resource Management	3
BAS	285	Problems in Marketing & Management	3
BAS	287	Supervisory Management	3
BAS	288	Personal & Organizational Leadership	3
BAS	289	Operations Management	3
BAS	290	Management, Ethics & Society	3
BAS	291	Retail Management	3
BAS	299	Selected Topics Management: (Option Topic)	1-3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
QMS	202	Performance Management	3
		Total Credit Hours	**15**

Office Systems - 5202013219

(Offered at BSC, GTW, HEC, HZC, MDC, SEC, SMC)

Required:

OST	110	Document Formatting and Word Processing	3
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures	3
OST	220	Administrative Office Simulations	3

Choose 6 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

OST	150	Transcription and Office Technology	3
OST	160	Records and Database Management	3
OST	216	Selected Topics in Office Systems: (Topic)	1-3
OST	235	Business Communications Technology	3
OST	295	Office Systems Technology Internship OR	1-3
COE	199	Cooperative Education: (Business Technology) OR	(1-3)
BAS	280	Business Internship	(1-3)
OST	275	Office Management	3
		Total Credits	**18**

Operations Management - 5202013369

(Offered at GTW, HPC, MYC, SEC,WKC)

Required:

BAS	160	Introduction to Business	3
BAS	287	Supervisory Management OR	3
BAS	288	Personal & Organizational Leadership OR	(3)
QMS	101	Introduction to Quality Systems	(3)
BAS	289	Operations Management OR	3
MFG	256	Production Management	(3)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Skills	(3)
		Total Credits	**12**

Payroll Accounting Specialist - 5202013439

(Offered at ASC, BGT, BSC, SEC, MDC, OWC,WKC)

Required:

ACC	201	Financial Accounting OR	3
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
ACT	196	Payroll Accounting	3
ACT	279	Computerized Accounting Systems	3
		Total Credits	**9-12**

Pre-Licensing Real Estate - 5202013239

(Offered at ASC, BSC, ELC, MDC, MYC, OWC, SEC, SMC,WKC)

Required:

REA	100	Real Estate Principles I	3

Choose 3 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

REA	120	Real Estate Marketing	3
REA	200	Real Estate Principles II	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
		Total Credits	**6**

Quality Management - 5202013229

(Offered at BSC, OWC, SEC, SMC)

Required:

QMS	101	Introduction to Quality Systems	3
QMS	240	Statistics for Quality I	3
QMS	201	Customer Service Improvement Skills	3
QMS	202	Performance Management	3
MAT	150	College Algebra	3
		Total Credits	**15**

Residential Real Estate - 5202013249

(Offered at BSC, ELC, MDC, MYC, OWC, SMC,WKC)

Required:

REA	100	Real Estate Principles I	3
REA	120	Real Estate Marketing	3

Choose 6 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

REA	121	Appraising	3
REA	122	Construction and Blueprints	3
REA	200	Real Estate Principles II	3
REA	201	Property Management	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
		Total Credits	**12**

Sales - 5202013259

(Offered at BSC, MYC, OWC, SEC, SMC,WKC)

Required:

BAS	155	Personal Selling	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)

Choose 6 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	291	Retail Management	3
IT	132	Web Page Development	3
QMS	201	Customer Service Improvement Skills	3
BAS	260	Professional Development and Protocol	2
COE	199	Cooperative Education OR	1-3
BAS	280	Business Internship	(1-3)
		Total Credits	**12**

Small Business Management - 5202013269

(Offered at ASC, BSC, ELC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)
Available Completely Online

Required:

BAS	160	Introduction to Business OR	3
BAS	170	Entrepreneurship	(3)
BAS	200	Small Business Management	3
BAS	212	Introduction to Financial Management OR	3
QMS	101	Introduction to Quality Systems OR Second Mathematics Course from General Education	(3)
BAS	282	Principles of Marketing	3
ACC	201	Financial Accounting OR	3
ACT	177	Entrepreneurial Accounting OR	(3)
ACT	101	Fundamentals of Accounting I AND	(3)
ACT	102	Fundamentals of Accounting II	(3)
		Total Credits	**15-18**

Supervisory Management - 5202013279

(Offered at ASC, BGT, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)
Available Completely Online

Required:

CIS	100	Introduction to Computers Applications	3
OST	235	Business Communications Technology	3
BAS	160	Introduction to Business	3
BAS	287	Supervisory Management	3
BAS	274	Human Resource Management	3

Choose 6 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator.

BAS	283	Principles of Management	3
BAS	288	Personal and Organizational Leadership	3
BAS	290	Management, Ethics & Society	3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
		Total Credits	**21**

Team Leadership - 5202013309

(Offered at BGT, BSC, JFC, MDC, MYC, OWC, SEC,WKC)
Available Completely Online

Required Courses:

OST	105	Introduction to Information Systems OR	3
CIS	100	Introduction to Computers	(3)
OST	235	Business Communication Technology OR	3
COM	181	Basic Public Speaking OR	(3)
COM	252	Interpersonal Communications	(3)
BAS	287	Supervisory Management	3
BAS	288	Personal & Organizational Leadership	3
QMS	101	Quality Management Systems	3

Choose 3 hours from the following Technical Courses. Students may select other courses as approved by the Business Administration Systems Program Coordinator

QMS	202	Performance Management	3
BAS	160	Introduction to Business	3
BAS	274	Human Resource Management	3
BAS	290	Management, Ethics & Society	3
		Total Credits	**18**

Telecommunication Systems Management - 5202013289

(Offered at SMC)

Required:

CMS	105	Multimedia Production and Applications I	3
CMS	205	Multimedia Production and Applications II	3
CMS	269	Media Advertising	3
COM	249	Mass Media/Mass Culture	3
JAT	101	Introduction to Communication Media	3

Choose 3-5 hours from the following Technical Courses. Students may select other courses (JAT, COM, or CMS course, except CMS 185) as approved by the Business Administration Systems Program Coordinator.

CIS	150	Doing Business on the Internet	1
CIS	151	Introduction to Electronic Commerce	3
CIS	152	Introduction to Web Page Design	1
CIS	153	Intermediate Web Page Design	2
BAS	284	Applied Management Skills	3
BAS	287	Supervisory Management	3
BAS	299	Selected Topics in Management: (Option Topic)	1-3
ENG	203	Business Writing OR	3
JOU	204	Writing for Mass Media	(3)
COE	199	Cooperative Education: (Business Administration)	1-3
		OR	
BAS	280	Business Internship	(1-3)
		Total Credits	**18-20**

Turf Grass / Landscaping Management - 5202013299

(Offered at OWC, SMC)

Required:

TGM	140	Turf Grass for Golf and Landscaping	3
AGR	125	Introduction to Soils & Fertilizers	3
TGM	210	Turf Grass Science	3
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
		Technical Course	3

Choose 3 hours from the following Approved Technical Courses:

TGM	160	Golf Course Maintenance Systems	3
TGM	220	Golf Course Irrigation	3
TGM	230	Golf Course Operations	3
AGR	140	Issues in Agriculture	3
AGR	160	Agriculture Seminar	3
AGR	170	Introduction to Equipment, Machines, & Engines	3
HRT	104	Herbaceous Plant Identification	4
HRT	108	Woody Plant Identification	4
HRT	120	Turf Management	3
COE	199	Cooperative Education OR	1-3
BAS	280	Business Internship	(1-3)
		Total Credits	**17**

Medical Information Technology

Medical Information Technology graduates prepare medical records and reports, maintain files, order supplies, perform accounting procedures, work with medical insurance and coding, and receive patients in a variety of health care settings. Laboratory and classroom experiences are combined to prepare graduates for careers in health care facilities. Some of the diplomas include Medical Administrative Assistant, Medical Insurance Coder, and Medical Transcriptionist. Students enrolled in the degree or diploma programs are required to do an internship or cooperative experience in a medical office environment.

Progression in the Medical Information Technology program is contingent upon achievement of a grade of "C" or better in each course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Medical Information Technology - 5107167019

(Offered at BGT, BLC, BSC, ELC, GTW, HZC, MDC, MYC, SMC,WKC)

General Education:

MAT	105	Math for Business OR	3
MAT	110	Applied Math OR	(3)
MAT	150	College Algebra OR	(3)
MAT	146	Contemporary College Mathematics OR	(3)
		A Higher Level Mathematics Course	(3)
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology	(3)
ENG	101	Writing I	3
ENG	102	Writing II	3
		Science*	3-4
		Oral Communication	3
		Heritage/Humanities	3
		Computer Literacy	3
		Subtotal	**24-25**

Technical Core:

OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST**	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Application	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek and Latin	(3)
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Subtotal	**27**

*When a science course other than a general education anatomy and physiology is used to meet the requirement for Science, one of the following courses must be included in the technical core.

AHS	109#	Introduction to Body Structure and Function	(4)
		OR	
BIO	135	Basic Anatomy and Physiology with Laboratory	(4)
		OR	
BIO	130	Aspects of Human Biology	(3)
		OR	
BIO	137	Human Anatomy and Physiology I	(4)
		AND	
BIO	139	Human Anatomy and Physiology II	(4)
**OST	230	is required for the Medical Records Option	
		Technical and General Education Subtotal	**51 – 52**

#This course does not meet general education requirements.

Administrative Option - 510716701

(Offered at BGT, BLC, BSC, GTW, HZC, MDC, SMC,WKC)

Available Completely Online

ACT	101	Fundamentals of Accounting I OR	3
ACC	201	Financial Accounting I	(3)
OST	225	Introduction to Desktop Publishing	3
OST	235	Business Communications Technology	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
		Course Approved by Program Coordinator	3
		Subtotal	**14 –15**
		Total	**65-67**

Insurance Coding Option - 510716702

(Offered at BLC, BSC, ELC, HZC, MDC, MYC, SMC,WKC)

Available Completely Online

ACT	101	Fundamentals of Accounting I OR	3
ACC	201	Financial Accounting I	(3)
OST	204	Medical Coding	3
OST	205	Advanced Medical Coding	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
		Course Approved by Program Coordinator	3
		Subtotal	**14-15**
		Total	**65-67**

Medical Records Option - 510716703

(Offered at BLC, BSC, ELC, HZC, MDC, MYC, SMC,WKC)

Available Completely Online

ACT	101	Fundamentals of Accounting I	3
ACC	201	Financial Accounting I	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
		Courses Approved by Program Coordinator	6-9
		Subtotal	**11-15**
		Total	**62-67**

Transcription Option - 510716704

(Offered at BLC, BSC, ELC, HZC, MDC, SMC,WKC)

Available Completely Online

OSTL	106	Introduction to Medical Transcription Lab	1
OST	206	Medical Transcription	3
OSTL	206	Medical Transcription Lab	2
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
		Course Approved by Program Coordinator	3
		Subtotal	**11-12**
		Total	**62-64**

Diplomas

Medical Administrative Assistant - 5107164019

(Offered at BGT, BLC, BSC, ELC, HZC, JFC, MYC, SMC,WKC)

Available Completely Online

General Education/Applied Academics

BIO	130	Aspects of Human Biology OR	3
AHS	109#	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
OST	108	Editing Skills for Office Professionals OR	3
ENG	101	Writing I	(3)
		Subtotal	**6-11**

#This course does not meet general education requirements.

Technical or Support Courses

ACT	101	Fundamentals of Accounting I	3
ACC	201	Financial Accounting I	(3)
OST	110	Document Formatting and Word Processing	3
OST	213	Business Calculation for Office Professionals OR	3
MAT	105	Business Mathematics OR Higher Math course	(3)
OST	235	Business Communications Technology	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Application	3
OST	240	Software Integration	3
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Course Approved by Program Coordinator	3
		Subtotal	**44-45**
		Total	**50 – 56**

Medical Office Assistant - 5107164039

(Offered at BLC, BSC, ELC, GTW, HZC, MYC, SEC, SMCWKC)

Available Completely Online

General Education/Applied Academics

BIO	130	Aspects of Human Biology OR	3
AHS	109#	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
OST	108	Editing Skills for Office Professional OR	3
ENG	101	Writing I	(3)
		Subtotal	**6-11**

#This course does not meet general education requirements.

Technical or Support Courses

OST	110	Document Formatting and Word Processing	3
OST	213	Business Calculations for Office Professionals OR	3
MAT	105	Business Math OR Higher Math course	(3)
OST	235	Business Communications Technology	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Application	3
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Subtotal	**35-36**
		Total	**41-47**

Medical Insurance Coding - 5107164029

(Offered at BLC, BSC, ELC, HZC, MDC, MYC, SMC,WKC)

Available Completely Online

General Education/Applied Academics

BIO	130	Aspects of Human Biology OR	3
AHS	109#	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
ENG	101	Writing I OR	3
OST	108	Editing Skills for Office Professional OR	(3)
		Subtotal	**6-11**

#This course does not meet general education requirements.

Technical or Support Courses

OST	110	Document Formatting and Word Processing	3
OST	213	Business Calculations for Office Professionals OR	3
MAT	105	Business Math OR Higher Math course	(3)
OST	235	Business Communications Technology	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
OST	104	Introduction to Medical Insurance	3
OST	204	Medical Coding	3
OST	205	Advanced Medical Coding	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Subtotal	**35-36**
		Total	**41 – 47**

Medical Records Clerk - 5107164049

(Offered at BLC, BSC, ELC, GTW, HZC, JFC, MYC, SMC,WKC)
Available Completely Online

General Education/Applied Academics

BIO	130	Aspects of Human Biology OR	3
AHS	109#	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
OST	108	Editing Skills for Office Professional OR	3
ENG	101	Writing I	(3)
		Subtotal	**6-11**

#This course does not meet general education requirements.

Technical or Support Courses

OST	110	Document Formatting and Word Processing	3
OST	235	Business Communications Technology	3
OST	210	Advanced Word Processing Application	3
OST	240	Software Integration	3
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education OR	(2)
OST	104	Introduction to Medical Insurance	3
OST	230	Medical Records and Data Management	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Subtotal	**32-33**
		Total	**38-44**

Medical Transcriptionist - 5107164059

(Offered at BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, SMC,WKC)
Available Completely Online

General Education/Applied Academics

BIO	130	Aspects of Human Biology OR	3
AHS	109#	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
OST	108	Editing Skills for Office Professionals OR	3
ENG	101	Writing I	(3)
		Subtotal	**6-11**

#This course does not meet general education requirements.

Technical or Support Courses

OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Application	3
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2)
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OSTL	106	Introduction to Medical Transcription Lab	1
OST	206	Medical Transcription	3
OSTL	206	Medical Transcription Lab	2
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	110	Document Formatting and Word Processing	3
		Computer Literacy	3
		Subtotal	**32-33**
		Total	**38-44**

Certificates

Medical Unit Coordinator - 5107163019

(Offered at BGT, BLC, BSC, ELC, HZC, MDC, MYC, OWC, SEC, SMC,WKC)
Available Completely Online

BIO	130	Aspects of Human Biology OR	3
AHS	109	Introduction to Body Structure and Functions OR	(4)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
OST	108	Editing Skills for Office Professionals OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Total	**30-35**

Hospital Admissions Clerk - 5107163029

(Offered at BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)
Available Completely Online

OST	108	Editing Skills for Office Professionals OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	235	Business Communications Technology	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	104	Introduction to Medical Insurance	3
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
OST	227	Medical Office Software	3
		Computer Literacy	3
		Total	**27**

Medical Receptionist - 5107163049

(Offered at BGT, BLC, BSC, ELC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

OST	108	Editing Skills for Office Professionals OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
		Computer Literacy	3
		Total	**18**

Medical Office Trainee - 5107163039

(Offered at BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	103	Medical Office Terminology OR	3
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek & Latin	(3)
		Computer Literacy	3
		Total	**12**

Office Systems Technology

Office Systems Technology program is an integrated curriculum which prepares graduates at the certificate, diploma, and associate degree level. The Office Systems Technology program prepares students to work in an office environment of people, process, and technologies. Job titles may include Administrative Assistant, Office Assistant, Office Manager, and Financial Assistant. These personnel use a variety of office technology and computer-based applications (word processing, electronic mail, desktop publishing, graphics, database, and spreadsheet). They support and help facilitate accurate communication and information exchange to internal and external customers on a timely basis. Technical courses combined with general education courses prepare students for today's workforce and provide a basis for lifelong learning, a necessity for the workforce of the future. Students select an area of specialty from the following options: financial assistant, administrative, desktop publishing, legal, and medical. Program graduates are employed in professional office, education, government, businesses, and industries. Graduates may choose to sit for the Certified Professional Secretary Examination or Certified Administrative Professional Examination or Microsoft Office Specialists Certifications.

Students entering this program will need to have basic computer skills and keyboarding skills. Those skills may be obtained through OST 105 (Introduction to Information Systems) or a comparable Computer Literacy** course and OST 100 (Keyboarding) and OST 101 (Keyboarding & Introduction to Document Formatting).

Associate in Applied Science

(Offered at ASC, BLC, ELC, JFC, HPC, MYC, OWC, SEC, SMC,WKC)

Office Systems Technology - 5204027039

General Education:

ENG	101	Writing I	3
MAT	105	Business Mathematics OR	3
MAT	110	Applied Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Heritage/Humanities/Foreign Language Course	3
		Oral Communication Course	3
		Natural/Applied Science Course*	3-4
		Social Interaction Course***	3
		Computer Literacy**	3
		General Education Credit Hours	21-22

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

Technical Core

OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Database Management	(3)
OST	210	Advanced Word Processing Application	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
OST	235	Business Communications Technology	3
OST	275	Office Management	3
		Second Writing Course approved by Program Coordinator	3
		Technical Core Credit Hours	**21**

*Medical Option Students must take BIO 135 or BIO 130 or (BIO 137 and BIO 139).

***Association of Collegiate Business Schools and Programs (ACBSP) accredited colleges must require Economics.

Administrative Option - 520402701

(Offered at ASC, BLC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	220	Administrative Office Simulation	3
OST	225	Introduction to Desktop Publishing	3

Choose three courses (8-9 credit hours) from the following list:

OST	150	Transcription and Office Technology	3
OST	115	Input Technologies	3
OST	114	Computerized Financial Management	3
BAS	160	Introduction to Business	3
OST	108	Editing Skills for the Office Professional	3
OST	272	Presentation Graphics	3
OST	250	Advanced Desktop Publishing	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Administrative Option Credit Hour	**20-21**
		Total Credit Hours OST AAS Administrative Option	**62-64**

Financial Assistant Option - 520402703

(Offered at BLC,WKC)

Available Completely Online

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
ACT	102	Fundamentals of Accounting II OR	3
		Higher Level Accounting Course	(3)
ACT	279	Computerized Accounting Systems OR	3
OST	114	Computerized Financial Management	(3)
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)

Choose three courses (8-9 hours) from the following list:

OST	112	Financial Management	3
BAS	160	Introduction to Business	3
OST	225	Introduction to Desktop Publishing	3
OST	115	Input Technologies	3
BAS	120	Personal Finance	3
OST	213	Business Calculations for the Office Professional	

OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Financial Assistant Option Credit Hours	**20-21**
		Total Credit Hours OST AAS Financial Assistant Option	**62-64**

Desktop Publishing Option - 520402704

(Offered at BLC)
Available Completely Online

OST	130	Typography	3
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures OR	(3)
OST	120	Legal Office Systems	(3)
OST	225	Introduction to Desktop Publishing	3
OST	250	Advanced Desktop Publishing	3
OST	255	Introduction to Business Graphics	3
OST	272	Presentation Graphics	3
OST	220	Administrative Office Simulation OR	3
OST	295	Office Systems Technology Internship OR	(3)
COE	199	Cooperative Education	(2-3)
		Total Desktop Publishing Option Credit Hours	**20-21**
		Total Credit Hours OST AAS Desktop Publishing Option	**62-64**

Legal Administrative Option - 520402705

(Offered at BLC,WKC)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting	(3)
OST	114	Computerized Financial Management	3
BAS	267	Introduction to Business Law	3
OST	109	Legal Terminology	3
OST	221	Legal Office Simulations	3
OST	120	Legal Office Systems OR	3
OST	215	Office Procedures OR	(3)
OST	217	Medical Office Procedures	(3)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
		Total Legal Administrative Assistant Option Credit Hours	**21**
		Total Credit Hours OST AAS Legal Administrative Option	**63-64**

Medical Administrative Option - 520402702

(Offered at ASC, BLC, HPC, MYC, OWC, SMC,WKC)
Available Completely Online

OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	227	Medical Office Software	3
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)

Choose four courses (11-13 hours) from the following list:

BIO	139	Human Anatomy and Physiology II (If BIO 137 was taken for Science)	4
OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
OST	204	Medical Coding	3
OST	206	Medical Transcription	3
OST	205	Advanced Medical Coding	3
ACT	101	Fundamentals of Accounting 1 OR	3
ACC	201	Financial Accounting	(3)
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Medical Option Credit Hours	**20-22**
		Total Credit Hours OST AAS Medical Option	**62-65**

Diplomas

Administrative Assistant - 5204024019

(Offered at ASC, BGT, BLC, BSC, ELC, JFC, MYC, SMC,WKC)
Available Completely Online

General Education

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	225	Introduction to Desktop Publishing	3
OST	235	Business Communications Technology	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)

Choose three courses (8-9 hours) from the following list:

OST	150	Transcription and Office Technology	3
OST	115	Input Technologies	3
BAS	160	Introduction to Business	3
OST	114	Computerized Financial Management	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Technical Hours	**35-36**
		Total Credit Hours	**41-42**

Desktop Publishing Specialist - 5204024029

(Offered at BLC)
Available Completely Online

General Education

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	110	Document Formatting and Word Processing	3
OST	130	Typography	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures	3
OST	225	Introduction to Desktop Publishing	3
OST	235	Business Communication Technology	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
OST	250	Advanced Desktop Publishing	3

OST	255	Introduction to Business Graphics	3
OST	272	Presentation Graphics	3
OST	220	Administrative Office Simulation OR	3
OST	295	Office Systems Technology Internship OR	(3)
COE	199	Cooperative Education	(2-3)
		Total Technical Hours	**38-39**
		Total Credit Hours	**44-45**

Financial Assistant - 5204024049

(Offered at BGT, BLC, BSC, ELC, JFC, SMC,WKC)
Available Completely Online

General Education

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
ACT	102	Fundamentals of Accounting II OR	3
		Higher Level Accounting Course	(3)
OST	114	Computerized Financial Management OR	3
ACT	279	Computerized Accounting Systems	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)

Choose three courses (8-9 hours) from the following list:

OST	112	Financial Management	3
OST	210	Advanced Word Processing	3
OST	115	Input Technologies	3
OST	225	Introduction to Desktop Publishing	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Technical Hours	**32-33**
		Total Credit Hours	**38-39**

Legal Office Assistant - 5204024059

(Offered at BLC,WKC)

General Education

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level of Accounting Course	(3)
BAS	267	Introduction to Business Law	3
OST	109	Legal Terminology	3
OST	221	Legal Office Simulations	3
OST	120	Legal Office Systems OR	3
OST	215	Office Procedures OR	(3)
OST	217	Medical Office Procedures	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	235	Business Communications Technology	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)

Choose one course (3 hours) from the following:

OST	114	Computerized Financial Management	3
OST	210	Advanced Word Processing Applications	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	3
		Total Technical Hours	**33**
		Total Credit Hours	**39**

Medical Office Assistant - 5204024069

(Offered at ASC, BGT, BLC, MYC, SMC,WKC)
Available Completely Online

General Education

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

AHS	109	Introduction to Body Structure and Functions OR	4
BIO	135	Basic Anatomy and Physiology with Lab OR	(4)
BIO	130	Aspects of Human Biology OR	(3)
BIO	137	Human Anatomy and Physiology I	(4)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
OST	227	Medical Office Software	3
OST	235	Business Communications Technology	3

Choose four courses (11-13 hours) from the following list:

OST	104	Introduction to Medical Insurance	3
OST	106	Introduction to Medical Transcription	3
BIO	139	Human Anatomy and Physiology II (If BIO 137 was taken)	4
OST	204	Medical Coding	3
OST	206	Medical Transcription	3
ACT	101	Fundamentals of Accounting 1	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Technical Hours	**38-41**
		Total Credit Hours	**44-47**

Office Assistant - 5204024039

(Offered at ASC, BGT, BLC, BSC, ELC, JFC, MYC, SEC, SMC,WKC)

Available Completely Online

General Education

OST	108	Editing Skills for the Office Professional- OR	3
ENG	101	Writing I	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total General Education	**6**

Technical Courses

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures OR3	
OST	217	Medical Office Procedures	(3)
OST	235	Business Communications Technology	3
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)

Choose three courses (9 hours) from the following list:

OST	150	Transcription and Office Technology	3
OST	115	Input Technologies	3
ACT	101	Fundamentals of Accounting 1	3
OST	114	Computerized Financial Management	3
BAS	160	Introduction to Business	3
OST	225	Introduction to Desktop Publishing	3
OST	295	Office Systems Technology Internship OR	3
COE	199	Cooperative Education	(2-3)
		Total Technical Hours	**30**
		Total Credit Hours	**36**

Certificates

Administrative - 5204023039

(Offered at ASC, BLC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
OST	110	Document Formatting and Word Processing	3
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
OST	235	Business Communications Technology	3
OST	160	Records and Database Management	3
ACT	101	Fundamental of Accounting I OR	3
		Higher level Accounting Course	(3)

Choose one course (3 hours) from the following list:

OST	150	Transcription and Office Technology	3
OST	115	Input Technologies	3
OST	114	Computerized Financial Management	3
		Total Credit Hours	**30**

Basic Business Presentation - 5204023119

(Offered at BLC, SEC, SMC,WKC)

Available Completely Online

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	225	Introduction to Desktop Publishing	3
OST	255	Introduction to Business Graphics	3
OST	272	Presentation Graphics	3
		Total Credit Hours	**15**

Data Entry Operator - 5204023079

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	110	Document Formatting and Word Processing	3
		Total Credit Hours	**6**

Desktop Publishing - 5204023099

(Offered at BLC, BSC, SEC, SMC,WKC)

Available Completely Online

ENG	101	Writing I OR	3
OST	108	Editing Skills for the Office Professional	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	110	Document Formatting and Word Processing	3
OST	130	Typography	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	225	Introduction to Desktop Publishing	3
OST	255	Introduction to Business Graphics3	3
OST	272	Presentation Graphics	3
		Total Credit Hours	**27**

Electronic Health Records Specialist - 5204023229

(Offered by ASC, GTW, OWC,WKC)

OST	105	Introduction to Information Systems OR	3
CIS	100	Introduction to Computers	(3)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
OST	104	Introduction to Medical Insurance	3
OST	110	Document Formatting and Word Processing	3
OST	204	Medical Coding	3
OST	217	Medical Office Procedures	3
OST	227	Medical Office Software	3
OST	228	Electronic Health Records	3
OST	230	Medical Records/Data Management	3
CIS	130	Microcomputer Applications	3
		Total Credit Hours	**30**

Financial Assistant Clerk - 5204023129

(Offered at BGT, BLC, BSC, HPC, JFC, OWC, SEC, SMC,WKC)

Available Completely Online

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total Credit Hours	**18**

Financial Assistant Trainee - 5204023139

(Offered at BGT, BLC, BSC, HPC, JFC, OWC, SEC, SMC,WKC)

Available Completely Online

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
OST	110	Document Formatting and Word Processing	3
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
		Total Credit Hours	**12**

Financial Record Keeper - 5204023069

(Offered at BGT, BLC, BSC, JFC, OWC, SEC, SMC,WKC)

Available Completely Online

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

ACT	101	Fundamentals of Accounting I OR	3
		Higher Level Accounting Course	(3)
OST	114	Computerized Financial Management OR	3
		Higher Level Accounting Course	(3)
OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	112	Financial Management OR	3
		Course Approved by Program Coordinator	(3)
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
		Total Credit Hours	**30**

Integrated Office Skills - 5204023059

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, OWC, SEC, SMC,WKC)

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	210	Advanced Word Processing Applications	3
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	240	Software Integration OR	3
CIS	130	Microcomputer Applications	(3)
		Total Credit Hours	**21**

Legal Receptionist - 5204023149

(Offered at BLC, MYC, SEC,WKC)

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	109	Legal Terminology	3
		Total Credit Hours	**15**

Medical Administrative - 5204023049

(Offered at ASC, BLC, HPC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	213	Business Calculations for the Office Professional OR	3
MAT	105	Business Mathematics OR	(3)
		Higher Level Mathematics Course	(3)
OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
OST	104	Introduction to Medical Insurance OR	3
OST	106	Introduction to Medical Transcription	(3)
OST	110	Document Formatting and Word Processing	3
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	215	Office Procedures OR	3
OST	217	Medical Office Procedures	(3)
OST	235	Business Communications Technology	3
AHS	109	Introduction to Body Structure and Functions OR	4
BIO	135	Basic Anatomy and Physiology with Lab OR	(4)
BIO	130	Aspects of Human Biology OR	(3)
BIO	137	Human Anatomy and Physiology I	(4)
		Course Approved by Program Coordinator OR	3
BIO	139	Human Anatomy and Physiology II (if BIO 137 was taken)	(4)
		Total Credit Hours	**33-35**

Medical Admissions Clerk - 5204023109

(Offered at ASC, BLC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Computer Literacy** 3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	110	Document Formatting and Word Processing	3

OST	160	Records and Database Management OR	3
OST	230	Medical Records Management	(3)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
		Total Credit Hours	**15**

Medical Coding - 5204023199

(Offered at BLC, HPC, OWC, SEC,WKC)

Available Completely Online

OST	101	Keyboarding & Intro to Word Processing OR	3
OST	110	Document Formatting & Word Processing	(3)
AHS	109	Introduction to Body Structure and Functions OR	4
BIO	135	Basic Anatomy and Physiology with Lab OR	(4)
BIO	130	Aspects of Human Biology OR	(3)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II (if BIO 137 was taken)	(4)
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek & Latin OR	(3)
AHS	115	Medical Terminology	(3)
OST	104	Introduction to Medical Insurance	3
OST	204	Medical Coding	3
OST	205	Advanced Medical Coding	3
		Total Credit Hours	**18-23**

Medical Transcriptionist - 5204023209

(Offered at BLC, HPC, SEC,WKC)

Available Completely Online

OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek & Latin OR	(3)
AHS	115	Medical Terminology	(3)
OST	106	Introduction to Medical Transcription	3
OSTL	106	Introduction to Medical Transcription Lab (Optional)	(1)
OST	206	Medical Transcription	3
OSTL	206	Medical Transcription Lab (Optional)	(2)
OST	212	Medications	1
OST	113	Speedbuilding	1
OST	217	Medical Office Procedures OR	3
OST	215	Office Procedures	(3)
		Total Credit Hours	**14-17**

Receptionist - 5204023089

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

		Computer Literacy**	3

(**Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.)

OST	108	Editing Skills for the Office Professional OR	3
ENG	101	Writing I	(3)
OST	160	Records and Database Management OR	3
OST	230	Medical Records and Data Management	(3)
OST	110	Document Formatting and Word Processing	3
		Total Credit Hours	**12**

Business Management and Marketing

The Business Management and Marketing program prepares students for a variety of careers in business. A core curriculum provides students with a foundation of knowledge applicable to any business career. The curriculum is designed for those who seek entry-level jobs, as well as for currently employed individuals wishing to enhance their skills. A student specializes by choosing from one of the following options: The Management Option prepares the student with broad-based management knowledge and skills, which lead to a variety of positions in organizations. The Marketing and Retailing Option leads to employment in sales, merchandise management, buying, department supervising, or retail management. The Real Estate Management Option leads to a career in real estate, which may include sales, finance, counseling, development market analysis, valuation, and/or property management. The Equine Management Option provides the knowledge and skills students need to take advantage of various employment opportunities within the horse industry. All students must complete the computer literacy requirement as defined by KCTCS before graduating.

Associate in Applied Science

Business Management and Marketing Core – 5202017139

(Offered at BLC)

General Education

COM	181	Basic Public Speaking* OR	3
COM	252	Introduction to Interpersonal Communications*	(3)
ENG	101	Writing I*	3
ENG	102	Writing II*	3
ENG	203	Business Writing	3
ECO	201	Principles of Microeconomics*	3
		College Algebra or Higher*	3
		Heritage/Humanities/Foreign Language Course*	3
		Science Course *	3
		Subtotal	**24**

*Satisfies General Education requirement for AAS degree

Technical Core

MGT	101	Quality Management Principles	3
MGT	160	Introduction to Business	3
MGT	240	Business Ethics and Self Management	3
MKT	282	Principles of Marketing	3
MGT	283	Principles of Management	3
ACC	201	Financial Accounting	3
ACC	202	Managerial Accounting	3
CIT	130	Productivity Software **OR**	3
IMD	210	Integrated Information Processing **OR**	(3)
OST	240	Software Integration **OR**	(3)
		Microsoft MCAS certification	
		Subtotal	**24**
		Core Subtotal	**48**

Management Option - 520201711

(Offered at BLC)

Required:

MGT	200	Small Business Management **OR**	3
MGT	256	Operations Management	(3)
MGT	274	Human Resource Management **OR**	3
MGT	287	Supervisory Management	(3)
MGT	284	Applied Management Skills	3
MGT	267	Introduction to Business Law	3

Choose a total of 6 hours from the following:

MGT	120	Personal Finance	3
MGT	200	Small Business Management	3
MGT	256	Operations Management	3
MGT	258	Project Management	3
MGT	274	Human Resource Management	3
MGT	287	Supervisory Management	3
MGT	288	Self Management	3
MKT	155	Personal Selling	3
MKT	290	Advertising and Promotion	3
MKT	291	Retail Management	3
MKT	293	Buying and Merchandising	3
MGT	299	Selected Topics in Management: (Option Topic)	1-3
MKT	299	Selected Topics in Marketing: (Option Topic)	1-3
IMD	275	Workplace Management	3

COE	199	Cooperative Education: Business Technology	1-4
ECO	202	Principles of Macroeconomics	3
REA	100	Real Estate Principles I	3
REA	120	Real Estate Marketing	3
MA	123	Elementary Calculus	3
STA	291	Statistical Methods	3
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology	(3)
		Subtotal	**18-19**
		Total	**66-67**

Marketing and Retailing Option - 520201712

(Offered at BLC)

Required:

MKT	155	Personal Selling	3
MKT	290	Advertising and Promotion	3
MKT	291	Retail Management	3
MKT	293	Buying and Merchandising	3
MGT	267	Introduction to Business Law	3

Choose 3 hours from the following:

MGT	120	Personal Finance	3
MGT	200	Small Business Management	3
MGT	258	Project Management	3
MGT	288	Self Management	3
MKT	299	Selected Topics in Business Management and Marketing (Option Topic)	1-3
COE	199	Cooperative Education: Business Management and Marketing	1-4
ECO	202	Principles of Macroeconomics	3
		Subtotal	**18-19**
		Total	**66-67**

Real Estate Management Option – 520201713

(Offered at BLC)

Required:

REA	100	Real Estate Principles I	3
REA	121	Appraising	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3

Choose 6 hours from the following:

REA	120	Real Estate Marketing	3
REA	122	Construction and Blueprints	3
REA	200	Real Estate Principles II	3
REA	201	Property Management	3
REA	202	Real Estate Investments I	3
REA	220	Real Estate Brokerage Management	3
COE	199	Cooperative Education: Business Management and Marketing	1-4
		Subtotal	**18-19**
		Total	**66-67**

Equine Management Option – 520201710

(Offered at BLC)

Required:

EQM	100	Introduction to Equine Studies	3
EQM	120	Introduction to Commercial Breeding Practices	4
EQM	140	Equine Business Management I	2
EQM	240	Equine Business Management II	2
EQM	242	Equine Law	3
EQM	246	Current Trends in the Equine Industry	1
EQM	250	Equine Practicum	3
		Subtotal	**18**
		Total	**66**

Certificates

Equine Management – 5202013399

(Offered at BLC)

Required:

EQM	100	Introduction to Equine Studies	3
EQM	120	Introduction to Commercial Breeding	4
EQM	140	Equine Business Management I	2
MGT	160	Introduction to Business	3
EQM	240	Equine Business Management II	2
EQM	242	Equine Law	3
EQM	246	Current Trends in the Equine Industry	1
PSY	110	General Psychology	3
MGT	101	Quality Management Principles	3
		Total	**24**

Real Estate Pre-Brokerage Management – 5202013409

(Offered at BLC)

REA	100	Real Estate Principles I	3
REA	220	Brokerage Management	3
REA	230	Real Estate Law	3
		Subtotal	**9**

Choose 9 hours from the following:

REA	120	Real Estate Marketing	3
REA	121	Appraising	3
REA	122	Construction and Blueprints	3
REA	201	Property Management	3
REA	202	Real Estate Investments	3
REA	225	Real Estate Financing	3
		Subtotal	**9**

Additional General Education Requirements:

Choose 6 hours:

PSY	110	General Psychology	3
ECO	201	Principles of Microeconomics	3
ACC	201	Financial Accounting	3
CIT	130	Productivity Software	3
		Subtotal	**6**
		Total	**24**

Real Estate Pre-Licensing – 5215013029

(Offered at BLC)

REA	100	Real Estate Principles I	3
REA	120	Real Estate Marketing	3
		Total	**6**

Choose two (2) from the following:

REA	122	Construction and Blueprints	3
REA	220	Brokerage Management	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
		Total	**6**
		Total	**12**

Civil Engineering Technology

The Civil Engineering Technology program is an Associates of Applied Science program designed to offer students the training necessary to establish careers in civil engineering technology fields. Career options include materials testing, commercial, residential and highway surveying; highway construction management; construction management; construc-

tion estimation; construction documentation; construction site design and waste-water management.

The Civil Engineering Technology Program will focus on the field tasks and hands on aspects of construction.

Associate in Applied Science

Civil Engineering Technology - 1502017019

(Offered at BLC, BSC)

Required

ENG	101	Writing I*	3
ENG	102	Writing II*	3
CAD	100	Introduction to Computer-Aided Design OR	3
ACH	185	Computer-Aided Drafting I	(3)
		Heritage/Humanities/Foreign Language Course*	3
MA	109	College Algebra*	3
		Oral Communication Course*	3
PHY	211	General Physics*	5
		Social Interaction Course*	3

Core

ACH	160	Building Materials and Construction I	3
ACH	225	Structures	3
CE	211	Surveying	4
CET	150	Civil Engineering Graphics	3
CET	200	Civil Engineering Materials	3
CET	210	Structural Analysis and Design	3
CET	220	Intermediate Surveying	4
CET	260	Hydrology and Drainage	3
MA	112	Trigonometry	2
		Elective	3
		Technical Electives	9
		Subtotal	**40**
		Total	**67**

Technical Electives**

ACH	100	Construction Documents I	3
ACH	150	Construction Documents II	3
ACH	161	Building Materials and Construction II	3
ACH	285	Computer-Aided Drafting II	3
ACH	290	Building Codes I	3
ACH	291	Construction Management	3
ACH	292	Building Codes II	3
ACH	294	Specification Writing	3
ACH	297	Estimating Techniques	3
ACH	298	Computer 3D Modeling	3
CAD	200	Intermediate Computer-Aided Design	4
CET	280	Highway Design	3
CET	295	Independent Problems	1-4
COE	199	Cooperative Education: CET	3
GIS	110	Spatial Data Analysis and Map Interpretation	3
GIS	120	Introduction to Geographic Information Systems	3
GIS	210	Advanced Topics in GIS	3
GLY	220	Principles of Physical Geology	4

* Satisfies General Education requirement for AAS degree

**Other course(s) approved by program coordinator

Clinical Laboratory Technician

The Clinical Laboratory Technician (CLT) program provides students with the opportunity to acquire the necessary skills to work under the supervision of a registered clinical scientist or pathologist in a clinical laboratory, hospital, or other health agency.

The CLT student learns to collect specimens from the patient and perform laboratory tests in all areas of the clinical laboratory to include immunohematology, clinical chemistry, hematology, microbiology, serology and urinalysis.

Students enrolled in the CLT program must achieve a minimum grade of "C" in each of the clinical laboratory technician courses.

Upon completion of the program, the graduate is eligible for the national certification examination as a clinical laboratory technician.

The following Associate Degree Clinical Laboratory Technician Programs are fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Address and telephone number of NAACLS are: NAACLS, 5600 North River Road, Suite 720, Rosemont, Illinois 60018 Telephone: 773.714.8880 Fax: 773.714.8886 (Website): http://www.naacls.org (E-mail): info@naacls.org.

Henderson Community College, Madisonville Community College, Somerset Community College, Southeast Kentucky Community and Technical College, and (West Kentucky Community and Technical College – Accreditation Pending).

All program graduates take the national board exam, called the Board of Registry of the American Society of Clinical Pathology, after having met their academic and laboratory educational requirements. If successful, graduates may then use the initials "MLT (ASCP)" indicating proficiency in laboratory medicine.

Associate in Applied Science

Clinical Laboratory Technician - 5110047029

(Offered at HEC, JFC, MDC, SEC, SMC,WKC)

General Education Courses:

ENG	101	Writing I	3
MAT	110	Applied Mathematics OR	3
		Higher mathematics course	(3)
CHE	130	Introductory General and Biological Chemistry OR	4
		Higher Chemistry course	(3)
PSY	110	General Psychology	3
		Heritage/Humanities/Foreign language	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
		Computer Literacy	0-3
		Subtotal	**(18-22)**

Core Courses:

BIO 135	Basic Anatomy & Physiology with Laboratory*	4
CLT 111	Urinalysis	2
CLT 125	Serology	2
CLT 215	Hematology I AND	4
CLT 216	Hematology II OR	3
CLT 217	Fundamentals of Hematology AND	(3)
CLT 218	Clinical Hematology	(4)
CLT 225	Immunohematology I AND	2
CLT 226	Immunohematology II OR	2
CLT 227	Immunohematology	(4)
CLT 280	Practicum	
	Option #1	4
	Option #2	5
	Subtotal	**23-24**

*BIO 137 & BIO 139 may be substituted for BIO 135

Option I-511004701

(Offered at SMC, SEC, HEC)

BIO 225	Medical Microbiology	4
CLT 101	Introduction to the Clinical Laboratory AND	3
PHB 151	Phlebotomy for the Health Care Worker AND	1
PHB 152	Phlebotomy: Clinical Experience	1

CLT 205	Clinical Microbiology I AND	3
CLT 206	Clinical Microbiology II	2
CLT 235	Clinical Chemistry I AND	3
CLT 236	Clinical Chemistry II	2
CLT 290	Practicum II	4
	Subtotal	**23**
	Total Credit Hours – Option I	**64-68**

Option II-511004702

(Offered at MDC,WKC))

CLT 207	Introduction to Clinical Diagnostic Microbiology	2
PHB 170	Applied Phlebotomy AND	3
PHB 152	Phlebotomy Clinical Experience	1
CLT 208	Clinical Diagnostic Microbiology I AND	3
CLT 209	Clinical Diagnostic Microbiology II	2
CLT 237	Introduction to Clinical Chemistry AND	3
CLT 238	Advanced Clinical Chemistry	3
CLT 290	Practicum II	5
	Subtotal	**22**
	Total Credit Hours – Option II	**64-68**

Electives

CLT 130	Applied Laboratory	3

Diploma

Certified Medical Laboratory Assistant - 5110044029

(Offered at MDC)

General Education Courses:

Course from Area I:

ENG	101	Writing I	3

Course from Area II:

MAT	110	Applied Mathematics OR	3
		Higher mathematics course	(3)

Course from Area III:

		Computer Literacy	0-3
		Subtotal	**(6-9)**

Support Courses:

BIO	135	Basic Anatomy & Physiology with Laboratory*	4
BIO	225	Medical Microbiology OR	4
CLT	130	Applied Laboratory OR	(3)
CLT	207	Introduction to Clinical Diagnostic Microbiology	(2)
		Subtotal	**(6-8)**

*BIO 137 & BIO 139 may be substituted for BIO 135.

Technical Courses:

CLT	101	Introduction to the Clinical Laboratory AND	3
PHB	151	Phlebotomy for the Health Care Worker AND	1
PHB	152	Phlebotomy: Clinical Experience AND	1
CLT	225	Immunohematology I OR	2
PHB	170	Applied Phlebotomy AND	(3)
PHB	152	Phlebotomy: Clinical Experience	(1)
CLT	111	Urinalysis	2
CLT	125	Serology	2
CLT	217	Fundamentals of Hematology OR	3
CLT	215	Hematology I	(4)
CLT	237	Introduction to Clinical Chemistry OR	3
CLT	235	Clinical Chemistry I	(3)
CLT	275	Clinical Experience	1
CLT	280	Practicum I	4
OST	217	Medical Office Procedures OR	3
MAI	150	Medical Assisting Administrative Procedures I	(3)
		Subtotal	**22-26**
		Total	**34-43**

Certificates

Physician's Office Laboratory - 51160043029

(Offered at BLC, HEC, HZC, JFC, MDC, SEC, SMC,WKC)

PHB	151	Phlebotomy AND	1
PHB	152	Phlebotomy Clinical Experience AND	1
CLT	101	Introduction to the Clinical Laboratory OR	3
PHB	170	Applied Phlebotomy AND	(3)
PHB	152	Phlebotomy Clinical Experience	(1)
CLT	111	Urinalysis	2
CLT	125	Serology	2
		Total	**8-9**

Phlebotomy for the Health Care Worker - 5110043039

(Offered at BLC, HEC, HZC, JFC, MDC, SEC, SMC,WKC)

PHB	151	Phlebotomy AND	1
PHB	152	Phlebotomy: Clinical Experience AND	1
CLT	101	Introduction to the Clinical Laboratory OR	3
PHB	170	Applied Phlebotomy AND	(3)
PHB	152	Phlebotomy: Clinical Experience	(1)
		Total	**4-5**

Advanced Phlebotomy Technician - 5110043049

(Offered at HZC, SEC,)

PHB	151	Phlebotomy AND	1
PHB	152	Phlebotomy: Clinical Experience AND	1
PHB	155	Phlebotomy Clinical AND	2
CLT	101	Introduction to the Clinical Laboratory OR	3
PHB	151	Phlebotomy AND	(1)
PHB	153	Advanced Topics in Phlebotomy AND	(4)
PHB	155	Phlebotomy Clinical OR	(3)
PHB	170	Applied Phlebotomy AND	(3)
PHB	152	Phlebotomy: Clinical Experience AND	(1)
PHB	155	Phlebotomy Clinical	(2)
		Total	**6-8**

Phlebotomist - 5110043019

(Offered at BLC, HZC, JFC)

PHB	100	Phlebotomy	6
PHB	155	Phlebotomy Clinical	3
		Total	**9**

Collision Repair Technology

From repairing small dents to rebuilding the bodies of wrecked or damaged vehicles, this program maintains the current commercial standards. Students are taught the types of materials used in filler compounds, the colors and chemical make-up of paints used to refinish, welding and cutting procedures, design and installation of trim, cost estimating and preparation for finish work. All are skills applied in actual jobs performed in shop assignments.

Progression in the Collision Repair Technology program is contingent upon achievement of a grade of "C" or better in each course and maintenance of a 2.0 cumulative grade point average.

Diploma

Collision Repair Technician - 4706034019

(Offered at BGT, BLC, BSC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

General Education Courses:

Area 1 =	Writing/Accessing Information, Oral Communications Humanities, Heritage, or Foreign Language	3

Area 2 =	Social Science, Behavioral Science, Natural/Applied Science, or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses:

CRT	100	Introduction to Collision Repair	2
CRT	130	Non-Structural Analysis and Damage Repair	6
CRT	131	Non-Structural Analysis and Damage Repair Lab	6
CRT	150	Painting and Refinishing	6
CRT	151	Painting and Refinishing Lab	6
CRT	230	Structural Analysis and Damage Repair	6
CRT	231	Structural Analysis and Damage Repair Lab	6
CRT	250	Mechanical and Electrical Components	6
CRT	251	Mechanical and Electrical Components Lab	6
		Subtotal	**50**
		Total Credits	**56-59**

Recommended Program Electives

CRT	198	Practicum OR	(1)
CRT	199	Cooperative Education	(1)
CRT	298	Advanced Practicum OR	(2)
CRT	299	Advanced Cooperative Education	(2)

Certificates

Automotive Painter - 4706033049

(Offered at BGT, BLC, BSC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

Technical Courses:

CRT	100	Introduction to Collision Repair	2
CRT	130	Non-Structural Analysis and Damage Repair	6
CRT	131	Non-Structural Analysis and Damage Repair Lab	6
CRT	150	Painting and Refinishing	6
CRT	151	Painting and Refinishing Lab	6
CRT	230	Structural Analysis and Damage Repair	6
CRT	231	Structural Analysis and Damage Repair Lab	6
		Total Credits	**38**

Automotive Painter Helper - 4706033029

(Offered at BGT, BLC, BSC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

Required:

CRT	100	Introduction to Collision Repair	2
CRT	150	Painting and Refinishing	6
CRT	151	Painting and Refinishing Lab	6
		Total Credits	**14**

Collision Repair Helper - 4706033059

(Offered at BGT, BLC, BSC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

Required:

CRT	100	Introduction to Collision Repair	2
		Electives (Collision Repair Courses with the exception of CRT 150 and CRT 151)	12
		Total Credits	**14**

Collision Repairer – 4706033109

CRT 100	Introduction to Collision Repair	2
CRT 130	Non-Structural Analysis and Damage Repair	6
CRT 131	Non-Structural Analysis and Damage Repair Lab	6
CRT 150	Painting and Refinishing	6
CRT 151	Painting and Refinishing Lab	6
CRT 230	Structural Analysis and Damage Repair	6
CRT 231	Structural Analysis and Damage Repair Lab	6
CRT 250	Mechanical and Electrical Components	6
CRT 251	Mechanical and Electrical Components Lab	6
	Total Credits	**50**

Computer Aided Drafting and Design

A computer aided drafter and designer is a technical specialist with broad-based skills for architectural, civil, mechanical, and manufacturing fields. In this program, the students are taught manual drafting techniques and 2D and 3D CAD. Specific skills taught include, but are not limited to, lettering, geometric construction, orthographic projections, dimensioning and tolerancing, and related technical processes. These skills are required to transform specifications and instructions of architects, designers, and engineers into complete and precise drawings. The drafter is a skilled technician with a thorough understanding of the graphic language and is an indispensable contributor to the engineering design team.

Progression in the Computer Aided Drafting and Design program is contingent upon achievement of a grade of "C" or greater in each technical and mathematics course with maintenance of a 2.0 cumulative grade point average or above (on a 4 scale).

Associate in Applied Science

Computer Aided Drafting and Design - 1513017029

(Offered at BLC, BSC, ELC)

General Education:

ENG	101	Writing I	3
		Mathematics (MAT 105 and MAT 120 excluded)	3
		Science	3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		Oral Communications	3
		Computer Literacy course OR demonstrated competency	0-3
		Subtotal	**18 – 21**

NOTE: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Technical Core:

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals	4
CAD	112	Engineering Graphics	4
CAD	130	Descriptive Geometry	4
CAD	200	Intermediate Computer Aided Design	4
CAD	201	Parametric Modeling	4
		Subtotal	**23**

Technical Electives:

	Choose 19 credits from the technical electives list	19
	Subtotal	**19**
	Total Credits	**60-63**

Technical Electives: (This list is not all inclusive, other courses may be taken as approved by the program coordinator such as courses with prefix ACH, BRX, CAR, SMT, and PLW.)

CAD	108	Introduction to Surveying	3
CAD	120	Introduction to Architecture	4
CAD	150	Programming in CAD	4
CAD	212	Industrial Drafting Processes	4
CAD	222	Mechanical Design	4
CAD	220	Architectural Design	4
CAD	230	Construction Techniques	4
CAD	240	Advanced Dimensioning and Measurement	4
CAD	252	Commercial Detailing	4
CAD	262	Working Drawings	4
CAD	292	Industrial Applications	4
CAD	293	Special Problems	1-4
CAD	298	Practicum	1-3
CAD	299	Cooperative Experience	1-3

Diploma

Computer Aided Drafting and Design - 1513014049

(Offered at ASC, BLC, BSC, ELC, GTW, HZC, HPC, JFC, MYC, OWC, SEC, SMC, WKC)

Available Completely Online

General Education:

Area 1:	Writing/Accessing Information, Oral Communications, Humanities, Heritage, and Foreign Language	3
Area 2:	Mathematics (MAT 105 and MAT 120 excluded)	3
Area 3:	Computer Literacy course	0-3
	Subtotal	**6-9**

NOTE: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Technical Core:

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals	4
CAD	112	Engineering Graphics	4
CAD	130	Descriptive Geometry	4
CAD	200	Intermediate Computer Aided Design	4
CAD	201	Parametric Modeling	4
		Subtotal	**23**

Technical Electives:

	Choose 19 credits from the technical electives list	19
	Subtotal	**19**
	Total Credits	**48-51**

Technical Electives: (This list is not all inclusive, other courses may be taken as approved by the program coordinator such as courses with prefix ACH, BRX, CAR, SMT, and PLW.)

CAD	108	Introduction to Surveying	3
CAD	120	Introduction to Architecture	4
CAD	150	Programming in CAD	4
CAD	212	Industrial Drafting Processes	4
CAD	222	Mechanical Design	4
CAD	220	Architectural Design	4
CAD	230	Construction Techniques	4
CAD	240	Advanced Dimensioning and Measurement	4
CAD	252	Commercial Detailing	4
CAD	262	Working Drawings	4
CAD	292	Industrial Applications	4
CAD	293	Special Problems	1-4
CAD	298	Practicum	1-3
CAD	299	Cooperative Experience	1-3

Certificates

Computer Assisted Drafter - 1513013059

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Choose one 3 credit course from the following categories: 3

Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Mathematics (MAT 105 and MAT 120 excluded)	3
Computer Literacy course OR demonstrated competency	0-3
Subtotal	**6-9**

Technical Core:

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals	4
CAD	112	Engineering Graphics	4
CAD	130	Descriptive Geometry	4
CAD	200	Intermediate Computer Aided Design	4
CAD	201	Parametric Modeling	4
		Technical Elective	1-4
		Subtotal	**24-27**
		Total Credits	**30-36**

Detailer - 1513013089

(Offered at ASC, BLC, BSC, ELC, GTW, HPC, HZC, JFC, OWC, SEC, SMC,WKC)

Available Completely Online

General Education:

Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Mathematics (MAT 105 and MAT 120 excluded)	3
Computer Literacy course OR demonstrated competency	0-3
Subtotal	**6-9**

Technical Core:

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals	4
CAD	112	Engineering Graphics	4
CAD	130	Descriptive Geometry	4
CAD	200	Intermediate Computer Aided Design	4
		Subtotal	**19**
		Total Credits	**25-28**

Drafter Assistant – 1513013079

(Offered at ASC, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

Available Completely Online

Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Mathematics (MAT 105 and MAT 120 excluded)	3
Computer Literacy course OR demonstrated competency	0-3
Subtotal	**6-9**

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals OR	4
CAD	112	Engineering Graphics	(4)
		Subtotal	**7**
		Total Credits	**13-16**

Civil Drafter - 1513013049

(Offered at ASC, BLC, BSC, HZC, OWC, SEC,WKC)

Mathematics (MAT 105 and MAT 120 excluded)	3
Computer Literacy course OR demonstrated competency	0-3
Subtotal	**3-6**

Technical Core:

CAD	100	Introduction to Computer Aided Design	3
CAD	102	Drafting Fundamentals	4
CAD	112	Engineering Graphics	4
CAD	130	Descriptive Geometry	4
		Subtotal	**15**

Surveying Core:

Choose 9-12 hours from the following courses:

CAD	108	Introduction to Surveying	3
SMT	110	Principles of Surveying	3
SMT	130	Land Surveying Graphics	3
SMT	160	Construction Surveying	3
SMT	210	Advanced Surveying Measurement	3
SMT	220	Surveying Lab	3
SMT	230	Land Boundary Location	3
SMT	250	Mine Surveying	3
		Subtotal	**9-12**
		Total Credits	**27-33**

Computer Information Systems

(Curriculum Revision Pending)

Applications Option: The Applications Option is designed to train students to operate a wide variety of software packages and to assist businesses in developing and maintaining databases, producing financial statements, and developing applications using various software packages. Students are required to take Co-op or Internship to gain work experience that will improve their job marketability. Students completing this Option are prepared to work with microcomputer-based systems in business and industry.

Programming Option: The Programming Option provides students with an introduction to at least three programming languages with one of the languages studied at the intermediate level. Students are required to take Co-op or Internship to gain work experience that will improve their job marketability. Students completing this Option are prepared for the entry-level position of computer programmer.

Web Business Applications Option: The Web Business Applications Option trains students to develop state-of-the-art web pages for business and industry. Students are required to take Co-op or Internship to gain work experience that will improve their job marketability. Students completing this Option are prepared to develop and work with web-based systems in business and industry.

Associate in Applied Science

Computer Information Systems - 1103017029

(Offered at JFC)

MAT	150	College Algebra	(3)
		Heritage/Humanities	3
		Science	3
		Social Interaction	3
ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
CIS	100	Introduction to Computers OR	3
		Equivalent	(3)
		Total General Education Credits	**24**

CIS Core:

CIS	110	Operating Systems Concepts	3
CIS	120	Program Design & Development	3
CIS	130	Microcomputer Applications & Development	3
CIS	147	Query Programming	3
CIS	210	Communications & Networking	3
CIS	220	Systems Analysis & Design	3
CIS	270	Database Management Systems	3
		Programming Language I	3
		Accounting Course	3
		Management Course (Web Business Applications Option majors required to take BAS 282	3
CIS	280	Internship OR	3
COE	199	Co-op (Note: If an internship or Co-Op is not available, then an additional class may be taken at the discretion of the CIS Academic Program Coordinator)	(3)
BAS	160	Introduction to Business	3
		Total CIS Core Credits:	**36**

CIS – Application Option - 110301701

(Offered at JFC)

CIS	230	Advanced Microcomputer Applications	3
IT	132	Web Page Development	3
		Total Applications Option Credits:	**6**
		Total Credits	**66**

CIS – Programming Option - 110301702

(Offered at JFC)

		Programming Language I (in addition to CIS core)	3
		Programming Language II	3
		Total Programming Option Credits:	**6**
		Total Credits	**66**

CIS – Web Business Applications Option - 110301703

(Offered at JFC)

IT	132	Web Page Development	3
IT	230	Advanced Web Page Development	3
		Total Web Business Applications Option Credits:	**6**
		Total Credits	**66**

Computer and Information Technologies

(Curriculum Revision Pending)

With options in Applications, Internet Technologies, Network Technologies and Programming

This program includes an Applications option, an Internet Technologies option, a Network Technologies option, and a Programming option, with a core of courses common to all. The core includes a general education component essential to a collegiate education and technical courses giving students an introduction to information systems, computer applications, program development, system maintenance, networking, security, and Internet technologies. In addition to core courses, students take specialty courses for their selected option.

The **Applications option** emphasizes several aspects of computer system configuration, applications software, end-user documentation, and training. Students completing this option are prepared to work with computer-based systems in business and industry.

The **Internet Technologies option** prepares students to design, program, and maintain Internet-based services. With specializations in client and server programming or web server administration, this option prepares students for positions developing and maintaining interactive web sites.

The **Network Technologies option** provides the concepts and skills needed to set up, maintain, and expand networked computer systems. Employment opportunities include entry level positions in installation and administration of local area networks in medium to large organizations and as computer network administrators in small businesses.

The **Programming option** provides students with instruction in at least two programming languages at the intermediate level. Students completing this option are prepared for entry-level positions in computer programming.

Basic Computer Skills Certificate

The Basic Computer Skills Certificate offers students the opportunity to earn a credential demonstrating basic competency in the area of computers. The certificate consists of a natural progression of classes that are required for the Associate in Applied Science degree in Computer & Information Technologies. It gives those who are unable, or do not need, to complete a degree a way of demonstrating their level of computer proficiency. The Basic Computer Skills Certificate prepares students

to complete the Certiport Internet and Computing Core Certification (IC3), which is recognized by the National Educational Technology Standards (NETS) for both teachers and students. The certificate will prepare students for basic Microsoft Office certification.

Intermediate Computer Skills Certificate

The Intermediate Computer Skills Certificate offers students the opportunity to earn a credential demonstrating intermediate competency in the area of computers. The certificate consists of a natural progression of classes that are required for the Associate in Applied Science degree in Computer & Information Technologies. It gives those who are unable, or do not need, to complete a degree a way of demonstrating their level of computer proficiency. The Intermediate Computer Skills Certificate prepares students for the CompTIA A+ and Net+ certification exams which are recognized by the computer industry around the world.

Computer Technician Certificate

The Computer Technician Certificate offers students the opportunity to earn a credential demonstrating computer technician competencies. This certificate consists of the core skills that students need to achieve the industry A+ and Security+ certifications. In addition, this certificate will provide a way for professionals currently in the industry to update their technician skills and for new students to show progress in the CIT program.

Database Specialist Certificate

The Database Specialist Certificate offers students the opportunity to earn a credential demonstrating database specialist competencies. This certificate consists of the core skills that students need to effectively build and maintain databases. In addition, this certificate will provide a way for professionals currently in the industry to update their database management skills and for new students to show progress in the CIT program.

Internet Technologies Specialist Certificate

The Internet Technologies Specialist Certificate offers students the opportunity to earn a credential demonstrating Internet technologies specialist competencies. This certificate consists of the core skills that students need to effectively develop websites using web programming or maintaining them through network and web server administration. In addition, this certificate will provide a way for professionals currently in the industry to update their Internet technologies specialist skills and for new students to show progress in the CIT program.

Microsoft Enterprise Administrator Certificate

The Microsoft Enterprise Administrator Certificate offers students the opportunity to earn a credential demonstrating Microsoft network administrator competencies. This certificate consists of the core skills that students need to effectively build and maintain a Microsoft network. In addition, this certificate will provide a way for professionals currently in the industry to update their Microsoft network administrator skills and for new students to show progress in the CIT program.

Microsoft Server Administrator Certificate

The Microsoft Server Administrator Certificate offers students the opportunity to earn a credential demonstrating Microsoft network administrator competencies. This certificate consists of the core skills that students need to effectively configure and maintain a Microsoft server. In addition, this certificate will provide a way for professionals currently in the industry to update their Microsoft server administrator skills and for new students to show progress in the CIT program.

Network Specialist Certificate

The Network Specialist Certificate offers students the opportunity to earn a credential demonstrating network technology competencies. This certificate consists of the core skills that students need to effectively configure and maintain networks using network technologies specialist skills. In addition, this certificate will provide a way for professionals currently in the industry to update their network technologies specialist skills and for new students to show progress in the CIT program.

Productivity Software Specialist Certificate

The Productivity Software Specialist Certificate offers students the opportunity to earn a credential demonstrating productivity software competencies. This certificate consists of the core skills that students need to effectively use various productivity software products. In addition, this certificate will provide a way for professionals currently in the industry to update their productivity software skills and for new students to show progress in the CIT program.

Programming Specialist Certificate

The Programming Specialist Certificate offers students the opportunity to earn a credential demonstrating programming competencies. This certificate consists of the core skills that students need to effectively develop programs using multiple computer languages. In addition, this certificate will provide a way for professionals currently in the industry to update their programming skills and for new students to show progress in the CIT program.

Associate in Applied Science

Computer and Information Technologies - 1103017039

(Offered at BLC)

General Education

ENG	101	Writing I	3
ENG	102	Writing II	3
MA	109	College Algebra	3
		OR	
MAT	150	College Algebra	(3)
		Oral Communications Course	3
		Social Interaction Course	3
		Heritage/Humanities/Foreign Language Course	3
		Science Course	3
CIT	105	Introduction to Computing	3
		Subtotal	**24**

Major Requirements

CIT	111	Hardware and Software Systems Concepts	4
CIT	120	Programming Concepts	4
CIT	130	Productivity Software	3
CIT	150	Internet Technologies	3
CIT	160	Data Communications and Networking	4
CIT	180	Security Fundamentals	3
CIT	291	System Development and Implementation	4
		Approved Level I Programming Language Course	3
		Subtotal	**28**

Applications Option - 110301704

(Offered at BLC)

CIT	170	Introduction to Database Design	3
CIT	232	Applications Development and Utilization	3
		OR	
CIT	253	PHP/MySQL - Data-Driven Web Pages	(3)
		Approved Applications Specialization Sequence	9
		Approved Management Course	3
		OR	

		Approved Accounting Course ..... (3)
		Approved Applications Specialization Course..... 3
		Approved CIT Technical Course(s) ..... 1 - 3
		Subtotal **22 - 24**

Internet Technologies Option - 110301707

(Offered at BLC)

CIT	170	Introduction to Database Design..... 3
CIT	253	PHP/MySQL - Data-Driven Web Pages 3
CIT	294	Seminar in Web Technologies 3
		Approved Internet Technologies Specialization Sequence 12-15
		Subtotal **21-24**

Network Technologies Option - 110301705

(Offered at BLC)

CIT	269	Internet Protocols 3
CIT	289	Network Security..... 3
		Approved Level I and Level II Network Technology Microsoft Windows Specialization Sequence..... 12
		OR
		Approved Level I and Level II Network Technology Cisco Specialization Sequence ..... (12)
		Approved Level I, Level II, or Level III Network Technologies Specialization Sequence..... 4-6
		Subtotal **22-24**

Programming Option - 110301706

(Offered at BLC)

CIT	170	Introduction to Database Design..... 3
CIT	253	PHP/MySQL - Data-Driven Web Pages 3
		Approved Level I Programming Language Course..... 3
		Approved Level II Programming Language Course..... 3
		Approved Level II Programming Language Course..... 3
		Approved Level I or II Programming Language Course..... 3
		Approved Management Course 3
		OR
		Approved Accounting Course ..... (3)
		Approved CIT Technical Course(s) ..... 1 - 3
		Subtotal **22 - 24**
		Total **73 - 76**

Course Choice Lists

Approved Accounting Courses*

ACC	201	Financial Accounting I 3
ACC	202	Managerial Uses of Accounting Information 3

Approved Management Courses*

MGT	200	Small Business Management 3
MGT	283	Principles of Management 3
MKT	291	Retail Management..... 3
MGT	101	Quality Management Principles..... 3

Approved Applications Specialization Courses*

CIT	232	Applications Development and Utilization..... 3
CIT	234	Advanced Spreadsheet Applications 3
CIT	236	Advanced Database Applications 3
CIT	253	PHP/MySQL - Data-Driven Web Pages 3
CIT	171	SQL I 3
CIT	271	SQL II..... 3
GIS	110	Spatial Data Analysis and Map Interpretation 3
GIS	120	Introduction to Geographic Information Systems..... 3
GIS	210	Advanced Geographic Information Systems 3
IMD	235	Advanced Word Processing 3

Approved Applications Specialization Sequences*

Productivity Software Specialization Sequence

IMD	235	Advanced Word Processing 3
		AND
CIT	234	Advanced Spreadsheet Applications 3
		AND
CIT	236	Advanced Database Applications 3

Database Developer Specialization Sequence

CIT	171	SQL I 3
		AND
CIT	271	SQL II..... 3
		AND
CIT	236	Advanced Database Applications 3

Geographic Information Systems Sequence

GIS	110	Spatial Data Analysis and Map Interpretation 3
		AND
GIS	120	Introduction to Geographic Information Systems..... 3
		AND
GIS	210	Advanced Geographic Information Systems 3

Approved Internet Technologies Specialization Sequences*

Web Programming Specialization Sequence

CIT	140	JavaScript I..... 3
		OR
CIT	144	Flash Programming with ActionScript I..... (3)
		AND
CIT	171	SQL I 3
		AND
		Approved Level I Web Programming Language Course..... 3
		AND
		Approved Level II Web Programming Language Course..... 3

Web Server Administration Specialization Sequence

CIT	255	Internet Server Administration..... 3
		AND
CIT	269	Internet Protocols 3
		AND
CIT	289	Network Security..... 3
		AND
		Approved Level I Network Technologies Specialization Sequence..... 4-6

Approved Level I Network Technologies Specialization Sequences*

Microsoft Windows Specialization Sequence I

		Any 6 credit hours of course work from the Microsoft Windows Network Specialization Course list 6

Unix Specialization Sequence

CIT	217	Unix Administration 3
		AND
CIT	218	Advanced Unix Administration..... 3

Cisco Specialization Sequence I

CIT	281	Routing..... 4

Approved Level II Network Technology Specialization Sequences*

Microsoft Windows Specialization Sequence II

		Any 6 credit hours of course work from the Microsoft Windows Network Specialization Course list (after completing the requirements for the Microsoft Windows Specialization Sequence I) 6

Cisco Specialization Sequence II

CIT	282	Switching..... 4
		AND
CIT	283	Wide Area Network Design and Management..... 4

Approved Level III Network Technology Specialization Sequences*

Internet Servers Administration Specialization Sequence

CIT	255	Internet Server Administration	3
		AND	
CIT	265	Microsoft Applications Server Infrastructure	3

Microsoft Windows Specialization Sequence III

		Any 6 credit hours of course work from the Microsoft Windows Network Specialization Course list (after completing the requirements for the Microsoft Windows Specialization Sequence II)	6

Approved Microsoft Windows Network Specialization Courses*

CIT	213	Microsoft Windows Client and Server Configuration	3
CIT	261	Microsoft Windows Directory Services Administration	3
CIT	262	Microsoft Windows Network Infrastructure	3
CIT	263	Advanced Topics in Microsoft Windows	1-6
CIT	264	Microsoft Server Administration	3
CIT	265	Microsoft Applications Server Infrastructure	3
CIT	266	Microsoft Enterprise Administration	3

Approved Level I Programming Language Courses*

CIT	140	JavaScript I	3
CIT	143	COBOL I	3
CIT	144	Flash Programming with ActionScript I	3
CIT	145	Perl I	3
CIT	148	Visual Basic I	3
CIT	149	Java I	3
CIT	171	SQL I	3
CS	115	Introduction to Computer Programming	3

Approved Level II Programming Language Courses*

CIT	243	COBOL II	3
CIT	245	Perl II	3
CIT	248	Visual Basic II	3
CIT	249	Java II	3
CIT	271	SQL II	3
CS	215	Introduction to Program Design, Abstraction, and Problem Solving	4
CS	216	Introduction to Software Engineering	3

Approved Level I Web Programming Language Courses*

CIT	140	JavaScript I	3
CIT	144	Flash Programming with ActionScript I	3
CIT	145	Perl I	3
CIT	148	Visual Basic I	3
CIT	149	Java I	3
CIT	171	SQL I	3

Approved Level II Web Programming Language Courses*

CIT	245	Perl II	3
CIT	248	Visual Basic II	3
CIT	249	Java II	3
CIT	271	SQL II	3

Approved CIT Technical Courses*

ACH	100	Construction Documents I	3
ACH	185	Computer-Aided Drafting I	3
CAD	100	Introduction to Computer-Aided Design	3
COE	199	Cooperative Education: CIT	1-8
GIS	120	Introduction to Geographic Information Systems	3
IMD	126	Introduction to Desktop Publishing	3
IMD	180	Intermediate Web Design	3
IMD	226	Advanced Desktop Publishing	3
IMD	240	Web Development with Adobe Flash	3
		Additional CIT Course(s) EXCEPT CIT 103	1-3
		Additional CS Course(s) EXCEPT CS 100 and CS 101	3-4
		Approved Accounting Course(s)	3

*Or other courses approved by Computer & Information Technologies Program Coordinator

Note: Students may not use one course to fulfill multiple requirements.

Students may choose CIT 280 or COE 199 for a maximum of 3 credit hours.

Certificates

Basic Computer Skills - 1103013019

(Offered at BLC)

CIT	105	Introduction to Computing	3
CIT	111	Hardware and Software Systems Concepts	4
CIT	120	Programming Concepts	4
CIT	130	Productivity Software	3
ENG	101	Writing I	3
		Oral Communication Course	3
		Total	**20**

Computer Technician - 1103013049

(Offered at BLC)

CIT	105	Introduction to Computing	3
CIT	111	Hardware and Software Systems Concepts	4
CIT	160	Data Communications and Networking	4
CIT	180	Security Fundamentals	3
		Total	**14**

Database Specialist - 1103013059

(Offered at BLC)

CIT	150	Internet Technologies	3
CIT	170	Introduction to Database Design	3
CIT	171	SQL I	3
CIT	236	Advanced Database Applications	3
CIT	253	PHP/MySQL Data-Driven Web Pages	3
CIT	271	SQL II	3
		Total	**18**

Intermediate Computer Skills - 1103013029

(Offered at BLC)

CIT	150	Internet Technologies	3
CIT	160	Data Communications & Networking	4
MA	109	College Algebra	3
		OR	
MAT	150	College Algebra	(3)
ENG	102	Writing II	3
		Approved Level I Programming Course	3
		Approved CIT Technical Course	3
		Total	**19**

Internet Technologies Specialist - 1103013069

(Offered at BLC)

CIT	150	Internet Technologies	3
CIT	170	Introduction to Database Design	3
		Approved Internet Technologies Specialization Sequence	12-15
CIT	294	Seminar in Internet Technologies	3
		Total	**21-24**

Microsoft Enterprise Administrator - 1103013079

(Offered at BLC)

CIT	213	Microsoft Windows Client and Server Configuration	3
CIT	261	Microsoft Windows Directory Services Administration	3
CIT	262	Microsoft Windows Network Infrastructure	3
CIT	264	Microsoft Applications Server Infrastructure	3
CIT	266	Microsoft Enterprise Administration	3
CIT	269	Internet Protocols	3
		Total	**18**

Microsoft Server Administrator - 1103013089

(Offered at BLC)

CIT	261	Microsoft Windows Directory Services Administration	3
CIT	262	Microsoft Windows Network Infrastructure	3
CIT	264	Microsoft Applications Server Infrastructure	3
CIT	269	Internet Protocols	3
		Total	**12**

Networking Specialist - 1103013109

(Offered at BLC)

		Approved Level I and Level II Network Technology Microsoft Windows Specialization Sequence	12
		OR	
		Approved Level I and Level II Network Technology Cisco Specialization Sequence	(12)
		Approved Level I, Level II or Level III Network Technology Sequence	4-6
CIT	269	Internet Protocols	3
CIT	289	Network Security	3
		Total	**22-24**

Productivity Software Specialist - 1103013039

(Offered at BLC)

CIT	105	Introduction to Computing	3
CIT	130	Productivity Software	3
CIT	232	Applications Development and Utilization	3
CIT	234	Advanced Spreadsheet Applications	3
CIT	236	Advanced Database Applications	3
IMD	235	Advanced Word Processing	3
		Total	**18**

Programming - 1103013099

(Offered at BLC)

CIT	150	Internet Technologies	3
CIT	170	Introduction to Database Design	3
CIT	253	PHP/MySQL Data-Driven Web Pages	3
		(2) Approved Level I Programming Language Courses	6
		Approved Level II Programming Language Course	3
		Total	**18**

Note: Students may not use one course to fulfill multiple requirements.

Students may choose CIT 280 or COE 199 for a maximum of 3 credit hours.

Construction Technology

The Construction Technology program is designed to prepare students for entry level positions in the construction industry. Residential and light commercial construction applications are taught. This program includes instructional units in blueprint reading, building site layout procedures, foundation systems, light framing construction methods, exterior and interior finish systems, concrete forming systems and construction safety. Units of instruction are designed to include lecture and practical experience in the lab or on-site projects. This program also offers an excellent prerequisite for students that plan to pursue a career in areas such as construction management, civil engineering or architectural design.

Progression in the Construction Technology Program is contingent upon achievement of a grade of "C" or better in each technical and mathematics course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Construction Technology - 4602017029

(Offered at BLC, ELC)

General Education Requirements:

		Writing/Accessing Information	3
MAT	105	Business Mathematics OR higher level of Mathematics	3
		Social Interaction	3
		Heritage/Humanities/Foreign Languages	3
		Natural/Applied Science	3
		Oral Communication	3
		Computer Literacy	0-3
		Subtotal	**18-21**

Note: Computer Literacy must be demonstrated either by competency exam or by completing an approved computer literacy course.

Technical Requirements:

BRX	220	Blueprint Reading For Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
CAR	190	Light Frame Construction I	3
CAR	191	Light Frame Const. I-Lab	2
CAR	196	Light Frame Construction II	3
CAR	197	Light Frame Const. II-Lab	2
CAR	200	Light Frame Construction III	3
CAR	201	Light Frame Const. III-Lab	2
CAR	298	Practicum in Construction OR	2
CAR	299	Co-op in Construction	(2)
ISX	100	Industrial Safety	3
		Technical Electives*	10
		Subtotal	**42**
		Total	**60-63**

***Technical Electives: (This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Construction Technology instructor.)**

BRX	120	Basic Blueprint Reading	3
CAR	150	Construction Formwork	3
CAR	151	Construction Formwork - Lab	2
CAR	198	Special Topics in Construction	1 - 6
CAR	240	Light Frame Construction IV	3
CAR	241	Light Frame Const. IV-Lab	2

Diploma

Construction Carpenter - 4602014019

(Offered at ASC, BLC, BSC, ELC, JFC, MYC, OWC, SEC, SMC,WKC)

General Education Requirements:

Area 1:	Writing/Accessing Information, Oral Communications, Humanities, or Heritage	3
Area 2:	Social Science, Behavioral Science, Natural or Applied Science, or Mathematics	3
Area 3:	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Note: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Note: WPP200 or EFM 100 may be taken for 3 credit hours of Social Interaction to meet the Diploma General Education requirements.

Technical Requirements:

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
CAR	190	Light Frame Construction I	3

CAR	191	Light Frame Const. I –Lab	2
CAR	196	Light Frame Construction II	3
CAR	197	Light Frame Const. II–Lab	2
CAR	200	Light Frame Construction III	3
CAR	201	Light Frame Const. III–Lab	2
CAR	298	Practicum in Construction OR	2
CAR	299	Co-op in Construction	(2)
ISX	100	Industrial Safety	3
		Technical Electives*	10
		Subtotal	**42**
		Total	**48-51**

***Technical Electives: (This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Carpentry instructor.)**

BRX	120	Basic Blueprint Reading	3
CAR	150	Construction Formwork	3
CAR	151	Construction Formwork - Lab	2
CAR	198	Special Topics in Construction	1 - 6
CAR	240	Light Frame Construction IV	3
CAR	241	Light Frame Const. IV-Lab	2

Finish Carpenter - 4602014029

(Offered at JFC)

General Education Requirements: (6-9 credit hours)

Area 1:	Writing/Accessing Information, Oral Communications, Humanities or Heritage	3
Area 2:	Social Science, Behavioral Science, Natural or Applied Science or Mathematics	3
Area 3:	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Note: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Note: WPP 200 or EFM 100 may be taken for 3 credit hours of Social Interactions to meet the Diploma General Education requirements.

Technical Requirements:

INF	105	Introduction to Painting	2
INF	111	Advanced Painting	2
INF	115	Introduction to Wall covering	2
INF	121	Advanced Wall Covering	2
INF	125	Introduction to Drywall	2
INF	131	Advanced Drywall	2
INF	205	Introduction to Acoustical Carpentry	3
INF	211	Advanced Acoustical Carpentry	2
INF	220	Customer Relations	2
INF	298	Practicum (or)	2
CAR	299	Cooperative Education in Construction	(2)
		Subtotal	**21**
		Total Credits	**27-30**

Certificates

Carpenter Helper - 4602013109

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
CAR	190	Light Frame Construction I – Floors and Walls	3
CAR	191	Light Frame Construction I – Floors and Walls (Lab)	2
		Total Credits	**17**

Construction Forms Helper - 4602013029

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	150	Construction Formwork	3
CAR	151	Construction Formwork - Lab	2
		Electives: (*Suggested Technical Electives)	6
		Total Credits	**18**

***Suggested Technical Electives:**

(This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Construction Technology Program Coordinator.

BRX	120	Basic Blueprint Reading	(3)
ISX	100	Industrial Safety	(3)
CAR	140	Construction Surveying and Foundation Systems	(3)
CAR	141	Construction Surveying and Foundation Systems-Lab	(2)
CAR	150	Construction Formwork	(3)
CAR	151	Construction Formwork – Lab	(2)
CAR	190	Light Frame Construction I- Floors and Walls	(3)
CAR	191	Light Frame Construction I- Floors and Walls-Lab	(2)
CAR	196	Light Frame Construction II- Ceilings and Roofs	(3)
CAR	197	Light Frame Construction II- Ceilings and Roofs-Lab	(2)
CAR	198	Special Topics in Construction	(1 – 6)
CAR	200	Light Frame Construction III- Exterior and Interior Finish	(3)
CAR	201	Light Frame Construction III- Exterior and Interior Finish-Lab	(2)
CAR	240	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques	(3)
CAR	241	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques (Lab)	(2)

***Suggested General Education Electives:**

TEC	200	Technical Communications	(3)
COM	181	Basic Public Speaking	(3)
COM	252	Intro to Interpersonal Communications	(3)
MAT	105	Business Mathematics	(3)
MAT	110	Applied Mathematics	(3)
MAT	116	Technical Mathematics	(3)
PHX	150	Introductory Physics	(3)
EFM	100	Personal Financial Management	(3)
WPP	200	Workplace Principles	(3)
CPU	100	Introduction to Computers	(3)
CPU	150#	Computer Fundamentals	(3)

#This course does not meet computer literacy requirements.

Residential Carpenter - 4602013059

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
CAR	190	Light Frame Construction I – Floors and Walls	3
CAR	191	Light Frame Construction I – Floors and Walls (Lab)	2
CAR	196	Light Frame Construction II – Ceilings and Roofs	3
CAR	197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
CAR	200	Light Frame Construction III – Exterior and Interior Finish	3
CAR	201	Light Frame Construction III – Exterior and Interior Finish (Lab)	2
CAR	240	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques	3
CAR	241	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques (Lab)	2
		Total Credits	**32**

Residential Roofer - 4602013069

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	196	Light Frame Construction II – Ceilings and Roofs	3
CAR	197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
		Total Credits	**12**

Residential Site Layout Assistant - 4602013079

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
		Electives: *Suggested Technical Electives	6
		Total Credits	**15**

***Suggested Technical Electives:**

(This list is not all inclusive. Other courses (technical or general education) may be taken as approved by Construction Technology Program Coordinator.

BRX	120	Basic Blueprint Reading	(3)
BRX	220	Blueprint Reading for Construction	(3)
ISX	100	Industrial Safety	(3)
CAR	150	Construction Formwork	(3)
CAR	151	Construction Formwork-Lab	(2)
CAR	190	Light Frame Construction I-Floors and Walls	(3)
CAR	191	Light Frame Construction I-Floors and Walls	(2)
CAR	196	Light Frame Construction II-Ceilings and Walls	(3)
CAR	197	Light Frame Construction II-Ceilings and Walls-Lab	(2)
CAR	198	Special Topics in Construction	(1-6)
CAR	200	Light Frame Construction III-Exterior and Interior Finish	(3)
CAR	201	Light Frame Construction III-Exterior and Interior Finish-Lab	(2)
CAR	240	Light Frame Construction IV-Cabinetry and Trim Carpentry Techniques	(3)
CAR	241	Light Frame Construction IV-Cabinetry and Trim Carpentry Techniques-Lab	(2)

***Suggested General Education Electives:**

TEC	200	Technical Communications	(3)
COM	181	Basic Public Speaking	(3)
COM	252	Intro to Interpersonal Communications	(3)
MAT	105	Business Mathematics	(3)
MAT	110	Applied Mathematics	(3)
MAT	116	Technical Mathematics	(3)
PHX	150	Introductory Physics	(3)
EFM	100	Personal Financial Management	(3)
WPP	200	Workplace Principles	(3)
CPU	100	Introduction to Computers	(3)
CPU	150#	Computer Fundamentals	(3)

#This course does not meet computer literacy requirements.

Rough Carpenter - 4602013089

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	220	Blueprint Reading for Construction	3
CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
CAR	140	Surveying & Foundations	3
CAR	141	Surveying & Foundations-Lab	2
CAR	190	Light Frame Construction I – Floors and Walls	3
CAR	191	Light Frame Construction I – Floors and Walls (Lab)	2
CAR	196	Light Frame Construction II – Ceilings and Roofs	3
CAR	197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
		Total Credits	**22**

Basic Carpenter - 4602013139

(Offered at ASC, BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

CAR	126	Intro to Construction	3
CAR	127	Intro to Construction-Lab	1
		Electives: (Any five [5] additional credits, program or otherwise)	5
		Total Credits	**9**

Acoustical Carpenter - 4602013119

(Offered at BSC, ELC, JFC, SEC)

INF	205	Introduction to Acoustical Carpentry	3
INF	211	Advanced Acoustical Carpentry	2
		Electives: *Technical Electives	6
		Total Credits	**11**

Dry Waller - 4602013039

(Offered at BSC, ELC, JFC, SEC)

INF	125	Introduction to Drywall	2
INF	131	Advanced Drywall	2
		Electives: *Technical Electives	4
		Total Credits	**8**

Painter, Interior Finish - 4602013049

(Offered at BSC, JFC, SEC)

INF	105	Introduction to Painting	2
INF	111	Advanced Painting	2
		Electives: *Technical Electives	2
		Total Credits	**6**

Painter, Paper Hanger - 4602013129

(Offered at BSC, JFC, SEC)

INF	125	Introduction to Painting	2
INF	111	Advanced Painting	2
INF	115	Introduction to Wallcovering	2
INF	121	Advanced Wallcovering	2
		Total Credits	**8**

Cosmetology

Knowledge of the theories of hair, skin, and nail care is coupled with practice of the various techniques used in salons.

Any person enrolling in a cosmetology program shall meet KCTCS admission requirements and complete an application for enrollment provided by the Board of Hairdressers and Cosmetologists. As required by the Board of Hairdressers and Cosmetologists, the applicant shall furnish proof that he or she has completed two (2) years of high school or its equivalent. The required proof shall be any one (1) of the following: A transcript of subjects and grades showing the applicant has completed grades nine (9) and ten (10); G. E. D. test indicating a minimum grade of thirty-nine (39);

A notarized statement from the high school principal, counselor, or superintendent, stating that in their opinion the applicant has an educational equivalency of completing tenth grade. Said statement shall be on school stationery;

If the student has graduated from high school or completed the G. E. D. test for four (4) years high school, his or her diploma may be presented.

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first cosmetology course.

Progression in the Cosmetology program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

After successful completion of the prescribed 1800 hours of instruction and the six-month apprenticeship, program graduates are eligible to take the examination administered by the Kentucky Board of Hairdressers and Cosmetology to become licensed cosmetologists.

After successful completion of the prescribed 1000 hours of instruction, program graduates are eligible to take the examination administered by the Kentucky Board of Hairdressers and Cosmetology to become licensed cosmetology instructors.

After successful completion of the prescribed 600 hours of instruction, program graduates are eligible to take the examination administered by the Kentucky Board of Hairdressers and Cosmetology to become licensed nail technicians.

After successful completion of the prescribed 1000 hours of instruction, program graduates are eligible to take the examination administered by the Kentucky Board of Hairdressers and Cosmetology to become licensed estheticians.

Diploma

Cosmetologist - 1204014019

(Offered at ASC, BLC, BSC, GTW, HZC, JFC, OWC, SMC,WKC)

General Education:

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities/Heritage/Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Natural/Applied Science, or Mathematics	3
	Subtotal	**6**

NOTE: Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first cosmetology course.

Technical Courses:

COS	114	Cosmetology I	14
COS	116	Cosmetology II	14
COS	218	Cosmetology III	14
COS	220	Cosmetology IV	12
		Subtotal	**54**
		Total Credits	**60**

Electives:

COS	135	Individual Requirements I	1-8
COS	235	Individual Requirements II	1-8

Certificates

Cosmetologist - 1204013039

(Offered at ASC, BLC, BSC, GTW, HZC, JFC, MYC, OWC, SMC,WKC)

COS	114	Cosmetology I	14
COS	116	Cosmetology II	14
COS	218	Cosmetology III	14
COS	220	Cosmetology IV	12
		Total Credits	**54**

Electives:

COS	135	Individual Requirements I	1-8
COS	235	Individual Requirements II	

Apprentice Cosmetology Instructor - 1204013019

(Offered at ASC, BSC, GTW, HZC, JFC, OWC, SMC,WKC)

COS	210	Student Teaching I	13
COS	212	Student Teaching II	13
COS	214	Student Teaching III	13
		Total Credits	**39**

Electives:

COS	135	Individual Requirements I	1-8
COS	235	Individual Requirements II	1-8

Nail Technician - 1204013029

(Offered at ASC, BSC, HZC, JFC, MYC, OWC, SMC,WKC)

COS	150	Basic Nail Tech	13
COS	152	Applied Nail Technology	13
		Total Credits	**26**

Electives:

COS	135	Individual Requirements I	1-8
COS	235	Individual Requirements II	1-8

Esthetician - 1204093019

(Offered at BLC,WKC)

COS	105	Esthetician I	17
COS	205	Esthetician II	12
COS	275	Esthetician III	13
		Total Credits	**42**

Electives

COS	135	Individual Requirements I	1-8
COS	235	Individual Requirements II	1-8

Criminal Justice

This program prepares the student for entry into the field of police work and related occupations. Criminal justice vocations have evolved from jobs with minimal requirements to jobs requiring complex knowledge and skills. This curriculum gives the student theory, principles, and techniques employed by criminal justice agencies and police units. The study of the law as it relates to criminal justice agencies, human behavior, government, and communications along with specialized course work comprise the curriculum. Graduates from the AAS in Criminal Justice program may seek job opportunities on the federal, state, county, and municipal levels.

With experience, the CJ graduate may move into administrative or supervisory positions in corrections, security and/or law enforcement.

The Computer Forensics certificate develops skills and techniques needed to adequately gather computer forensics information during a criminal investigation and follow chain of custody procedures to insure a successful prosecution.

Associate in Applied Science

Criminal Justice - 4301037039

(Offered at ASC, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, OWC, SEC, SMC, WKC)*

Available Completely Online

General Education:

ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
CIS	100	Introduction to Computers	3
		Mathematics Course (s)	3

		Science Course	3
		Heritage/Humanities/Foreign Language Course	3
POL	101	American Government OR	3
POL	255	State Government	(3)
PSY	110	General Psychology	3
SOC	101	Introduction to Sociology	3
		Elective Courses	6
		Subtotal:	**36**

Technical Core Requirements:

CRJ	100	Introduction to Criminal Justice	3
CRJ	216	Criminal Law	3
CRJ	217	Criminal Procedures	3
CRJ	204	Criminal Investigations	3
CRJ	202	Issues and Ethics in Criminal Justice	3
		Subtotal:	**15**

Criminal Justice Option - 430103701

(Offered at ASC, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, OWC, SEC, SMC, WKC)

Option Electives: (Choose 9 credit hours from the following courses)

CRJ	102	Introduction to Corrections	3
CRJ	110	Principles of Asset Protection	3
CRJ	201	Introduction to Criminalistics	3
CRJ	203	Community Corrections/Probation & Parole	3
CRJ	208	Delinquency and the Juvenile Justice System	3
CRJ	210	Physical Security Technology and Systems	3
CRJ	211	Liability and Legal Issues	3
CRJ	215	Introduction to Law Enforcement	3
CRJ	218	Police Supervision	3
CRJ	220	Introduction to Computer Forensics	3
CRJ	222	Prison and Jail Administration	3
CRJ	230	Criminal Justice Courtroom Procedures	3
CRJ	231	Legal Aspects of Corrections	3
CRJ	240	Introduction to Corporate and Industrial Security	3
CRJ	245	Introduction to Business and Financial Fraud	3
CRJ	277	Introduction to Criminology	3
CRJ	279	Terrorism and Political Violence	3
CRJ	290	Internship in Criminal Justice	3
CRJ	299	Selected Topics in Criminal Justice	1-3
		Subtotal:	**9**
		Technical Elective	0-3
		Subtotal	**0-3**
		Total Credits	**60-63**

Law Enforcement Option - 430103702

(Offered at ASC, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, OWC, SEC, SMC, WKC)

Available Completely Online

Required Course:

CRJ	215	Introduction to Law Enforcement	3
		Subtotal:	**3**

Option Electives: (Choose 6 credit hours from the following courses)

CRJ	201	Introduction to Criminalistics	3
CRJ	208	Delinquency and the Juvenile Justice System	3
CRJ	218	Police Supervision	3
CRJ	220	Introduction to Computer Forensics	3
CRJ	230	Criminal Justice Courtroom Procedures	3
CRJ	277	Introduction to Criminology	3
CRJ	279	Terrorism and Political Violence	3
CRJ	290	Internship in Criminal Justice	3
CRJ	299	Selected Topics in Criminal Justice	1-3
		Subtotal:	**9**

Corrections Option - 430103703

(Offered at ASC, BLC, ELC, GTW, HPC, HZC, JFC, OWC, SEC, SMC)

Required:

CRJ	102	Introduction to Corrections	3
		Subtotal	**3**

Option Electives: (Choose 6 credit hours from the following courses)

CRJ	208	Delinquency and the Juvenile Justice System	3
CRJ	203	Community Corrections/Probation & Parole	3
CRJ	220	Introduction to Computer Forensics	3
CRJ	222	Prison and Jail Administration	3
CRJ	231	Legal Aspects of Corrections	3
CRJ	277	Introduction to Criminology	3
CRJ	290	Internship in Criminal Justice	3
CRJ	299	Selected Topics in Criminal Justice	1-3
		Subtotal	**9**
		Technical Elective	0-3
		Subtotal	**0-3**
		Total Credits	**60-63**

Security and Loss Prevention Option - 430103704

(Offered at ASC, BLC, ELC, GTW, HPC, HZC, JFC, MDC, OWC, SEC, SMC,WKC)

Available Completely Online

Required course:

CRJ	110	Principles of Asset Protection	
		Subtotal	

Option Electives: (Choose 6 credit hours from the following courses)

CRJ	210	Physical Security Technology and Systems	
CRJ	211	Liability and Legal Issues	
CRJ	220	Introduction to Computer Forensics	
CRJ	240	Introduction to Corporate and Industrial Security	
CRJ	245	Introduction to Business and Financial Fraud	
CRJ	290	Internship in Criminal Justice	
CRJ	299	Selected Topics in Criminal Justice	
		Subtotal:	**9**
		Technical Elective	0-3
		Subtotal	**0-3**
		Total Credits	**60-63**

NOTE: CRJ 107 Introduction to Firearms I may be used as a technical elective only. Course will not substitute for option elective.

Certificates

Computer Forensics - 4301033019

(Offered ASC, BLC, BSC, ELC, GTW, HPC, HZC, MDC,WKC)

CRJ	100	Introduction to Criminal Justice	3
CRJ	204	Criminal Investigations	3
CRJ	220	Introduction to Computer Forensics	3
ELT	232	Computer Software Maintenance OR	3
IT	105	Computer Maintenance Essentials	(3)
ELT	234	Computer Hardware Maintenance OR	3
IT	205	Advanced Computer Maintenance	(3)
CIS	100	Introduction to Computers	3
CIS	130	Microcomputer Applications	3
		Total:	**21**

Criminal Justice Core – 4301033029

(Offered ASC, BSC, BLC, SEC,WKC)

CRJ	100	Introduction to Criminal Justice	3
CRJ	202	Issues and Ethics in Criminal Justice	3
CRJ	204	Criminal Investigations	3
CRJ	216	Criminal Law	3
CRJ	217	Criminal Procedures	3
		Total:	**15**

Corrections -4301033039

(Offered ASC, BSC, BLC, SEC,WKC)

CRJ	102	Introduction to Corrections	3
CRJ	203	Community Corrections: Probation and Parole	3
CRJ	208	Delinquency and the Juvenile Justice System	3
CRJ	222	Prison and Jail Administration	3
CRJ	231	Legal Aspects of Corrections	3
		Total:	**15**

Law Enforcement – 4301033049

(Offered ASC, BSC, BLC, SEC,WKC)

CRJ	215	Introduction to Law Enforcement	3
CRJ	218	Police Supervision	3
CRJ	204	Criminal Investigations (OR)	3
CRJ	201	Introduction to Criminalistics	(3)
CRJ	211	Liability and Legal Issues	3
CRJ	208	Delinquency and Juvenile Justice System	3
		Total:	**15**

Security and Loss Prevention – 4301033059

(Offered ASC, BSC, BLC, SEC,WKC)

CRJ	110	Principles of Asset Protection	3
CRJ	210	Physical Security Technology & Systems	3
CRJ	211	Liability and Legal Issues	3
CRJ	240	Introduction to Corporate Security	3
CRJ	220	Introduction to Computer Forensics	3
		Total:	**15**

*Pending Board of Regents approval 06/11

Culinary Arts

The KCTCS Culinary Arts program is designed to prepare students for careers in the Culinary Arts, Food and Beverage Management, Restaurant Management, Catering, Institutional Food Service, and as Professional Chefs. Course work covers a broad spectrum: the preparation of basic and specialized foods, catering and special event planning, international cuisine, baking and pastry arts, nutrition, sanitation, management techniques and functions, cost control, purchasing and culinary fundamentals. Students work in commercial kitchen/laboratory and dining room through the course of study. The program uses the teaching philosophy of the American Culinary Federation, the Academy of Chefs, the National Restaurant Association Education Foundation, and the American Personal Chef Association. The program competencies are those of the American Culinary Federation.

Progression in the Culinary Arts program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Culinary Arts - 1205037029

(Offered at ASC, BGT, JFC, MYC, SMC,WKC)*

General Education

	Mathematics	3
	Science	3
	Social Interaction	3
	Heritage/Humanities	3
	Writing/Accessing Information	3
	Oral Communication	3
	Required General Education Hours	**18**

Culinary Arts Technical Core

CUL	100	Fundamentals of the Culinary Arts Profession…OR	2
CUL	105	Applied Introduction to Culinary Arts	(2)
CUL	111	Garde Manger	4
CUL	200	Sanitation and Safety	2
CUL	211	Basic Food Production	4
CUL	215	Basic Baking	4
CUL	230	Basic Nutrition OR	3
NFS	101	Human Nutrition and Wellness	(3)
CUL	240	Meats, Seafood, and Poultry	4
CUL	270	Human Relations Management	3
CUL	280	Cost and Control	3
CUL	290	Front of the House OR	3
CUL	285	Front of the House/Catering	(4)
		Computer Literacy*	0-3
		Required Technical Core Hours	32-36

*Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Culinary Arts Degree Option - 120503702

(Offered at ASC, BGT, JFC, MYC, SMC,WKC)*

		General Education	18
		Technical Core	32-36
CUL	220	Advanced Baking and Pastry Arts	4
CUL	260	International Cuisine	4
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Total Hours	**60-65**

Food and Beverage Management Degree Option - 120503703

(Offered at ASC, BGT, JFC, MYC, SMC,WKC)*

		General Education	18
		Technical Core	32-36
BAS	160	Introduction to Business	3
BAS	170	Entrepreneurship OR	3
BAS	283	Principles of Management	(3)
BAS	282	Principles of Marketing	3
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Total Hours	**61-66**

Catering and Personal Chef Degree Option - 120503701

(Offered at ASC, BGT, JFC, MYC, SMC,WKC)*

		General Education	18
		Technical Core	32-36
CUL	220	Advanced Baking and Pastry Arts	4
BAS	170	Entrepreneurship AND	3
CUL	295	Doing Business as a Personal Chef OR	3
BAS	160	Introduction to Business AND	(3)
BAS	283	Principles of Management	(3)
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Total Hours	**62-67**

Diplomas

Culinary Arts - 1205034029

(Offered at ASC, BGT, BSC, ELC, MYC, OWC, SMC,WKC)*

General Education*

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, or Heritage	3
Area 2 =	Social Science, Behavioral Science, Natural/ Applied Science or Mathematics	3
	Subtotal	**6**

* If a diploma is sought, two of the three following courses may be used for the six (6) hours general education. These courses will not count toward the AAS degree:

WPP	200	Workplace Principles (Area 2) OR	3
EFM	100	Personal Financial Management (Area 2)	(3)
TEC	200	Technical Communications (Area 1)	3

Technical or Support Courses

		Technical Core	32-36
CUL	220	Advanced Baking and Pastry Arts	4
CUL	260	International Cuisine	4
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Technical/ Support Total	**42-47**
		Total Hours for Culinary Arts Diploma	**48-53**

Food and Beverage Management - 1205034039

(Offered at ASC, BGT, BSC, ELC, MYC, OWC, SMC,WKC)*

General Education*

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, or Heritage	3
Area 2 =	Social Science, Behavioral Science, Natural/ Applied Science or Mathematics	3
	Subtotal	**6**

* If a diploma is sought, two of the three following courses may be used for the six (6) hours general education. These courses will not count toward the AAS degree:

WPP	200	Workplace Principles (Area 2) OR	3
EFM	100	Personal Financial Management (Area 2)	(3)
TEC	200	Technical Communications (Area 1)	3

Technical or Support Courses

		Technical Core	32-36
BAS	160	Introduction to Business	3
BAS	170	Entrepreneurship OR	3
BAS	283	Principles of Management	(3)
BAS	282	Principles of Marketing	3
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Technical/Support Total	**43-48**
		Total Hours	**49-54**

Catering and Personal Chef - 1205034019

(Offered at ASC, BGT, BSC, ELC, MYC, OWC, SMC,WKC)*

General Education*

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, or Heritage	3
Area 2 =	Social Science, Behavioral Science, Natural/ Applied Science or Mathematics	3
	Subtotal	**6**

* If a diploma is sought, two of the three following courses may be used for the six (6) hours general education. These courses will not count toward the AAS degree:

WPP	200	Workplace Principles (Area 2) OR	3
EFM	100	Personal Financial Management (Area 2)	(3)
TEC	200	Technical Communications (Area 1)	3

Technical or Support Courses

		Technical Core	32-36
CUL	220	Advanced Baking and Pastry Arts	4
BAS	170	Entrepreneurship AND	3
CUL	295	Doing Business as a Personal Chef OR	3
BAS	160	Introduction to Business AND	(3)
BAS	283	Principles of Management	(3)
CUL	298	Practicum Experience OR	2-3
CUL	299	Cooperative Education	(2-3)
		Technical Support Total	44-49
		Total Hours	**50-55**

Certificates

Fundamentals of Culinary Arts - 1205033029

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)

CUL	100	Fundamentals of the Culinary Arts Profession OR	2
CUL	105	Applied Introduction to Culinary Arts	(2)
CUL	111	Garde Manger	4
CUL	200	Sanitation and Safety	2
CUL	211	Basic Food Production	4
CUL	215	Basic Baking	4
		Total Hours	**16**

Catering - 1205033059

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)

CUL	100	Fundamentals of the Culinary Arts Profession OR	2
CUL	105	Applied Introduction to Culinary Arts	(2)
CUL	111	Garde Manger	4
CUL	200	Sanitation and Safety	2
CUL	215	Basic Baking	4
CUL	285	Front of the House/Catering	4
		Total Hours	**16**

Advanced Catering - 1205033079

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)*

		Catering Certificate	16
CUL	211	Basic Food Production	4
CUL	220	Advanced Baking and Pastry Arts	4
CUL	240	Meats, Seafood, Poultry	4
CUL	260	International Cuisine	4
CUL	270	Human Relations Management	3
CUL	280	Cost and Control	3
BAS	170	Entrepreneurship OR	3
BAS	160	Introduction to Business AND	(3)
BAS	283	Principles of Management	(3)
		Total Hours	**42-44**

Culinary Arts - 1205033049

(Offered at ASC, BGT, ELC, MYC, OWC, SMC,WKC)

Culinary Arts Technical Core	32-36
Total Hours	**32-36**

Advanced Culinary Arts - 1205033069

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)*

Culinary Arts Technical Core	32-36
Culinary Arts Degree Option	10-11
Total Hours	**44-47**

Food and Beverage Management - 1205033039

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)*

CUL	100	Fundamentals of the Culinary Arts Profession OR	2
CUL	105	Applied Fundamentals of the Culinary Arts Profession	(2)
CUL	200	Sanitation and Safety	2
CUL	211	Basic Food Production	4
CUL	215	Basic Baking	4

CUL	240	Meats, Seafood, and Poultry	4
CUL	270	Human Relations Management OR	3
CUL	280	Cost and Control	3
BAS	160	Introduction to Business	3
BAS	282	Principles of Marketing	3
BAS	283	Principles of Management	3
		Computer Literacy*	0-3
		Total Hours	**31-34**

*Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Advanced Food and Beverage Management - 1205033089

(Offered at ASC, BGT, BSC, ELC, JFC, MYC, OWC, SMC,WKC)*

CUL	100	Fundamentals of the Culinary Arts Profession OR	2
CUL	105	Applied Fundamentals of the Culinary Arts Profession	(2)
CUL	111	Garde Manger	4
CUL	200	Sanitation and Safety	2
CUL	211	Basic Food Production	4
CUL	215	Basic Baking	4
CUL	230	Basic Nutrition OR	3
NFS	101	Human Nutrition and Wellness	(3)
CUL	240	Meats, Seafood, and Poultry	4
CUL	270	Human Relations Management	3
CUL	280	Cost and Control	3
CUL	285	Front of the House/Catering OR	4
CUL	290	Front of the House	(3)
BAS	160	Introduction to Business	3
BAS	170	Entrepreneurship OR	3
BAS	283	Principles of Management	(3)
BAS	282	Principles of Marketing	3
CUL	298	Culinary Arts Practicum Experience OR	2-3
CUL	299	Culinary Arts Cooperative Education Experience	(2-3)
		Total Hours	**44-46**

Culinary Arts Professional Development - 1205033099

(Offered at BGT, SMC)

CUL	Students may choose 12 credit hours from any Culinary Arts courses*	
	Total Hours	**12**

*Prerequisites apply

Additional Course

CUL	297	Selected Topics in Culinary Arts	1 – 6

*Pending Board of Regents approval 06/11

Dental Hygiene

This program prepares students to function as dental hygienists on a dental team under the general supervision of a dentist. The curriculum includes courses in general education and in dental hygiene as required by the Commission on Dental Accreditation and Kentucky state dental practice act. The program provides comprehensive educational experiences through lectures, clinical and related study in order that students may apply scientific knowledge in the performance of dental hygiene procedures. Students enrolled in the Dental Hygiene program must achieve a minimum grade of "C" in each Dental Hygiene and approved science course. Documentation of computer literacy as defined by KCTCS and Cardiopulmonary resuscitation (CPR) are required prior to admission to DHP courses.

Associate in Applied Science

Dental Hygiene - 5106027019

(Offered at BLC)

General Education Core

BIO	137	Human Anatomy & Physiology I*	4
BIO	139	Human Anatomy & Physiology I*	4
BIO	226	Principles of Microbiology	3
PSY	110	General Psychology	3
SOC	101	Introduction to Sociology	3
		Heritage/Humanities/Foreign Languages	3
		Mathematics	3
		Writing/Accessing Information	3
		Oral Communication	3
		Subtotal Credits	**29**

Technical Courses

DHP	120	Dental Hygiene I**	4
DHP	121	Oral Biology I	3
DHP	122	Dental Nutrition	2
DHP	130	Dental Hygiene II	3
DHP	131	Oral Biology II	5
DHP	135	Dental Radiology	3
DHP	136	Periodontics I	2
DHP	220	Dental Hygiene III	3
DHP	222	Special Needs Patients	3
DHP	224	Dental Materials	2
DHP	226	Periodontics II	2
DHP	230	Dental Hygiene IV	3
DHP	235	Principles of Practice	1
DHP	238	Community Dental Health	3
		Subtotal Credits	**39**
		Total Program Credits	**68**

Recommended Electives (Not Required)

DHP	229	Local Anesthesia	(2)
DHP	299	Independent Study Dental Hygiene	(1-4)
ENG	102	Writing II	(3)
NFS	101	Human Nutrition and Wellness	(3)

*The Dental Hygiene Program at BCTC requires that BIO 137 & BIO 139 or their equivalents be successfully completed with a grade of C or higher prior to beginning DHP 120.

**Documentation of computer literacy as defined by KCTCS is required prior to admission to DHP courses. CPR certification for the healthcare provider must be obtained prior to enrolling in DHP 120 and certification must be kept current throughout the Program

Dental Assisting/Dental Hygiene Integrated Program

The Dental Assisting/Dental Hygiene Integrated Program is a program that prepares graduates to function as dental auxiliaries.

The Dental Assisting Program prepares the student to function effectively as an integral member of the dental health team and to perform chairside assisting and related office and laboratory procedures under the direction and supervision of a dentist. The curriculum includes content areas in general studies, biomedical sciences, dental sciences, clinical sciences, radiography, and clinical experience. Students must achieve a minimum grade of "C" in each Dental Assisting (DAS) course, Dental Assisting/Hygiene (DAH) course, and approved science courses. Upon completion of the program, students are eligible to take the Dental Assisting National Board Examination to become a Certified Dental Assistant.

The Dental Hygiene Program prepares the student to function as a dental hygienist on a dental auxiliary team under the supervision of a dentist. The curriculum includes content areas in general studies, biomedical sciences, dental sciences, clinical sciences, radiography, periodontology, and dental hygiene clinical experience. The program provides comprehensive educational experiences through lectures, clinical, and related study in order that graduates may apply scientific knowledge in the performance of dental hygiene procedures. Students must achieve a minimum grade of "C" in each Dental Hygiene (DHG) course, Dental Assisting/Hygiene (DAH) course, and approved science courses. Upon completion, graduates are eligible to apply to take the Dental Hygiene National Board Examination. As the only licensed dental auxiliaries, dental hygienists may be employed in dental offices, clinics, dental schools, public health and government agencies.

The Dental Assisting/Dental Hygiene Integrated Program is accredited by the Commission on Dental Accreditation, a specialized accrediting agency of the American Dental Association.

Associate in Applied Science

Dental Hygiene - 5106027040

(Offered in West Consortium – Credential granted by Henderson CC but also taught at Elizabethtown CTC and West KY CTC)
(Offered in East Consortium – Credential granted by Big Sandy CTC but also taught at Bluegrass CTC and Somerset CC)

General Education Classes:

ENG	101	Writing I	3
ENG	102	Writing II	3
BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
BIO	225	Medical Microbiology	4
PSY	110	General Psychology	3
SOC	101	Introductory Sociology	3
MAT	110	Applied Mathematics OR	3
MAT	150	College Algebra and Functions	(3)
		Oral Communications	3
		Heritage/Humanities	3
		Subtotal	**33**

Integrated Classes:

DAH	101	Infection Control and Medical Emergencies	2
DAH	121	Dental Sciences	3
DAH	124	Materials in Dentistry	2
DAH	131	Oral Pathology	3
DAH	135	Oral Radiology	2
DAH	235	Practice Management	1
		Subtotal	**13**

Dental Hygiene Only Classes:

DHG	120	Pre-Clinical Dental Hygiene	3
DHG	130	Clinical Dental Hygiene I	3
DHG	132	Pharmacology	2
DHG	134	Dental Nutrition	2
DHG	136	Periodontology	1
DHG	220	Clinical Dental Hygiene II	4
DHG	226	Advanced Periodontology	2
DHG	230	Clinical Dental Hygiene III	3
DHG	238	Community Dental Health Issues	2
		Subtotal	**22**
		Total Credit Hours	**68**

Elective

DHG	221	Local Anesthesia and Nitrous Oxide Sedation	2

Diploma

Dental Assisting - 5106024019

(Offered in West Consortium – Credential granted by West KY CTC but also taught at Elizabethtown CTC and Henderson CC)
(Offered in East Consortium – Credential granted by Bluegrass CTC but also taught at Big Sandy CTC and Somerset CC)

General Education Classes:

Program Related Classes

BIO	135	Basic Anatomy & Physiology with Laboratory OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
		Three credits from Writing/Assessing Information, Oral Communications, Humanities or Heritage	3
PSY	110	General Psychology *	(3)

*Required at Bluegrass CTC, recommended at West Kentucky CTC

		Subtotal	**7-14**

Integrated Classes

DAH	101	Infection Control and Medical Emergencies	2
DAH	121	Dental Sciences	3
DAH	124	Materials in Dentistry	2
DAH	131	Oral Pathology	3
DAH	135	Oral Radiology	2
DAH	235	Practice Management	1
		Subtotal	**13**

Dental Assisting Only Classes

DAS	120	Dental Assisting I	6
DAS	130	Seminar I	2
DAS	220	Dental Assisting II	9
DAS	230	Seminar II	1
		Subtotal	**18**
		Total Credit Hours	**38-45**

Dental Laboratory Technology

This program prepares individuals to fabricate dental prosthetic appliances that replace or repair natural teeth to help patients eat, chew, talk, and smile as well as, or better than, they did before. Dental technicians work collaboratively with dentists by following a written work authorization that details the type of prosthesis needed. Dental technicians do not have direct contact with the patient but instead use stone models made from impressions of the patient's teeth and surrounding soft tissues.

The curriculum includes courses in general education and in dental laboratory technology as required by the Commission on Dental Accreditation. The curriculum includes lectures and extensive laboratory experiences to enhance the students' learning.

The dental laboratory technician has many employment options including commercial dental laboratories, dental offices that have their own laboratories, dental sales and manufacturing firms. Graduates may also choose to own a laboratory, state laws permitting, or seek a teaching position at a dental technology education program.

Dental Laboratory Technology students completing the first year of the curriculum will earn a Certificate in Dental Laboratory Technology which prepares students for employment as entry-level dental technicians.

Dental Laboratory Technology students completing two years of the curriculum will earn an Associate Degree in Applied Science which will

prepare graduates for employment as technicians and graduates are eligible to take the National Board for Certification Recognized Graduate Examination and the Certified Dental Technician exam.

Applicants are accepted into the Program each fall according to the Guidelines for Admission to the Dental Laboratory Technology Program. This is a selective admissions process with approximately twenty students accepted each year. Students must maintain technical standards and a minimum GPA of at least a 2.0 (on a 4.0 scale) in the curriculum in order to progress from one semester to the next.

The Dental Laboratory Technology program is accredited by the Commission on Dental Accreditation of the American Dental Association.

For more information, visit the Dental Laboratory Technology program web site at bluegrass.kctcs.edu.

Associate in Applied Science

Dental Laboratory Technology - 5106037019

(Offered at BLC)

ENG	101	Writing I*	3
ENG	102	Writing II*	3
		Social Interaction Course*	3
		Heritage/Humanities/Foreign Language Course*	3
		Oral Communication Course*	3
		Mathematics Course*	3
		Science Course*	3
		Computer Literacy*	0-3
DLT	101	Dental Morphology	2
DLT	111	Dental Materials I	2
DLT	121	Complete Dentures I	2
DLT	131	Removable Partial Dentures I	2
DLT	151	Fixed Prosthodontics I	2
DLT	112	Dental Materials II	2
DLT	122	Complete Dentures II	2
DLT	132	Removable Partial Dentures II	2
DLT	142	Occlusion	2
DLT	152	Fixed Prosthodontics II	2
DLT	261	Applied Lab Techniques	8
DLT	281	Orthodontic Lab Techniques	2
DLT	262	Advanced Specialty Laboratory Techniques	8
DLT	291	Dental Laboratory Management, History and Ethics	2
		Total	**61-64**

Certificate

Dental Laboratory Technology - 5106033019

(Offered at BLC)

DLT	101	Dental Morphology	2
DLT	111	Dental Materials I	2
DLT	112	Dental Materials II	2
DLT	121	Complete Dentures I	2
DLT	122	Complete Dentures II	2
DLT	131	Removable Partial Dentures I	2
DLT	132	Removable Partial Dentures II	2
DLT	142	Occlusion	2
DLT	151	Fixed Prosthodontics I	2
DLT	152	Fixed Prosthodontics II	2
ENG	101	Writing I	3
		Science Course	3
		Total	**26**

Diagnostic Medical Sonography

Diagnostic Medical Sonography is a highly-skilled profession which uses specialized equipment to create images of structures inside the human body used by physicians to make medical diagnoses. Graduates of the program are qualified to provide patient services using diagnostic techniques under the supervision of a licensed physician.

This program contains four options, the general/vascular option, the general option, the vascular option and the cardiac option. The general/vascular option prepares the graduate to be a general sonographer who is qualified to perform vascular ultrasound. Sonographers have extensive, direct patient contact that may include performing some invasive procedures. The general option prepares the graduate to perform sonograms on the abdominal, small parts and OB/GYN applications. The vascular option prepares the graduate to perform sonograms on the cerbrovascular, peripheral arterial, peripheral venous and abdominal vascular applications. The cardiac option prepares the graduate to perform cardiovascular sonograms.

Sectional anatomy, ultrasonic instrumentation and imaging are the major components in this program. Skills are developed through clinical experiences using diagnostic imagery equipment.

An advanced option (certificate) in vascular sonography is offered for candidates who are currently employed and registry eligible in Diagnostic Medical Sonography.

The student is exposed to and expected to acquire skills, attitudes, and habits that are generally common to all professionals in the medical field. Graduates will be prepared for a professional career in the opted sonography field.

CPR requirement must be successfully completed prior to enrolling in the first sonography course and must be kept current throughout the program. Documentation of successful completion of a minimum 75 hour nursing assistant course or its equivalent and computer literacy competency as defined by KCTCS are required prior to enrolling in the first sonography course.

Progression in the Diagnostic Medical Sonography program is contingent upon achievement of a grade of "C" or better in each Sonography course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale)Transportation to the community agencies is the responsibility of each student.

Associate in Applied Science

Diagnostic Medical Sonography - 5109107019

(Offered at ASC, BGT, HZC, JFC, OWC,WKC)

General Education:

MAT	150	College Algebra	3
ENG	101	Writing I	3
		Heritage/Humanities/Foreign Language	3
		Social Interaction	3
BIO	137	Human Anatomy and Physiology I AND	4
BIO	139	Human Anatomy and Physiology II OR	4
BIO	135	Basic Anatomy and Physiology with Laboratory	(4)
PHY	151	Introductory Physics I OR	3
PHY	152	Introductory Physics Ii OR	(3)
PHY	171	Applied Physics	(4)
		Subtotal	**19-24**

General/Vascular Option – 510910701

(Offered at BGT, HZC,WKC)

AHS	120	Medical Terminology	1
DMS	109	Sonography I	7
DMS	115	Sonography II	6
DMS	119	Ultrasonic Physics and Instrumentation	6
DMS	199	Online Physics Review AND/OR	1
DMS	201	Online Abdomen Review AND/OR	(1)
DMS	202	Online OB/GYN Review	(1)
DMS	255	Vascular Technology	6
DMS	260	Vascular Clinical Education	6

A total of 17 credit hours must be completed from the following clinical courses: 17

DMS	126	Clinical Education I	(3-4)
DMS	230	Clinical Education II	(5-8)
DMS	240	Clinical Education III	(5-8)
		Subtotal	**50-52**
		Total	**69-76**

General Option - 510910703

(Offered at BGT, JFC, OWC)

AHS	120	Medical Terminology	1
NAA	100	Nursing Assistant Skills	3
DMS	111	Abdominal Sonography	7
DMS	112	Introduction to Patient Care*	(2)
DMS	116	OB/GYN Sonography	6
DMS	121	Sonography Physics and Instrumentation	6
DMS	199	Online Physics Review	1
DMS	201	Online Abdomen Review	1
DMS	202	Online OB/GYN Review	1

A total of 17 credit hours must be completed from the following clinical courses: 17

DMS	126	Clinical Education I	(3-4)
DMS	230	Clinical Education II	(5-8)
DMS	240	Clinical Education III	(5-8)
		Subtotal	**43-45**
		Total	**62-69**

*Required by Owensboro CTC.

Vascular Option – 510910704

(Offered at JFC)

AHS	120	Medical Terminology	1
DMS	117	Vascular Sonography I	7
DMS	118	Vascular Sonography II	6
DMS	121	Sonography Physics and Instrumentation	6
DMS	136	Vascular Clinical Education I	4
DMS	199	Online Physics Review	1
DMS	204	Online Vascular Review	2
DMS	206	Online Vascular Sonography III	3
DMS	236	Vascular Clinical Education II	8
DMS	237	Vascular Clinical Education III	5
		Subtotal	**43**
		Total	**62-67**

Cardiac Option – 510910702

(Offered at ASC, JFC)

AHS	120	Medical Terminology	1
CHE	140	Introductory General Chemistry	3
DMS	105	Introduction to Cardiology	13
DMS	145	Cardiac Sonography I	12
DMS	205	Cardiac Sonography II	6
DMS	215	Cardiac Sonography III	6
DMS	245	Cardiac Sonography IV	6
		Subtotal	**47**
		Total	**66-71**

Certificates

Basic Vascular Technology – 5109103019

(Offered at BGT, WKC)

DMS	280	Basic Vascular Technology	3
		Total	**3**

Cardiac – 5109103029

(Offered at JFC)

CHE	140	Introductory General Chemistry	3
DMS	105	Introduction to Cardiology	13
DMS	145	Cardiac Sonography I	12
DMS	205	Cardiac Sonography II	6
DMS	215	Cardiac Sonography III	6
DMS	245	Cardiac Sonography IV	6
		Total	**46**

General -5109103039

(Offered at JFC, OWC)

DMS	111	Abdominal Sonography	7
DMS	116	OB/GYN Sonography	6
DMS	121	Sonography Physics and Instrumentation	6
DMS	199	Online Physics Review	1
DMS	201	Online Abdomen Review	1
DMS	202	Online OB/GYN Review	1

A total of 17 credit hours must be completed from the following clinical courses: 17

DMS	126	Clinical Education I	(3-4)
DMS	230	Clinical Education II	(5-8)
DMS	240	Clinical Education III	(5-8)
		Total	**39**

Vascular – 5109103049

(Offered at JFC)

DMS	117	Vascular Sonography I	7
DMS	118	Vascular Sonography II	6
DMS	121	Sonography Physics and Instrumentation	6
DMS	136	Vascular Clinical Education I	4
DMS	199	Online Physics Review AND	1
DMS	204	Online Vascular Review	2
DMS	206	Online Vascular Sonography III	3
DMS	236	Vascular Clinical Education II	8
DMS	237	Vascular Clinical Education III	5
		Total	**42**

Basic Cardiac Ultrasound Technology - 5109103059

(Offered at BGT)

DMS	217	Basic Cardiac Ultrasound Technology	3
		Total	**3**

Diesel Technology

Emphasizes the skills needed to analyze malfunctions and repair, rebuild and maintain construction equipment, agriculture equipment, or medium and heavy trucks in this program of study. Provides instruction and experience in systems such as diesel engines, fuel injection, onboard computers, transmissions, steering and suspension, and brakes.

A student must receive a grade of "C" or better to receive credit for successful completion of courses in the diesel technology curriculum.

Associate in Applied Science

Diesel Technology - 4706057039

(Offered at ELC, SEC)

General Education:

Writing/Accessing Information	3
Mathematics (With the exception of MAT 120)	3
Science	3
Social Interaction	3
Heritage/Humanities/Foreign Language	3
Computer Literacy	3
Subtotal	**18**

NOTE: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course. If demonstrated by a competency exam, an additional three credit hour class must be taken.

Technical Core:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity Lab for Non-Majors OR	2
ADX	120	Basic Automotive Electricity AND	(3)
ADX	121	Basic Automotive Electricity Lab OR	(2)
ELT	110	Circuits I	(5)
ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
DIT	103	Preventive Maintenance Lab	2
DIT	110	Introduction to Diesel Engines AND	3
DIT	111	Introduction to Diesel Engines Lab OR	2
ADX	150	Engine Repair AND	(3)
ADX	151	Engine Repair Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	140	Hydraulics AND	3
DIT	141	Hydraulics Lab OR	2
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
DIT	150	Power Trains	3
DIT	151	Power Trains Lab	2
DIT	190	Electrical Systems for Diesel Equipment AND	3
DIT	191	Electrical Systems for Diesel Equipment Lab OR	2
ADX	260	Electrical Systems AND	(3)
ADX	261	Electrical Systems Lab	(2)
		Subtotal	**36**

Agriculture Diesel Technician Option - 470605701

(Offered at SEC)

DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
		Subtotal	**8-10**
		Total	**62-64**

Construction Equipment Technician Option - 470605702

(Offered at SEC)

DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
DIT	123	Undercarriage Lab	3
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
		Subtotal	**11-13**
		Total	**65-67**

Medium and Heavy Truck Technician Option - 470605703

(Offered at ELC, SEC)

DIT	180	Brakes	3
DIT	181	Brakes Lab	2
DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
		Subtotal	**10**
		Total	**64**

Recommended Technical Electives (Program Coordinator Approval required)

DIT	180	Brakes	3
DIT	181	Brakes Lab	2
DIT	160	Steering and Suspension	2
DIT	161	Steering and Suspension Lab	2
DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
DIT	123	Undercarriage Lab	3
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	105	Mechanical Concepts OR	1
PMX	100	Precision Measurement	(3)
DIT	193	Special Problems I	1
DIT	195	Special Problems II	2
DIT	197	Special Problems III	3
DIT	198	Practicum	1
DIT	298	Practicum II	2
DIT	199	Cooperative Education	1
DIT	299	Cooperative Education II	2

(Or other courses as approved by the Program Coordinator that will prepare the student for entry into the workforce)

Diplomas

Agriculture Equipment Technician - 4706054039

(Offered at ASC, BSC, MYC, OWC, SEC, SMC,WKC)

General Education

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Science or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses

ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity Lab for Non-Majors OR	2
ADX	120	Basic Automotive Electricity AND	(3)
ADX	121	Basic Automotive Electricity Lab OR	(2)
ELT	110	Circuits I	(5)
DIT	103	Preventive Maintenance Lab	2
DIT	110	Introduction to Diesel Engines AND	3
DIT	111	Introduction to Diesel Engines Lab OR	2
ADX	150	Engine Repair AND	(3)
ADX	151	Engine Repair Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
DIT	140	Hydraulics AND	3

DIT	141	Hydraulics Lab OR	2
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
DIT	150	Power Trains	3
DIT	151	Power Trains Lab	2
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	190	Electrical Systems for Diesel Equipment AND	3
DIT	191	Electrical Systems for Diesel Equipment Lab OR	2
ADX	260	Electrical Systems AND	(3)
ADX	261	Electrical Systems Lab	(2)
		Subtotal	**44-46**
		Total	**50-55**

Construction Equipment Technician - 4706054019

(Offered at ASC, BSC, HZC, MYC, OWC, SEC,WKC)

General Education

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Science or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses

ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity Lab for Non-Majors OR	2
ADX	120	Basic Automotive Electricity AND	(3)
ADX	121	Basic Automotive Electricity Lab OR	(2)
ELT	110	Circuits I	(5)
DIT	103	Preventive Maintenance Lab	2
DIT	110	Introduction to Diesel Engines AND	3
DIT	111	Introduction to Diesel Engines Lab OR	2
ADX	150	Engine Repair AND	(3)
ADX	151	Engine Repair Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	150	Power Trains	3
DIT	151	Power Trains Lab	2
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
DIT	123	Undercarriage Lab	3
DIT	140	Hydraulics AND	3
DIT	141	Hydraulics Lab OR	2
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
DIT	190	Electrical Systems for Diesel Equipment AND	3
DIT	191	Electrical Systems for Diesel Equipment Lab OR	2
ADX	260	Electrical Systems AND	(3)
ADX	261	Electrical Systems Lab	(2)
		Subtotal	**47-49**
		Total	**53-58**

Medium and Heavy Truck Technician - 4706054049

(Offered at ASC, BSC, ELC, MYC, OWC, SEC, SMC,WKC)

General Education

Area 1 =	Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Science or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses

ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity Lab for Non-Majors OR	2
ADX	120	Basic Automotive Electricity AND	(3)
ADX	121	Basic Automotive Electricity Lab OR	(2)
ELT	110	Circuits I	(5)
DIT	103	Preventive Maintenance Lab	2
DIT	110	Introduction to Diesel Engines AND	3
DIT	111	Introduction to Diesel Engines Lab OR	2
ADX	150	Engine Repair AND	(3)
ADX	151	Engine Repair Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	140	Hydraulics AND	3
DIT	141	Hydraulics Lab OR	2
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
DIT	150	Power Trains	3
DIT	151	Power Trains Lab	2
DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
DIT	180	Brakes	3
DIT	181	Brakes Lab	2
DIT	190	Electrical Systems for Diesel Equipment AND	3
DIT	191	Electrical Systems for Diesel Equipment Lab OR	2
ADX	260	Electrical Systems AND	(3)
ADX	261	Electrical Systems Lab	(2)
		Subtotal	**46**
		Total	**52-55**

Recommended Technical Electives (Program Coordinator Approval required)

DIT	180	Brakes	3
DIT	181	Brakes Lab	2
DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
DIT	121	Introduction to Maintenance Welding Lab OR	3
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab OR	(2)
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(3)
WLD	121	Shielded Metal Arc Welding (SMAW) Lab	(2)
DIT	123	Undercarriage Lab	3
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	105	Mechanical Concepts OR	1
PMX	100	Precision Measurement	(3)
DIT	193	Special Problems I	1
DIT	195	Special Problems II	2
DIT	197	Special Problems III	3
DIT	198	Practicum	1
DIT	298	Practicum II	2
DIT	199	Cooperative Education	1
DIT	299	Cooperative Education II	

(Or other courses as approved by the Program Coordinator that will prepare the student for entry into the workforce)

Certificate

Agriculture Equipment Mechanic Helper - 4706053109

(Offered at ASC, BSC, MYC, OWC, SEC, SMC,WKC)

ADX	150	Engine Repair AND	3
ADX	151	Engine Repair Lab OR	2
DIT	110	Introduction to Diesel Engines AND	(3)
DIT	111	Introduction to Diesel Engines Lab	(2)
ADX	260	Electrical Systems AND	3
ADX	261	Electrical Systems Lab OR	2
DIT	190	Electrical Systems for Diesel Equipment AND	(3)
DIT	191	Electrical Systems for Diesel Equipment Lab	(2)

DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
		Total	**20**

Construction Equipment Mechanic Helper - 4706053019

(Offered at ASC, BSC, HZC, MYC, OWC, SEC,WKC)

ADX	150	Engine Repair AND	3
ADX	151	Engine Repair Lab OR	2
DIT	110	Introduction to Diesel Engines AND	(3)
DIT	111	Introduction to Diesel Engines Lab	(2)
ADX	260	Electrical Systems AND	3
ADX	261	Electrical Systems Lab OR	2
DIT	190	Electrical Systems for Diesel Equipment AND	(3)
DIT	191	Electrical Systems for Diesel Equipment Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	152	Powertrain for Construction Equipment	3
DIT	153	Powertrain for Construction Equipment Lab	2
DIT	123	Undercarriage Lab	3
		Total	**23**

Diesel Engine Mechanic - 4706053079

(Offered at ASC, BLC, BSC, ELC, GTW, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	110	Introduction to Diesel Engines AND	3
DIT	111	Introduction to Diesel Engines Lab OR	2
ADX	150	Engine Repair AND	(3)
ADX	151	Engine Repair Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
		Electives (Diesel Courses/Industrial Education Core)	2
		Total	**12**

Diesel Mechanics Assistant - 4706053159

(Offered at BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	103	Preventive Maintenance Lab	2
DIT	110	Introduction to Diesel Engines	3
DIT	111	Introduction to Diesel Engines Lab	2
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
DIT	180	Brakes	3
DIT	181	Brakes Lab	2
DIT	190	Electrical Systems for Diesel Equipment	3
DIT	191	Electrical Systems for Diesel Equipment Lab	2
		Total	**27**

Diesel Steering & Suspension Mechanic - 4706053179

(Offered at ASC, BLC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
		Electives (Diesel Courses/Industrial Education Core)	7
		Total	**12**

Electrical/Electronics Systems Mechanic - 4706053059

(Offered at ASC, BSC, ELC, GTW, HZC, MYC, SEC, SMC,WKC)

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity Lab for Non-Majors OR	2
ADX	120	Basic Automotive Electricity AND	(3)
ADX	121	Basic Automotive Electricity Lab OR	(2)
ENGT	110	Circuits I	(5)
DIT	190	Electrical Systems for Diesel Equipment AND	3
DIT	191	Electrical Systems for Diesel Equipment Lab OR	2
ADX	260	Electrical Systems AND	(3)
ADX	261	Electrical Systems Lab	(2)
		Electives (Diesel Courses/Industrial Education Core)	2
		Total	**12**

Fluid Power Mechanic - 4706053119

(Offered at ASC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

FPX	100	Fluid Power OR	3
DIT	140	Hydraulics	(3)
FPX	101	Fluid Power Lab OR	2
DIT	141	Hydraulics Lab	(2)
		Electives (Diesel Courses/Industrial Education Core)	7
		Total	**12**

Heavy Duty Brake Mechanic - 4706053039

(Offered at ASC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	180	Brakes	3
DIT	181	Brakes Lab	2
		Electives (Diesel Courses/Industrial Education Core)	7
		Total	**12**

Heavy Duty Drive Train Mechanic - 4706053089

(Offered at ASC, BLC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	150	Power Trains	3
DIT	151	Power Trains Lab	2
		Electives (Diesel Courses/Industrial Education Core)	7
		Total	**12**

Medium and Heavy Truck Mechanic Helper - 4706053149

(Offered at ASC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

ADX	120	Basic Automotive Electricity AND	3
ADX	121	Basic Automotive Electricity Lab OR	2
BEX	100	Basic Electricity for Non-Majors AND	(3)
BEX	101	Basic Electricity Lab for Non-Majors OR	(2)
ELT	110	Circuits I	(5)
ADX	150	Engine Repair AND	3
ADX	151	Engine Repair Lab OR	2
DIT	110	Introduction to Diesel Engines AND	(3)
DIT	111	Introduction to Diesel Engines Lab	(2)
ADX	260	Electrical Systems AND	3
ADX	261	Electrical Systems Lab OR	2
DIT	190	Electrical Systems for Diesel Equipment AND	(3)
DIT	191	Electrical Systems for Diesel Equipment Lab	(2)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
DIT	160	Steering and Suspension	3
DIT	161	Steering and Suspension Lab	2
DIT	180	Brakes	3
DIT	181	Brakes Lab	2
		Total	**30**

Mobile Air Conditioning Mechanic - 4706053029

(Offered at ASC, BSC, ELC, GTW, HZC, MYC, OWC, SEC, SMC,WKC)

ADX	170	Climate Control	3
ADX	171	Climate Control Lab	1
		Electives (Diesel Courses/Industrial Education Core)	8
		Total	**12**

Preventive Maintenance Mechanic - 4706053199

(Offered at ASC, BSC, ELC, GTW, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	103	Preventive Maintenance Lab	1
		Electives (Diesel Courses/Industrial Education Core)	11
		Total	**12**

Undercarriage Mechanic - 4706053099

(Offered at ASC, BSC, ELC, HZC, MYC, OWC, SEC, SMC,WKC)

DIT	123	Undercarriage Lab	3
		Electives (Diesel Courses/Industrial Education Core)	9
		Total	**12**

Digital Game Design

Provides students with a thorough understanding of techniques for designing advanced 3-d games. Courses will cover 2-d and 3-d graphics, animation, character development, texturing, rigging, story development, and scripting using state-of-the-art software development tools. Completing students will have developed the skills necessary to create sophisticated video and/or computer game graphics and animation.

Certificate

Digital Game Design - 1108033019

(Offered at JFC)

VCC	166	Digital Imaging	3
IT	131	Introduction to Digital 3-D Game Graphics	3
IT	232	3-D Digital Game Character Development	3
IT	233	3-D Texturing and Special Effects for Games	3
IT	231	3-D Digital Game Animation	3
		Total	**15**

Education

The Associate in Applied Science Degree (AAS) in Education, Teacher Preparation, is an option for students who wish to begin coursework at a community and technical college and then apply for transfer admission to a teacher education program at a four-year college or university. The Paraeducator Certificate program is designed to prepare students to successfully complete the Kentucky Paraeducator Assessment or Kentucky Department of Education approved alternative assessment. Paraeducators who wish to earn a two-year degree may complete the (AAS) Teacher Associate option. Associate in Applied Science

Associate in Applied Science

Education - 1315017019

Teacher Prep Option - 131501701

(Offered at BLC, ELC, HPC, JFC, OWC, SEC, SMC)

General Education

ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking	3
		OR	
COM	252	Introduction to Interpersonal Communications	(3)
		Humanities[1] / Foreign Language[1]	3-4
HIS	108	History of the United States Through 1865	3
		OR	
HIS	109	History of the United States Since 1865	(3)
MAT	146	Contemporary College Mathematics	3
		OR	
MAT	150	College Algebra	(3)
		OR	
MA	109	College Algebra	(3)
		OR	
MA	111	Contemporary Mathematics	(3)
		Science[2]	7
PSY	110	General Psychology	3
		Social Interaction [1]	6
		Computer Literacy[3]	3
		Subtotal	**37-38**

Technical Core or Support Core (Common)

EDU	201	An Introduction to American Education	3
EDP	202	Human Development and Learning	3
EDP	203	Teaching Exceptional Learners in Regular Classrooms	3
		Total Common	**9**

Technical or Support Electives

		Technical or Support Electives	15
		Total Teacher Preparation Option	**15**
		Total Credit Hours	**61-62**

[1]At least one course within the 48 credit hour general education block must be selected from the identified Cultural Studies course list.

[2]Must include at least one Science course with a laboratory experience.

[3]Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.

Teacher Associate Option - 131501702

(Offered at BLC, ELC, GTW, HPC, JFC, OWC, SEC, SMC)

General Education

ENG	101	Writing I	3
ENG	102	Writing II	3
		Oral Communications	3
		Humanities[1] or Foreign Language [1]	3 - 4
HIS	108	History of the United States Through 1865	3
		OR	
HIS	109	History of the United States Since 1865	(3)
		Science [2]	6
		Mathematics	3
PSY	110	General Psychology	3
		Social Interaction [1]	6
		Computer Literacy[3]	3
		Subtotal	**36 - 37**

Technical Core or Support Core (Common)

EDU	201	An Introduction to American Education	3
EDP	202	Human Development and Learning	3
EDP	203	Teaching Exceptional Learners in Regular Classrooms	3
		Total Common	**9**

Technical or Support Courses

EDU	110	Orientation to Education	3
EDU	120	Child and Adolescent Development	3
EDU	130	Introduction to Special Education	3
EDU	140	Introduction to Behavior Management	3
EDU	150	Practical Experiences for the Paraeducator	3
EDU	280	Education Externship/Co-op	3
		Total Teacher Associate Option	**18**
		Total Credit Hours	**63 - 64**

[1]At least one course within the 48 credit hour general education block must be selected from the identified Cultural Studies course list.

[2]Must include at least one Science course with a laboratory experience.

[3]Successfully passing the computer competency exam will satisfy this requirement. If the computer competency exam is successfully completed, the student must take three (3) credit hours of coursework approved by the program coordinator.

Certificate

Paraeducator - 1315013019

(Offered at BLC, ELC, HPC, JFC, MYC, OWC, SEC, SMC)

EDU	110	Orientation to Education	3
EDU	120	Child and Adolescent Development	3
EDU	130	Introduction to Special Education	3
EDU	140	Introduction to Behavior Management	3
EDU	150	Practical Experiences for the Paraeducator	3
		Computer Literacy	0-3
		Total Paraeducator Certificate	**15-18**

Energy Systems

The Energy Systems degree is designed to prepare its graduates for entry level positions across the entire range of energy technologies. The initial option will prepare students to work safely and effectively as operators in fossil-fueled electricity generating power plants. The curriculum will also provide a background in other types of energy production and distribution, including solar, wind, geothermal, and petroleum-based as well as emerging technologies such as ethanol, biodiesel, and clean coal technologies. Graduates will have an understanding of the financial, societal, and environmental impacts of the various energy production technologies, and will be able to operate and troubleshoot the machinery and systems used in energy production.

Associate in Applied Science

Energy Systems - 1505037019

(Offered at MYC)

General Education

MAT	116	Technical Mathematics	3
ENG	101	Writing I	3
PHY	151	Introductory Physics I or higher	3
		Heritage/Humanities	3
		Social Interaction (ECO 101 preferred)	3
		Communications	3
		Computer Literacy	0-3
		Subtotal	**18-21**

Technical Core

ESP	101	Introduction to Energy Systems	3
ESP	211	Power Plant Operations I	3
IS	100	Introduction to Industrial Safety	3
ELT	102	Blueprint Reading	2
ESP	220	Power Plant Thermodynamics or	3
ELT	210	Thermodynamic Applications	(3)
ENV	110	Introduction to Environmental Technology	4
ESP	110	Petroleum Based Fuels	3
ESP	280	Capstone in Energy Systems or	3
ISM	210	Fundamentals of Process Control	(3)
		Subtotal	**24**

Power Plant Operations Option - 150503701

(Offered at MYC)

ESP	212	Power Plant Operations II	3
ESP	213	Power Plant Operations III	3
ESP	214	Power Plant Operations IV	3
ESP	120	Power Plant Chemistry	3
ESP	130	Electrical Concepts	3
ESP	132	Electrical Machinery and Controls	3
COE**	199	Cooperative Education	3
		Subtotal	**21**
		TOTAL Credits	**63-66**

**COE 199 requirement can be met by relevant work experience approved by the program coordinator.

Certificate

Power Plant Operations - 1505033019

(Offered at MYC)

General Education

MAT	116	Technical Mathematics	3
PHY	151	Introductory Physics I or higher	3
		Subtotal	**6**

Core

ELT	102	Blueprint Reading	2
ESP	220	Power Plant Thermodynamics or	3
ELT	210	Thermodynamic Applications	(3)
ESP	211	Power Plant Operations I	3
ESP	120	Power Plant Chemistry	3
IS	100	Introduction to Industrial Safety	3
ESP	212	Power Plant Operations II	3
ESP	213	Power Plant Operations III	3
ESP	130	Electrical Concepts	3
COE**	199	Cooperative Education	3
		Subtotal	**26**
		TOTAL Credits	**32**

**COE 199 requirement can be met by relevant work experience approved by the program coordinator.

Energy Technologies

Offers an option for students to build a career in the energy field. The degree incorporates multiple options for certificates associated with different energy careers, allowing students to match their strengths and interests with an appropriate plan of study. It is focused on preparing graduates to enter the workforce in positions such as an entry-level utility apprentice, line maintenance technician, transformer/relay technician, fiber optic technician, outside plant fiber optic technician, network communications technician, voice and data wiring technician, or renewable energy and energy efficiency specialist. The degree provides a broad foundation across many facets of utility and communications technologies, resulting in a multi-skilled technician valued by the workforce. Hands-on instruction is used to teach students aspects of smart grid technology, fiber optics installation, utility operation, line maintenance, underground operations, substation operations, transmission distribution, solar/photovoltaic systems installation, design and placement of wind energy systems, energy efficiency analysis, electrical energy efficiency control technologies, and job safety. The technical certificate options are complemented by an operations management certificate, which provides background knowledge of business operations.

Associate in Applied Science

Energy Technologies - 1505037029

General Education

ENG	101	Writing I	3
MAT	110	Applied Mathematics OR	3
		Any Higher Level Mathematics Course (excluding MAT120)	(3)
PHY	171	Applied Physics OR	4
		Natural / Applied Science	(3)
		Heritage / Humanities / Foreign Language	3
		Oral Communications	3
		Social Interaction	3
		Subtotal	**18-19**

Core

BAS	160	Introduction to Business	3
EET	150	Transformers	2
EET	151	Transformers Lab	1
ELT	110	Circuits I	5
ETT	110	Voice and Data Installer Level I	4
IS	100	Introduction to Industrial Safety	3
EGY	170	Energy Utility Technologies	4
EGY	120	Outside Plant Communications	4
		Computer Literacy (NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.)	0-3
		Subtotal	**26-29**

Technical Electives

		Any course listed below OR in the certificates listed below (not including courses in the technical core) OR as approved by the program coordinator	16
COE	199	Cooperative Education (up to 8 credit hours)	
DFT	122	Introduction to Computer Aided Drafting	
		Subtotal	**16**
		Total Credits	**60-64**

Certificate

Energy Efficiency Electrical Controls Technician – 1505033049

EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
EET	250	National Electric Code	4
EET	252	Electrical Construction II	2
EET	253	Electrical Construction II Lab	2
ELT	110	Circuits I	5
EGY	220	Energy Efficiency Electrical Controls	4
		Total	**21**

Outside Plant Technician - 1505033039

ELT	110	Circuits I	5
ETT	110	Voice and Data Installer Level I	4
IS	100	Introduction to Industrial Safety	3
EGY	120	Outside Plant Communications	4
		Computer Literacy (NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.)	0-3
		Total	**16-19**

Energy Utility Technician - 1505033029

EET	150	Transformers	2
EET	151	Transformers Lab	1
ELT	110	Circuits I	5
IS	100	Introduction to Industrial Safety	3
EGY	170	Energy Utility Technologies	4
		Computer Literacy (NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.)	0-3
		Total	**15-18**

Wind System Technologies - 1505033059

ELT	110	Circuits I	5
IMT	150	Maintaining Industrial Equipment	3
IMT	151	Maintaining Industrial Equipment Lab	2
EGY	250	Wind / Turbine Technologies	4
		Total	**14**

Solar/Photovoltaic Technologies – 1505033069

EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
ELT	110	Circuits I	5
EGY	230	Solar / Photovoltaic Technologies	4
		Total	**13**

Energy Efficiency and Analysis – 1505033079

ACR	170	Heat Load / Duct Design	3
EGY	240	Energy Efficiency and Analysis	4
		Computer Literacy (NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.)	0-3
		Total	**7-10**

Engineering and Electronics Technology

The Engineering and Electronics Technology program provides course work, competencies and experiences to prepare the students for success in the areas of Engineering technology, electronics, computer maintenance, mechanical, industrial, computer aided design, robotics and automation, communications, instrumentation, medical equipment, and telephony.

Progress in the Engineering and Electronics Technology program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Engineering and Electronics Technology - 1500007019

(Offered at BGT, BLC, ELC, HPC, JFC, MYC, OWC, SMC)

General Education

MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
PHY	171	Applied Physics OR	4
		Other Science with Consent of Program Coordinator	(3)
ENG	101	Writing I	3
		Social Interaction	3
		Oral Communications	3
		Heritage/Humanities/Foreign Language	3
		Subtotal:	**18-19**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
		Subtotal:	**24-25**

Electronics Specialization – 150000707

(Offered at BGT, BLC, ELC, HPC, JFC, MYC, OWC, SMC)

ELT	214	Devices II	4
ELT	220	Digital II	3
		Technical Electives *	13
		Subtotal:	**20**
		Total	**62-64**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Computer Maintenance Specialization – 150000703

(Offered at BGT, BLC, ELC, JFC, SMC)

ELT	234	Computer Hardware Maintenance OR	3
IT	105	Computer Maintenance Essentials OR	(3)
ELT	105	Computer Maintenance Essentials	(3)
ELT	232	Computer Software Maintenance OR	3
IT	205	Advanced Computer Maintenance OR	(3)
ELT	205	Advanced Computer Maintenance	(3)
ELT	220	Digital II	3
NIS	160	Networking Core Technologies OR	3
IT	120	Cisco Internetworking I OR	(4)
CIT	160	Data Communications and Networking	(4)
		Technical Electives *	9
		Subtotal:	**21-22**
		Total	**63-66**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Apprenticeship Specialization – 150000701

(Offered at BGT, JFC)

APS	201	Apprenticeship Studies	24
		Total	**66-68**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Mechanical Specialization – 150000706

(Offered at JFC, OWC)

ELT	122	Mechanical Power Transmission Systems AND	3
ELT	124	Mechanical Power Transmission Systems Lab OR	1
IMT	150	Maintaining Industrial Equipment I AND	(3)
IMT	151	Maintaining Industrial Equipment I Lab	(2)
ELT	265	Applied Fluid Power	3
BRX	120	Basic Blueprint Reading	3
CAD	200	Intermediate Computer Aided Drafting	4
		Technical Electives *	8
		Subtotal:	**22-23**
		Total	**64-67**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Industrial Specialization – 150000704

(Offered at BGT, BLC, HPC, JFC, MYC, OWC)

ELT	214	Devices II	4
ELT	220	Digital II	3
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Technical Electives *	9
		Subtotal:	**24**
		Total	**66-68**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Computer Aided Design Specialization – 150000702

(Offered at BGT, HPC, JFC)

CAD	150	Programming in CAD OR	4
ELT	290	Selected Topics in Engineering Technology OR	(3-4)
ADFT	130	Introduction to Architecture	(4)
CAD	200	Intermediate Computer Aided Drafting	4
CAD	201	Advanced 3D Modeling	4
		Technical Electives *	12
		Subtotal:	**23-24**
		Total	**65-68**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Robotics and Automation Specialization – 150000705

(Offered at BGT, BLC, HPC, JFC, MYC)

ELT	118	Manufacturing III: Computer Numerical Control OR	3
MTT	132	CAD/CAM/CNC	(3)
ELT	265	Applied Fluid Power	3
ELT	260	Robotics and Industrial Automation	5
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Technical Electives *	5
		Subtotal:	**24**
		Total	**66-68**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Communications Specialization – 150000708

(Offered at BLC, ELC)

ELT	214	Devices II	4
ELT	220	Digital II	3
ELT	240	Communications Electronics	6
		Technical Electives *	9
		Subtotal:	**22**
		Total	**64-66**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Instrumentation Specialization – 150000709

(Offered at ELC)

ELT	220	Digital II	3
ISM	102	Fundamentals of Instrumentation	4
ISM	210	Fundamentals of Process Control	4
		Technical Electives *	7
		Subtotal:	**18**
		Total	**60-62**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Medical Equipment and Instrumentation Specialization – 150000710

ELT	214	Devices II	4
BIO	135	Basic Anatomy and Physiology with Laboratory	4
BMT	200	Insight into Biomedical Equipment Technology	2
BMT	202	General Equipment Studies	3
BMT	204	Electrical, Mechanical, and Optical Principles	3
BMT	205	Biomedical Equipment Practices I	1
BMT	206	Specialized Biomedical Equipment	3
BMT	207	Biomedical Equipment Practices II	1
BMT	209	Clinical	2
		Subtotal	**23**
		Total	**65-67**

Diplomas

Electronics – 1500004019

(Offered at BGT, BLC, ELC, HPC, JFC, MDC, MYC, OWC, SEC, SMC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1

COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
ELT	214	Devices II	4
ELT	220	Digital II	3
		Technical Electives *	13
		Subtotal:	**20**
		Total	**51-53**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Apprenticeship- 1500004059

(Offered at BGT, JFC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
APS	201	Apprenticeship Studies	24
		Subtotal:	**24**
		Total	**55-57**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Industrial Electronics – 1500004079

(Offered at BGT, BLC, HPC, JFC, MYC, OWC, SEC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
ELT	214	Devices II	4
ELT	220	Digital II	3
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Technical Electives *	9
		Subtotal:	**24**
		Total	**55-57**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Engineering Design Technician – 1500004089

(Offered at JFC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
CAD	150	Programming in CAD OR	4
ELT	290	Selected Topics in Engineering Technology OR	(3-4)
ADFT	130	Introduction to Architecture	(4)
CAD	200	Intermediate Computer Aided Drafting	4
CAD	201	Advanced 3D Modeling	4
		Technical Electives *	12
		Subtotal:	**23-24**
		Total	**54-57**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Communications – 1500004029

(Offered at BLC, ELC, JFC, OWC, SEC, SMC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)

		Computer Literacy 3
ELT	289	Engineering and Electronics Technology Capstone Course.... 1
COED	198	Practicum OR 1-2
COE	199	Cooperative Education OR ..... (1-2)
		Equivalent Course with Consent of Program Coordinator (1-2
		Subtotal: 25-27
ELT	214	Devices II..... 4
ELT	220	Digital II..... 3
ELT	240	Communications Electronics 6
		Technical Electives * 11
		Subtotal: 24
		Total 55-57

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Computer Maintenance – 1500004049

(Offered at BGT, BLC, ELC, JFC, OWC, SEC, SMC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications.... 3
		AND
Area 2:		
MAT	150	College Algebra OR 3
MAT	126	Technical Algebra and Trigonometry ..... (3)
		Subtotal: 6

Core:

ELT	110	Circuits I 5
ELT	114	Circuits II 5
ELT	210	Devices I 4
ELT	120	Digital I..... 3
CAD	100	Introduction to Computer Aided Design OR..... 3
		Equivalent Course with Consent of Program Coordinator(3-4)
		Computer Literacy 3
ELT	289	Engineering and Electronics Technology Capstone Course.... 1
COED	198	Practicum OR 1-2
COE	199	Cooperative Education OR ..... (1-2)
		Equivalent Course with Consent of Program Coordinator (1-2
		Subtotal: 25-27
ELT	234	Computer Hardware Maintenance OR 3
IT	105	Computer Maintenance Essentials OR..... (3)
ELT	105	Computer Maintenance Essentials..... (3)
ELT	232	Computer Software Maintenance OR 3
IT	205	Advanced Computer Maintenance OR ..... (3)
ELT	205	Advanced Computer Maintenance..... (3)
ELT	220	Digital II..... 3
NIS	160	Networking Core Technologies OR 3
IT	120	Cisco Internetworking I OR..... (4)
CIT	160	Data Communications and Networking ..... (4)
		Technical Electives * 9
		Subtotal: 21-22
		Total 52-55

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Mechanical – 1500004069

(Offered at JFC, OWC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications.... 3
		AND
Area 2:		
MAT	150	College Algebra OR 3
MAT	126	Technical Algebra and Trigonometry ..... (3)
		Subtotal: 6

Core:

ELT	110	Circuits I 5
ELT	114	Circuits II 5
ELT	210	Devices I 4
ELT	120	Digital I..... 3
CAD	100	Introduction to Computer Aided Design OR..... 3
		Equivalent Course with Consent of Program Coordinator(3-4)
		Computer Literacy 3
ELT	289	Engineering and Electronics Technology Capstone Course.... 1
COED	198	Practicum OR 1-2
COE	199	Cooperative Education OR ..... (1-2)
		Equivalent Course with Consent of Program Coordinator (1-2
		Subtotal: 25-27
ELT	122	Mechanical Power Transmission Systems AND 3
ELT	124	Mechanical Power Transmission Systems Lab OR..... 1
IMT	150	Maintaining Industrial Equipment I AND ..... (3)
IMT	151	Maintaining Industrial Equipment I Lab ..... (2)
ELT	265	Applied Fluid Power 3
BRX	120	Basic Blueprint Reading 3
CAD	200	Intermediate Computer Aided Drafting 4
		Technical Electives * 8
		Subtotal: 22-23
		Total 53-56

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Robotics and Automation – 1500004039

(Offered at BGT, BLC, BSC, HPC, JFC, MYC, OWC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications.... 3
		AND
Area 2:		
MAT	150	College Algebra OR 3
MAT	126	Technical Algebra and Trigonometry ..... (3)
		Subtotal: 6

Core:

ELT	110	Circuits I 5
ELT	114	Circuits II 5
ELT	210	Devices I 4
ELT	120	Digital I..... 3
CAD	100	Introduction to Computer Aided Design OR..... 3
		Equivalent Course with Consent of Program Coordinator(3-4)
		Computer Literacy 3
ELT	289	Engineering and Electronics Technology Capstone Course.... 1
COED	198	Practicum OR 1-2
COE	199	Cooperative Education OR ..... (1-2)
		Equivalent Course with Consent of Program Coordinator (1-2
		Subtotal: 25-27
ELT	118	Manufacturing III: Computer Numerical Control OR 3
MTT	132	CAD/CAM/CNC..... (3)
ELT	265	Applied Fluid Power 3
ELT	260	Robotics and Industrial Automation 5
ELT	244	Electrical Machinery and Controls OR 4
EET	270	Electrical Motor Controls I AND..... (2)
EET	271	Electrical Motor Controls I Lab..... (2)
ELT	250	Programmable Logic Controllers OR 4
EET	276	Programmable Logic Controllers AND..... (2)
EET	277	Programmable Logic Controllers Lab ..... (2)
		Technical Electives * 5
		Subtotal: 24
		Total 55-57

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Instrumentation – 1500004099

(Offered at ELC)

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
ELT	220	Digital II	3
ISM	102	Fundamentals of Instrumentation	4
ISM	210	Fundamentals of Process Control	4
		Technical Electives *	9
		Subtotal:	**20**
		Total	**51-53**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Digital Telephony - 1500004109

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
ELT	222	Mechanics of Telephony	3
ELT	224	Basic Telecoms Installation and Maintenance	3
ELT	226	Safety in the Workplace OR	2
ISX	100	Industrial Safety	(3)
ELT	214	Devices II	4
ELT	220	Digital II	3
		Subtotal	**15-16**
		Total	**46-49**

*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Medical Equipment Service Technician - 1500004119

General Education:

Area 1:		Writing/Accessing Information or Oral Communications	3
		AND	
Area 2:			
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra and Trigonometry	(3)
		Subtotal:	**6**

Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
		Computer Literacy	3
ELT	289	Engineering and Electronics Technology Capstone Course	1
COED	198	Practicum OR	1-2
COE	199	Cooperative Education OR	(1-2)
		Equivalent Course with Consent of Program Coordinator	(1-2
		Subtotal:	**25-27**
ELT	214	Devices II	5
BIO	135	Basic Anatomy and Physiology with Laboratory	4
BMT	200	Insight into Biomedical Equipment Technology	2
BMT	202	General Equipment Studies	3
BMT	204	Electrical, Mechanical, and Optical Principles	3
BMT	205	Biomedical Equipment Practices I	1
BMT	206	Specialized Equipment Studies	3
BMT	207	Biomedical Equipment Practices II	1
BMT	209	Clinical	2
		Subtotal	**24**
		Total	**55-57**

Certificates

Electronics Tester – 1500003089

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC, SMC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	120	Digital I	3
		Total	**13**

Electronics Technician – 1500003069

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC, SMC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	214	Devices II	4
ELT	120	Digital I	3
ELT	220	Digital II	3
		Total	**24**

Maintenance Technician – 1500003059

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC)

CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	265	Applied Fluid Power	3
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Total	**24-25**

Robotics and Automation Technician – 1500003099

(Offered at BGT, BLC, BSC, HEC, HPC, JFC, MYC, OWC, SEC, SMC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
ELT	118	Manufacturing III, Computer Numerical Control OR	3
MTT	132	CAD/CAM/CNC	(3)
ELT	265	Applied Fluid Power	3
ELT	260	Robotics and Industrial Automation	5
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Total	**36**

Digital Telephony Technician – 1500003119

(Offered at BSC, JFC, MYC, SEC)

ELT	222	Mechanics of Telephony	3
ELT	224	Basic Telecoms Installation and Maintenance	3
ELT	226	Safety in the Workplace OR	2
ISX	100	Industrial Safety	(3)
ELT	110	Circuits I	5
ELT	120	Digital I	3
		Computer Literacy	3
		Total	**19-20**

Computer Maintenance Technician – 1500003029

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC, SMC)

ELT	110	Circuits I	5
ELT	120	Digital I	3
		Computer Literacy	3
ELT	234	Computer Hardware Maintenance OR	3
IT	105	Computer Maintenance Essentials OR	(3)
ELT	105	Computer Maintenance Essentials	(3)
ELT	232	Computer Software Maintenance OR	3
IT	205	Advanced Computer Maintenance OR	(3)
ELT	205	Advanced Computer Maintenance	(3)
		Total	**17**

Industrial Electronics Technician I – 1500003129

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	120	Digital I	3
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Total	**17**

Industrial Electronics Technician II – 1500003139

(Offered at BGT, BLC, BSC, HPC, JFC, MYC, OWC, SEC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	214	Devices II	4
ELT	120	Digital I	3
ELT	220	Digital II	3
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
		Total	**32**

Mechanical Technician – 1500003149

(Offered at BSC, HPC, JFC, MYC, OWC, SEC)

CAD	100	Introduction to Computer Aided Design OR	3
		Equivalent Course with Consent of Program Coordinator	(3-4)
ELT	122	Mechanical Power Transmission Systems AND	3
ELT	124	Mechanical Power Transmission Systems Lab OR	1
IMT	150	Maintaining Industrial Equipment I AND	(3)
IMT	151	Maintaining Industrial Equipment I Lab	(2)
ELT	265	Applied Fluid Power	3
BRX	120	Basic Blueprint Reading	3
CAD	200	Intermediate Computer Aided Drafting	4
		Total	**17-19**

Automation Technician – 1500003229

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, JFC, MYC, OWC, SEC)

ELT	110	Circuits I	5
ELT	244	Electrical Machinery and Controls OR	4
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab	(2)
ELT	250	Programmable Logic Controllers OR	4
EET	276	Programmable Logic Controllers AND	(2)
EET	277	Programmable Logic Controllers Lab	(2)
ELT	265	Applied Fluid Power	3
		Total	**16**

Communications Technician – 1500003039

(Offered at BLC, BSC, ELC, HPC, JFC, MYC, OWC, SEC, SMC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	214	Devices II	4
ELT	120	Digital I	3
ELT	240	Communications Electronics	6
		Total	**27**

Instrumentation Technician – 1500003189

(Offered at BSC, ELC, JFC, MYC, OWC, SEC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ISM	102	Fundamentals of Instrumentation	4
ISM	210	Fundamentals of Process Control	4
		Total	**18**

General Medical Equipment Service Provider - 1500003169

ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	4
ELT	120	Digital I	3
		Computer Literacy	3
ELT	234	Computer Hardware Maintenance OR	3
IT	105	Computer Maintenance Essentials OR	(3)
ELT	105	Computer Maintenance Essentials OR	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory	4
BMT	200	Insight into Biomedical Equipment Technology	2
BMT	202	General Equipment Studies	3
BMT	204	Electrical, Mechanical, and Optical Principles	3
BMT	205	Biomedical Equipment Practices I	1
		Total Credits	**36**

CAD Technician – 1500003199

(Offered at BGT, HPC, JFC, OWC, SEC)

CAD	100	Introduction to CAD OR	3
DFT	122	Introduction to Computer Aided Drafting	(4)
CAD	200	Intermediate Computer Aided Drafting OR	4
DFT	152	Intermediate Computer Aided Drafting	(4)
CAD	201	Advanced 3D Modeling OR	4

DFT	252	Parametric Modeling	(4)
		Technical Electives *	1
		Total Credits	**12-13**

* Technical Electives: Any EET, ET, ENGT, ELT, IMT, CIS, NIS, IT, ISM, CAD, ICT, MFG, or any other course as approved by the program coordinator.

Environmental Science Technology

This program includes specialized environmental science courses in addition to general education coursework to provide individuals the background necessary for understanding the ecological relationships of the environment. Coursework also emphasizes the application of scientific principles to pollution control problems in accordance with state and federal regulations. Practical lab and field experience in sampling and analysis will be stressed. Emphasis is placed on developing the students' ability to function effectively in a variety of job situations. Graduates of this program will be prepared to sample and analyze air, water and soil in accordance with state and federal regulations. Environmental technicians may be responsible for such job duties as air pollution surveillance, analysis of water and wastewater samples, ground water and surface water assessment, field sampling, data interpretation, and other support services to engineering and science professionals. Graduates in this field may be employed as technicians by federal, state and local governmental units as well as utilities, private industry, and environmental engineering consulting firms.

Admissions Requirements

The following information has been taken from the Rules of the Senate and is subject to change without notice. All applicants meeting the appropriate academic requirements shall be considered equally for admission to Bluegrass Community and Technical College or to any academic program thereof regardless of economic or social status, and without discrimination on the basis of race, color, religion, sex, marital status, beliefs, age, national origin, sexual orientation, or physical or mental disability.

In order to be admitted to the Environmental Science Technology (EST) Program, each student must be admitted to Bluegrass Community and Technical College.

In order to be admitted to the Environmental Science Technology Program, a student must:

1. Complete EST 150, EST 160, and MA 109 with a passing grade or transfer credit from an accredited institution for comparable courses (to be assessed by EST Coordinator), and
2. Attend a pre-admission conference with the EST Program coordinator or the coordinator's designee.

Associate in Applied Science

Environmental Science Technology - 1505077019

(Offered at BLC)

ENG	101	Writing I*	3
ENG	102	Writing II*	3
MA	109	College Algebra*	3
COM	181	Basic Public Speaking* OR	3
COM	252	Intro to Interpersonal Communications*	(3)
		Social Interaction Course*	3
		Technical Elective	3
		Heritage/Humanities Course	3
CIS	105	Intro to Computing	3
BIO	112	*Introduction to Biology	3
BIO	111	Intro to Biology Lab	1
EST	150	Introductory Ecology	4
CIS	130	Microcomputer Applications	3
CHE	170	General College Chemistry I	3
CHE	175	General College Chemistry Lab I	2
EST	160	Hydrolic Geology	3
EST	170	Environmental Sampling Laboratory	2
EST	220	Pollution of Aquatic Ecosystems	3
EST	230	Aquatic Chemistry Lab	2
EST	240	Sources and Effects of Air Pollution	4
		Technical Elective	3
EST	250	Solid and Hazardous Waste Management	3
EST	260	Environmental Analysis Lab	2
EST	270	Environmental Law and Regulation	3
EST	280	Environmental Trends Seminar	1
		Total Credits	**66**

Technical Electives

PHY	151	Introductory Physics I	3
COE	199	Cooperative Education (Internship)	1-3
EST	299	Selected Topics in EST	1-3
STA	210	Statistics: A Force in Human Judgment	3
CAD	100	Intro to Computer-Aided Design	3
ACH	185	Computer-Aided Drafting I	3
GIS	110	Spatial Data Analysis	3
GIS	120	Introduction to Geographic Information Systems	3
CIS	234	Advanced Spreadsheet Applications	3
ENG	203	Business Writing	3
CHE	180	General College Chemistry II	3
CHE	185	General College Chemistry Lab II	1
GEO	210	Pollutions, Hazards, and Environmental Mgmt	3
GLY	220	Principles of Physical Geology	4
ECO	201	Principles of Economics I	3
CE	211	Surveying	4

Courses not on this list may be approved at the coordinator's discretion.

* Satisfies General Education requirement for AAS degree

Environmental Technology

The environmental technology program has been developed in concert with various regulatory agencies, state universities and businesses and industries. Environmental Technicians conducts tests and field investigations to obtain data for use by environmental, engineering, and scientific personnel in determining sources and methods of controlling pollutants in air, water and soil, by utilizing knowledge of agriculture, chemistry, meteorology, engineering principles and applied technologies.

Certificates

Hazardous Materials Technician - 1505073019

(Offered at BLC)

CPU	100	Introduction to Computers	3
ENV	100	Environmental Mathematics	3
ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	120	Environmental Chemistry	3
ENV	121	Environmental Chemistry Lab	1
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	260	Hazardous Materials	6
ENV	261	Hazardous Materials Lab	3
ENV	270	Treatment and Disposal Technologies	3
TEC	200	Technical Communications	3

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**37**

Waste Processing Attendant - 1505073029

(Offered at BLC)

ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	260	Hazardous Materials	6
ENV	261	Hazardous Materials Lab	3

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**21**

Wastewater Treatment Plant Attendant - 1505073039

(Offered at BLC)

ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	290	Wastewater Treatment Technology	6
ENV	291	Wastewater Treatment Technology Lab	2

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**20**

Wastewater Treatment Plant Operator - 1505073049

(Offered at BLC)

CPU	100	Introduction to Computers	3
ENV	100	Environmental Mathematics	3
ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	120	Environmental Chemistry	3
ENV	121	Environmental Chemistry Lab	1
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	270	Treatment and Disposal Technologies	3
ENV	290	Wastewater Treatment Technology	6
ENV	291	Wastewater Treatment Technology Lab	2
TEC	200	Technical Communications	3

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**36**

Water Treatment Plant Attendant - 1505073059

(Offered at BLC)

ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	280	Water Treatment Technology	6
ENV	281	Water Treatment Technology Lab	2

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**20**

Water Treatment Plant Operator - 1505073069

(Offered at BLC)

CPU	100	Introduction to Computers	3
ENV	100	Environmental Mathematics	3
ENV	110	Introduction to Environmental Technology	4
ENV	111	Environmental Sampling Techniques Lab	2
ENV	120	Environmental Chemistry	3
ENV	121	Environmental Chemistry Lab	1
ENV	140	Geology, Hydrology and Soils	4
ENV	141	Geology, Hydrology and Soils Lab	2
ENV	270	Treatment and Disposal Technologies	3
ENV	280	Water Treatment Technology	6
ENV	281	Water Treatment Technology Lab	2
TEC	200	Technical Communications	3

Electives:

ENV	293	Special Problems I	(1)
ENV	295	Special Problems II	(2)
ENV	297	Special Problems III	(3)
		Total Credits	**36**

Equine Studies

(Curriculum Revision Pending)

The Equine Studies program will prepare students for a career as an equine professional such as jockey, horseman, or racing official. Students will learn basics of horse care; principles and techniques for riding as it relates to racehorse exercise, requirements for advancing to a professional jockey career; anatomy and physiology of horses; and life skills necessary for a successful career in the Equine industry.

The exercise rider's certificate will prepare students for a career as a professional exercise rider. Students will learn basics of horse care by taking care of at least one horse daily; principles of balance as it relates to efficient racehorse exercise; proper position and use of hands, arms, feet, legs, back and head when exercising a racehorse; requirements for advancing to a professional jockey career; anatomy and physiology of horses; and life skills necessary for a successful riding career.

Associate in Applied Science

Equine Studies - 0105077019

(Offered at BLC)

General Education:

Mathematics	3
Science	3
Social Interaction	3
Heritage/Humanities/Foreign Language	3
Writing/Accessing Information	3
Oral Communications	3
Computer Literacy	0-3
Total General Education Requirements	**18-21**

Technical Core: (30 Credit Hours)

EQM	100	Introduction to Equine Studies	3
EQM	120	Introduction to Commercial Breeding Practices	3
EQS	103	Racehorse Care	3
EQS	110	Basic Equine Physiology	3
EQS	130	Introduction to the Racing Industry	3
EQS	200	Lameness in Racehorses	3
EQS	203	Racing Stable Operations	3
EQS	299	Cooperative Education(Internship)(540 Contact Hours)	9
		Total Technical Core	**30**

Jockey Option - 10507701

(Offered at BLC)

EQS	111	Introduction To Riding Racehorses	1
EQS	112	Racehorse Riding Skills I	3
EQS	113	Racehorse Riding Skills II	3
EQS	212	Racehorse Riding Principles	3
EQS	213	Racehorse Riding Techniques	3
EQS	215	Life Skills for Jockeys	3
		Subtotal Jockey Option	**16**
		Total Jockey Option AAS	**64-67**

Horseman Option - 010507702

(Offered at BLC)

EQS	121	History of Thoroughbred Racing	1
EQS	122	Yearling Breaking and Training	3
EQS	123	Breaking and Prepping Two Year Olds	3
EQS	223	Training Principles and Practices	4
EQS	225	Life Skills for Horsemen	3
EQM	140	Equine Business Management	2
		Subtotal Horseman Option	**16**
		Total Horseman Option	**64-67**

Racing Industry Support Option - 010507703

(Offered at BLC)

EQM	140	Equine Business Management I	2
EQM	240	Equine Business Management II	2
EQM	242	Equine Law	3
EQM	246	Current Trends in the Equine Industry	1
EQS	225	Life Skills for Horsemen	3
EQS	230	Racing Office Operations	3
		Subtotal Racing Industry Support Option	**14**
		Total Racing Industry Support Option	**62-65**

Diplomas

Equine Studies - 0105074019

(Offered at BLC)

General Education Core

Area I	(Writing/Accessing Information/Oral Communications, Humanities/Heritage/Foreign Language)	3
Area II	(Social Interaction, Natural/Applied Science, Mathematics)	3
Area III	(Computer Literacy or demonstrated competency)	0-3
	General Education Total	6-9

Technical Core

EQM	100	Introduction to Equine Studies	3
EQM	120	Introduction to Commercial Breeding Practices	3
EQS	103	Racehorse Care	3
EQS	110	Basic Equine Physiology	3
EQS	130	Introduction to the Racing Industry	3
EQS	200	Lameness in Racehorses	3
		Total Technical Core	**18**

Jockey Option - 010507401

(Offered at BLC)

EQS	111	Introduction to Riding Racehorses	1
EQS	112	Racehorse Riding Skills I	3
EQS	113	Racehorse Riding Skills II	3
EQS	203	Racing Stable Operations	3
EQS	212	Racehorse Riding Principles	3
EQS	213	Racehorse Riding Techniques	3
EQS	215	Life Skills for Jockeys	3
EQS	299	Cooperative Education(Internship)(540 Contact Hours)	9
		Subtotal Jockey Option	**28**
		Total Jockey Option Diploma	**52-55**

Horseman Option - 010507402

(Offered at BLC)

EQS	121	History of Thoroughbred Racing	1
EQS	122	Yearling Breaking and Training	3
EQS	123	Breaking and Training Yearlings/Two Year Olds	3
EQS	203	Racing Stable Operations	3
EQS	223	Training Principles and Practices	4
EQS	225	Life Skills for Horsemen	3
EQM	140	Equine Business Management	2
EQS	299	Cooperative Education(Internship)(540 Contact Hours)	9
		Subtotal Horseman Option	**28**
		Total Horseman Option	**52-55**

Racing Industry Support Option - 010507403

(Offered at BLC)

EQM	140	Equine Business Management I	2
EQM	240	Equine Business Management II	2
EQM	242	Equine Law	3
EQM	246	Current Trends in the Equine Industry	1
EQS	203	Racing Stable Operations	3
EQS	225	Life Skills for Horsemen	3
EQS	230	Racing Office Operations	3
EQM	250	Equine Practicum (180 Contact Hours)	3
		Subtotal Racing Industry Support Option	**20**
		Total Racing Industry Support Option	**44-47**

Certificate

Exercise Rider - 0105073019

(Offered at BLC)

EQM	100	Introduction to Equine Studies	3
EQM	120	Introduction to Commercial Breeding Practices	3
EQS	103	Racehorse Care	3
EQS	110	Basic Equine Physiology	3
EQS	130	Introduction to the Racing Industry	3
EQS	111	Introduction to Riding Racehorses	1
EQS	112	Racehorse Riding Skills I	3
EQS	113	Racehorse Riding Skills II	3
EQS	203	Racing Stable Operations	3
		Total Credits	**25**

Fire/Rescue Science Technology

Fire/Rescue Science Technology:

If you are interested in a career in the fire service, the Fire/Rescue Science Technology Program will prepare you for the challenges facing today's emergency responders. In the program you will learn the skills of fire suppression and prevention, technical rescue, hazardous materials, emergency medical care, and leadership. This program is beneficial whether you are seeking a career in emergency services (Fire, Rescue, EMS or Emergency Management) or if you are already involved in providing fire, rescue or EMS services in your community.

Students may enter the program with or without experience in emergency services. The degree, certificate, and diploma programs that are offered can help you in obtaining employment in various emergency service fields, or if you are already a firefighter, help you get that promotion you have been waiting for. Classes are offered through State Fire/Rescue Training and may be offered in various formats such as: Web courses, hybrid courses, and traditional classroom offerings. For more information regarding this program, contact your local State Fire/Rescue Training Area Office or see list of contacts on page 69.

Emergency Medical Technician Certificate:

Students in the Emergency Medical Technician program are instructed in the proper care of sick and injured patients. Students are trained to treat victims suffering from traumatic and medical emergencies such as broken bones, puncture wounds, cardiac, and respiratory emergencies, vehicle accidents and more. This course meets the standards set forth by the US Department of Transportation National Standard Curriculum for EMT-Basic and the Kentucky Board of Emergency Medical Services. Students that successfully complete the course and its requirements will be awarded a certificate for Emergency Medical Technician, and will be prepared to challenge the certification examination process set forth by the Kentucky Board of Emergency Medical Services.

Associate in Applied Science

Fire/Rescue Science Technology - 4302037019

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SMC, WKC)

General Education:

Heritage/Humanities/Foreign Language	3
Mathematics	3
Science	3
Social Interaction	3
Writing/Accessing Information	3
Computer Literacy	0-3
Subtotal	**15-18**

Technical Courses:

FRS	101	Introduction to Fire Service	3
FRS	102	Firefighters Basic Skills I	3
FRS	103	Firefighters Basic Skills II	3
FRS	104	Firefighters Intermediate Skills I	3
FRS	105	Firefighters Intermediate Skills II	3
FRS	201	Firefighters Advanced Skills I	3
FRS	202	Firefighters Advanced Skills II	3
FRS	203	Firefighters Advanced Skills III	3
FRS	204	EMT First Responder	3
FRS	205	Fire Officer I	5
FRS	206	Fire Officer II	8
FRS	207	Fire Officer III	6
		Subtotal	**46**
		Total Credits	**61-64**

NOTE: All FRS courses are available in modules; see course description section.

Diploma

Fire Chief - 4302034039

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SMC, WKC)

General Education:

Area 1	Writing/Accessing Information, Oral Communication, or Humanities/Heritage/Foreign Language	3
Area 2	Social Science, Behavioral Science, Natural/Applied Science, or Mathematics	3
Area 3	Computer Literacy Course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses:

FRS	101	Introduction to Fire Service	3
FRS	102	Firefighters Basic Skills I	3
FRS	103	Firefighters Basic Skills II	3
FRS	104	Firefighters Intermediate Skills I	3
FRS	105	Firefighters Intermediate Skills II	3
FRS	201	Firefighters Advanced Skills I	3
FRS	202	Firefighters Advanced Skills II	3
FRS	203	Firefighters Advanced Skills III	3
FRS	204	EMT First Responder	3
FRS	205	Fire Officer I	5
FRS	206	Fire Officer II	8
FRS	207	Fire Officer III	6
		Subtotal	**46**
		Total Credits	**52-55**

NOTE: All FRS courses are available in modules; see course description section.

Certificate

Basic Firefighter - 4302033019

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SMC, WKC)

FRS	101	Introduction to Fire Service	3
FRS	102	Firefighters Basic Skills I	3
FRS	103	Firefighters Basic Skills II	3
FRS	104	Firefighters Intermediate Skills I	3
		Total Credits	**12**

NOTE: All FRS courses are available in modules; see course description section.

Advanced Firefighter - 4302033029

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SMC, WKC)

FRS	101	Introduction to Fire Service	3
FRS	102	Firefighters Basic Skills I	3
FRS	103	Firefighters Basic Skills II	3
FRS	104	Firefighters Intermediate Skills I	3
FRS	105	Firefighters Intermediate Skills II	3
FRS	201	Firefighters Advanced Skills I	3
FRS	202	Firefighters Advanced Skills II	3
FRS	203	Firefighters Advanced Skills III	3
		Total Credits	**24**

NOTE: All FRS courses are available in modules; see course description section.

Fire Officer - 4302033039

(Offered at ASC, BGT, BLC, BSC, ELC, HZC, JFC, MDC, MYC, OWC, SMC,WKC)

FRS	2051	Fire Prevention, Public Education and Fire Cause Determination II	0.5
FRS	2052	Firefighter Survival and Rescue	1.1
FRS	2053	Hazardous Materials Technician	3.4
FRS	2062	Managing Company Tactical Operations:Decision Making	1.0
FRS	2063	Instructional Techniques for Company Officers	1.0
FRS	2071	Company Officer	3.5
FRS	2072	Incident Command System (ICS)	0.9
FRS	2073	Leadership I: Strategies for Company Success	0.8
FRS	2074	Fire/Arson Detection (Arson I)	0.8
		Total Credits	**13**

NOTE: All FRS courses are available in modules; see course description section.

Emergency Medical Technician - 5109042010

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, JFC, MDC, MYC, OWC, SMC, SEC,WKC)

FRS	2061	Emergency Medical Technician	6
		Total Credits	**6**

NOTE: Contact faculty concerning pre-requisites.

General Occupational/Technical Studies

The Associate in Applied Science degree in General Occupational/Technical Studies provides flexible alternatives for meeting student and employer needs. This program serves two general purposes: 1) Individualized program – provides a flexible curriculum that can be designed to meet specifics student and workplace needs, and 2) Degree completion – provides a structure through which credit may be granted for significant prior learning experiences in occupational/technical areas.

Credit earned through certificate and diploma program completion will be applicable toward the Associate in Applied Science in General Occupational/Technical Studies degree when consistent with the objectives of the student's individual plan of study. This heavily advisor-driven model can combine certificates and/or diplomas in different disciplines for meeting employer needs for unique skill combinations for which there is no established degree program. As much as twenty hours of credit for experiential learning may be applied toward degree completion. KCTCS certificate and diploma credit and acceptable credit transferred from other colleges may also be applied to a student's program completion plan. At least 25 percent of the approved curriculum credits must be completed at the KCTCS institution granting the degree.

Associate in Applied Science

General Occupational/Technical Studies - 3099997017

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

General Education Component Minimum[3]

Mathematics	3
Science	3
Social Interaction	3
Heritage/Humanities/Foreign Language	3
Writing/Accessing Information	3
Computer Literacy (Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course)[1]	0-3
Additional General Education Coursework	0-5
Subtotal	**15- 23**

Technical Component Minimum[3]

Technical Courses[2]	45-50
Subtotal	**45- 50**
Total Credits	**60-68**

NOTE:

[1]If computer literacy is demonstrated by a competency exam, an additional three credit hour course is required.

[2]The student must have a plan of study on file in the academic affairs office.

[3]A combination of general education and technical courses should not exceed 68 credits.

Geographic Information Systems Technology

A Geographic Information System (GIS) is a powerful combination of mapping technology and databases, that, when combined, may create an array of spatially arranged data on a map surface for detailed analysis. Once the domain of a few specialized government agencies and the military, GIS is now utilized by virtually every branch of the government and has become commonplace throughout the private sector. GIS may be employed for a stunning variety of applications: environmental, marketing, demographic and urban planning are just a few of the fields in which GIS is currently utilized.

All students enrolled at Bluegrass Community and Technical College are eligible to pursue the GIS Technology Certificate. There is no application to enroll in the certificate, but it is suggested that if you elect to pursue the certificate that you inform the coordinator of the GIS Certificate as well as your technical advisor and the chair of your technical degree program. The curriculum is tailored to those enrolled in the following technical degree programs: Architectural Technology, Civil Engineering, Computer Information Systems and Environmental Science Technology. The acquisition of a two-year technical degree coupled with a Certificate in GIS Technology will make a graduate more marketable in his/her respective field. Those pursuing a B.A. or B.S. degree in geography will also find the curriculum tailored to their respective degree program. The GIS Technology Certificate requires the completion of twenty-four (24) hours of coursework. Non-certificate seeking students are free to take courses in GIS. All students pursuing the certificate must take the following four core courses:

Certificate

Geographic Information Systems Technology - 4507023019

(Offered at BLC)

Core

CIS	105	Introduction to Computing	3
GIS	110	Spatial Data Analysis and Map Interpretation	3
GIS	120	Introduction to Geographic Information Systems	3
GIS	210	Advanced Geographic Information Systems	3

Students must complete one of the following related field course pairings listed below. The student may not complete the requirement by selecting courses from different pairs. It is highly recommended that the student select the course pairing that doubles as requirements for their technical degree (or pre-major requirement for the B.A./B.S. in geography)

Eligible Course Pairings for GIS Technology Certificate

- Earth's Physical Environment (GEO 130) and/or Pollution, Natural Hazards and Environmental Management (GEO 210) and/or Introduction to Planning (GEO 285)
- Fundamentals of Hydrological Geology (ENV 101) and Fundamentals of Solid Waste (ENV 203)
- Visual Basic I (CIS 148) and Visual Basic II (CIS 248)
- Introduction to Computer-Aided Design (CAD 100) and Intermediate Computer-Aided Design (CAD 200)
- Computer Aided Drafting I (ACH 185) and Computer Aided Drafting II (ACH 285) or Computer 3-D Modeling (ACH 298)
- Introduction to Surveying (CE 211) and Intermediate Surveying (CET 220)

Students may utilize an additional six-hour course pairing not listed above with prior written approval from the coordinator of the GIS Certificate.

Students must also take a minimum of six (6) hours of General Education courses in order to receive a certificate in GIS Technology from Bluegrass Community and Technical College, unless otherwise noted on their academic transcript(s).

Recommended Track for GIS Technology Certificate

GIS	110	Spatial Data Analysis and Map Interpretation	3
CIS	105	Introduction to Computing	3
		General Education Course	3
		General Education Course	3
GIS	120	Introduction to Geographic Information Systems	3
		Course in related field (see above list)	3
GIS	210	Advanced Geographic Information Systems	3
		Course in related field (see above list)	3
		Total	**24**

Global Studies

The Associate of Applied Science Degree in Global Studies (Transfer) is designed to prepare students to be more globally aware and globally literate employees and citizens of the Commonwealth of Kentucky, the United States, and the world. It exposes students to a diverse set of courses and competencies which will prepare them to live and work in settings with diverse ethnic and cultural populations and to function more effectively as members of an increasingly interconnected world.

Associate in Applied Science

Global Studies - 3020017019

(Offered at JFC)

Global Studies

ENG	101	Writing I[1] AND	3
ENG	102	Writing II[1] OR	3
ENG	105	Writing: An Accelerated Course[1] and	(3)
		Global Studies Humanities/Fine Arts[2]	(3)
MAT	146	Contemporary College Mathematics[1] OR	3
MAT	150	College Algebra[1]	(3)
		Science[1]	3-4
		Social Interaction[1]	3
		Heritage/Humanities[1]	3
		Computer Literacy[3]	3
COM	254	Introduction to Intercultural Communication[1]	3
		Foreign Language[1]	8
		One Study Abroad/Overseas Experience course (HRS 200, IES 235 or other Study Abroad course from a non-KCTCS accredited higher education institution)	3
		Global Studies Heritage[4]	6
		Global Studies Humanities/Fine Arts[2]	6
		Global Studies Natural Science/Business[5]	6-7
		Global Studies Social Interaction[6]	6
GBS	290	Global Studies Capstone Course	3
		Total	**62-64**

[1]General Education

[2] Select from Global Studies Humanities/Fine Arts list.

[3]Students who pass the computer literacy exam in lieu of completing an approved computer literacy course must take an additional three (3) credits of Global Studies credit from the approved Global Studies course lists.

[4]Select from Global Studies Heritage list.

[5]Select from Global Studies Natural Science list.

[6]Select from Global Studies Social Interaction list.

Certificate

Global Studies - 3020013010

(Offered at ECTC, JFC)

COM	254	Introduction to Intercultural Communication	3
		Foreign Language	4
		Global Studies Heritage[4]	3
		Global Studies Humanities/Fine Arts[2]	3
		Global Studies Natural Science/Business[5]	3
		Global Studies Social Interaction[6]	3
		Total	**19**

[2] Select from Global Studies Humanities/Fine Arts list.

[4]Select from Global Studies Heritage list.

[5]Select from Global Studies Natural Science list.

[6]Select from Global Studies Social Interaction list.

Health and Wellness Technology

The Health and Wellness Technology degree offers a flexible, innovative curriculum designed to meet the changing needs of the health care marketplace. The program will educate students in the principles of integrative modalities and the promotion of health and well-being. The program will provide students with the skills and knowledge necessary to work in a variety of settings, including but not limited to, hospitals, massage clinics, rehabilitation clinics, spas, behavioral health clinics, wellness/fitness centers, doctor's offices, private practice, and athletic programs at the high school, college, or professional level.

The Massage Therapy Certificate Program will train the Massage Therapist in techniques ranging from an entry level Swedish Massage, for its therapeutic and relaxation benefits, through advanced clinical massage (sports and orthopedic massage) for the specific needs of athletes and to aid in recovery and rehabilitation from illness, injury and surgery. Using medical model, therapists will have expanded knowledge in Anatomy and Physiology, Kinesiology and Medical Terminology. Other modalities are introduced to the Massage Therapist's education to enhance their skills and knowledge. Business education is included in the program to assist therapists in the operation of a practice.

Associate in Applied Science

Health and Wellness Technology - 5109997019

Massage Therapy Option - 510999701

(Offered at GTW)

ENG	101	Writing I	3
ENG	102	Writing II	3
COM	252	Introduction to Interpersonal Communication OR	3
COM	254	Introduction to Intercultural Communication	(3)
		Mathematics	3
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
PSY	110	General Psychology	3
		Social Interaction	3
		Heritage/Humanities	6
		Computer Literacy	0-3
		Subtotal	**32-35**
OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
CPR	100	CPR for the Healthcare Professional	1
SFA	100	Safety and First Aid	1
BAS	200	Small Business Management OR	3
BAS	288	Personal and Organizational Leadership	(3)
MSG	100	Musculoskeletal Anatomy and Physiology I	4
MSG	110	Musculoskeletal Anatomy and Physiology II	4
MSG	125	Massage Technique I	3
MSG	135	Massage Technique II	3
MSG	205	Advanced Clinical Massage I	3
MSG	210	Advanced Clinical Massage II	3
MSG	215	Massage Therapy Student Clinic	1
MSG	220	Massage Therapy Practice	3
		Subtotal	**32**
		Total Credits (AAS)	**64-67**

Certificate

Massage Therapy - 510993019

(Offered at GTW)

GEN	100	Introduction to College	1
OST	103	Medical Office Terminology OR	3

CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
CPR	100	CPR for the Healthcare Professional	1
MSG	100	Musculoskeletal Anatomy and Physiology I	4
MSG	110	Musculoskeletal Anatomy and Physiology II	4
MSG	125	Massage Technique I	3
MSG	135	Massage Technique II	3
MSG	205	Advanced Clinical Massage I	3
MSG	210	Advanced Clinical Massage II	3
MSG	215	Massage Therapy Student Clinic	2
MSG	220	Massage Therapy Pathology	3
		Total Credits	**30**

Health Education

The Personal Trainer Certificate offers a flexible, innovative curriculum designed to meet the changing needs of the wellness promotion and health care marketplace. The program will provide students with the skills and knowledge necessary to develop and implement exercise programs for healthy individuals or those who have medical clearance to exercise. Work settings include but are not limited to spas, fitness centers, weight loss clinics, corporate wellness centers, private practice, and high school athletic programs.

Certificate

Personal Trainer – 5109993029

OST	103	Medical Office Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
AHS	115	Medical Terminology	(3)
CPR	100	CPR for the Healthcare Professional	1
SFA	100	Safety and First Aid	1
BAS	200	Small Business Management OR	3
BAS	288	Personal and Organizational Leadership	(3)
MSG	100	Musculoskeletal Anatomy and Physiology I	4
MSG	110	Musculoskeletal Anatomy and Physiology II	4
KHP	150	Personal Health Behavior	3
KHP	160	Personal Nutrition and Fitness	3
KHP	225	Exercise Techniques and Physical Training	3
KHP	235	Personal Trainer Practicum	2
		Total Credits	**27**

Health Information Technology

This program prepares the graduate to take an active role in the field of health information management. Graduates will interact with physicians, health professionals, and financial and administrative staffs to ensure the protection of information systems. Graduates will help determine health information budgets, resources and policies, utilizing current and accurate data. The curriculum includes course work in the supporting sciences and general education areas. Classroom instruction is supplemented with learning experiences in the campus laboratory and in area health care facilities. Students enrolled in the Health Information Program are required to achieve a minimum grade of "C" in each Health Information Technology course.

Health Information Technicians are employed in hospitals, medical clinics, nursing homes, other health care facilities and industry. Graduates may take the American Health Information Management Association's CCA, CCS-P and CCS coding examinations and the American Academy of Professional Coders' CPC and CPC-H coding examination. Graduates are qualified to take the American Health Information Management Association's Registered Health Information Technician examination.

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first HIT course.

The Health Information Technology associate degree program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM.)

Associate in Applied Science

Health Information Technology - 5107077019

(Offered at BLC, GTW*, HZC*, JFC)*

General Education Requirements:

ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
MAT	110	Applied Mathematic OR	3
MAT	150	College Algebra	(3)
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology	(3)
		Heritage/Humanities	3
		Subtotal	**26**

Technical Course Requirements:

CLA	131	Medical Terminology from Greek or Latin OR	3
OST	103	Medical Office Terminology OR	(3)
AHS	115	Medical Terminology	(3)
HIT	100	Introduction to Healthcare Delivery Systems	3
HIT	104	Pathophysiology of Human Diseases	3
HIT	106	Pharmacology for Health Information Professionals	2
CIS	130	Microcomputer Applications OR	3
OST	240	Software Integration	(3)
HIT	108	Clinical Classification Systems	3
HIT	110	Legal/Ethical Issues in Health Information	2
HIT	112	Reimbursement Methodologies	3
HIT	114	Clinical Practicum 1	2
HIT	200	Computers in Healthcare	3
HIT	202	Clinical Classification Systems II	3
HIT	204	Quality Assessment in Health Information	2
HIT	206	Clinical Classification Systems III	2
HIT	208	Clinical Coding Practicum	1
HIT	210	Health care statistics	2
HIT	212	Health Care Organization and Supervision	2
HIT	214	Clinical Practicum II	3
		Subtotal	**42**
		Total Credits	**68**

NOTE: Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first HIT course.

Certificate

Medical Record Coding - 5107073019

(Offered at JFC)

CLA	131	Medical Terminology from Greek or Latin OR	3
OST	103	Medical Office Terminology OR	(3)
AHS	115	Medical Terminology	(3)
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
HIT	100	Introduction to Healthcare Delivery Systems	3
HIT	104	Pathophysiology of Human Diseases	3
HIT	106	Pharmacology for Health Information Professionals	2
HIT	108	Clinical Classification Systems	3
HIT	110	Legal/Ethical Issues in Health Information	2
HIT	112	Reimbursement Methodologies	3
HIT	202	Clinical Classification Systems II	3

HIT	204	Quality Assessment in Health Information	2
HIT	206	Clinical Classification Systems III	2
HIT	208	Clinical Coding Practicum	1
		Total Credits	**35**

Release of Information Data Specialist – 5107073039

(Offered at JFC)

HIT	100	Introduction to Health Information Technology	3
HIT	110	Legal/Ethical Issues in Health Information	2
		Total Credits	**5**

*Pending KCTCS Board of Regents approval 06/11

Health Physics

The Health Physics program is designed to prepare students to conduct health physics activities in a variety of occupational and environmental settings. Students will study the basic properties of radiation including its origin, its interactions with matter, and radiation detection procedures. Rules and regulations governing human exposure to occupational radiation health hazards are covered. Emphasis is placed on the proper use of survey instrumentation to detect and measure occupational radiation health hazards, the equipment and techniques employed to conduct work-place and environmental surveys, and the current technologies used in hazard control. The Radiation Control Technician certificate prepares students for employment in a Department of Energy (DOE) facility. The AAS degree in Health Physics prepares the graduate for the National Registry of Radiation Protection Technologists examination and for employment at a nuclear facility.

Associate in Applied Science

Health Physics - 5122057019

(Offered at WKC)

General Education Courses

PHY	152	Introduction to Physics OR higher level Physics course	3
CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Laboratory	1
BIO	112	Introdction to Biology	3
BIO	113	Introduction to Biology Lab	1
MAT	150	College Algebra or higher level Mathematics course	3
ENG	101	Writing I	3
ENG	102	Writing II	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
		Computer Literacy*	0-3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		Subtotal	**29-32**

Technical Courses

HPH	101	Introduction to Health Physics I	3
HPH	102	Introduction to Health Physics II	3
HPH	120	Introduction to Radiation Biology	3
HPH	201	Nuclear Instrumentation and Measurement I	4
HPH	202	Nuclear Instrumentation and Measurement II	4
HPH	246	Environmental Law	2
ISX	100	Industrial Safety	3
QMS	101	Introduction to Quality Systems	3
INDT	250	Team Dynamics and Problem Solving	3
BAS	287	Supervisory Management	3
		Subtotal	**31**
		Total Credits	**60-63**

*Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Certificate

Radiation Control Technician - 5122053019

(Offered at WKC)

HPH	100	Health Physics Fundamentals	3
HPH	101	Introduction to Health Physics I	3
HPH	102	Introduction to Health Physics II	3
HPH	201	Nuclear Instrumentation and Measurement I	4
HPH	202	Nuclear Instrumentation and Measurement II	4
		Total Credits	**17**

Health Science Technology

The Health Science Technology (HST) program is designed to prepare students for entry-level career opportunities in the field of healthcare and health-related services. The program is designed for those students who seek entry level jobs as well as for the currently employed individual wishing to broaden skills for career enhancement. Graduates will possess marketable skills sets for direct care services as well as the foundation needed to understand current health care delivery. Many of the general education and core courses are required for completion of varied professional health programs. Examples include diagnostic medical sonography, medical assisting, nursing, physical therapy assistant, radiography, respiratory care, and surgical technology. The HST provides a smooth transition or career pathway to an Allied Health or nursing selective admission program once a student is accepted.

Associate in Applied Science

Health Science Technology – 5100007019

(Offered at ASC,WKC)

General Education

MAT	150	College Algebra and Functions OR	3
MAT	110	Applied Math	(3)
ENG	101	Writing I	3
ENG	102	Writing II	3
BIO	135	Basic Human Anatomy OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
		Computer literacy*	3
PSY	110	General Psychology	3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		Oral Communication	3
		Subtotal	**28-32**

Technical Courses

CLA	131	Medical Terminology from Greek and Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
NAA	100	Nursing Assistant Skills I	3
NAA	115	Nursing Assistant Skills II	3
PHB	170	Applied Phlebotomy OR	3
PHB	151	Phlebotomy for the Health Care Worker AND	(2)
CLT	101	Introduction to the Clinical Laboratory	(3)
PHB	152	Phlebotomy: Clinical Experience	1
KHP	190	First Aid and Emergency Care	2
PHA	125	Pharmaceutical Calculations	2
PHA	104	Parenterals	2
PHA	136	Pharmacology	3
PHA	110	Pharmacy Procedures and Skills	5
PHA	250	Pharmacy Experience	2
		Elective approved by program coordinator	3
		Subtotal	**32-34**
		Total Credits	**60-66**

*Students who achieve computer literacy based on passing the IC3 exam must take 3 hours elective course credit approved by the program coordinator.

Certificates

Medicaid Nurse Aide

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

MNA	100	Medicaid Nurse Aide OR	3
NAA	100	Nursing Assistant Skills I OR	(3)
MNA	125	Advanced Nursing Assistant	(6)
		Total Credits	**3-6**

Advanced Nursing Assistant

(Offered at ELC, MYC,WKC)

NAA	125	Advanced Nursing Assistant OR	6
NAA	100	Nursing Assistant Skills I AND	(3)
NAA	115	Nursing Assistant Skills II OR	(3)
MNA	100	Medicaid Nurse Aide AND	(3)
NAA	115	Nursing Assistant Skills II	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	4
AHS	109	Introduction to Body Structure and Function OR	(4)
BIO	137	Human Anatomy & Physiology IAND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication OR	(3)
ENG	101	Writing I OR	(3)
TEC	200	Technical Communications	(3)
		Computer Literacy	3
		Total Credits	**16-20**

Pharmacy Technician I

(Offered at ASC, JFC, OWC, SMC,WKC)

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication OR	(3)
COM	101	Introduction to Communications*	(3)
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
PHA	110	Pharmacy Procedures and Skills	5
PHA	125	Pharmaceutical Calculations	2
PHA	136	Pharmacology	3
PHA	104	Parenterals**	2
PHA	250	Pharmacy Experience	2
		Computer Literacy	0-3
		Total Credits	**20-23**

Phlebotomy for the Health Care Worker

(Offered at BLC, HEC, HZC, MDC, SEC, SMC,WKC)

PHB	151	Phlebotomy AND	1-2
PHB	152	Phlebotomy: Clinical Experience AND	1
CLT	101	Introduction to the Clinical Laboratory OR	3
PHB	170	Applied Phlebotomy AND	(3)
PHB	152	Phlebotomy: Clinical Experience	(1)
		Total Credits	**4-6**

Heavy Equipment Operation

Designed to instruct students in the safe operation of heavy equipment, e.g., bulldozers, backhoes, front-end loaders, hydraulic excavators and graders. Instruction in digging, ditching, sloping, stripping, grading, back filling, clearing trees and rubble, and foundation excavating is provided as well as instruction in the proper care and maintenance of equipment.

Diploma

Operating Engineer - 4902024019

(Offered at HZC, SEC)

CPU	100#	Introduction to Computers OR	3
CPU	150#	Computer Fundamentals OR	(3)
CIS	100	Introduction to Computers	(3)
EFM	100	Personal Financial Management	3
HEO	100	Heavy Equipment Operations I**	12
HEO	125	Special Problems I	3
HEO	200	Heavy Equipment Operation II	7
HEO	225	Special Problems II	3
WPP	200	Workplace Principles	3
		Total Credits	**34**

Recommended Elective:

HEO	215	Heavy Equipment Operations	(1-4)
		Total Credits	**34-38**

Note: HEO 150 Heavy Equipment Operations IA and HEO 250 Heavy Equipment IIA will be utilized when students are enrolled bi-term during the fall semester.

**DIT 103 is a pre-requisite for courses in this program.

#This course does not meet computer literacy requirements.

Certificate

Backhoe Operator - 4902023019

(Offered at HZC, SEC)

HEO	109	Power Shovel Backhoe Operator	2
HEO	125	Special Problems	3
		Total Credits	**5**

Bulldozer Operator- 4902023029

(Offered at HZC, SEC)

HEO	111	Bulldozer Operator	7
HEO	125	Special Problems	3
		Total Credits	**10**

Front-End Loader Operator - 4902023039

(Offered at HZC, SEC)

HEO	105	Utility Tractor Loader Operator	4
HEO	125	Special Problems	3
		Total Credits	**7**

Motor-Grader Operator - 4902023049

(Offered at HZC, SEC)

HEO	106	Motor-grader Operator	7
HEO	125	Special Problems	3
		Total Credits	**10**

Hydraulic Excavator Operator - 4902023059

(Offered at SEC)

HEO	100	Heavy Equipment Operations I**	12
HEO	115	Hydraulic Excavator Operator	7
HEO	125	Special Problems 1	3
		Total Credits	**22**

Historic Information Management

Archival Management

Trains individuals to arrange, preserve, and present archival materials for use, and instructs students in the basics of working in either public or private archives. The program will also provide students with a context for making decisions about the worthiness of material for archiving. The program is designed for students seeking entry into the field of archival management and those already working in the field.

Museum Management

Prepares students for entry level work in the museum field and provides technical training for persons working in museums. Among the topics addressed by the courses are: the basics of collection development and cataloging, exhibit design, work with the public, and the use of computer technology in the museum environment.

Records Management

Focuses on training for persons responsible for the efficient management of an organization's recorded information. Students will learn to identify the content, value and importance of recorded information and through a comprehensive understanding of the "information life cycle" learn to organize, manage and deliver that recorded information in a timely and efficient manner.

Certificates

Archival Management - 5401053029

(Offered at SEC)

Available Completely Online

ENG	101	Writing I	3
		Heritage/Humanities	3
		Social Interaction	3
HIM	102	Archives Studies: Characteristics & Overview	3
HIM	210	Archives Studies: Appraisal & Accessioning	3
HIM	212	Archives Studies: Arrangement & Description	3
HIM	214	Archives Studies: Preservation & Conservation	3
HIM	216	Archives Studies: Automation & Electronic Records	3
		Total	**24**

Museum Management - 5401053019

(Offered at SEC)

Available Completely Online

ENG	101	Writing I	3
		Heritage/Humanities	3
		Social Interaction	3
HIM	104	Museum Studies: Characteristics & Overview	3
HIM	230	Museum Studies: Collections Care & Management	3
HIM	232	Museum Studies: Conservation and Preservation	3
HIM	234	Museum Studies: Exhibits	3
HIM	236	Museum Studies: Automation	3
		Total	**24**

Records Management - 5401053039

(Offered at SEC)

Available Completely Online

ENG	101	Writing I	3
		Heritage/Humanities	3
		Social Interaction	3
OST	160	Records and Database Management	3
HIM	106	Records Management: Characteristics & Overview	3
HIM	250	Records Inventory & Analysis	3
HIM	252	Electronic Records Management	3
HIM	254	Records Reproduction & Imaging Systems	3
		Total	**24**

Homeland Security/ Emergency Management

The degree program includes an overview of homeland security, emergency management and first responder agencies, including but not limited to: Fire Departments, Law Enforcement, and Medical Services and how these agencies function within the National Incident Management System.

Fire Science Option:

This degree option includes fire department organization, fire behavior, firefighter safety, personal protective equipment, portable fire extinguishers, fire hose, appliance and streams.

Criminal Justice Option:

This criminal justice degree option prepares the student for entry into the field of police work and related occupations. Criminal justice vocations have evolved from jobs with minimal requirements to jobs requiring complex knowledge and skills. This curriculum gives the student theory, principles, and techniques employed by criminal justice agencies and police units. The study of the law as it relates to criminal justice agencies, human behavior, government, and communications along with specialized course work comprise the curriculum.

Security Management Option:

The Security Management Coordinator degree option provides a comprehensive overview of physical security policies, procedures and techniques. Topics covered are perimeter protection, intrusion detection, access control, CCTV, security design and surveys, contingency planning, and acts of violence.

Homeland Security/Emergency Management Specialist Certificate:

This certificate program includes an overview of homeland security, emergency management and first responder agencies, including but not limited to: fire departments, law enforcement and emergency medical services and how these agencies function within the National Incident Management System.

Progression in the program is contingent upon achievement of a grade of "C" or better in each technical course for all program options above

Associate in Applied Science

Homeland Security/Emergency Management - 4399997019

(Offered at BLC,WKC)

General Education Core

Writing/Accessing Information	3
Mathematics	3
Science	3
Social Interaction	3
Heritage/Humanities/Foreign Language	3
Oral Communications	3
Computer Literacy	0-3

NOTE: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

General Education Core Credit Hour Subtotal 18-21

Technical Core or Support Courses

HSM	100	Introduction to Homeland Security	3
HSM	110	Introduction to Emergency Management	3
HSM	225	Issues and Ethics in Homeland Security	3
CRJ	110	Principles of Asset Protection OR	3
LSI	120	Comprehensive Security Specialist	(4)
CRJ	210	Physical Security Technology & Systems OR	3
LSI	146	Crisis Management/Contingency Planning	(2)
CRJ	220	Intro to Computer Forensics for Criminal Justice	3
AHS	140	Introduction to Public and Community Health	3
BAS	212	Introduction to Financial Management	3
FRS	204	EMT First Responder	3
**		Fire Science Technology in Homeland Security: See listing below for required courses.	6
		Technical Core Subtotal	**32-34**

**** Fire Science Technology in Homeland Security individual course listing. (6)**

FRS	1011	Fire Department Organization I	0.7
FRS	1012	Fire Behavior I	0.3
FRS	1013	Firefighter Safety I	0.4
FRS	1014	Personal Protective Equipment I	0.8
FRS	1024	Rescue I	0.4
FRS	1027	Emergency Disaster Planning I	0.1
FRS	1041	Water Supply I	0.4
FRS	1045	Fire Alarms and Communications I	0.2
FRS	1046	Hazardous Materials Awareness	0.5
FRS	1047	Hazardous Materials Operations	1.1
FRS	1048	Sprinklers I	0.2
FRS	2072	Incident Command System	0.9

Fire Science Option - 439999701

(Offered at BLC,WKC)

FRS	1015	Portable Fire Extinguishers I	0.2
FRS	1016	Fire Hose, Appliances and Streams I	0.5
FRS	1021	Ropes I	0.2
FRS	1022	Ladders I	0.6
FRS	1023	Aircraft Rescue	0.4
FRS	1025	First Aid	0.3
FRS	1026	Blood borne Pathogens	0.3
FRS	1028	Forcible Entry I	0.2
FRS	1029	CPR	0.5
FRS	1042	Foam Fire Streams I	0.2
FRS	1043	Salvage I	0.3
FRS	1044	Overhaul I	0.1
FRS	103	Firefighters Basic Skills II	3.0
FRS	105	Firefighters Intermediate Skills II	3.0
FRS	201	Firefighters Advanced Skills I	3.0
		Elective	0.2
		Fire Science Option Subtotal	**13**
		Fire Science Option Total Degree Requirements	**63-68**

Criminal Justice Option - 439999702

(Offered at BLC,WKC)

CRJ	204	Criminal Investigations	3
CRJ	215	Introduction to Law Enforcement	3
CRJ	217	Criminal Procedures	3
CRJ	279	Terrorism and Political Violence	3
		Criminal Justice Option Subtotal	12
		Criminal Justice Option Total Degree Requirements	**62-67**

Security Management Option - 439999703

(Offered at BLC,WKC)

LSI	101	Perimeter Security	2
LSI	103	Closed Circuit Television (CCTV) Systems	2
LSI	107	Intrusion Detection	2
LSI	110	Security Surveys	2
LSI	125	Supply Chain Security	2
LSI	127	Cargo Crime	2
		Security Management Option Subtotal	12
		Security Management Option Total Degree Requirements	**62-67**

Certificate

Homeland Security/Emergency Management Specialist - 4399993019

(Offered at JFC,WKC)

HSM	100	Introduction to Homeland Security	3
HSM	110	Introduction to Emergency Management	3
HSM	225	Issues and Ethics in Homeland Security	3
CRJ	110	Principles of Asset Protection OR	3
LSI	120	Comprehensive Security Specialist	(4)
CRJ	210	Physical Security Technology & Systems OR	3
LSI	146	Crisis Management/Contingency Planning	(2)
AHS	140	Introduction to Public and Community Health	3
FRS	204	EMT First Responder	3
**		Fire Science Technology in Homeland Security: See individual course listing below.	6
		HSEM Specialist Certificate	**26-28**

****Fire Science in Homeland Security courses (6)**

FRS	1011	Fire Department Organization I	0.7
FRS	1012	Fire Behavior I	0.3
FRS	1013	Firefighter Safety I	0.4
FRS	1014	Personal Protective Equipment I	0.8
FRS	1024	Rescue I	0.4
FRS	1027	Emergency Disaster Planning I	0.1
FRS	1041	Water Supply I	0.4
FRS	1045	Fire Alarms and Communications I	0.2
FRS	1046	Hazardous Materials Awareness	0.5
FRS	1047	Hazardous Materials Operations	1.1
FRS	1048	Sprinklers I	0.2
FRS	2072	Incident Command System (ICS)	0.9

Horticulture

The Horticulture program provides students with knowledge and skills needed for careers in greenhouse, nursery, and landscape operations. Students acquire practical experience in turf and landscape maintenance, design, plant production, and business management.

Associate in Applied Science

Horticulture - 0106017019

(Offered at JFC)

General Education:

Mathematics	3
Science	3
Heritage/Humanities	3
Social Interaction	3
Writing	3
Computer Literacy *	0-3
Subtotal	**15-18**

* Must meet computer literacy general education requirement.

Technical Core:

HRT	110	Nursery Management	4
HRT	120	Turf Management OR	4
HRT	160	Retail Floral Design AND	(4)
HRT	161	Retail Floral Design Lab	(2)
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
HRT	150	Horticulture Business Management	3
HRT	210	Landscape Design	4

HRT	240	Greenhouse Management	4
HRT	241	Greenhouse Management Lab	2
		Subtotal	**26-28**

Science Option - 010601701

(Offered at JFC)

		General Education Science Course	3
COE	199	Cooperative Education OR	3
COED	198	Practicum	(3)
HRT	104	Introduction to Herbaceous Plants	4
HRT	108	Introduction to Woody Plants	4
		Electives (Horticulture Course List including COE198)	8
		Subtotal	**22**
		Total Science Option Credits	**63-68**

Business Option - 010601702

(Offered at JFC)

COE	199	Cooperative Education OR	2
COED	198	Practicum	(2)
ACT	101	Fundamentals of Accounting I	3
BAS	200	Small Business Management	3
BMO	170	Introduction to Business Management	3
OST	215	Office Procedures	3
BAS	267	Introduction to Business Law	3
		Electives (Horticulture Course List including COE198)	3
		Subtotal	**20**
		Total Business Option Credits	**61-66**

Diploma

Landscape Technology - 0106014009

(Offered at BSC, JFC)

General Education:

Area 1=	Writing/Accessing Information, Oral Communications, Humanities, or Heritage General Education Course	3
Area 2=	Social Science, Behavioral Science, Natural/ Applied Science, or Mathematics General Education Course	3
Area 3=	Computer Literacy*	3
	Subtotal	**9**

* If computer literacy is met by the competency exam, an additional 3 credit hours of general education or program elective must be taken.

Technical:

COE	199	Cooperative Education OR	6
COED	198	Practicum	(6)
HRT	104	Introduction to Herbaceous Plants	4
HRT	108	Introduction to Woody Plants	4
HRT	120	Turf Management OR	4
HRT	160	Retail Floral Design AND	(4)
HRT	161	Retail Floral Design Lab	(2)
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
HRT	210	Landscape Design	4
		Subtotal	**27-29**
		Total	**36-38**

Ornamental Horticulture - 0106014029

(Offered at BSC, JFC, MYC)

General Education:

Area 1=	Writing/Accessing Information, Oral Communications, Humanities, or Heritage General Education Course	3
Area 2=	Social Science, Behavioral Science, Natural/ Applied Science or Mathematics General Education Course	3
Area 3=	Computer Literacy*	3
	Subtotal	**9**

* If computer literacy is met by the competency exam, an additional 3 credit hours of general education or program elective must be taken.

Technical:

COE	199	Cooperative Education OR	3
COED	198	Practicum	(3)
HRT	104	Introduction to Herbaceous Plants	4
HRT	108	Introduction to Woody Plants	4
HRT	110	Nursery Management	4
HRT	120	Turf Management OR	4
HRT	160	Retail Floral Design AND	(4)
HRT	161	Retail Floral Design Lab	(2)
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
HRT	150	Horticulture Business Management	3
HRT	210	Landscape Design	4
HRT	240	Greenhouse Management	4
HRT	241	Greenhouse Management Lab	2
COED	198	Practicum	8
		Subtotal	**45-47**
		Total	**54-56**

Certificates

Greenhouse Operations - 0106013029

(Offered at BSC, JFC, MYC)

HRT	240	Greenhouse Management	4
HRT	241	Greenhouse Management Lab	2
		Electives (Horticulture Course List)	6
		Total Credits	**12**

Greenhouse Production – 10613019

HRT	104	Introduction to Herbaceous Plants	4
HRT	240	Greenhouse Management	4
HRT	241	Greenhouse Management Lab	2
		Electives (Horticulture Course List including COE198)	8
		Total Credits	**18**

Horticulture Sales - 0106013119

(Offered at BSC, JFC, MYC)

HRT	108	Introduction to Woody Plants OR	4
HRT	104	Introduction to Herbaceous Plants	(4)
HRT	120	Turf Management OR	4
HRT	160	Retail Floral Design AND	(4)
HRT	161	Retail Floral Design Lab	(2)
HRT	130	Landscape Maintenance	3
HRT	150	Horticulture Business Management	3
		Electives (Horticulture Course List)	1-2
		Total Credits	**15-18**

Landscape Installation - 0106013049

(Offered at BSC, JFC, MYC)

HRT	108	Introduction to Woody Plants OR	4
HRT	104	Introduction to Herbaceous Plants	(4)
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
		Electives (Horticulture Course List)	3
		Total Credits	**12**

Landscape Planning - 0106013059

(Offered at BSC, JFC, MYC)

HRT	104	Introduction to Herbaceous Plants	4
HRT	108	Introduction to Woody Plants	4
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
HRT	210	Landscape Design	4
		Electives (Horticulture Course List)	5
		Total Credits	**22**

Lawn Maintenance - 0106013069

(Offered at BSC, JFC, MYC)

HRT	120	Turf Management	4
HRT	130	Landscape Maintenance	3
HRT	131	Landscape Maintenance Lab	2
		Electives (Horticulture Course List)	1
		Total Credits	**10**

Nursery Production - 0106013079

(Offered at ASC, BSC, JFC, MYC)

HRT	108	Introduction to Woody Plants	4
HRT	110	Nursery Management	4
HRT	240	Greenhouse Management	4
		Electives (Horticulture Course List including COE198)	8
		Total Credits	**20**

Nursery Operations - 0106013089

(Offered at BSC, JFC, MYC)

HRT	108	Introduction to Woody Plants	4
HRT	110	Nursery Management	4
		Electives (Horticulture Course List including COE198)	5
		Total Credits	**13**

Human Services

This program prepares individuals for entry level positions in agencies and institutions which provide social, community, educational and mental health services. The curriculum provides an opportunity for the student to develop the knowledge and skills necessary for entry level employment. Included in the curriculum is a core of human services courses, general education courses, and technical courses with a specific human services emphasis. Application of human services principles and skills is provided through a clinical experience in an appropriate setting.

Upon completion of the program the graduate is prepared to seek employment in various areas which may include child care facilities, mental health settings, chemical dependency settings, hospitals, educational institutions, correctional facilities, geriatric settings, child and youth centers, and social service agencies.

Associate in Applied Science

Human Services- 4407017000

(Offered at BLC, BSC, ELC, HPC, HZC, JFC, OWC)

General Education:

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
ENG	101	Writing I	3
ENG	102	Writing II	3
PSY	110	General Psychology	3
PSY	223	Developmental Psychology	3
SOC	101	Introduction to Sociology	3
		Second Sociology course	3
CIS	100	Introduction to Computers OR	3
CS	101	Introduction to Computing I	(3)
		Heritage/Humanities course	3
		Mathematics course	3
		Science	3
		Subtotal	**33**

Technical Core:

HMS	101	Human Services Survey	3
HMS	102	Values of Human Services in a Contemporary Society	3
HMS	103	Theories and Techniques in Human Services	3
HMS	104	Group Dynamics for Human Services	3
HMS	250	Clinical Practice in Human Services OR	4
COE	199	Cooperative Education	(4)
		Technical courses	6
		Electives	9
		Subtotal	**31**
		Total Credits	**64**

Technical Courses: Choose six hours **6**

CRJ	101	Introduction to Criminal Justice	3
CRJ	208	Delinquency and the Juvenile Justice System	3
EDP	203	Teaching Exceptional Learners in Regular Classrooms	3
FAM	252	Introduction to Family Science	3
FAM	253	Human Sexuality: Development, Behavior and Attitudes	3
HMS	210	Drugs, Society, and Human Behavior	3
HMS	225	Application of Assistive Technology for Persons with Disabilities	3
HMS/SWK	200	Dynamics of Human Behavior	3
HMS/SWK	211/255	Introduction to Addictions	3
HMS/SWK	212/260	Crisis Intervention	3
HMS/SWK	220	Cultural Diversity in Human Services	3
HMS/SWK	235/250	Teaching Persons with Mental Retardation	3
HMS	265	Working with Disabilities in Human Services	3
HMS	299	Special Topics in Human Services	1-3
IEC	130	Early Childhood Development	3
IEC	200	Child Guidance	3
MNA	100	Medicaid Nurse Aide OR	3
NAA	100	Nursing Assistant Skills I	(3)
PSY	180	Human Relations	3
PSY	185	Human Potential	3
PSY	230	Psychosocial Aspects of Death and Dying	3
SED	110	Orientation to Interpreting for the Deaf	3
SED	101	American Sign Language I	3
SED	102	American Sign Language II	3
SOC	220	The Community	3
SWK	124	Introduction to Social Services	3
SWK	222	Development of Social Welfare	3
SWK	180	Introduction to Gerontology	3
SWK	269	Juvenile Delinquency	3
SWK	270	Corrections	3
SWK	275	The Family	3
SWK	276	Criminology	3
SWK	280	Methods of Working with the Aged	3
SWK	281	Psychology of Aging	3

Murray State University Courses:

SWK	120	Group Preparation and Selection for Foster and Adoptive Parents	2
SWK	121	Child Sexual Abuse for Foster and Adoptive Parents	2

Eastern Kentucky University Courses:

CDR	106	Foundations of Youth Work	3
COR	423*	Reclaiming Our Prodigal Sons and Daughters	3
COR	423*	Life Space Crisis Intervention	3

* Special Topics course at EKU; different section numbers indicate different topic content

Eastern Kentucky University Courses:

SWK	106	Food Benefits	3

Certificates

Direct Support Work - 4407013039

(Offered at BLC, BSC, ELC, HPC, HZC, JFC, OWC, SEC)

Available Completely Online

HMS	102	Values of Human Services in a Contemporary Society	3
HMS	265	Working with Disabilities in Human Services	3
MNA	100	Medicaid Nurse Aide OR	3
NAA	100	Nursing Assistant Skills I	(3)
SWK	275	The Family OR	3
FAM	252	Introduction of Family Science	(3)

Electives – choose one course from the following list:

HMS/SWK	235/250	Teaching Persons with Mental Retardation	3
SWK	180	Introduction to Gerontology	(3)
PSY	230	Psychosocial Aspects of Death and Dying	(3)
HMS/SWK	200	Dynamics of Human Behavior	(3)
		Total Credits	**15**

Industrial Chemical Technology

This program is designed to prepare its graduates for entry-level positions in the areas of process operators, process technicians, and chemical technicians. Basic knowledge in the areas of chemical unit operations; organic, analytical and inorganic chemistry; mathematics; policies and practices in areas of environment, health and safety; process systems and control; and statistics for quality help the graduate to understand the operation of modern chemical industries.

Associate in Applied Science

Industrial Chemical Technology - 4103017019

(Offered at JFC,WKC)*

General Education

ENG	101	Writing I	3
CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Lab	1
MAT	126	Technical Algebra and Trigonometry OR Higher Level Mathematics Course	3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		General Education	**16**

Process Technician Option – 4103017019

(Offered at JFC,WKC)*

Technical core:

AET	110	Introduction to Circuit Analysis	4
CHE	150	Introduction to Organic and Biological Chemistry	3
CHE	155	Introduction to Organic and Biological Chemistry Lab	1
GEN	276	Employment and Professional Skills	1
ICT	185	Introduction to Industrial Chemical Technology	1
ICT	190	Chemical Processes – Mass & Energy Balances	2
ICT	220	Unit Operations I	3
ICT	230	Health, Safety, & Environmental Practices	3
ICT	240	Unit Operations II	3
ICT	250	Chemical Process Systems and Control	3
ICT	280	Capstone in Industrial Chemical Technology	2
IMT	140	Industrial Mechanics	3
IMT	141	Industrial Mechanics Lab	1
INDT	250	Team Dynamics and Problem Solving	3
PHY	171	Applied Physics OR	4
PHY	152	Introductory Physics II AND	(3)
PHY	162	Introductory Physics II Lab	(1)
QMS	101	Introduction to Quality Systems	3
TEC	200	Technical Communications	3
		Computer Literacy	0-3
ELT	295	Independent Problems OR	1-2
COE	199	Co-operative Education	(1-4)
		Technical Core Total	**44-50**
		Total	**60-66**

*Pending KCTCS Board of Regents approval 06/11

Information Management and Design

The Information Management & Design program prepares students for careers in various industries utilizing cutting-edge technology within graphic design, web design, project management and library professions. Students will specialize their degree from a choice of four options.

The Graphic Design option provides the concepts and skills needed to create and produce design projects such as brochures, flyers, newsletters, logos, product packaging, photo restorations and manipulations, multimedia presentations, simple illustrations, and web sites using industry-standard techniques and graphic design applications.

The Web Design option provides the concepts and skills needed to create and produce web sites using industry-standard techniques using graphic and web design, and video editing applications. The Web Design option graduates will have the ability to create and maintain professional sites and also be capable of working with other web professionals such as programmers, network administrators and database administrators as well as interfacing with management and clients.

The Project Management option focuses on the management of time-limited operations in terms of four constraints: time, cost, resources and specification. Students learn to identify priorities, organize assignments and deploy the necessary resources to accomplish projects on time and within specified budgets.

The Library and Information Technology option prepares graduates for paraprofessional library work.

The courses within the Graphic and Web Design options will assist with preparation for Adobe Certifications and the Certified Internet Webmaster (CIW) certification exam. The Library and Information Technology option courses may be used to meet Kentucky public library certification requirements.

The IMD program also offers two certificates within the web and graphic design options. The web and graphic design certificates provide up-to-date training in current industry-standard software and trends for practitioners in the fields as well as introductory education for beginning students.

Associate in Applied Science

Information Management and Design - 5204027049

(Offered at BLC)

General Education Courses

ENG	101	Writing I*	3
ENG	102	Writing II*	3
		Mathematics Course*	3
		Science Course*	3
		Heritage/Humanities/Foreign Language Course*	3
		Social Interaction Course*	3
		Subtotal	**18**

Core Content:

IMD	100	Introduction to Information Systems	3
IMD	133	Beginning Web Design	3
IMD	126	Introduction to Desktop Publishing	3
IMD	210	Microsoft Office Applications	3
IMD	270	Professional Practices	3
IMD	275	Information Management & Communications	3
COE	199	Coop Education OR	3
IMD	271	Internship	(3)
		Subtotal	**21**
		Subtotal (General Education & Core Content)	**39**

*Satisfies General Education requirement for the AAS degree

Project Management Option-- 520402719

(Offered at BLC)

IMD	212	Advanced Microsoft Office Applications	3
IMD	235	Advanced Work Processing	3
IMD	260	Integrated Project Management	3
IMD	265	Project Management for Information Management & Business	3

IMD	267	Microsoft Project Software	3
		Accounting Course	3
		Project Management Option Courses	6

Choose from Project Management Option Courses:

ACC	202	Managerial Accounting	3
MGT	267	Introduction to Business Law	3
MGT	274	Human Resource Management	3
MGT	288	Self-Management	3
ECO	202	Principles of Macroeconomics	3
ENG	203	Business Writing	3
IMD	114	Information Literacy	3
IMD	115	Introduction to Graphic Design	3
IMD	127	Vector Design with Adobe Illustrator	3
IMD	128	Raster Design with Adobe Photoshop	3
IMD	175	Web Usability Design	3
IMD	180	Intermediate Web Design	3
IMD	226	Advanced Desktop Publishing	3
IMD	230	Advanced Web Design	3
IMD	232	Web Design with Adobe Dreamweaver	3
IMD	240	Web Development with Adobe Flash	3
IMD	250	Digital Video Editing with Final Cut Pro	3
IMD	290	Photography	3
IMD	294	Seminar in Information Management & Design Technologies	3
IMD	299	Selected Topics in Information Management & Design	3
		Other Project Management Courses Approved by Program Coordinator	1-3
		Other Computer Information Technologies, Business, Communications, Fine Arts or other option approved courses approved by Program Coordinator	1-3
		Subtotal	**24**
		Total	**63**

Graphic Design Option - 520402707

(Offered at BLC)

IMD	115	Introduction to Graphic Design	3
IMD	127	Vector Design with Adobe Illustrator	3
IMD	128	Raster Design with Adobe Photoshop	3
IMD	180	Intermediate Web Design	3
IMD	226	Advanced Desktop Publishing	3
IMD	280	Portfolio Practicum: Graphic Design	3
IMD	277	Typography	3
IMD	228	Advanced Photoshop OR	3
IMD	229	Advanced Illustrator	(3)
		Graphic Design Option Courses	3

Choose from Graphic Design Option Courses:

IMD	212	Advanced Microsoft Office Applications	3
IMD	230	Advanced Web Design	3
IMD	232	Web Design with Adobe Dreamweaver	3
IMD	240	Web Development with Adobe Flash	3
IMD	250	Digital Video Editing with Final Cut Pro	3
IMD	260	Integrated Project Management	3
IMD	290	Photography	3
IMD	228	Advanced Photoshop (if not taken as core requirement)	3
IMD	229	Advanced Illustrator (if not taken as core requirement)	3
IMD	294	Seminar in Information Management & Design Technologies	3
IMD	299	Selected Topics in Information Management & Design	3
MGT	282	Principles of Marketing	3
ENG	203	Business Writing	3
		Other Graphic Design Courses Approved by Program Coordinator	1-3
		Other Computer Information Technologies, Architectural, Business, Communications, Fine Arts or other option appropriate courses approved by Program Coordinator	1-3
		Subtotal	**27**
		Total	**66**

Library Information Technology Option - 520402709

(Offered at BLC)

Available Completely Online

LIT	115	Introduction to Reference Services	3
LIT	124	Library Administration	3
LIT	132	Library Technical Services	3
LIT	243	Library Services for Children	3
		OR	
LIT	245	Library Services for Young Adults	(3)
		OR	
LIT	247	Library Services for Adults	(3)
		Library & Information Technology Option Courses	12

Choose a Total of 12 hours from the following:

LIT	130	Web Publishing for Public Libraries	3
LIT	243	Library Services for Children **	3
LIT	245	Library Services for Young Adults **	3
LIT	247	Library Services for Adults **	3
LIT	285	History of Libraries	3
LIT	299	Selected Topics in Library Information Management (may be repeated for up to 6 hours)	1-3

** Course can be used as LIT option course if not utilized as LIT option core course

		Subtotal	**24**
		Total	**63**

Web Design – 520402708

(Offered at BLC)

IMD	180	Intermediate Web Design	3
IMD	230	Advanced Web Design	3
IMD	232	Web Design with Adobe Dreamweaver	3
IMD	240	Web Development with Adobe Flash	3
IMD	250	Digital Video Editing with Final Cut Pro	3
IMD	292	Portfolio Practicum: Web Design	3
		Web Design Option Courses	6

Choose from Web Design Option Courses:

IMD	115	Introduction to Graphic Design	3
IMD	127	Vector Design with Adobe Illustrator	3
IMD	128	Raster Design with Adobe Photoshop	3
IMD	160	Introduction to E-Commerce	3
IMD	175	Web Usability Design	3
IMD	212	Advanced Microsoft Office Applications	3
IMD	250	Digital Video Editing with Final Cut Pro	3
IMD	260	Integrated Project Management	3
IMD	265	Project Management for Information Management & Business	3
IMD	290	Photography	3
IMD	294	Seminar in Information Management & Design Technologies	3
CIT	150	Internet Technologies	3
CIT	120	Computational Thinking	3
CIT	140	JavaScript I	3
		Computer Programming Course Approved by Program Coordinator	1-3
		Other Computer Information Technologies, Architectural, Business, Communication, Fine Arts or other Option Appropriate Courses Approved by Program Coordinator	1-3
		Other Web or Graphic Design Courses Approved by Program Coordinator	1-3
		Subtotal	**24**
		Total	**63**

Certificate

Library Information Technology - 5204023159

(Offered at BLC)

The certificate in Library Information Technology prepares students for paraprofessional jobs in libraries and particularly in Kentucky public libraries. Upon completion of the academic certificate, students will be able to: perform basic library reference services using print and online sources, plan and produce library services and programs for a selected group of library customers, describe the role of the public library in the community as an agency for information services, and perform readers advisory services and collection development analysis for a selected group of Kentucky authors or genres. Courses taken for the Certificate in Library Information Technology may be used also for the Associate of Applied Science degree in Information Management & Design, Library Information Technology option. All Library Information Technology courses are web-based distance courses.

The Certificate in Library Information Technology requires 18 credit hours.

The required course is:

LIT	115	Introduction to Reference Services	3

Students will select one course from each of the following groups to complete the certificate requirement of 18 credit hours.

1. Library Procedures

LIT	124	Library Administration OR	3
LIT	132	Library Technical Services OR	(3)

2. Library Services

LIT	243	Library Services for Children OR	3
LIT	245	Library Services for Young Adults OR	(3)
LIT	247	Library Services for Adults OR	(3)
LIT	248	Library Services for Preschool Children OR	(3)
LIT	280	Genealogy Services in Libraries OR	(3)

3. Library Information Technology Elective

		LIT elective: any LIT course above LIT 115	3

4. Kentucky Literature (out-of-state students may substitute any English literature course)

LIT	200	Seminar in Kentucky Literature OR	3
LIT	240	Literature of Appalachian Kentucky OR	(3)
LIT	241	Literature of Central Kentucky OR	(3)
LIT	242	Literature of Western Kentucky OR	(3)

5. General Education

ENG	101	Writing I OR	3
ENG	102	Writing II OR	(3)
HIS	108	History of the United States through 1865 OR	(3)
HIS	109	History of the United States since 1865 OR	(3)
HIS	240	History of Kentucky	(3)
		Total	**18**

Graphic Design – 5204023239

(Offered at BLC)

IMD	115	Introduction to Graphic Design	3
IMD	133	Beginning Web Design	3
IMD	126	Introduction to Desktop Publishing	3
IMD	127	Vector Design with Adobe Illustrator	3
IMD	128	Raster Design with Adobe Photoshop	3
IMD	226	Advanced Desktop Publishing	3
		Total	**18**

Web Design – 5204023249

(Offered at BLC)

IMD	133	Beginning Web Design	3
IMD	180	Intermediate Web Design	3
IMD	232	Web Design with Adobe Dreamweaver	3
IMD	240	Web Development with Adobe Flash	3
IMD	250	Digital Video Editing with Final Cut Pro	3
		Total	**15**

Information Technology

(Curriculum Revision Pending)

The Information Technology Program offers an Associate in Applied Science degree and certificates in Information Technology Fundamentals, Computer Programming, Database Administration, Electronic Commerce, GIS Essentials, Information Security, Computer Support Specialist, Network Administration, and Web Development. This curriculum is supported by a solid foundation of core courses that focus on problem-solving and communication skills for Information Technology professionals involved in computer network environments. The program provides opportunities for practitioners in a variety of career fields to obtain knowledge and skills that enable them to adapt technology use to specific needs in their field of study.

Students entering this program will need to have basic computer skills such as would be obtained through CIS 100 (Introduction to Computers) or equivalent.

The Computer Programming Option/Certificate provides students with an introduction to programming languages with at least one of the languages studied at the intermediate level. Students will have the opportunity to study one language in depth or develop a breadth of knowledge in several languages. Students completing this option are prepared for the entry-level computer programmer positions.

The Database Administration Option/Certificate is intended for students wishing to upgrade or acquire new vocational skills in the fields of database administration, database design, and programming with database management systems. The course of study includes a foundation in business information systems, database theory and design, a procedural programming language, and a database language. A capstone course utilizes a special project, encompassing all of the areas, suitable for job experience and a job portfolio. Upon completion of the option/certificate, the graduate will be qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions to develop, implement, manage and maintain database systems.

The Electronic Commerce Option/Certificate provides training in designing, deploying, and managing an Internet e-commerce site. This option will prepare students for careers as web page designers, web masters, or web site managers of a web-based business. A capstone class in web site implementation will encompass all facets of the program of study, and will provide experience and a job portfolio.

The GIS Essentials Certificate is designed to develop support in the GIS field and provide students with practical GIS skills and a solid foundation for geographical manipulation. Students will gain experience through developing and implementing GIS Applications.

Students entering this certificate program will need to have basic computer skills and basic program logic skills such as would be obtained through CIS 100 (Introduction to Computers), CIS 120 (Program Design and Development) and CIS 130 (Microcomputer Applications) or equivalent.

Information Security Option/Certificate

A program of study designed to provide a solid background in information security. Fundamentals of information security, offensive techniques, defensive techniques, and security topics such as operating system security, network security design, or other security topics are covered. This option will prepare students for entry-level positions in the areas of network security, auditing and penetration testing, firewall configuration, and computer crime investigation.

The Computer Support Specialist Option/Certificate will provide an in-depth knowledge of application software, current Microsoft Windows client operating systems and user support skills. Upon completion of the option/certificate, the graduate will be qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions supporting applications, operating systems, and end users.

The Network Administration Option/Certificate provides the concepts and skills needed to design, set-up, maintain and expand networked and telecommunications systems. The curriculum provides specific training in Cisco, and/or Microsoft network systems. Upon completion of the option/certificate, the graduate will be qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions in installation and administration of local and wide area networks in medium to large businesses and organizations, and computer network administration positions in small businesses.

The Web Development and Administration Option/Certificate will provide training in designing, deploying, and managing a web site from both a hardware and software perspective. This option will prepare students for careers as web site developers, webmasters, and web administrators. A capstone class in web site implementation will encompass all facets of the program of study, and will provide experience and a job portfolio.

Associate in Applied Science

Information Technology - 1101017079

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

General Education Core:

ENG	101	Writing I	3
ENG	102	Writing II	3
MAT	150	College Algebra	3
		Science Course with Lab	3-4
		Oral Communications Course	3
		Social Interaction Course	3
		Heritage/Humanities Course	3
		Subtotal	**21-22**

Technical Core

CIS	120	Program Design and Development	3
CIS	130	Microcomputer Applications OR	3
ET	107	Computer Applications for Technicians	(4)
IT	105	Computer Maintenance Essentials AND	3
IT	205	Advanced Computer Maintenance OR	3
ELT	232	Computer Software Maintenance AND	(3)
ELT	234	Computer Hardware Maintenance OR	(3)
CIS	110	Operating Systems Concepts AND	(3)
ELT	234	Computer Hardware Maintenance	(3)
IT	170	Introduction to Database Design	3
IT	132	Web Page Development OR	3
IT	130	Web Site Design and Production	(4)
		Introductory Networking Course	3-4
		Beginning Level Programming Language	3
		Subtotal	**24-27**

Introductory Networking Courses:

NIS	160	Networking Core Technologies *	3
IT	120	Networking Fundamentals **	4
IT	121	Networking for Home and Small Business	4

* recommended for Microsoft Networking Tracks

** recommended for Cisco Networking Tracks

Beginning Level Programming Language Courses:

CIS	143	COBOL Programming	3
IT	147	SQL Programming	3
CIS	148	Visual BASIC I	3
CIS	149	Java Programming I	3
CIS	155	C/C++ Programming I	3
CS	115	Introduction to Computer Programming	3
NIS	150	Perl Programming I*	3
NIS	152	Introduction to Javascript*	3

* Suggested for Electronic Commerce option

Intermediate Level Programming Language Courses:

CIS	232	Programming for Windows Environment	3
CIS	243	COBOL Applications	3
CIS	252	C/C++ Programming II	3
CIS	262	C/C++ Programming III	3
CIS	248	Visual Basic II: Desktop Applications	3
CIS	249	Java Programming II	3
CIS	250	Java Game Development I	4
CIS	255	C++ Game Development I	3
CS	215	Introduction to Program Design, Abstraction, and Problem Solving	4

Advanced Level Programming Language Courses

CIS	258	Visual Basic III: Distributed Applications	3
CIS	259	Java Programming III	3
CIS	260	Java Game Development II	4
CIS	265	C++ Game Development II	3

Computer Programming Option - 110101704

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

(Programming Track)

Available Completely Online

CIS	220	Systems Analysis and Design	3
COE	199	Cooperative Education OR	3
CIS	280	Internship	(3)
ACC	201	Financial Accounting	3
		Programming Languages (must include at least 6 credit hours above the beginning level)	12
		Management Course (Choose from courses listed below)	3
		Subtotal	**24**
		Total	**69-73**

(Game Programming Track)

Available Completely Online

CIS	250	Java Game Development I	4
CIS	260	Java Game Development II	4
CIS	255	C++ Game Development I	4
CIS	265	C++ Game Development II	4
VCC	166	Digital Imaging	3
CIS	155	C/C++ Programming I OR	3
CIS	149	Java Programming I (whichever was not taken as part of technical core)	(3)
		Subtotal	**22**
		Total	**67-71**

Management Courses for Computer Programming Option/Certificate

BAS	200	Small Business Management	3
BAS	274	Human Resource Management	3
BAS	287	Supervisory Management	3

BAS	288	Personal and Organizational Leadership	3
MFG	256	Production Management	3
OST	275	Office Management	3
QMS	101	Introduction to Quality Systems	3
QMS	201	Customer Service Improvement Skills	3

Database Administration Option - 110101702

(Offered at BGT, BLC, BSC, HPC, JFC, MDC, MYC, OWC, SEC, SMC)
Available Completely Online

IT	147	SQL Programming	3
IT	270	Database Systems – Implementation & Management	3

Server Administration Course:

NIS	213	Microsoft Windows Server OR	3
NIS	230	Unix Administration	(3)

Multi-Vendor Database Administration Courses:

NIS	246	Microsoft SQL Server Administration Topic:	3
IT	272	Oracle Database Fundamentals I	3
IT	266	Open Source Database Administration Topic:	3

Web/Database Programming Course:

IT	235	Data-Driven Web Applications OR	3
IT	236	Active Server Pages OR	(3)
		Functionally equivalent course approved by Program Coordinator	(3)
		Technical Elective (Select from any IT Option technical elective list or "Selected Topics" course approved by Program Coordinator)	3
		Subtotal	**24**
		Total	**69-73**

Electronic Commerce Option - 110101703

(Offered at BLC, BSC, HEC, HPC, JFC, MDC, MYC, SEC, SMC,WKC)

B&E	100	Introduction to Business and Economics OR	1
BAS	160	Introduction to Business	(3)
BAS	282	Principles of Marketing	3
ACC	201	Financial Accounting	3
BAS/CIS	151	Introduction to Electronic Commerce	3
IT	132	Web Page Development* OR	3
IT	130	Web Site Design and Production *	(4)
IT	230	Advanced Web Page Development	3
IT	235	Data-Driven Web Design	3
IT	291	E-Commerce Practicum: Site Implementation	3

* Must take either IT 130 or IT 132 whichever course was not taken in the technical core.

		Subtotal	**22-25**
		Total	**67-74**

Computer Support Specialist Option - 110101705

(Offered at BGT, BLC, BSC, HEC, HPC, JFC, MDC, MYC, OWC, SEC,WKC)
Available Completely Online

CIS	230	Advanced Microcomputer Applications OR	3
OST	225	Introduction to Desktop Publishing	(3)
IT	237	Help Desk Service Skills and Tools	3
IT	210	Operating System Support	3
IT	215	Application Support	3
CIS	280	Internship OR	3
COE	199	Cooperative Education	(3)
		Technical Electives (listed below)	6
		Subtotal	**21**
		Total	**66-70**

Technical Electives for Computer Support Specialist Option /Certificate

ACC	201	Financial Accounting	3
BAS	287	Supervisory Management	3
BAS	288	Personal and Organizational Leadership	3
OST	275	Office Management	3
		Beginning Level Programming Course (Cannot be same course as taken in the technical core)	3
		Intermediate Level Programming Course	3
IT	130	Web Site Design and Production	3
IT	230	Advanced Web Page Development	3
IT	147	SQL Programming	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	230	UNIX Administration	3
IT	235	Data-Driven Web Design	3
CIS	230	Advanced Microcomputer Applications *	3
OST	225	Introduction to Desktop Publishing *	3
IT	180	IT Project Management	3
		Other Technical Courses as Approved by Program Coordinator	

* If not taken as a requirement in the option above

Network Administration Option - 110101701

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Microsoft MCSA Track - 1101013199

Available Completely Online

NIS	211	Administering Microsoft Windows Professional: Topic	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	214	Supporting Windows Network Infrastructure Topic:	3
		Take one of the following MCSA Track electives	3-6
		Technical Electives (listed below)	6
		Subtotal	**18-21**
		Total	**63-70**

Electives for MCSA Track

NIS	216	Implementing and Administering Microsoft Windows Directory Services Topic:	3
NIS	246	Microsoft SQL Server System Administration Topic:	3
NIS	245	Designing a Secure Windows Network Topic:	3
NIS	262	Microsoft Internet Security and Acceleration Server (ISA)	3
NIS	264	Implementing and Managing Microsoft Exchange Server	3
IT	210	Operating System Support* AND	3
IT	215	Application Support *	3

* must be completed together to count as single elective

Microsoft MCSE Track - 1101013229

Available Completely Online

NIS	211	Administering Microsoft Windows Professional: Topic	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	214	Supporting Windows Network Infrastructure Topic:	3
NIS	216	Implementing and Administering Microsoft Windows Directory Services Topic:	3
NIS	244	Designing a Windows Networking Services Infrastructure Topic:	3
NIS	242	Designing a Windows Directory Services Infrastructure Topic: OR	3
NIS	245	Designing a Secure Windows Network Topic:	(3)
		Take one of the following MCSE Track electives	3
		Technical Elective (listed below)	3
		Subtotal	**24**
		Total	**69-73**

Electives for MCSE Track

NIS	242	Designing a Windows Directory Services Infrastructure Topic:*	3
NIS	245	Designing a Secure Windows Network Topic:*	3
NIS	246	Microsoft SQL Server System Administration Topic:	3
NIS	262	Microsoft Internet Security and Acceleration Server (ISA)	3
NIS	264	Implementing and Managing Microsoft Exchange Server	3
IT	250	Introduction to Security	4

* must be different than the course chosen above

Cisco Networking Associate Track

IT	122	Routing Protocols and Concepts (If IT 120 was taken in the core.) OR	4
IT	123	Small to Medium Business or ISP Networking (If IT 121 was taken in the core.)	(4)
IT	220	LAN Switching and Wireless AND	4
IT	222	Accessing the WAN	4
		OR	
IT	223	Introducing Routing and Switching in the Enterprise AND	(4)
IT	225	Designing and Supporting Computer Networks	(4)
NIS	213	Administering Microsoft Windows Server Topic OR	3
NIS	230	UNIX Administration	(3)
		Technical Electives (listed below)	6
		Subtotal	**21-25**
		Total	**66-74**

* IT 121 and 123 may be substituted for IT 120 in the sequence.

Cisco Networking Professional Track - 1101013189

IT	280	Building Scalable Cisco Internetworks (BSCI)	4
IT	282	Implementing Secure Converged Wide-area Networks (ISCW)	4
IT	284	Building Cisco Multilayer Switched Networks (BCMSN)	4
IT	286	Optimizing Converged Cisco Networks (ONT)	4
		Technical Electives (listed below)	6
		Subtotal	**22**
		Total	**67-71**

Technical Electives for Network Administration Option/Certificates:

COE	199	Cooperative Education	1-6
NIS	270	Network Hardware Installation and Troubleshooting	3
NIS	290	Selected Topics in Network and Information Systems Technology	1-4
NIS	295	Independent Problems in Network and Information Systems	1-4
CIS	280	Internship	3
CMS	105	Multimedia Production and Applications I	3
ET	102	Blueprint Reading	2
ET	112	Digital Logic Circuits OR	4
ENGT	220	Digital II AND	(2)
ENGT	221	Digital II Lab	(1)
ET	256	Microprocessor Fundamentals	4
NIS	246	Microsoft SQL Server System Administration Topic:	3
NIS	247	Microsoft SQL Server Implementation	3
IT	270	Database Systems – Implementation & Management	3
NIS	262	Microsoft Internet Security and Acceleration Server (ISA)	3
NIS	264	Implementing and Managing Microsoft Exchange Server	3
IT	250	Introduction to Security	4
IT	252	Attacks and Exploits	4
IT	254	Firewalls and Perimeter Defense	4
		Any Course from another approved Networking Option Track Programming or Scripting Language (must be different from technical core)	3
		Other technical courses approved by the Program Coordinator	1-3

Development and Administration Option - 110101706

(Offered at BGT, BLC, BSC, ELC, HPC, HZC, JFC, MDC, MYC, SEC, SMC)

CIS	248	Visual Basic II: Desktop Applications OR	3
CIS	249	Java Programming II	(3)
NIS	150	Perl Programming I OR	3
NIS	152	Introduction to Javascript	(3)
NIS	275	Internet Servers Administration OR	3
NIS	213	Administrating Microsoft Windows Server	(3)
IT	130	Web Site Design and Production	4
IT	230	Advanced Web Page Development	3
IT	235	Data-driven Web Design	3
IT	295	Web Development & Administration Practicum: Site Implementation	3
		Technical Elective (listed below)	3
		Subtotal	**25**
		Total	**70-74**

Technical Electives for Web Development and Administration Option/Certificates:

NIS	211	Administering Microsoft Windows Professional: Topic	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	275	Internet Servers Administration: Topic	3
IT	147	SQL Programming	3
NIS	246	Microsoft SQL Server System Administration Topic:	3
IT	240	XML	3
IT	236	Active Server Pages	3
IT	134	Macromedia Flash	3
IT	270	Database Systems – Implementation & Management	3
		Beginning Level Programming Language (must be different from technical core. Recommend CIS 148 Visual BASIC I or CIS 149 Java Programming I)	3

Information Security Option - 110101707

(Offered at BSC, HZC, JFC, MDC, MYC, SEC,WKC)

Available Completely Online

IT	250	Introduction to Security	4
IT	252	Attacks and Exploits	4
IT	254	Firewalls and Perimeter Defense	4
		Security Elective	3
		Networking Sequence	9-12
		Subtotal	**24-27**
		Total	**69-76**

Security Electives

IT	255	Computer Forensics	3
IT	256	UNIX/LINUX Operating System Security	3
IT	258	Windows Operating System Security	3
IT	259	Selected Topics in Information Security	3
NIS	245	Designing a Secure Windows Network Topic:	3

Networking Sequence– Must take one complete sequence of three classes

NIS	211	Administering Microsoft Windows Professional: Topic AND	3
NIS	213	Administering Microsoft Windows Server: Topic AND	3
NIS	214	Supporting Windows Network Infrastructure Topic:	3
		OR	
NIS	230	UNIX Administration AND	(3)
NIS	260	Advanced UNIX AND	(3)
NIS	275	Internet Servers Administration	(3)
		OR	
IT	122	Routing Protocols and Concepts AND	(4)
IT	220	LAN Switching and Wireless AND	(4)
IT	222	Accessing the WAN	(4)
		OR	
IT	123	Small to Medium Business or ISP Networking AND	(4)
IT	223	Introducing Routing and Switching in the Enterprise AND	(4)
IT	225	Designing and Supporting Computer Networks	(4)

Certificates

Information Technology Fundamentals - 1101013039

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

CIS	120	Program Design and Development	3
CIS	130	Microcomputer Applications OR	3
ET	107	Computer Applications for Technicians	(4)
IT	105	Computer Maintenance Essentials AND	3
IT	205	Advanced Computer Maintenance OR	3
ET	232	Computer Software Maintenance AND	(3)

ET	234	Computer Hardware Maintenance OR	(3)
CIS	110	Operating Systems Concepts AND	(3)
ET	234	Computer Hardware Maintenance	(3)
IT	170	Introduction to Database Design	3
IT	132	Web Page Development OR	3
IT	130	Web Site Design and Production	(4)
		Beginning Level Programming Language	3
		Introductory Networking Course	3-4
		Total	**24-27**

A+ Certification - 1101013049

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

CIS	130	Microcomputer Applications OR	3
ET	107	Computer Applications for Technicians	(4)
IT	105	Computer Maintenance Essentials AND	3
IT	205	Advanced Computer Maintenance OR	3
ET	232	Computer Software Maintenance AND	(3)
ET	234	Computer Hardware Maintenance OR	(3)
CIS	110	Operating Systems Concepts AND	(3)
ET	234	Computer Hardware Maintenance	(3)
		Total	**9-10**

Computer Programming - 1101013139

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

CIS	120	Program Design and Development	3
CIS	220	Systems Analysis and Design	3
COE	199	Cooperative Education OR	3
CIS	280	Internship	(3)
ACC	201	Financial Accounting	3
		Beginning Level Programming Language	3
		Programming Languages (must include at least 6 credit hours above the beginning level)	12
		Management course (listed in the option)	3
		Total	**30**

Game Programming - 1101013249

(Offered at ELC, JFC, MYC, SEC)

Available Completely Online

CIS	120	Program Design and Development	3
VCC	166	Digital Imaging	3
CIS	149	Java Programming I	3
CIS	155	C/C++ Programming I	3
CIS	250	Java Game Development I	4
CIS	260	Java Game Development II	4
CIS	255	C/C++ Game Development I	4
CIS	265	C/C++ Game Development II	4
		Total	**28**

Database Administration - 1101013269

(Offered at BGT, JFC, MDC, MYC, SMC)

(Prerequisite: Moderate knowledge of industry-standard microcomputer operating systems, application software, computer program design and development techniques, and familiarity with at least one programming language).

IT	170	Introduction to Database Design	3
IT	147	SQL Programming	3
IT	270	Database Systems – Implementation and Management	3
IT	272	Oracle Database Fundamentals I	3
NIS	246	Microsoft SQL Server System Administration Topic:	3
IT	266	Open Source Database Administration Topic:	3
NIS	213	Administering Microsoft Windows Server OR	3
NIS	230	UNIX Administration	(3)
		Total	**21**

Database Administration – Oracle Basic - 1101013089

(Offered at BLC, BSC, HPC, JFC, MDC, MYC, SEC, SMC,WKC)

Available Completely Online

(Prerequisite: Moderate knowledge of industry-standard microcomputer operating systems, application software, computer program design and development techniques, and familiarity with at least one programming language).

IT	170	Introduction to Database Design	3
IT	147	SQL Programming	3
IT	270	Database Systems – Implementation and Management	3
IT	272	Oracle Database Fundamentals I	3
NIS	213	Administering Microsoft Windows Server OR	3
NIS	230	UNIX Administration	(3)
		Total	**21**

Database Administration – Oracle Enhanced - 1101013239

(Offered at BSC, JFC, MDC, MYC, SEC)

(Prerequisite: Moderate knowledge of industry-standard microcomputer operating systems, application software, computer program design and development techniques, and familiarity with at least one programming language).

IT	170	Introduction to Database Design	3
IT	147	SQL Programming	3
IT	270	Database Systems – Implementation and Management	3
IT	272	Oracle Database Fundamentals I	3
IT	274	Oracle Database Fundamentals II	3
IT	278	Oracle Performance Tuning	3
NIS	213	Administering Microsoft Windows Server OR	3
NIS	230	UNIX Administration	(3)
		Total	**21**

Database Administration –Microsoft Enhanced - 1101013109

(Offered at BLC, BSC, HPC, JFC, MDC, MYC, SEC, SMC)

(Prerequisite: Moderate knowledge of industry-standard microcomputer operating systems, application software, computer program design and development techniques, and familiarity with at least one programming language).

IT	170	Introduction to Database Design	3
IT	147	SQL Programming	3
IT	270	Database Systems – Implementation and Management	3
NIS	246	Microsoft SQL Server System Administration Topic:	3
NIS	247	Microsoft SQL Server Implementation	3
NIS	248	Microsoft SQL Server Data Warehousing	3
NIS	213	Administering Microsoft Windows Server: Topic	3
		Total	**21**

Web/Database Programmer - 1101013259

((Offered at BGT, BLC, BSC, HPC, JFC, MDC, MYC, SEC, SMC,WKC)

IT	170	Introduction to Database Design	3
IT	147	SQL Programming	3
IT	270	Database Systems – Implementation & Management	3

Server Administration Course:

NIS	213	Microsoft Windows Server OR	3
NIS	230	Unix Administration	(3)

Database Administration Course:

NIS	246	Microsoft SQL Server Administration Topic: OR	3
IT	272	Oracle Database Fundamentals I OR	(3)
IT	266	Open Source Database Administration Topic:	(3)

Web/Database Programming Courses:

IT	132	Web Page Development OR	3
IT	130	Web Site Design and Production	(4)
IT	230	Advanced Web Page Development	3

IT	235	Data-Driven Web Design OR	3
IT	236	Active Server Pages OR	(3)
		Functionally equivalent course approved by Program Coordinator	(3)
		Total	**24-25**

Electronic Commerce - 1101013129

(Offered at BLC, BSC, HEC, HPC, JFC, MDC, MYC, SEC, SMC,WKC)

B & E	100	Introduction to Business and Economics OR	1
BAS	160	Introduction to Business	(3)
BAS	282	Principles of Marketing	3
ACC	201	Financial Accounting	3
BAS/CIS	151	Introduction to Electronic Commerce	3
IT	130	Web Site Design and Production	4
IT	132	Web Page Development	3
IT	230	Advanced Web Page Development	3
IT	235	Data-Driven Web Design	3
IT	291	E-Commerce Practicum: Site Implementation	3
		Total	**26-28**

GIS Essentials - 1101013209

(Offered at BSC, JFC, MYC, SEC, SMC)

CIS	148	Visual BASIC I	3
IT	170	Introduction to Database Design	3
IT	160	Introduction to Geographical Information System	3
IT	268	Selected Topics in JavaScript	3
IT	260	GIS Software Tools	3
		Total	**15**

Information Security - 1101013219

(Offered at BLC, BSC, GTW, HPC, HZC, JFC, MDC, MYC, SEC, SMC)

Available Completely Online

IT	250	Introduction to Security	4
IT	252	Attacks and Exploits	4
IT	254	Firewalls and Perimeter Defense	4
		Security Elective (listed in the option)	3
		Total	**15**

Computer Support Specialist - 1101013149

(Offered at BGT, BLC, BSC, HEC, HPC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

CIS	130	Microcomputer Applications OR	3
ET	107	Computer Applications for Technicians	(4)
IT	105	Computer Maintenance Essentials AND	3
IT	205	Advanced Computer Maintenance OR	3
ET	232	Computer Software Maintenance AND	(3)
ET	234	Computer Hardware Maintenance OR	(3)
CIS	110	Operating Systems Concepts AND	(3)
ET	234	Computer Hardware Maintenance	(3)
CIS	230	Advanced Microcomputer Applications OR	3
OST	225	Introduction to Desktop Publishing	(3)
IT	237	Help Desk Service Skills and Tools	3
IT	210	Operating System Support	3
IT	215	Application Support	3
CIS	280	Internship OR	3
COE	199	Cooperative Education	(3)
		Computer Support Elective (listed in the option)	6
		Total	**30-31**

Cisco Networking Basic - 1101013029

(Offered at ASC, BLC, BSC, ELC, HEC, HPC, HZC, JFC, MYC, OWC, SEC, SMC)

IT	120	Networking Fundamentals AND	4
IT	122	Routing Protocols and Concepts AND	4
IT	220	LAN Switching and Wireless AND	4
IT	222	Accessing the WAN	4
		OR	
IT	121	Networking for Home and Small Business AND	(4)
IT	123	Small to Medium Business or ISP Networking AND	(4)
IT	223	Introducing Routing and Switching in the Enterprise AND	(4)
IT	225	Designing and Supporting Computer Networks	(4)
		Total	**16**

Cisco Networking Enhanced - 1101013069

(Offered at ASC, BGT, BLC, BSC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

IT	120	Networking Fundamentals AND	4
IT	122	Routing Protocols and Concepts AND	4
IT	220	LAN Switching and Wireless AND	4
IT	222	Accessing the WAN	4
		OR	
IT	121	Networking for Home and Small Business AND	(4)
IT	123	Small to Medium Business or ISP Networking AND	(4)
IT	223	Introducing Routing and Switching in the Enterprise AND	(4)
IT	225	Designing and Supporting Computer Networks	(4)
NIS	213	Administering Microsoft Windows Server: Topic OR	3
NIS	230	UNIX Administration	(3)
		Electives (listed in the option)	6
		Total	**25**

Cisco Networking Professional - 1101013189

(Offered at BLC, BSC, ELC, HPC, HZC, JFC, MYC, SEC,WKC)

IT	280	Building Scalable Cisco Internetworks (BSCI)	4
IT	282	Implementing Secure Converged Wide-area Networks (ISCW)	4
IT	284	Building Cisco Multilayer Switched Networks (BCMSN)	4
IT	286	Optimizing Converged Cisco Networks (ONT)	4
		Electives (listed in the option)	6
		Total	**22**

Microsoft Networking MCSA Track – 1101013199

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

NIS	211	Administering Microsoft Windows Professional: Topic	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	214	Supporting Windows Network Infrastructure Topic:	3
		Electives (listed in the Network Administration Option MCSA Track)	3-6
		Introductory Networking Course	3-4
		Total	**15-19**

Microsoft Networking MCSE Track - 1101013229

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

NIS	211	Administering Microsoft Windows Professional: Topic	3
NIS	213	Administering Microsoft Windows Server: Topic	3
NIS	214	Supporting Windows Network Infrastructure Topic:	3
NIS	216	Implementing and Administering Microsoft Windows Directory Services Topic:	3
NIS	244	Designing a Windows Networking Services Infrastructure Topic:	3
NIS	242	Designing a Windows Directory Services Infrastructure Topic: R	3
NIS	245	Designing a Secure Windows Network Topic:	(3)
		Elective (listed in Network Administration Option MCSE Track)	3
		Introductory Networking Course	3-4
		Total	**24-25**

Web Administrator - 1101013159

(Offered at BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MYC, OWC, SEC)

Available Completely Online

NIS	275	Internet Servers Administration OR	3
NIS	213	Administering Microsoft Windows Server	(3)
IT	105	Computer Maintenance Essentials AND	3
IT	205	Advanced Computer Maintenance OR	3
ET	232	Computer Software Maintenance AND	(3)
ET	234	Computer Hardware Maintenance OR	(3)
CIS	110	Operating Systems Concepts AND	(3)
ET	234	Computer Hardware Maintenance	(3)
IT	132	Web Page Development	3
NIS	150	Perl Programming I OR	3
NIS	152	Introduction to Javascript	(3)
		Electives (listed in the option)	6
		Introductory Networking Course	3-4
		Total	**24-25**

Web Site Developer - 1101013169

(Offered at BGT, BLC, BSC, ELC, HEC, HPC, HZC, JFC, MYC, SEC, SMC)

Available Completely Online

CIS	120	Program Design and Development	3
IT	130	Web Site Design and Production	4
IT	132	Web Page Development	3
IT	170	Introduction to Database Design	3
IT	230	Advanced Web Page Development	3
IT	235	Data-Driven Web Design	3
		Programming Languages	9
		Electives (listed in the option)	6
		Total	**34**

Insurance Risk Management

The Certificate program in Insurance and Risk Management is a four-course (12 credit hour) credential. Students will learn the foundations of insurance production and multiple lines insurance production. Students will also master the fundamentals of operating an agency and managing sales. Completers of this certificate program will be eligible to sit for the national Accredited Advisor in Insurance (AAI) Certification exam.

Certificate

Insurance and Risk Management – 5208053019

(Offered at JFC)

INS	100	Introduction to Insurance and Risk Management	3
INS	181	Foundations of Insurance Production	3
INS	182	Multiple Lines Insurance Production	3
INS	183	Agency Operations and Sales Management	3
		Total Credits	**12**

Interactive Design

The Interactive Design Technology program prepares students for present and future employment in expanding fields of interactive advertising/marketing and animation. Employers of these graduates include advertising agencies, marketing companies, in-house agencies, movie studios, production companies and game developers.

Students will need to achieve a "C" or better in each class to remain in the program.

Certificate

3D Modeling Specialist – 0907023019

(Offered at BGT, GTW)

IDT	100	Fundamentals of Design	3
IDT	110	3D Modeling & Animation I	4
IDT	120	Digital Design Tools	4
IDT	210	3D Modeling & Animation II	3
IDT	170	Project Strategy	3
IDT	250	Advanced Project and Portfolio Development	3
		Computer Literacy Course	0-3
		Total Credits	**20-23**

Interdisciplinary Early Childhood Education

The Interdisciplinary Early Childhood Education Program is designed to provide students an understanding of the cognitive, physical, social and emotional development for working with young children. Opportunities to apply this knowledge in practical experiences are incorporated in the curriculum. Curriculum topics include, but are not limited, to developmental ages and stages, health and safety, curriculum planning, assessment and family involvement. Employment opportunities are available in public and private preschools, early care educational settings, early intervention programs, Head Start, hospitals, campus child development centers, rehabilitation clinics and recreation centers.

Progression in the Interdisciplinary Early Childhood Education program is contingent upon achievement of a grade of "C" or better in each IEC course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Interdisciplinary Early Childhood Education - 1907097019

(Offered at ASC, BLC, ELC GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SMC)

ENG	101	Writing I	3
ENG	102	Writing II	3
COM	101	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
PSY	110	General Psychology	3
		Heritage/Humanities/Foreign Language	3-4
		Science	3
		Mathematics	3
		Computer literacy	0-3

Computer literacy must be demonstrated by competency exam or by completing a computer literacy course

		Subtotal	**21-25**

Technical Core Courses

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
IEC	120	Health, Safety & Nutrition OR	3
KHP	230	Human Health & Wellness OR	(3)
NFS	101	Human Nutrition and Wellness	(3)
IEC	130	Early Childhood Development	3
IEC	170	Observation & Assessment OR	3
IEC	190	Applied Experiences in Early Childhood Education	(3)
IEC	180	Approaches to Early Childhood Education Curriculum	3
IEC	200	Child Guidance	3
IEC	216	Literacy and Language in IECE	3
IEC	221	Creative Expressions in IECE	3

IEC	246	Sciences and Mathematics for IECE	3
IEC	235	Introduction to Inclusive Education	3
IEC	260	Infant and Toddler Education and Programming	3
IEC	291	IECE Practicum/Cooperative Education	3
		Subtotal	**39**

Choose one course from the following approved technical support elective courses:

IEC	210	Families & Communities in Early Childhood Education	3
IEC	240	Administration of Early Childhood Education	3
IEC	250	School Age Child Care	3
		Subtotal	**3**
		Total Credits	**63-67**

Diploma

Interdisciplinary Early Childhood Education - 1907094019

(Offered at ASC, BLC, ELC, GTW, HEC, HPC, HZC, MDC, MYC, OWC, SMC)

General Education: (6-9 credit hour requirement for diplomas in areas 1-3)

Area 1 =	Writing/ Assessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Sciences, Behavioral Science, or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
IEC	120	Health, Safety, and Nutrition OR	3
KHP	230	Human Health & Wellness OR	(3)
NFS	101	Human Nutrition and Wellness	(3)
IEC	130	Early Childhood Development	3
IEC	200	Child Guidance	3
IEC	180	Approaches to Early Childhood Education Curriculum	3
IEC	170	Observation and Assessment OR	3
IEC	190	Applied Experiences in Early Childhood Education	(3)
IEC	216	Literacy and Language in IECE	3
IEC	221	Creative Expressions in IECE	3
IEC	246	Sciences and Mathematics for IECE	3
IEC	235	Introduction to Inclusive Education	3
IEC	240	Administration of Early Childhood Education OR	3
IEC	250	School Age Child Care OR	(3)
IEC	210	Families & Communities in Early Childhood Education	(3)
IEC	260	Infant and Toddler Education and Programming	3
IEC	291	IECE Practicum/Cooperative Education	3
		Subtotal	**42**
		Total Credits:	**48-51**

Certificate

Interdisciplinary Early Childhood Education Technical Studies - 1907093019

(Offered at ASC, BLC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SMC,WKC)

Required:

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
IEC	120	Health, Safety, and Nutrition OR	3
KHP	230	Human Health & Wellness OR	(3)
NFS	101	Human Nutrition and Wellness	(3)
IEC	130	Early Childhood Development	3
IEC	200	Child Guidance	3
IEC	180	Approaches to Early Childhood Education Curriculum	3
IEC	170	Observation and Assessment OR	3
IEC	190	Applied Experiences in Early Childhood Education	(3)
IEC	216	Literacy and Language in IECE	3
IEC	221	Creative Expressions in IECE	3
IEC	246	Sciences and Mathematics for IECE	3
IEC	235	Introduction to Inclusive Education	3
IEC	240	Administration of Early Childhood Education OR	3
IEC	250	School Age Child Care OR	(3)
IEC	210	Families & Communities in Early Childhood Education	(3)
IEC	260	Infant and Toddler Education and Programming	3
IEC	291	IECE Practicum/Cooperative Education	3
		Total Credits	**42**

Child Care Assistant - 1907093039

(Offered at ASC, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Required:

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
		Any IECE three (3) hour course with the exception of IECE 190, IECE 230, IECE 250, and IECE 291.	3
		Total Credits	**9**

Kentucky Child Care Provider - 1907093049

(Offered at ASC, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

Required:

IEC	101	Orientation to Early Childhood Education	3
		Total Credits	**3**

Early Childhood Administrator - 1907093059

(Offered at ASC, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SMC,WKC)

Option One: Course Work

Required:

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
IEC	240	Administration of Early Childhood Education	3
BAS	200	Small Business Management OR	3
IEC	230	Business Administration of ECE Programs	(3)
		Total Credits	**12**

Option Two: With a current CDA Articulated credit for IECE 101 and IECE 102

Required:

IEC	240	Administration of Early Childhood Education	3
BAS	200	Small Business Management OR	3
IEC	230	Business Administration of ECE Programs	(3)

Option Three: With Life Skills Portfolio to replace competencies for IEC 101 and IEC 102

Required:

IEC	240	Administration of Early Childhood Education	3
BAS	200	Small Business Management OR	3
IEC	230	Business Administration of ECE Programs	(3)

Life Skills is defined as a Total of five years (10,000 Hours) of paid, full-time work experience in a licensed child care facility. Two and one-half years (5,000 Hours) must have been within the last five (5) years.

School Age Child Care - 1907093069

(Offered at ASC, BLC, ELC, GTW, HEC, HPC, HZC, JFC, OWC, SMC,WKC)

IEC	101	Orientation to Early Childhood Education	3
IEC	102	Foundations of Early Childhood Education	3
IEC	130	Early Childhood Development	3
IEC	200	Child Guidance	3
IEC	250	School Age Child Care	3
		Total Credits:	**15**

Invasive Cardiology

The goal of the Invasive Cardiology Program is to provide a competency-based didactic course with a well-rounded clinical experience. The student will be exposed to and expected to acquire skills, attitudes, and habits that are common to professionals in the medical field. Graduates will be prepared for a professional career as an Invasive Cardiovascular Technologist.

Certificate

Invasive Cardiology – 5109153019

(Offered at JFC)

DMS	105	Introduction to Cardiology	13
IVC	140	Invasive Cardiology I	16
IVC	150	Invasive Cardiology II	3
IVC	160	Invasive Cardiology Clinical Education I	6
IVC	165	Invasive Cardiology Clinical Education II	6
		Total Credits:	**44**

Locomotive Technology

Expertise in the inspection, repair, service and overhaul of locomotive electrical systems. Interpreting specifications from locomotive manuals, using testing procedures and equipment, diagnosing problems and performing repairs. To work in the railroad industry, following DOT guidelines.

Certificates

Locomotive Electrical Technician - 4902993029

(Offered at SMC)

CIS	100	Introduction to Computers OR	3
CPU	150	Computer Fundamentals	(3)
MAT	150	College Algebra OR	3
MAT	126	Technical Algebra & Trigonometry	(3)
DIT	112	Diesel Engine Repair	3
DIT	113	Diesel Engine Repair Lab	2
ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	210	Devices I	5
ELT	214	Devices II	5
EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
EET	270	Electrical Motor Controls I	2
EET	271	Electrical Motor Controls I Lab	2
EET	272	Electrical Motor Controls II	2
EET	273	Electrical Motor Controls II Lab	2
ENGT	242	Introduction to the Rail Industry	5
ENGT	240	Railroad Locomotive Electrical Systems	2
		Total Credits	**50**

Logistics and Operations Management

The Logistics and Operations Management program is designed to teach students about the sourcing, procurement, conversion, and logistics concepts associated with the production and delivery of goods and services.

Associate in Applied Science

Logistics and Operations Management – 5202037019

(Offered at WKC)*

General Education Courses

		Computer Literacy **	0-3
ENG	101	Writing I	3
MAT	110	Applied Mathematics	3
		Science	3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
COM	252	Interpersonal Communications	3
		Subtotal	**18-21**

Technical or Support Courses

IT	180	IT Project Management	3
ACC	201	Financial Accounting	3
ACC	202	Managerial Accounting	3
BAS	160	Introduction to Business	3
BAS	282	Principles of Marketing	3
BAS	287	Supervisory Management	3
BAS	256	International Business	3
BAS	289	Operations Management	3
TEC	200	Technical Communications	3
LOM	100	Introduction to Logistics Management	3
LOM	101	Transportation	3
LOM	102	Supply Chain Management	3
LOM	202	Applied Supply Chain Management	3
ECO	101	Contemporary Economic Issues	3
		Electives#	0.5 - 5
		Subtotal	**42.5-47**
		Total Credits	**60.5-68**

**Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

#May include BAS, QMS, STA or Business and Industry approved courses.

Certificates

Logistics Management – 5202033019

(Offered at WKC)*

		Computer Literacy**	0-3
LOM	100	Introduction to Logistics Management	3
LOM	101	Transportation	3
LOM	102	Supply Chain Management	3
BAS	287	Supervisory Management	3
TEC	200	Technical Communications	3
		Total Credits	**15-18**

**Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

*Pending KCTCS Board of Regents approval 06/11.

Machine Tool Technology

Work activities in machine shop involve applying knowledge of machine capabilities, the properties of materials, and shop practices to set-up and operate various machines. The skills needed to position work pieces, adjust machines, and verify the accuracy of machine functions and finish products are taught by classroom instruction, demonstration, and hands on experience.

Students enrolled in the Machine Tool Technology program must achieve a minimum grade of "C" in each technical course

Associate in Applied Science

Machine Tool Technology - 4805037019

(Offered at BGT, BLC, BSC, ELC, MDC, MYC, OWC,WKC)

General Education:

ENG	101	Writing I	3
MAT	116	Technical Mathematics OR	3
MAT	126	Technical Algebra and Trigonometry or Higher	(3)
		Heritage/Humanities	3
		Science	3
		Social Interaction	3
		Computer Literacy*	0-3
		Subtotal:	**15-18**
		Electives (Co-op or Practicum)	1
		Subtotal:	**1**

Technical:

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	118	Metrology/Control Charts	2
MTT	120	Applied Machining I and	3
MTT	122	Applied Machining II or	3
MTT	124	Applied Machining	(6)
MTT	130	Manual Programming and	3
MTT	132	CAD/CAM/CNC or	3
MTT	134	Manual Programming/CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
MTT	210	Industrial Machining I and	3
MTT	212	Industrial Machining II or	3
MTT	214	Industrial Machining	(6)
MTT	220	Advanced Industrial Machining I and	4
MTT	222	Advanced Industrial Machining II or	2
MTT	224	Advanced Industrial Machining	(6)
MTT	2301	Intro to Conversational Programming and	3
MTT	2302	Conversational Editing and Subroutines or	3
MTT	230	Conversational Programming or	(6)
MTT	234	CNC Machines and Coding Practices	(6)
MTT	2401	Intro to 3-D Code Sequencing and Tool path Production and	3
MTT	2402	Advanced 3-D Code Sequencing and Macro Systems or	3
MTT	240	Intro to 3-D Programming or	(6)
MTT	244	Advanced Programming/Setup Practices	(6)
BRX	110	Basic Blueprint Reading for Machinist and	2
BRX	210	Mechanical Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	(4)
		Subtotal	**49**
		Total Credits	**65-68**

*Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Diploma

CNC Machinist - 4805034069

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

General Education:

Area 1:

Writing/Accessing Information, Oral Communication, Humanities, or Heritage 3

Area 2:

MAT	116	Technical Mathematics or	3
MAT	126	Technical Algebra and Trigonometry or Higher	(3)

Area 3:

	Computer Literacy*	0-3
	Subtotal	**6-9**
	Electives (General Education or Technical)	1
	Subtotal	**1**

Technical:

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	118	Metrology/Control Charts	2
MTT	120	Applied Machining I and	3
MTT	122	Applied Machining II or	3
MTT	124	Applied Machining	(6)
MTT	130	Manual Programming and	3
MTT	132	CAD/CAM/CNC or	3
MTT	134	Manual Programming/CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
MTT	210	Industrial Machining I and	3
MTT	212	Industrial Machining II or	3
MTT	214	Industrial Machining	(6)
MTT	220	Advanced Industrial Machining I and	4
MTT	222	Advanced Industrial Machining II or	2
MTT	224	Advanced Industrial Machining	(6)
MTT	2301	Intro to Conversational Programming and	3
MTT	2302	Conversational Editing and Subroutines or	3
MTT	230	Conversational Programming or	(6)
MTT	234	CNC Machines and Coding Practices	(6)
MTT	2401	Intro to 3-D Code Sequencing and Tool path Production and	3
MTT	2402	Advanced 3-D Code Sequencing and Macro Systems or	3
MTT	240	Intro to 3-D Programming or	(6)
MTT	244	Advanced Programming/Setup Practices	(6)
BRX	110	Basic Blueprint Reading for Machinist and	2
BRX	210	Mechanical Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	(4)
		Subtotal:	**49**
		Total Credits:	**56-59**

Machinist - 4805034079

(Offered at ASC, BLC, BSC, ELC, GTW, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

General Education:

Area 1:

Writing/Accessing Information, Oral Communication, Humanities, or Heritage 3

Area 2:

MAT	116	Technical Mathematics OR	3
MAT	126	Technical Algebra and Trigonometry or Higher	(3)

Area 3:

	Computer Literacy*	0-3
	Subtotal	**6-9**
	Electives (Co-op or Practicum)	1
	Subtotal:	**1**

Technical:

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	118	Metrology/Control Charts	2
MTT	120	Applied Machining I and	3
MTT	122	Applied Machining II or	3
MTT	124	Applied Machining	(6)
MTT	130	Manual Programming or	3
MTT	134	Manual Programming/CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
MTT	210	Industrial Machining I and	3
MTT	212	Industrial Machining II or	3
MTT	214	Industrial Machining	(6)
MTT	220	Advanced Industrial Machining I and	4
MTT	222	Advanced Industrial Machining II or	2
MTT	224	Advanced Industrial Machining	(6)
BRX	110	Basic Blueprint Reading for Machinist and	2
BRX	210	Mechanical Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	(4)
		Subtotal:	**34-37**
		Total Credits:	**41-47**

Certificates

Exploratory Machining I - 4805033199

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B and	4
		Electives (Technical or Gen Ed) or	5
MTT	114	Fundamentals of Machine Tools and	(7)
		Electives (Technical or Gen Ed) or	5
MTT	130	Manual Programming and	(3)
MTT	132	CAD/CAM/CNC and	(3)
		Elective (Technical or Gen Ed) or	6
MTT	134	Manual Programming/CAD/CAM/CNC and	(6)
		Elective (Technical or Gen Ed) or	6
MTT	138	Intro to Programming & CNC Machines or	(6)
		Elective (Technical or Gen Ed)	6
		Total Credits	**12**

Machine Tool Operator I - 4805033109

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	130	Manual Programming or	3
MTT	134	Manual Programming CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
BRX	110	Basic Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	4
MAT	116	Technical Mathematics	3
		Total Credits:	**15-20**

Machine Tool Operator II - 4805033119

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	118	Metrology/Control Charts	2
MTT	120	Applied Machining I and	3
MTT	122	Applied Machining II or	3
MTT	124	Applied Machining	(6)
MTT	130	Manual Programming or	3
MTT	134	Manual Programming CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
BRX	110	Basic Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	4
		Computer Literacy*	0 – 3
MAT	116	Technical Mathematics or	3
MAT	126	Technical Algebra and Trigonometry or Higher	(3)
		Total Credits	**23-31**

CNC Operator - 4805033129

(Offered at BLC, HPC, JFC, MDC, SEC, SMC,WKC)

MTT	110	Fundamentals of Machine Tools A and	3
MTT	112	Fundamentals of Machine Tools B or	4
MTT	114	Fundamentals of Machine Tools	(7)
MTT	118	Metrology/Control Charts	2
MTT	130	Manual Programming and	3
MTT	132	CAD/CAM/CNC or	3
MTT	134	Manual Programming CAD/CAM/CNC or	(6)
MTT	138	Intro to Programming & CNC Machines	(6)
MTT	2301	Intro to Conversational Programming and	3
MTT	2302	Conversational Editing and Subroutines or	3
MTT	230	Conversational Programming or	(6)
MTT	234	CNC Machines and Coding Practices	(6)
BRX	110	Basic Blueprint Reading for Machinist or	2
BRX	112	Blueprint Reading for Machinist	4
		Computer Literacy*	0- 3
MAT	116	Technical Mathematics or	3
MAT	126	Technical Algebra and Trigonometry or Higher	(3)
		Total Credits	**26-31**

Tool & Die Apprentice - 4805033130

(Offered at BLC, JFC, MDC, SEC)

MTT	150	Shop Theory Or	2
MTT	110	Fundamentals of Machine Tools A	(3)
MTT	118	Metrology/Control Charts	2
MTT	151	Machinery's Handbook/Metallurgy OR	3
MTT	112	Fundamentals of Machine Tools B	(4)
MTT	152	Jigs, Fixtures and Gaging OR	3
MTT	120	Applied Machining I	(3)
MTT	153	Mold Theory	3
MTT	154	Die Theory	3
MTT	130	Manual Programming	3
MTT	132	CAD/CAM/CNC	3
BRX	110	Basic Blueprint Reading for Machinist	2
BRX	210	Mechanical Blueprint Reading	2
MAT	116	Technical Mathematics	3
WLD	151	Basic Welding A OR	2
		Computer Literacy* OR	(0-3)
IEX	295	Special Problems III	(3)
		Total Credits	**29-34**

CNC Machining & Waterjet Technology - 4805033189

(Offered at BLC, GTW, SEC)

MTT	138	Intro to Programming and CNC Machines	6
MTT	234	CNC Machines & Coding Practices	6
MTT	244	Advance Programming/Setup Practices	6
		Total Credits	**18**

* Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

Major Appliance Technology

Instruction is provided in preparing cost estimates and using tools, testing equipment, and service manuals to repair a variety of major appliances. Laboratory experiences include work on relays, timer watches, pumps, and agitators.

Diploma

Major Appliance Technician - 4701064019

(Offered at SMC)

General Education:

MAT	116	Technical Mathematics	3
TEC	200	Technical Communications	3
WPP	200	Workplace Principles	3
		Computer Literacy	0-3
		Subtotal	**9-12**

Technical Courses:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity for Non-Majors Lab OR	2
ACR	102	HVAC Electricity AND	(3)
ACR	103	HVAC Electricity Lab OR	(1)
ENGT	110	Circuits I	(5)
MAR	100	Refrigeration Applications I OR	3
ACR	100	Refrigeration Fundamentals	(3)
MAR	101	Refrigeration Applications I Lab OR	2
ACR	101	Refrigeration Fundamentals Lab	(2)
MAR	110	Gas and Electric Dryers	3

MAR	111	Gas and Electric Dryers Lab	2
MAR	120	Automatic Washers	3
MAR	121	Automatic Washers Lab I	2
MAR	130	Automatic Dishwashers	3
MAR	131	Automatic Dishwashers Lab	2
MAR	140	Gas and Electric Ranges	3
MAR	141	Gas and Electric Ranges Lab	1
MAR	160	Window Air Conditioners OR	3
ACR	250	Cooling and Dehumidification	(3)
MAR	161	Window Air Conditioners Lab OR	1
ACR	251	Cooling and Dehumidification Lab	(2)
MAR	171	Trash Compactors	1
MAR	180	Microwave Ovens	3
MAR	181	Microwave Oven Lab I	2
MAR	199	Cooperative Education OR	3
MAR	198	Practicum	(3)
MAR	299	Cooperative Education OR	3
MAR	298	Practicum	(3)
		Subtotal	**44-46**
		Total Credits	**53-58**

Electives (Optional):

ISX	100	Industrial Safety	(3)
MAR	103	Refrigeration Applications Lab II for Major Appliances	(2)
MAR	123	Automatic Washers Lab II	(2)
MAR	183	Microwave Ovens Lab II	(2)

Certificates

Air Conditioner Installer Servicer - 4701063029

(Offered at SMC)

General Education:

MAT	116	Technical Mathematics	3
TEC	200	Technical Communications	3
WPP	200	Workplace Principles	3
		Computer Literacy	0-3
		Subtotal	**9-12**

Technical Courses:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity for Non-Majors Lab OR	2
ACR	102	HVAC Electricity AND	(3)
ACR	103	HVAC Electricity Lab OR	(1)
ENGT	110	Circuits I	(5)
MAR	160	Window Air Conditioners OR	3
ACR	250	Cooling and Dehumidification	(3)
MAR	161	Window Air Conditioners Lab OR	1
ACR	251	Cooling and Dehumidification Lab	(2)
		Subtotal	**8-10**
		Total Credits	**17-22**

Electrical Assistant - 4701063039

(Offered at SMC)

General Education:

MAT	116	Technical Mathematics	3
		Subtotal	**3**

Technical Courses:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity for Non-Majors Lab OR	2
ACR	102	HVAC Electricity AND	(3)
ACR	103	HVAC Electricity Lab OR	(1)
ENGT	110	Circuits I	(5)
		Subtotal	**4-5**
		Total Credits	**7-8**

Gas Appliance Servicer - 4701063049

(Offered at SMC)

General Education:

MAT	116	Technical Mathematics	3
TEC	200	Technical Communications	3
WPP	200	Workplace Principles	3
		Computer Literacy	0-3
		Subtotal	**9-12**

Technical Courses:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity for Non-Majors Lab OR	2
ACR	102	HVAC Electricity AND	(3)
ACR	103	HVAC Electricity Lab OR	(1)
ENGT	110	Circuits I	(5)
MAR	110	Gas and Electric Dryers	3
MAR	111	Gas and Electric Dryers Lab	2
MAR	140	Gas and Electric Ranges	3
MAR	141	Gas and Electric Ranges Lab	1
		Subtotal	**13-14**
		Total Credits	**22-26**

Refrigeration Unit Repairer - 4701063059

(Offered at SMC)

MAT	116	Technical Mathematics	3
TEC	200	Technical Communications	3
WPP	200	Workplace Principles	3
		Computer Literacy	0-3
		Subtotal	**9-12**

Technical Courses:

BEX	100	Basic Electricity for Non-Majors AND	3
BEX	101	Basic Electricity for Non-Majors Lab OR	2
ACR	102	HVAC Electricity AND	(3)
ACR	103	HVAC Electricity Lab OR	(1)
ENGT	110	Circuits I	(5)
MAR	100	Refrigeration Applications I OR	3
ACR	100	Refrigeration Fundamentals	(3)
MAR	101	Refrigeration Applications I Lab OR	2
ACR	101	Refrigeration Fundamentals Lab	(2)
MAR	103	Refrigeration Applications Lab II for Major Appliances	2
		Subtotal	**11-12**
		Total Credits	**20-24**

Manufacturing Engineering Technology

The Manufacturing Engineering Technology degree offers students the opportunity to build a career in advanced manufacturing. It is focused on producing graduates to work as engineering technicians and first-line supervisors in manufacturing firms. The degree provides a broad foundation across many facets of operations management and manufacturing technologies. Graduates will be able to assist in leading projects across multiple disciplines in advanced manufacturing firms. They will possess an understanding of manufacturing operations and possess the interpersonal skills to lead work groups. They will be able to work in almost any manufacturing setting from discrete manufacturing to continuous flow and assembly line operations.

Associate in Applied Science

Manufacturing Engineering Technology - 1506137029

(Offered at GTW)

General Education

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
ENG	101	Writing I	3
MAT	150	College Algebra	3
MAT	155	Trigonometry	3
STA	220	Statistical Method OR	3
MAT	170	Brief Calculus with Applications	(3)
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology	(3)
		Natural or Applied Science	3
		Heritage /Humanities /Foreign Languages	3
		Computer Literacy	0-3
		Subtotal	**24-27**

Core

BAS	160	Introduction to Business	3
COE	199	Cooperative Education OR	1
MFG	175	Lean Operations	(2)
ELT	110	Circuits I	5
ELT	201	Statics and Strengths of Materials	4
BAS	289	Operations Management OR	3
MFG	256	Production Management	(3)
MFG	135	Fundamentals of Mechatronics	6
QMS	101	Introduction to Quality Systems	3
		Subtotal	**25-26**

Technical Electives

BAS	287	Supervisory Management	3
BAS	288	Personal and Organizational Leadership	3
BRX	112	Blueprint Reading for Machinists OR	4
BRX	120	Basic Blueprint Reading	(3)
COE	199	Cooperative Education	1-5
CAD	102	Drafting Fundamentals OR	4
CAD	112	Engineering Graphics	(4)
DFT	152	Intermediate Computer Aided Drafting	4
EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
EET	264	Rotating Machinery	2
EET	265	Rotating Machinery Lab	2
EET	270	Electrical Motor Controls I	2
EET	271	Electrical Motor Controls I Lab	2
EET	272	Electrical Motor Controls II	2
EET	273	Electrical Motor Controls II Lab	2
EET	276	Programmable Logic Controllers	2
EET	277	Programmable Logic Controllers Lab	2
ELT	110	Circuits I	5
ELT	114	Circuits II	5
ELT	260	Robotics and Industrial Automation	5
ETT	110	Voice & Data Installer Level I	4
FPX	100	Fluid Power	3
FPX	101	Fluid Power Lab	2
IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
MFG	145	Manufacturing Processes OR	3
MTT	110	Fundamentals of Machine Tool - A	(3)
MTT	112	Fundamentals of Machine Tool – B	4
MTT	118	Metrology and Control Charts	3
MTT	130	Manual Programming	3
MTT	132	CAD/CAM/CNC	3
MFG	256	Production Management	3
QMS	101	Introduction to Quality Systems	3
QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I (if ST291 is not taken in the core)	3
		Subtotal	**14**
		Total Credits	**63-67**

A minimum of fourteen (14) credit hours must be taken from the approved technical elective list. Other courses may be taken with the approval of the program coordinator.

Certificates

Integrated Manufacturing Technologies - 1506133069

(Offered at GTW)

FPX	100	Fluid Power	3
FPX	101	Fluid Power Lab	2
ELT	110	Circuits I	5
IMT	150	Maintaining Industrial Equipment	3
IMT	151	Maintaining Industrial Equipment Lab	2
EET	270	Electrical Motor Controls I	2
EET	271	Electrical Motor Controls I Lab	2
		Total Credits	**19**

Quality Control - 1506133049

(Offered at GTW)

General Education

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
MAT	150	College Algebra	3
		Subtotal	**6**

Core

BRX	112	Blueprint Reading for Machinists OR	4
BRX	120	Basic Blueprint Reading OR	(3)
CAD	102	Drafting Fundamentals OR	(4)
CAD	112	Engineering Graphics	(4)
MTT	118	Metrology and Control Charts	3
QMS	101	Introduction to Quality Systems	3
QMS	220	Quality Audits	3
STA	220	Statistics OR	3
QMS	240	Statistics for Quality I	(3)
		Subtotal	**15-16**
		Total	**21-22**

Operations Management - 5202013369

(Offered at BSC, GTW)

General Education

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communications	(3)
		Subtotal	**3**

Core

BAS	160	Introduction to Business	3
BAS	287	Supervisory Management OR	3
BAS	288	Personal and Organizational Leadership OR	(3)
QMS	101	Introduction to Quality Systems	(3)
BAS	289	Operations Management OR	3
MFG	256	Production Management	(3)
		Subtotal	**9**
		Total	**12**

Exploratory Machining - 4805033039

MTT	110	Fundamentals of Machine Tools A AND	3
MTT	112	Fundamentals of Machine Tools B OR	4
MTT	114	Fundamentals of Machine Tools	(7)
		Total	**7**

Fundamentals of Mechatronics - 1500003219

(Offered at BSC)

MFG	135	Fundamentals of Mechatronics OR	6
MFG	125	Special Topics in Engineering Technology: Fundamentals of Mechatronics – A AND	(3)
MFG	130	Special Topics in Engineering Technology: Fundamentals of Mechatronics – B	(3)
		Total	**6**

Manufacturing Industrial Technology

Two programs are offered under the broader heading of MIT. They are Electrical Technology and Industrial Maintenance Technology

MIT: Electrical Technology

The Electrical Technology Program focuses on preparing students for various entry-level electrical positions in industry and the building trades. The study of electrical theory in the classroom and the practical application of that theory in labs provide the foundation of this program. This program is versatile in offering three different specializations within the Associate of Applied Science degree. A variety of certificates and diplomas serve as pathways to the AAS degree specializations or as meeting specific training needs.

Students enrolled in the Electrical Technology program are required to achieve a minimum grade of "C" in the technical core and in those courses selected as technical electives.

Associate in Applied Science

Electrical Technology - 4603027039

(Offered at BLC, ELC, OWC,WKC)

General Education:

ENG	101	Writing I	3
MAT	116	Technical Mathematics OR	3
MAT	126	Technical Algebra & Trigonometry OR	(3)
		Higher Level Mathematics Course	(3)
		Science	3
		Social Interaction	3
		Heritage/Humanities	3
		Oral Communication	3
		Subtotal	**18**

Technical Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	250	National Electric Code	4
EET	264	Rotating Machinery	2
EET	265	Rotating Machinery Lab	2
EET	270	Electrical Motor Controls I	2
EET	271	Electrical Motor Controls I Lab	2
		Computer Literacy OR	3
		If any student successfully tests out of Computer Literacy he/she must take an additional Technical Course approved by the Electrical Program Coordinator.	(3)
		Subtotal	**25**

Industrial Electrician Specialization - 460302701

(Offered at BLC, ELC, OWC,WKC)

EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
EET	272	Electrical Motor Controls II AND	2
EET	273	Electrical Motor Controls II Lab AND	2
EET	276	Programmable Logic Controllers AND	2
EET	277	Programmable Logic Controllers Lab OR	2
EET	278	Electrical Motor Controls II and PLCs AND	(3)
EET	279	Electrical Motor Controls II and PLCs Lab	(4)
		Technical Electives*	9
		Subtotal	**23-25**
		Total Credits	**66-68**

Construction Electrician Specialization - 460302702

(Offered at BLC, ELC, OWC,WKC)

EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
		Technical Electives*	10
		Subtotal	**17-18**
		Total Credits	**60-61**

Motor Controls Electrician Specialization - 460302703

(Offered at BLC, OWC,WKC)

EET	272	Electrical Motor Controls II AND	2
EET	273	Electrical Motor Controls II Lab AND	2
EET	276	Programmable Logic Controllers AND	2
EET	277	Programmable Logic Controllers Lab OR	2
EET	278	Electrical Motor Controls II and PLC's AND	(3)
EET	279	Electrical Motor Controls II and PLC's Lab	(4)
FPX	100	Fluid Power AND	3
FPX	101	Fluid Power Lab OR	2
ELT	265	Applied Fluid Power	(3)
		Technical Electives*	7
		Subtotal	**17-20**
		Total Credits	**60-63**

Diploma

Electrical Technology - 4603024049

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

General Education:

Area 1

		Writing/ Accessing Information or	3
		Heritage/ Humanities	(3)
		Oral Communication	(3)

Area 2

MAT	116	Technical Mathematics OR	3
MAT	126	Technical Algebra & Trigonometry OR	(3)
		Higher Level Mathematics Course	(3)

*** Area 3**

		*Computer Literacy Course OR If any student successfully tests out of Computer Literacy he/she must take an additional Technical Course approved by the Electrical Program Coordinator.	
		Subtotal	**6**

Technical Core:

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	250	National Electric Code	4
EET	264	Rotating Machinery	2
EET	265	Rotating Machinery Lab	2
EET	270	Electrical Motor Controls I	2
EET	271	Electrical Motor Controls I Lab	2
		*Computer Literacy OR	3
		If any student successfully tests out of Computer Literacy he/she must take an additional Technical Course approved by the Electrical Program Coordinator	(3)
		Subtotal	**25**

Industrial Electrician Option - 460302401

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
EET	272	Electrical Motor Controls II AND	2
EET	273	Electrical Motor Controls II Lab AND	2
EET	276	Programmable Logic Controllers AND	2
EET	277	Programmable Logic Controllers Lab OR	2
EET	278	Electrical Motor Controls II and PLCs AND	(3)
EET	279	Electrical Motor Controls II and PLCs Lab	(4)
		Technical Electives*	9
		Subtotal	**23-25**
		Total Credits	**54-56**

Construction Electrician Option - 460302402

(Offered at BGT, BLC, BSC, ELC, GTW, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
		Technical Electives*	10
		Subtotal	**17-18**
		Total Credits	**48-49**

Motor Controls Electrician Option - 460302403

(Offered at BLC, BSC, OWC,WKC)

EET	272	Electrical Motor Controls II AND	2
EET	273	Electrical Motor Controls II Lab AND	2
EET	276	Programmable Logic Controllers AND	2
EET	277	Programmable Logic Controllers Lab OR	2
EET	278	Electrical Motor Controls II and PLC's AND	(3)
EET	279	Electrical Motor Controls II and PLC's Lab	(4)
FPX	100	Fluid Power AND	3
FPX	101	Fluid Power Lab OR	2
ELT	265	Applied Fluid Power	(3)
		Technical Electives*	7
		Subtotal	**17-20**
		Total Credits	**48-51**

Certificates

Electrical Construction - 4603023029

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, HZC, JFC, MYC, OWC, SEC, SMC, WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	150	Transformers	2
EET	151	Transformers Lab	1
EET	250	National Electric Code	4
EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
EET	264	Rotating Machinery AND	2
EET	265	Rotating Machinery Lab AND	2
EET	270	Electrical Motor Controls I AND	2
EET	271	Electrical Motor Controls I Lab OR	2
EET	268	Rotating Machinery Electrical Motor Controls I AND	(3)
EET	269	Rotating Machinery Electrical Motor Controls I Lab	(4)
		Total Credits	**31-33**

Electrician Trainee Level I - 4603023039

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
		Technical Electives	3
		Total Credits	**8**

Electrician Trainee Level II - 4603023059

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
		Technical Electives	3
		Total Credits	**13**

Residential Electricity Level I - 4603023049

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
		Total Credits	**14**

Residential Electricity Level II - 4603023069

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	154	Electrical Construction I AND	2
EET	155	Electrical Construction I Lab AND	2
EET	252	Electrical Construction II AND	2
EET	253	Electrical Construction II Lab OR	2
EET	254	Electrical Construction AND	(3)
EET	255	Electrical Construction Lab	(4)
EET	250	National Electrical Code	4
		Total Credits	**21-22**

Electrical Motor Control Level I - 4603023079

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	150	Transformers AND	2
EET	151	Transformers Lab AND	1
EET	264*	Rotating Machinery AND	2
EET	265*	Rotating Machinery Lab OR	2
EET	266	Rotating Machinery and Transformers AND	(3)
EET	267	Rotating Machinery and Transformers Lab	(3)
EET	250	National Electrical Code	4
EET	270	Electrical Motor Controls I AND	2
EET	271	Electrical Motor Controls I Lab AND	2
EET	264*	Rotating Machinery AND	(2)
EET	265*	Rotating Machinery Lab OR	(2)
EET	268	Rotating Machinery Electrical Motor Controls I AND	(3)
EET	269	Rotating Machinery Electrical Motor Controls I Lab	(4)
CPU	150	Computer Fundamentals OR	3
CIS	100	Introduction to Computers	(3)
		Total Credits	**28-30**

*May be offered in different combinations.

Electrical Motor Control Level II - 4603023089

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, HZC, JFC, MYC, OWC, SEC, SMC,WKC)

ELT	110	Circuits I	5
ELT	114	Circuits II	5
EET	150	Transformers AND	2
EET	151	Transformers Lab AND	1
EET	264*	Rotating Machinery AND	2
EET	265*	Rotating Machinery Lab OR	2
EET	266	Rotating Machinery and Transformers AND	(3)
EET	267	Rotating Machinery and Transformers Lab	(3)
EET	250	National Electrical Code	4
EET	264*	Rotating Machinery AND	(2)
EET	265*	Rotating Machinery Lab AND	(2)
EET	270	Electrical Motor Controls I AND	2
EET	271	Electrical Motor Controls I Lab OR	2
EET	268	Rotating Machinery Electrical Motor Controls I AND	(3)
EET	269	Rotating Machinery Electrical Motor Controls I Lab	(4)
EET	272	Electrical Motor Controls II AND	2
EET	273	Electrical Motor Controls II Lab AND	2
EET	276	Programmable Logic Controllers AND	2
EET	277	Programmable Logic Controllers Lab OR	2
EET	278	Electrical Motor Controls II and PLCs AND	(3)
EET	279	Electrical Motor Controls II and PLCs Lab	(4)
CPU	150	Computer Fundamentals OR	3
CIS	100	Introduction to Computers	(3)
		Total Credits	**35-38**

* May be offered in different combinations.

Voice and Data Wiring Installer Level II - 4603023109

(Offered at BLC, ELC, GTW, SMC)

EET	252	Electrical Construction II	2
EET	253	Electrical Construction II Lab	2
ETT	114	Voice and Data Installer Level 2	4
ETT	116	Fiber Optics Systems	3
ETT	118	Residential Network Wiring	3
		Total Credits	**14**

Voice and Data Wiring Installer Level I - 4603023099

(Offered at ASC, BLC, ELC, GTW, SMC)

		Computer Literacy Course	3
EET	154	Electrical Construction I	2
EET	155	Electrical Construction I Lab	2
ETT	110	Voice and Data Installer Level 1	4
ETT	112	Basic Electrical Theory	3
ETT	113	Basic Electrical Theory Lab	1
		Total Credits	**15**

Voice and Data Wiring Technician - 4603023119

(Offered at BLC, ELC, GTW, SMC)

ETT	120	Project Management	3
ETT	122	Voice and Data Installer Technician	3
ETT	123	Voice and Data Installer Technician Lab	2
ETT	199	Cooperative Education for Voice and Data Wiring Technicians	3
		Total Credits	**11**

MIT: Industrial Maintenance Technology

An understanding of the requirements and opportunities in maintenance, good safety practices, pride in workmanship, and an understanding of the principles and accepted practices of the maintenance trade are covered in this program. Students are trained to hold positions in factories, hospitals, hotels, etc., where multi-skilled maintenance personnel are needed. Included are courses in air conditioning, carpentry, electricity, machine tool, metal fabrication, and welding.

Progression in the Industrial Maintenance Technology program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Industrial Maintenance Technology - 4703037019

(Offered at BGT, BLC, ELC, GTW, HEC, SMC,WKC)

ENG	101	Writing I	3
MAT	116	Technical Mathematics OR	3
MAT	126	Technical Algebra & Trigonometry	(3)
		Science	3
		Heritage/Humanities/Foreign Language	3
		Social Interaction	3
		Oral Communications	3
		Computer Literacy	3
		Subtotal	**21**

Technical Core:

BRX	120	Basic Blueprint Reading OR	3
BRX	110	Basic Blueprint Reading for Machinist OR	(2)
BRX	112	Blueprint Reading for Machinist OR	(4)
ELT	102	Blueprint Reading	(2)
FPX	100	Fluid Power AND	3
FPX	101	Fluid Power Lab OR	2
ELT	265	Applied Fluid Power	(3)
IMT	110	Industrial Maintenance Electrical Principles AND	3
IMT	111	Industrial Maintenance Electrical Principles Lab OR	2
ELT	110	Circuits I	(5)
IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
IMT	220	Industrial Maintenance Electrical Motor Controls I AND	3
IMT	221	Industrial Maintenance Electrical Motor Controls I Lab OR	2
EET	270	Electrical Motor Controls I AND	(2)
EET	271	Electrical Motor Controls I Lab OR	(2)
ELT	244	Electrical Machinery and Controls OR	(4)
IMT	120	Industrial Maintenance Rotating Machinery AND	(3)
IMT	121	Industrial Maintenance Rotating Machinery Lab OR	(2)
EET	264	Rotating Machinery AND	(2)
EET	265	Rotating Machinery Lab	(2)
IMT	100	Welding for Maintenance AND	3
IMT	101	Welding for Maintenance Lab OR	2
WLD	120	Shielded Metal Arc Welding AND	(2)
WLD	121	Shielded Metal Arc Welding Fillet Lab OR	(3)
WLD	152	Basic Welding B	(5)
		Subtotal	**24-29**

Technical Electives*:

Eighteen (18) credit hours of electives must be taken from the approved list. This list is not all inclusive. Other technical elective courses may be taken with approval of the program instructor/advisor.

Subtotal	**18**
Total Credits	**60-68**

Diploma

Industrial Maintenance Technician - 4703034049

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HPC, MYC, OWC, SMC, sec,WKC)

General Education:

Area 1 =

		Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language 3

Area 2 =

MAT	116	Technical Mathematics OR..... 3
MAT	126	Technical Algebra & Trigonometry ..... (3)

Area 3 =

		Computer Literacy 3
		Subtotal **9**

Technical Core:

BRX	120	Basic Blueprint Reading OR 3
BRX	110	Basic Blueprint Reading for Machinist OR..... (2)
BRX	112	Blueprint Reading for Machinist OR..... (4)
ELT	102	Blueprint Reading ..... (2)
FPX	100	Fluid Power AND..... 3
FPX	101	Fluid Power Lab OR 2
ELT	265	Applied Fluid Power ..... (3)
IMT	110	Industrial Maintenance Electrical Principles AND..... 3
IMT	111	Industrial Maintenance Electrical Principles Lab OR 2
ELT	110	Circuits I ..... (5)
IMT	150	Maintaining Industrial Equipment I AND 3
IMT	151	Maintaining Industrial Equipment I Lab 2
IMT	220	Industrial Maintenance Electrical Motor Controls I AND..... 3
IMT	221	Industrial Maintenance Electrical Motor Controls I Lab OR . 2
EET	270	Electrical Motor Controls I AND..... (2)
EET	271	Electrical Motor Controls I Lab OR ..... (2)
ELT	244	Electrical Machinery and Controls OR ..... (4)
IMT	120	Industrial Maintenance Rotating Machinery AND ..... (3)
IMT	121	Industrial Maintenance Rotating Machinery Lab OR..... (2)
EET	264	Rotating Machinery AND ..... (2)
EET	265	Rotating Machinery Lab..... (2)
IMT	100	Welding for Maintenance AND 3
IMT	101	Welding for Maintenance Lab OR 2
WLD	120	Shielded Metal Arc Welding AND..... (2)
WLD	121	Shielded Metal Arc Welding Fillet Lab OR ..... (3)
WLD	152	Basic Welding B ..... (5)
		Subtotal **24-29**

Technical Electives*:

Fifteen (15) credit hours of electives must be taken from the approved list. This list is not all inclusive. Other technical elective courses may be taken with approval of the program instructor/advisor.

Subtotal	**15**
Total Credits	**48-53**

**If courses equaling 10 credits are taken, five (5) credits may be used as electives.

Certificates

Fluid Power Mechanic - 4703033129

(Offered at BGT, BLC, BSC, ELC, HPC, MYC, OWC, SMC,)

FPX	100	Fluid Power AND..... 3
FPX	101	Fluid Power Lab OR 2
ELT	265	Applied Fluid Power ..... (3)
MST	200	Advanced Hydraulic Systems AND 3
MST	201	Advanced Hydraulic Systems Lab OR..... 2
MST	204	Advanced Pneumatic Systems AND ..... (3)
MST	205	Advanced Pneumatic Systems Lab ..... (2)
		Total Credits **8-10**

Industrial Maintenance Machinists Mechanic - 4703033119

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, JFC, MYC, OWC, SMC, SEC,WKC)

BRX	120	Basic Blueprint Reading OR 3
BRX	110	Basic Blueprint Reading for Machinist OR..... (2)
BRX	112	Blueprint Reading for Machinist OR..... (4)
ELT	102	Blueprint Reading ..... (2)
IMT	100	Welding for Maintenance AND 3
IMT	101	Welding for Maintenance Lab OR 2
WLD	120	Shielded Metal Arc Welding AND..... (2)
WLD	121	Shielded Metal Arc Welding Fillet Lab OR ..... (3)
WLD	152	Basic Welding B ..... (5)
IMT	115	Maintenance Machining I AND..... 2
IMT	116	Maintenance Machining I Lab OR 5
MTT	114	Fundamentals of Machine Tools OR ..... (7)
MTT	110	Fundamentals of Machine Tools -A AND ..... (3)
MTT	112	Fundamentals of Machine Tools -B..... (4)
IMT	150	Maintaining Industrial Equipment I 3
IMT	151	Maintaining Industrial Equipment I Lab 2
		Total Credits **19-21**

Industrial Maintenance Electrical Mechanic - 4703033189

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

FPX	100	Fluid Power AND..... 3
FPX	101	Fluid Power Lab OR 2
ELT	265	Applied Fluid Power ..... (3)
IMT	110	Industrial Maintenance Electrical Principles AND..... 3
IMT	111	Industrial Maintenance Electrical Principles Lab OR 2
ELT	110	Circuits I ..... (5)
IMT	220	Industrial Maintenance Electrical Motor Controls I AND..... 3
IMT	221	Industrial Maintenance Electrical Motor Controls I Lab OR . 2
EET	270	Electrical Motor Controls I AND..... (2)
EET	271	Electrical Motor Controls I Lab OR ..... (3)
ELT	244	Electrical Machinery and Controls OR ..... (4)
IMT	120	Industrial Maintenance Rotating Machinery AND ..... (3)
IMT	121	Industrial Maintenance Rotating Machinery Lab OR..... (2)
EET	264	Rotating Machinery AND ..... (2)
EET	265	Rotating Machinery Lab OR..... (2)
IMT	280	Advanced Programmable Logic Controllers AND..... (3)
IMT	281	Advanced Programmable Logic Controllers Lab OR ..... (2)
EET	276	Programmable Logic Controllers AND..... (2)
EET	277	Programmable Logic Controllers Lab ..... (2)
		Total Credits **12-15**

Industrial Maintenance Mechanic Level I - 4703033199

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

FPX	100	Fluid Power AND..... 3
FPX	101	Fluid Power Lab OR 2
ELT	265	Applied Fluid Power ..... (3)
IMT	110	Industrial Maintenance Electrical Principles AND..... 3
IMT	111	Industrial Maintenance Electrical Principles OR..... 2
ELT	110	Circuits I ..... (5)
IMT	150	Maintaining Industrial Equipment I 3
IMT	151	Maintaining Industrial Equipment I Lab 2
		Total Credits **13-15**

Industrial Maintenance Mechanic Level II - 4703033149

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, JFC, MYC, OWC, SEC, SMC,WKC)

BRX	120	Basic Blueprint Reading OR 3
BRX	110	Basic Blueprint Reading for Machinist OR..... (2)
BRX	112	Blueprint Reading for Machinist OR..... (4)
ELT	102	Blueprint Reading ..... (2)
FPX	100	Fluid Power AND..... 3
FPX	101	Fluid Power Lab OR 2
ELT	265	Applied Fluid Power ..... (3)

IMT	110	Industrial Maintenance Electrical Principles AND	3
IMT	111	Industrial Maintenance Electrical Principles OR	2
ELT	110	Circuits I	(5)
IMT	100	Welding for Maintenance AND	3
IMT	101	Welding for Maintenance Lab OR	2
WLD	120	Shielded Metal Arc Welding AND	(2)
WLD	121	Shielded Metal Arc Welding Fillet Lab OR	(3)
WLD	152	Basic Welding B	(5)
IMT	115	Maintenance Machining I AND	2
IMT	116	Maintenance Machining I Lab OR	5
MTT	114	Fundamentals of Machine Tools OR	(7)
MTT	110	Fundamentals of Machine Tools-A AND	(3)
MTT	112	Fundamentals of Machine Tools-B	(4)
		Total Credits	**22-26**

Electro-hydraulic Technician - 4703033169

(Offered at BLC, GTW, HPC, JFC, MYC, OWC, SMC)

IMT	110	Industrial Maintenance Electrical Principles AND	3
IMT	111	Industrial Maintenance Electrical Principles Lab OR	2
ELT	110	Circuits I	(5)
FPX	100	Fluid Power AND	3
FPX	101	Fluid Power Lab OR	2
ELT	265	Applied Fluid Power	(3)
MST	206	Electro-hydraulic	3
MST	207	Electro-hydraulic Lab	2
		Total Credits	**13-15**

Chemical Operator - 4703033179

(Offered at MYC,WKC)

CHE	140	Introductory General Chemistry	3
CHE	145	Introductory General Chemistry Lab	1
GEN	276	Employment and Professional Skills	1
IMT	140	Industrial Mechanics	3
IMT	141	Industrial Mechanics Lab	1
INDT	250	Team Dynamics and Problem Solving	3
ISX	100	Industrial Safety	3
MAT	116	Technical Mathematics	3
PHX	150	Introduction to Physics	3
QMS	101	Introduction to Quality Systems	3
TEC	200	Technical Communications	3
		Computer Literacy	0-3
		Total Credits	**27-30**

Presswork and Die Maintenance Technician Level I – 4703033209

(Offered at OWC, SMC)

IMT	115	Maintenance Machining I AND	2
IMT	116	Maintenance Machining I Lab OR	5
MTT	114	Fundamentals of Machine Tools OR	(7)
MTT	110	Fundamentals of Machine Tools-A AND	(3)
MTT	112	Fundamentals of Machine Tools-B	(4)
IMT	100	Welding for Maintenance AND	3
IMT	101	Welding for Maintenance Lab	2
IMT	260	Presswork and Die Maintenance	7
		Total Credits	**19**

Presswork and Die Maintenance Technician Level II – 4703033219

(Offered at OWC, SMC)

IMT	115	Maintenance Machining I AND	2
IMT	116	Maintenance Machining I Lab OR	5
MTT	114	Fundamentals of Machine Tools OR	(7)
MTT	110	Fundamentals of Machine Tools-A AND	(3)
MTT	112	Fundamentals of Machine Tools-B	(4)
IMT	100	Welding for Maintenance AND	3
IMT	101	Welding for Maintenance Lab	2
IMT	260	Presswork and Die Maintenance	7
FPX	100	Fluid Power	3
FPX	101	Fluid Power Lab	2
IMT	110	Industrial Maintenance Electrical Principles	3
IMT	111	Industrial Maintenance Electrical Principles Lab	2
IMT	220	Industrial Maintenance Electrical Motor Controls I	3
IMT	221	Industrial Maintenance Electrical Motor Controls I Lab	2
		Total Credits	**34**

Marine Technology

The Marine Technology curriculum is designed to provide a strong theoretical base for employees of the inland marine industry. The program introduces students to basic inland marine principles and concepts by applying contemporary skills in a variety of employment positions based on industry needs. It provides students with a strong foundation of managerial and operational knowledge by using a problem-solving approach in state-of-the-art classroom and work experience environments. It builds leadership, management, communication skills, and professional ethics, which serve as a foundation for future development and career success. The program contains core technical courses and advanced courses in each specialization to address the employment needs of the domestic market.

Associate in Applied Science

Marine Technology – 4903997019

(Offered at WKC)

		Computer Literacy	0-3
ENG	101	Writing I	3
MAT	116	Technical Mathematics	3
GEO	251	Weather and Climate	3
GEN	140	Development of Leadership	3
		Heritage/Humanities/Foreign Language	3
		Subtotal	**15-18**

Technical Core (required or all specialization options):

MRN	100	Introduction to Marine Technology	3
MRN	101	Anatomy of a Towboat	3
MRN	102	Basic Marine Safety	3
MRN	199	Co-Op Experience I	6
MRN	299	Co-Op Experience II	6
BAS	160	Introduction to Business	3
		Subtotal	**24**

Wheelhouse Management Option – 490399701

(Offered at WKC)

MRN	200	Shipboard Deck Operations	3
MRN	201	Rules of the Road	3
MRN	202	Piloting and Navigation	3
MRN	203	Environmental Protection Rules	3
BAS	274	Human Resources Management	3
BAS	283	Principles of Management	3
BAS	293	Principles of Finance	3
		Option Subtotal	**21**
		Option Total	**60-63**

Marine Engineering Option – 490399702

(Offered at WKC)

MRN	204	Marine Electrical Systems I	3
MRN	205	Marine Electrical Systems II	3
MRN	206	Marine Diesel I	3
MRN	207	Marine Diesel II	3
FPX	100	Fluid Power	3
FPX	101	Fluid Power Lab	2
ACR	100	Refrigerator Fundamentals	3
ACR	101	Refrigerator Fundamentals Lab	2
		Option Subtotal	**22**
		Option Total	**61-64**

Marine Logistics Operations Option – 490399703

(Offered at WKC)

BAS	283	Principles of Management	3
BAS	293	Principles of Finance	3
BAS	289	Operations Management	3
MRN	208	Inland River Systems	3
MRN	209	Applied Marine Operations	3
MRN	210	Intermodal Transportation	3
CRJ	210	Physical Security Technologies & Systems	3
		Option Subtotal	**21**
		Option Total	**60-63**

Certificate:

Marine Technology Business – 4903993019

(Offered at WKC)

		Computer Literacy	0-3
BAS	160	Introduction to Business	3
BAS	283	Principles of Management	3
BAS	293	Principles of Finance	3
BAS	289	Operations Management	3
MRN	208	Inland River Systems	3
MRN	209	Applied Marine Operations	3
MRN	210	Intermodal Transportation	3
		Total	**21-24**

Marine Industry - 4903993029

(Offered at WKC)

		Computer Literacy	0-3
MRN	100	Introduction to Marine Technology	3
MRN	101	Anatomy of a Towboat	3
MRN	102	Basic Marine Safety	3
MRN	203	Environmental Protection Rules	3
MRN	208	Inland River Systems	3
		Total	**15-18**

Masonry

The Masonry program prepares students for employment in the construction of houses, commercial structures and other projects involving brick, stone and other masonry materials. This program includes blueprint reading, introductory, intermediate and advanced masonry projects. Cost estimating, preparing materials lists, and practical experiences are included.

Progression in the Masonry program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average.

Diploma

Construction Mason - 4601014019

(Offered at BLC, BSC, JFC, MYC, SMC)

General Education: 6-9 credit hour requirement for diplomas in areas 1-3

Area 1 =	Writing/Accessing Information, Oral Communication, Humanities, Heritage, or Foreign Language	3
Area 2 =	Social Science, Behavioral Science, Natural/ Applied Science, or Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses:

BRX	220	Blueprint Reading for Construction	3
ISX	100	Industrial Safety OR	3
IS	100	Introduction to Industrial Safety	(3)
MSY	105	Introductory Masonry	3
MSY	115	Intermediate Masonry	3
MSY	199	Cooperative Education OR	3
MSY	198	Practicum	(3)
MSY	205	Advanced Masonry	3
MSY	215	Masonry Lab	3
MSY	225	Brick Construction	3
MSY	235	Special Techniques in Brick Construction	3
MSY	245	Anchors and Reinforcement	3
MSY	275	Fireplace Construction	3
MSY	299	Cooperative Education OR	3
MSY	298	Practicum	(3)
		Technical Electives*	6
		Subtotal	**42**
		Total Credits	**48-51**

Technical Electives

MSY	251	Concrete Finishing	3
MSY	253	Masonry Floors and Steps	3
MSY	255	Glass Blocks and Tile	3
MSY	257	Stone	3

Electives (Optional):

MSY	291	Special Problems III	(3)

Certificates

Bricklayer Trainee - 4601013019

(Offered at BLC, BSC, JFC, MYC, SMC)

ISX	100	Industrial Safety OR	3
IS	100	Introduction to Industrial Safety	(3)
MSY	105	Introductory Masonry	3
MSY	115	Intermediate Masonry	3
MSY	199	Cooperative Education OR	3
MSY	198	Practicum	(3)
MSY	205	Advanced Masonry	3
MSY	215	Masonry Lab	3
MSY	225	Brick Construction	3
MSY	235	Special Techniques in Brick Construction	3
MSY	245	Anchors and Reinforcement	3
		Total Credits	**27**

Bricklayer Helper - 4601013029

(Offered at BLC, BSC, JFC, MYC, SMC)

ISX	100	Industrial Safety OR	3
IS	100	Introduction to Industrial Safety	(3)
MSY	105	Introductory Masonry	3
MSY	215	Masonry Lab	3
MSY	291	Special Problems III	3
		Total Credits	**12**

Construction Bricklayer - 4601013039

(Offered at BLC, BSC, JFC, MYC, SMC)

BRX	220	Blueprint Reading for Construction	3
ISX	100	Industrial Safety OR	3
IS	100	Introduction to Industrial Safety	(3)
MSY	105	Introductory Masonry	3
MSY	115	Intermediate Masonry	3
MSY	199	Cooperative Education OR	3
MSY	198	Practicum	(3)
MSY	205	Advanced Masonry	3
MSY	215	Masonry Lab	3
MSY	225	Brick Construction	3
MSY	235	Special Techniques in Brick Construction	3
MSY	245	Anchors and Reinforcement	3
MSY	275	Fireplace Construction	3
MSY	299	Cooperative Education OR	3
MSY	298	Practicum	(3)
		Total Credits	**36**

Electives (Optional):

MSY	291	Special Problems III	(1-3)

Stone Mason - 4601013049

(Offered at BLC, BSC, JFC, MYC, SMC)

BRX	220	Blueprint Reading for Construction	3
MSY	105	Introductory Masonry	3
MSY	115	Intermediate Masonry	3
MSY	205	Advanced Masonry	3
MSY	215	Masonry Lab	3
MSY	245	Anchors and Reinforcement	3
MSY	253	Masonry Floors and Steps	3
MSY	257	Stone	3
MSY	275	Fireplace Construction	3
		Total Credits	**27**

Mechatronic Systems

A Mechatronic Systems Operating Technician will function as a well-grounded machine operator in a complex system, with responsibility for efficient operation of the equipment with minimal down-times.

Certificate

Mechatronic Systems Operating Technician: Siemens International Mechatronic Systems Certification Level I - 1500003179

(Offered at BGT, GTW, JFC, OWC,WKC)

MS	110	Mechatronic Systems Electrical Components	4
MS	120	Mechatronic Systems Mechanical Components	4
MS	130	Mechatronic Systems Hydraulic / Pneumatic Components	4
MS	150	Mechatronic Systems Programmable Controllers	4
		Total Credits	**16**

Electives:

MS	160	Systems Troubleshooting I	2
MS	190	Systems Thinking	1

Medical Administrative Services

Certificate

Medical Coding and Reimbursement Specialist - 5107033029

(Offered at BGT, GTW, JFC)

The Medical Coding and Reimbursement Specialist program insures that medical services are correctly identified on insurance claim forms. The individual codes the diagnoses and procedures performed, submits claim forms, researches and corrects insurance claim rejections. This program prepares graduates to file insurance forms for reimbursement and to code properly using the ICD, CPT and the HCPCS codes for patient diagnoses and procedures. Students are provided with an in-depth knowledge of medical terminology, anatomy, and coding procedures.

AHS	109	Introduction to Body Structure and Functions OR	4
BIO	130	Aspects of Human Biology OR	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
		Computer Literacy	3
MBS	100	Introduction to the Health Care Field OR	2
HIT	100	Introduction to Healthcare Delivery Systems	(2)
MBS	110	Medical Insurance and Claims Processing	6
MBS	120	Coding for Reimbursement OR	8
OST	204	Medical Coding AND	(3)
OST	205	Advanced Medical Coding	(3)
MBS	199	Internship	0-8
		Total Credits	**23-38**

Medical Assisting

A medical assistant is an integral member of the health care delivery team, qualified by education and experience to work in the administrative office, the examining room and the physician's laboratory. Individuals in this unique position will be involved in many of the following skills:

General: project a professional manner and image, adhere to legal and ethical principles, use medical terminology effectively, and use effective and correct verbal and written communication.

Administrative: schedule, coordinate and monitor appointments, perform telephone and written communications, arrange hospital admissions, manage medical records, process insurance claim forms, manage office financial records, and maintain inventory.

Clinical: prepare patient for examination procedures and treatment, record medical histories, take vital signs, chart patient information, administer medications and injections, provide patient instruction and education, perform venipunctures, collect and prepare other specimens, perform electrocardiograms (ECG), sterilize instruments, and perform basic laboratory tests.

With additional education, the medical assisting graduate may perform limited radiography.

The Medical Assistant is a vital liaison between the doctor and patient and plays an important role in diagnosis and treatment. The many different roles assumed in this profession assure a fast moving and challenging career.

Progression in the Medical Assisting program is contingent upon achievement of a grade of "C" or above in each required course and maintenance of a 2.0 cumulative grade-point average or above (on a 4.0 scale).

Clinical orientation and externship are "non-paid work assignments".

Transportation to the physician's offices/community agencies is the responsibility of each student.

Bluegrass CTC, Henderson CC, Jefferson CTC, Maysville CTC – Main Campus, Maysville CTC – Rowan Campus, and West Kentucky CTC are accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE). CAAHEP, 1361 Park Street, Clearwater, FL 33756, (727)210-2350.

Associate in Applied Science

Medical Assisting - 5108017029

(Offered at BLC, GTW, HEC)

Required General Education:

MAT	105	Mathematics for Business OR	3
MAT	110	Applied Mathematics	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory	4
PSY	110	General Psychology	3
ENG	101	Writing I	3
		Heritage/Humanities/Foreign Language	3

Additional Suggested General Education Courses (Not Required)

ENG	102	Writing II	(3)
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communications	(3)
		Subtotal	**16-22**

Support Classes

AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
CPR	100	CPR for Health Care Professionals OR	1
KHP	190	First Aid and Emergency Care	(2)
		Computer Literacy	3
		Subtotal	**7-8**

NOTE: Credit for CPR 100 may be granted with proof of CPR certification for Health Care Professionals.

Core Courses

MAI	105	Introduction to Medical Assisting	3
MAI	120	Medical Assisting Laboratory Techniques I	3
MAI	140	Medical Assisting Clinical Procedures I	4
MAI	150	Medical Assisting Administrative Procedures I OR	3
OST	217	Medical Office Procedures	(3)
MAI	170	Dosage Calculations OR	2
FHM	100	Dosage Calculations	(2)
MAI	200	Pathophysiology for the Medical Assistant	3
MAI	220	Medical Assisting Laboratory Techniques II	3
MAI	230	Medical Insurance OR	3
OST	104	Introduction to Medical Insurance	(3)
MAI	240	Medical Assisting Clinical Procedures II	4
MAI	250	Medical Assisting Administrative Procedures II OR	3
OST	227	Medical Office Software	(3)
MAI	270	Pharmacology for the Medical Assistant	3
MAI	281	Medical Assisting Practicum	1
MAI	282	Medical Assisting Externship	2-3
		Subtotal	**37-38**
		Total Credits	**60-68**

Elective List:

OST	100	Keyboarding	(1)
OSTL	100	Keyboarding Lab	(1)
MAI	260	Medical Transcription	(3)
MAI	299	Selected Topics: Medical Assisting: (Topic)	(1-4)

Diploma

Medical Assisting - 5108014020

(Offered at BLC, GTW, HEC, JFC, MYC, SEC, SMC)

General Education:

BIO	135	Basic Anatomy and Physiology with Laboratory	4
ENG	101	Writing I OR	3
TEC	200	Technical Communications	(3)
		Subtotal	**7**

Support Classes

AHS	115	Medical Terminology OR	3
AHS	120	Medical Terminology OR	(1)
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
CPR	100	CPR for Health Care Professionals OR	1
KHP	190	First Aid and Emergency Care	(2)
		Computer Literacy	3
		Subtotal	**5-8**

NOTE: Credit for CPR 100 may be granted with proof of CPR certification for Health Care Professionals.

Core Courses

MAI	105	Introduction to Medical Assisting	3
MAI	120	Medical Assisting Laboratory Techniques I	3
MAI	140	Medical Assisting Clinical Procedures I	4
MAI	150	Medical Assisting Administrative Procedures I OR	3
OST	217	Medical Office Procedures	(3)
MAI	170	Dosage Calculations OR	2
FHM	100	Dosage Calculations	(2)
MAI	200	Pathophysiology for the Medical Assistant	3
MAI	220	Medical Assisting Laboratory Techniques II	3
MAI	230	Medical Insurance OR	3
OST	104	Introduction to Medical Insurance	(3)
MAI	240	Medical Assisting Clinical Procedures II	4
MAI	250	Medical Assisting Administrative Procedures II OR	3
OST	227	Medical Office Software	(3)
MAI	270	Pharmacology for the Medical Assistant	3
MAI	281	Medical Assisting Practicum	1
MAI	282	Medical Assisting Externship	2-3
		Subtotal	**37-38**
		Total Credits	**49-53**

Elective Courses:

OST	100	Keyboarding	(1)
OSTL	100	Keyboarding Lab	(1)
MAI	260	Medical Transcription	(3)
MAI	299	Selected Topics: Medical Assisting: (Topic)	(1-4)

Certificates

Medical Office Clinical Assistant * - 5108013059

(Offered at BLC, HEC, JFC, MYC, SEC, SMC)

AHS	115	Medical Terminology OR	3
AHS	120	Medical Terminology OR	(1)
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
CPR	100	CPR for Health Care Professionals OR	1
KHP	190	First Aid and Emergency Care	(2)
BIO	135	Basic Anatomy and Physiology with Laboratory	4
MAI	120	Medical Assisting Laboratory Techniques I	3
MAI	140	Medical Assisting Clinical Procedures I	4
MAI	281	Medical Assisting Practicum	1
		Computer Literacy	3
		Total Credits	**17-20**

NOTE: Credit for CPR 100 may be granted with proof of CPR certification for Health Care Professionals.

Medical Office Insurance Billing and Coding* - 5108013049

(Offered at BLC, HEC, JFC, MYC, SEC, SMC)

AHS	115	Medical Terminology OR	3
AHS	120	Medical Terminology OR	(1)
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory	4
MAI	150	Medical Assisting Administrative Procedures I OR	3
OST	217	Medical Office Procedures	(3)
MAI	230	Medical Insurance OR	3
OST	104	Introduction to Medical Insurance	(3)
MAI	250	Medical Assisting Administrative Procedures II OR	3
OST	227	Medical Office Software	(3)
MAI	281	Medical Assisting Practicum	1
		Computer Literacy	3
		Total Credits	**18-20**

Medical Office Administrative Assistant * - 5108013069

(Offered at BLC, HEC, JFC, MYC, SEC, SMC)

BIO	135	Basic Anatomy and Physiology with Laboratory	4
AHS	115	Medical Terminology OR	3
AHS	120	Medical Terminology OR	(1)

CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
MAI	105	Introduction to Medical Assisting	3
MAI	150	Medical Assisting Administrative Procedures I OR	3
OST	217	Medical Office Procedures	(3)
MAI	250	Medical Assisting Administrative Procedures II OR	3
OST	227	Medical Office Software	(3)
MAI	281	Medical Assisting Practicum	1
		Computer Literacy	3
		Total Credits	**18-20**

Electrocardiograph Technician* - 5108013079

(Offered at JFC, MYC)

AHS	115	Medical Terminology OR	3
AHS	120	Medical Terminology OR	(1)
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
CPR	100	CPR for Healthcare Professionals OR	1
KHP	190	First Aid and Emergency Care	(2)
MAI	140	Medical Assisting Clinical Procedures I OR	4
MAI	240	Medical Assisting Clinical Procedures II	(4)
MAI	281	Medical Assisting Practicum	1
		Total Credits	**7-10**

NOTE: Credit for CPR 100 may be granted with proof of CPR certification for Health Care Professionals.

Medical Office Limited Radiography* - 5108013099

(Offered at JFC)

MOR	100	Medical Office Limited Radiography	8
MOR	115	Medical Office Limited Radiography Lab	5
		Total Credits	**13**

Phlebotomist*

(Offered at HEC, MYC, SEC)

PHB	100	Phlebotomy	6
PHB	155	Phlebotomy Clinical	2-3
		Total Credits	**8-9**
		OR	
MAI	120	Medical Assisting Laboratory Techniques I	3
PHB	155	Phlebotomy Clinical	2-3
		Total Credits	**5-6**
		OR	
MAI	120	Medical Assisting Laboratory Techniques I	3
PHB	152	Phlebotomy: Clinical Experience	1
		Total Credits	**4**

NOTE: For a directory of phlebotomy certification agencies and examination requirements, go to the Center for Phlebotomy Education web site.

*A competency level of successful completion of MAT 065, RDG 030 and ENC 091 must be attained for any certificate.

Mining Technology

The Mining Technology program will focus on the knowledge needed to succeed in the coal mining industry. Emphasis will be given to the statutory rights and safety procedures in all of the offerings including: the self-rescuer device, transportation controls, communication controls, mining conditions, mining methods, mining cycle, escapeways, emergency procedures, roof control, ground control, ventilation, health hazards, clean-up and rock dusting, health and safety aspects of assigned task, mine gases, explosives, compressed cylinders, electrical hazards, first aid, operation of equipment, electrical knowledge and troubleshooting, repairing electrical and fluid power equipment, maintaining the equipment, fabricating, supervising, and the engineering aspects of mining.

Associate in Applied Science

Mining Technology - 1509017019

(Offered at BSC, HZC, MDC)

General Education:

ENG	101	Writing I	3
		Mathematics course*	3
		Social Interaction course	3
GLY	101	Physical Geology AND	3
GLY	111	Laboratory for Physical Geology OR	1
		Science	(4)
		Heritage/Humanities/Foreign Language	3
		Computer Literacy	3
		Subtotal	**19**

*Note: MAT 150 is required for Engineering Operations Option and Supervisors Option.

Technical Core:

MNG	160	Elements of Underground Mining	3
MNG	161	Elements of Underground Mining Lab	1-3
MNG	170	Elements of Surface Mining	2
MNG	171	Elements of Surface Mining Lab	1-3
MNG	150	Mining Laws	3
BAS	160	Introduction to Business	3
EFM	100	Personal Financial Management OR	3
BAS	120	Personal Finance	(3)
MNG	274	Mine Safety	3
MNG	180	Environmental Issues in Mining	3
		Subtotal	**22-26**

Operators Option – 150901702

(Offered at BSC, MDC)

IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
		Technical Electives*	14-16
		Subtotal	**19-21**
		Total Credits	**60-66**

Electricians Option - 150901703

(Offered at BSC, HZC, MDC)

MNG	123	Mining Electricity I AND	4
MNG	125	Mining Electricity I Lab OR	1
IMT	110	Industrial Maintenance Electrical Principles AND	(3)
IMT	111	Industrial Maintenance Electrical Principles Lab	(2)
ET/ELT	244	Electrical Machinery and Controls OR	4
		Equivalent course	
IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
ET/ELT	250	Programmable Logic Controllers	4
		Technical Electives*	2
		Subtotal	**20**
		Total Credits	**61-65**

Supervisors Option - 150901704

(Offered at BSC, MDC)

ACT	101	Fundamentals of Accounting I	3
MNG	286	Roof Control and Ventilation	3
BAS	283	Principles of Management	3
BAS	288	Personal and Organizational Leadership	3
		Technical Electives*	8
		Subtotal	**20**
		Total Credits	**61-65**

Mechanics Option - 150901705

(Offered at BSC, HZC, MDC)

		Blueprint Reading course	2-3
ET/ELT	265	Applied Fluid Power OR	3
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
ET/ELT	122	Mechanical Power Transmission Systems	3
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
		Technical Electives*	2
		Subtotal	**20-23**
		Total Credits	**61-68**

Engineering Operations Option - 150901701

(Offered at BSC, MDC)

MA	112	Trigonometry OR	2
MAT	155	Trigonometry	(3)
		Blueprint Reading course	2-3
ET/ELT	264	Mechanical Design OR equivalent course	4
		Technical Electives*	12
		Subtotal	**20-22**
		Total Credits	**61-67**

***Technical Electives:**

Any AIT, EET, ELT, IMT, CIS, NIS, IT, ISM, ENV, SMT, CAD, ICT, MFG or any other course as approved by the program coordinator.

Certificates

Underground Operator 1509013129

(Offered at BSC, MDC, SEC)

MNG	160	Elements of Underground Mining	3
MNG	161	Elements of Underground Mining Lab	1-3
EFM	100	Personal Financial Management OR	3
BAS	120	Personal Finance OR	(3)
WPP	200	Workplace Principles	(3)
		Total Credits	**7-9**

Underground Mechanic/Electrician - 1509013069

(Offered at BSC, HZC, MDC, SEC)

		Computer Literacy	0-3
		Blueprint Reading course	2-3
MNG	123	Mining Electricity I	4
MNG	125	Mining Electricity I Lab	1
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
ET/ELT	244	Electrical Machinery and Controls OR	4
IMT	110	Industrial Maintenance Electrical Principles AND	(3)
IMT	111	Industrial Maintenance Electrical Principles Lab	(2)
ET/ELT	250	Programmable Logic Controllers	4
ET/ELT	265	Applied Fluid Power OR	3
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
IMT	150	Maintaining Industrial Equipment I	3
IMT	151	Maintaining Industrial Equipment I Lab	2
		Total Credits	**28-35**

Underground Supervisor - 1509013079

(Offered at BSC, HZC, MDC, SEC)

MNG	150	Mining Laws	3
MNG	274	Mine Safety	3
MNG	190	Mine Emergency Technician OR	3
KHP	190	First Aid & Emergency Care	(2)
BAS	160	Introduction to Business	3
MNG	286	Roof Control and Ventilation	3
		Computer Literacy	0-3
		Blueprint Reading course	2-3
		Total Credits	**16-21**

Surface Operator - 1509013139

(Offered at BSC, MDC, SEC)

MNG	170	Elements of Surface Mining	2
MNG	171	Elements of Surface Mining Lab	1-3
EFM	100	Personal Financial Management OR	3
BAS	120	Personal Finance OR	(3)
WPP	200	Workplace Principles	(3)
HEO	125	Special Problems I OR	3
		Technical Elective	(3)
		Total Credits	**9-11**

Surface Supervisor - 1509013099

(Offered at BSC, MDC, SEC)

		Computer Literacy	0-3
		Blueprint Reading Course	2-3
MNG	150	Mining Laws	3
MNG	190	Mine Emergency Technician OR	3
KHP	190	First Aid & Emergency Care	(2)
MNG	274	Mine Safety	3
BAS	160	Introduction to Business	3
		Total Credits	**13-18**

Surface Field Mechanic - 1509013109

(Offered at BSC, SEC)

ET/ELT	122	Mechanical Power Transmission Systems	3
ET/ELT	265	Applied Fluid Power OR	3
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
		Total Credits	**11-13**

Surface Technician/Greaser - 1509013119

(Offered at BSC, SEC)

PMX	100	Precision Measurement	3
DIT	103	Preventive Maintenance Lab	1
ET/ELT	122	Mechanical Power Transmission Systems	3
		Total Credits	**7**

Mining Technician Assistant I - 1509013019

(Offered at BSC, SEC)

PMX	100	Precision Measurement	3
DIT	103	Preventive Maintenance Lab	1
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
		Total Credits	**9**

Mining Technician Assistant II - 1509013029

(Offered at BSC, HZC, SEC)

MNG	123	Mining Electricity I	4
MNG	125	Mining Electricity Lab	1
ET/ELT	265	Applied Fluid Power OR	3
FPX	100	Fluid Power AND	(3)
FPX	101	Fluid Power Lab	(2)
		Total Credits	**8-10**

Mining Technician I - 1509013039

(Offered at BSC, SEC)

		Computer Literacy	0-3
MNG	160	Elements of Underground Mining	3
MNG	161	Elements of Underground Mining Lab	1-3
MNG	150	Mining Laws	3
MNG	286	Roof Control and Ventilation	3
		Total Credits	**10-15**

Mining Technician II - 1509013049

(Offered at BSC, SEC)

		Computer Literacy	0-3
MNG	123	Mining Electricity I	4
MNG	125	Mining Electricity Lab	1
MNG	150	Mining Laws	3
MNG	286	Roof Control and Ventilation	3
MNG	190	Mine Emergency Technician OR	3
KHP	190	First Aid & Emergency Care	(2)
IMT	100	Welding for Maintenance	3
IMT	101	Welding for Maintenance Lab	2
		Total Credits	**18-22**

Motorcycle Technology

The Motorcycle Technology Program prepares students for careers in a motorcycle dealership or private business. A core curriculum provides students with a foundation of knowledge applicable to the motorcycle industry.

Associate in Applied Science

Motorcycle Technology - 4706117019

(Offered at BSC)

General Education

ENG	101	Writing I	3
MAT	110	Applied Math	3
		Heritage/Humanities	3
		Social Interaction	3
		Science	3
		Oral Communication	3
		Computer Literacy	0-3
		Subtotal	**18-21**

Technical Core

MOT	100	Introduction to Motorcycles	3
OST	105	Introduction to Information Systems	3
MOT	120	Motorcycle Sales and Marketing	3
MOT	130	Shop Management	2
MOT	134	Service Requirements	2
MOT	244	Parts Management	2
MOT	260	Capstone	4
COE	199	Cooperative Education or	3
COED	198	Practicum	(3)
		Subtotal	**22**

Repair Option - 470611701

(Offered at BSC)

FEX	100	Fundamentals of Electricity	3
MOT	142	Basic Engines and Drive Systems	2
MOT	156	Frames and Suspensions	2
MOT	200	Advanced Engines and Drive Systems	2
MOT	220	Diagnostics and Troubleshooting	2
MOT	234	Performance Machine and Welding	2
		Approved Technical Electives	9
		Subtotal	**22**
		Total Credits (Repair Option)	**62-65**

Retail Option - 470611702

(Offered at BSC)

BAS	200	Small Business Management	3
ACC	201	Financial Accounting	3
		Approved Technical Electives	15
		Subtotal	**21**
		Total Credits (Retail Option)	**61-64**

Certificates

Repair Technician II - 4706113029

(Offered at BSC)

Technical Courses

MOT	100	Introduction to Motorcycles	3
OST	105	Introduction to Information Systems	3
MOT	120	Motorcycle Sales and Marketing	3
MOT	130	Shop Management	2
MOT	134	Service Requirements	2
MOT	142	Basic Engines and Drive Systems	2
MOT	156	Frames and Suspensions	2
MOT	200	Advanced Engines and Troubleshooting	2
MOT	220	Diagnostics and Troubleshooting	2
MOT	234	Performance Machining and Welding	2
MOT	244	Parts and Management	2
		Total	**25**

Repair Technician I - 4706113019

(Offered at BSC)

Technical Courses

MOT	100	Introduction to Motorcycles	3
OST	105	Introduction to Information Systems	3
MOT	120	Motorcycle Sales and Marketing	3
MOT	130	Shop Management	2
MOT	134	Service Requirements	2
MOT	142	Basic Engines and Drive Systems	2
		Total	**15**

Retail Technician II - 4706113049

(Offered at BSC)

Technical Courses

MOT	100	Introduction to Motorcycles	3
OST	105	Introduction to Information Systems	3
MOT	120	Motorcycle Sales and Marketing	3
BAS	200	Small Business Management	3
MOT	130	Shop Management	2
ACC	201	Financial Accounting	3
		Approved Technical Electives	12
		Total	**29**

Retail Technician I - 4706113039

(Offered at BSC)

Technical Courses

MOT	100	Introduction to Motorcycles	3
OST	105	Introduction to Information Systems	3
MOT	120	Motorcycle Sales and Marketing	3
BAS	200	Small Business Management	3
		Approved Technical Electives	6
		Total	**18**

Approved Technical Electives Repair Option:

CIS	130	Microcomputer Application	3
CRT	100	Introduction to Collision Repair	2
MTT	110	Fundamentals of Machine Tools A	3

Note: Other Electives may be approved by the Program Coordinator

Approved Technical Electives Retail Option:

CIS	130	Microcomputer Application	3
IT	132	Web Page Development	3
ACC	202	Managerial Accounting	3
BAS	267	Introduction to Business Law	3
BAS	274	Human Resource Management	3
BAS	283	Principles of Management	3
BAS	291	Retail Management	3

Natural Gas Technology

Construction and Maintenance Technician

This program prepares students for performing job tasks in five functional areas of pipeline construction and maintenance; work related safety, installing and inspecting gas distribution piping, maintenance on gas pipelines, placing pipelines into service and installing and monitoring cathodic protection systems. Classroom instruction and documented related skill performance prepares students to perform job related tasks at the technician level. Persons completing the program are "operator qualified" on related covered tasks according to 49CFR, Part 192, Subpart N.

Leakage and Corrosion Control Technician

This program prepares students for job related tasks in six functional areas of natural gas service; work related safety, installing and maintaining customer services lines and meter and regulator sets, installing gas operated equipment, installing and inspecting gas distribution piping and monitoring cathodic protection systems. Classroom instruction and documented related skill performance prepares students to perform job related tasks at the technician level. Persons completing the program are "operator qualified" on related covered tasks according to 49CFR, Part 192, Subpart N.

Gas Service Technician

This program prepares students for performing job tasks in four functional areas of natural gas leakage and corrosion control; work related safety, investigating and controlling gas leaks, installing cathodic protection systems, and monitoring cathodic protection systems. Classroom instruction and documented related skill performance prepares students to perform job related tasks at the technician level. Persons completing the program are "operator qualified" on related covered tasks according to 49CFR, Part 192, Subpart N.

Measurement and Regulation Technician

This program prepares students for performing job tasks in five functional areas of natural gas measurement and regulation; work related safety, basic gas laws, maintaining gas metering systems, maintaining gas regulation systems, and maintaining recording instruments. Classroom instruction and documented related skill performance prepares students to perform job related tasks at the technician level.

Certificates

Leakage and Corrosion Control Technician - 1509033020

(Offered at WKC)

NGT	100	Technologies Basic to the Delivery of Natural Fuel Gases	3
NGT	110	Preventing/Controlling Worksite Incidents	3
NGT	130	Maintaining Compliance with 49 Code of Federal Regulations (CFR), Part 192	1
NGT	140	Pipeline Construction Safety	3
NGT	150	Performing Patrol & Leakage Surveys on Natural Gas Pipeline Facilities	3
NGT	205	Identifying Practices & Procedures Used to Control and Monitor Cathodic Protection Systems	2
NGT	210	Troubleshooting Cathodic Protection Rectifiers	3
		Total Credits	**18**

Gas Service Technician - 1509033040

(Offered at WKC)

NGT	100	Technologies Basic to the Delivery of Natural Fuel Gases	3
NGT	110	Preventing/Controlling Worksite Incidents	3
NGT	125	Maintaining Compliance with the National Fuel Gas Code NFPA 54 and ANSI Z223.1	1
NGT	160	Installing & Maintaining Customer Service Lines and Meter and Regulator Sets	3
NGT	170	Installing Gas Operated Equipment	3
NGT	180	Installing and Inspecting Gas Distribution Piping	3
NGT	200	Placing Gas Pipelines into Service	3
NGT	205	Identifying Practices & Procedures Used to Control and Monitor Cathodic Protection Systems	2
		Total Credits	**21**

Measurement and Regulation Technician - 1509033030

(Offered at WKC)

NGT	100	Technologies Basic to the Delivery of Natural Fuel Gases	3
NGT	110	Preventing/Controlling Worksite Incidents	3
NGT	130	Maintaining Compliance with 49 Code of Federal Regulations (CFR), Part 192	1
NGT	140	Pipeline Construction Safety	3
NGT	150	Performing Patrol & Leakage Surveys on Natural Gas Pipeline Facilities	3
NGT	205	Identifying Practices & Procedures Used to Control and Monitor Cathodic Protection Systems	2
NGT	220	Identifying Principles & Performing Operations Basic to Gas Measurement	3
NGT	230	Inspecting & Maintaining Gas Metering Systems	3
NGT	240	Operating & Maintaining Gas Pressure Regulating Systems	3
		Total Credits	**24**

Construction and Maintenance Technician - 1509033010

(Offered at WKC)

NGT	100	Technologies Basic to the Delivery of Natural Fuel Gases	3
NGT	110	Preventing/Controlling Worksite Incidents	3
NGT	130	Maintaining Compliance with 49 Code of Federal Regulations (CFR), Part 192	1
NGT	140	Pipeline Construction Safety	3
NGT	180	Installing & Inspecting Gas Distribution Piping	3
NGT	190	Performing Maintenance on Gas Pipelines	3
NGT	200	Placing Gas Pipelines into Service	3
NGT	205	Identifying Practices & Procedures Used to Control and Monitor Cathodic Protection Systems	2
		Total Credits	**21**

Nuclear Medicine and Molecular Imaging Technology

The Nuclear Medicine and Molecular Imaging Technology (NMMIT) program prepares the individual to work in the field of Nuclear Medicine and Molecular Imaging. Nuclear Medicine and Molecular Imaging is the medical specialty that utilizes the nuclear properties of radioactive and stable nuclides to make diagnostic evaluation of the anatomic or physiologic conditions of the body and to provide therapy with unsealed radioactive materials. The skills of the nuclear medicine technologist complement those of the nuclear medicine physician and other profes-

sionals in the field. Nuclear medicine technologists have responsibilities in the following areas: (a) patient care and monitoring, (b) technical skills related to radiation safety, radiopharmacy, clinical instrumentation, diagnostic and therapeutic procedures (including hybrid imaging and emerging technologies), quality control, and computers, and (c) administrative functions related to supplies and equipment, documentation of operations related to disposition of radioactive materials, quality control data, and patient records.

The NMMIT program is a selective admission program. A student must earn a grade of C or better in the prerequisite and concurrent mathematics and science courses to be admitted to and to remain enrolled in the program. Also, a student must earn a grade of C or better in each of the NMMIT courses to be retained in the program. After graduation from the program, the individual is eligible to write either the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiologic Technologists (ARRT) nuclear medicine technology examination to earn credentials. Please see the guidelines for the selective admission requirements to the Nuclear Medicine and Molecular Imaging Technology program.

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first NMI course.

Note: Hours Exception (71-73 for the A.A.S.) approved by the KCTCS Board of Regents in December 2010

Associate in Applied Science

Nuclear Medicine and Molecular Imaging Technology - 5109057039

(Offered at BLC, JFC)

General Education:

ENG	101	Writing I	3
ENG	102	Writing II	3
MAT	150	College Algebra OR	3
MA	109	College Algebra	(3)
CHE	140	Introductory General Chemistry	3
CHE	150	Introduction to Organic and Biological Chemistry	3
CHE	155	Introduction to Organic and Biological Chemistry Lab	1
BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
PHY	171	Applied Physics OR	4
PHY	172	Physics for Health Sciences	(2)
		Social/Behavioral Science	3
		Heritage/Humanities	3
		Oral Communications Course	3
		Subtotal	**35-37**

Technical Courses:

NMI	140	Clinical Procedures I	2
NMI	141	Physics and Instrumentation I	2
NMI	142	Radiation Biology/Protection	1
NMI	150	Clinic I	2
NMI	160	Clinical Procedures II	2
NMI	161	Physics and Instrumentation II	2
NMI	170	Clinic II	2
NMI	230	Radiopharmacy	2
NMI	220	Clinic III	2
NMI	240	Clinical Procedures III	4
NMI	260	Clinic IV	4
NMI	250	Clinical Procedures IV	4
NMI	270	Clinic V	4
RDL	230	Sectional Anatomy for Advanced Imaging	3
		Subtotal	**36**
		Total Credits	**71-73**

Nursing

The Associate Degree Nursing program prepares graduates to provide and manage client care and to become members within the discipline of nursing. Intrinsic to the three roles of the nurse—provider of care, manager of care, and member of the discipline are the eight core components of nursing practice. The eight core components are: professional behaviors, nursing process, communication, clinical decision making, caring interventions, teaching/learning, collaboration, and managing care. These core components are introduced, developed, and built upon through the curriculum. Graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The Associate Degree Nursing curriculum is organized around a clearly defined conceptual framework and combines general education and nursing courses. The nursing courses correlate classroom and clinical instruction in a variety of community agencies. *

Acceptance into the Associate Degree Nursing program is based on a selective admissions process. In order to be considered for admission, applicants must comply with college and program admission requirements prior to March 1 for admission to a fall NSG 101 course (July 1 for admission to a spring NSG 101 course).

Progression in the Associate Degree Nursing program is contingent upon achievement of a grade of "C" or better in each biological science, nursing and mathematics course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, and documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course.

*Transportation to the community agencies is the responsibility of each student.

Note: The Kentucky Board of Nursing may deny a nursing graduate admission to the NCLEX-RN Exam if an individual has been convicted of a misdemeanor or felony which involves acts that bear directly on the qualifications of the graduate to practice nursing.

The following Associate Degree Nursing programs are accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Rd. NE, Suite 500, Atlanta GA 30326, www.nlnac.org Telephone: (404) 975-5000:

Ashland Community and Technical College, Elizabethtown Community and Technical College, Henderson Community College, Hopkinsville Community College, Jefferson Community and Technical College, Madisonville Community College, Somerset Community College, West Kentucky Community and Technical College.

Note: Hours Exception (69-72 for the A.A.S.) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Nursing - 5116017009

(Offered at ASC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MYC, OWC, SMC,WKC)
(Curriculum Revision Pending)

General Education:

BIO	137	*Human Anatomy & Physiology I	4
BIO	139	*Human Anatomy & Physiology II	4
BIO	225	*Medical Microbiology	4
PSY	110	*General Psychology	3
PSY	223	*Developmental Psychology	3
		*Writing Courses	6
		*Oral Communications Course	3
MAT	110	*Applied Mathematics OR	3
MAT	150	*College Algebra	(3)
		*Heritage/Humanities/Foreign Language Course	3
		Subtotal	**33-34**

Nursing (Option 1 – Traditional) - 511601701

Technical Courses:

NSG	101	***Nursing Practice I	9
NSG	202	***Nursing Practice II OR	9
NSG	198	** Accelerated LPN –ADN Bridge Course OR	(3)
NSG	201	** LPN – ADN Bridge	(5)
NSG	203	Nursing Practice III	9
NSG	204	Family Nursing	8
NSG	205	Transition to Professional Practice	3
		Subtotal	**38**
		Total CREDITS	**71**

*General Education Courses

**Taken by Licensed Practical Nurses who meet specific program requirements

***Credit may be awarded to Licensed Practical Nurses who meet specific program requirements.

NOTE: CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, and documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course.

Nursing (Option 2 - Modular) - 511601702

(Offered at ASC, BSC, ELC, GTW, HEC, HPC, MYC, OWC, SMC,WKC)

Technical Courses:

NSG	101	***Nursing Practice I	9
NSG	210	***Medical/Surgical Nursing I OR	6
NSG	197	** LPN – ADN Bridge OR	(3)
NSG	199	** Accelerated LPN –ADN Bridge Course	(2)
NSG	211	Maternal Newborn Nursing	3
NSG	212	Behavioral Health Nursing	3
NSG	213	Pediatric Nursing	3
NSG	215	Pharmacology I	1
NSG	220	Medical/Surgical Nursing II	6
NSG	225	Pharmacology II	1
NSG	230	Medical/Surgical Nursing III	6
		Subtotal	**38**
		Total CREDITS	**71**

**Taken by Licensed Practical Nurses who meet specific program requirements

***Credit may be awarded to Licensed Practical Nurses who meet specific program requirements.

NOTE: CPR requirements must be successfully complete prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, and documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course

Nursing (Option 3 - Standard) - 511601703

(Offered at JFC)

Technical Courses:

NSG	106	***Nursing One	9
NSG	206	***Nursing Two OR	9
NSG	196	**Nursing LPN Bridge	(5)
NSG	236	(Family Nursing) Nursing Three	9
NSG	246	Nursing Four	9
NSG	216	Nursing Pharmacology I	1
NSG	226	Nursing Pharmacology II	1
		Subtotal	**38**
		Total CREDITS	**71**

* General Education Courses

**Taken by Licensed Practical Nurses who meet specific program requirements

***Credit may be awarded to Licensed Practical Nurses who meet specific program requirements.

NOTE: CPR (BLS for Healthcare Providers) requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, a letter of good standing status from the Kentucky Nurse Aide Registry, criminal background checks and documentation of computer literacy as defined by KCTCS are required prior to enrolling in the first nursing course.

Nursing

The Associate Degree Nursing Curriculum offered by the Bluegrass Community and Technical College is accredited by the National League for Nursing Accrediting Commission [3343 Peachtree Rd. NE, Suite 500, Atlanta GA 30326, www.nlnac.org Telephone: (404) 975-5000] and approved by the Kentucky Board of Nursing. The curriculum combines general education and nursing education. Classroom lectures are held at the college and nursing faculty direct the learning of nursing practice in a variety of community settings. Classroom instruction is closely correlated with selected experiences in the health care facilities. Transportation to the facilities is the responsibility of each student. Preference in admission to the program will be given to persons who have completed all admission requirements prior to February 15.

The program prepares graduates to write the National Council Licensure Examination to become registered nurses, who are eligible to work in beginning staff level positions. The beginning registered nurse prepared at the Associate Degree level has the responsibility of performing nursing functions with clients who are under the supervision of a physician, assists in the assessment and planning of the day-to-day care of clients, evaluates the client's physical and emotional reactions to therapy, and may supervise other workers in nursing care. Employment is usually in hospitals, nursing facilities, physician's offices, clinics, and public health agencies. Please see the guidelines for the selective admission requirements to the Associate Degree Nursing Program.

Note: Hours Exception (69-72 for the A.A.S.) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Nursing – 5116017029

(Offered at BLC)

MA	109	College Algebra **OR**	3
MA	111	Contemporary Mathematics or higher **OR**	(3)
MAT	150	College Algebra	(3)
PSY	110	General Psychology	3
ENG	101	Writing I	3
ENG	102	Writing II	3
BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
BIO	225	Medical Microbiology	4
PSY	223	Developmental Psychology	3
		Heritage/Humanities/Foreign Language	3
		Oral Communication	3
		Elective	1
		Subtotal	**34**

Technical Program Core Courses

NRN	115	Nursing 1	9
NRN	125	Nursing II	2
NRN	235	Nursing III	4
NRN	245	Nursing IV	4
NRN	255	Nursing V	9
NRN	265	Nursing VI	9
		Subtotal	**37**
		Total	**71**

Nursing Assistant – Advanced

Provides knowledge and skills for nurse aides to assume the role and responsibility required in a variety of health care settings.

Certificate

Advanced Nursing Assistant - 5116143019

(Offered at ELC, MYC,WKC)

Available Completely Online

NAA	125	Advanced Nursing Assistant OR	6
NAA	100	Nursing Assistant Skills I AND	(3)
NAA	115	Nursing Assistant Skills II OR	(3)
MNA	100	Medicaid Nurse Aide AND	(3)
NAA	115	Nursing Assistant Skills II	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	4
AHS	109	Introduction to Body Structure and Function OR	(4)
BIO	137	Human Anatomy & Physiology IAND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication OR	(3)
ENG	101	Writing I OR	(3)
TEC	200	Technical Communications	(3)
		Computer Literacy	3
		Total Credits	**16-20**

Nursing – Academic/Career Mobility Program

The Academic/Career Mobility Program provides a seamless educational option in nursing with two exit points allowing students to choose a career as an LPN or RN. The program is implemented in a shared framework; however, distinct parameters have been established that support the PN and RN scopes of nursing practice. The curriculum is structured around a clearly defined organizing framework and provides the foundation for a competency-based approach to nursing education through the utilization of interactive and student-focused learning strategies. Content and performance-based outcomes for the nursing courses are selected, developed, and leveled from simple to complex. Students who successfully complete the first year will receive a diploma qualifying them to apply for licensure as practical nurses. Following successful completion of the second year, students will receive the Associate in Applied Science Degree in Nursing qualifying them to apply for licensure as registered nurses.

Acceptance into the program is based on a selective admissions process. In order to be considered for admission, applicants must comply with college and program admission requirements prior to March 1. Licensed practical nurses who graduated within three years of admission to the program, or have practiced at least one full year within the past three years and hold a current unrestricted license for practical nursing will be admitted to the associate degree level.

Proof of active status on the Kentucky Medicaid Nurse Aide Registry or its equivalent is required prior to enrolling in the first nursing course. CPR certificate for Health Care Providers/Professional Rescuer must be obtained prior to enrolling in the first nursing course and certification must be kept current throughout the program. Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course.

Progression in the nursing program is contingent upon achievement of a grade of "C" or better in each biological science, nursing and mathematics course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Note: The Kentucky Board of Nursing may deny a nursing graduate admission to the NCLEX Exam if an individual has been convicted of a misdemeanor or felony which involves acts that bear directly on the qualifications of the graduate to practice nursing.

The following Practical Nursing Program is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 www.nlnac.org Telephone: (404) 975-5000.

Southeast Kentucky Community and Technical College

The following Associate Degree Nursing Program is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 www.nlnac.org Telephone: (404) 975-5000.

Southeast Kentucky Community and Technical College

Note: Hours Exception (69-72 for the A.A.S.) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Academic/Career Mobility Program in Nursing - 5116017049

(Offered at BGT, SEC)

BIO	137	*Human Anatomy & Physiology I	4
BIO	139	*Human Anatomy & Physiology II	4
BIO	225	*Medical Microbiology OR	4
BIO	227	*Principles of Microbiology with Laboratory	(5)
PSY	110	*General Psychology	3
PSY	223	*Developmental Psychology	3
ENG	101	*Writing I	3
ENG	102	*Writing II	3
MAT	110	*Applied Mathematics OR	3
MAT	150	*College Algebra	(3)
		*Heritage/Humanities/Foreign Language Course	3
		*Oral Communications Course	3
NRS	101	Nursing Care I	9
NRS	102	Nursing Care II OR	10
NRS	200	**LPN to ADN Transition	(3)
NRS	203	Nursing Care III	9
NRS	204	Nursing Care IV	10
		Total CREDITS:	**71-72**

*General Education course

**Taken only by Licensed Practical Nurses who have been admitted to the program and have and have met the pre-requisites.

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course . Note: Proof of active status on the Kentucky Medicaid Nurse Aide Registry or its equivalent is required prior to enrolling in the first nursing course. CPR certificate for Health Care Providers/Professional Rescuer must be obtained prior to enrolling in the first nursing course and certification must be kept current throughout the program.

Diploma

Academic/Career Mobility Program in Nursing – Practical Nursing - 5116017049

(Offered at BGT, SEC)

BIO	137	*Human Anatomy & Physiology I	4
BIO	139	*Human Anatomy & Physiology II	4
ENG	101	*Writing I	3
MAT	110	Applied Mathematics OR	3
MAT	150	College Algebra	(3)
PSY	110	*General Psychology	3
PSY	223	*Developmental Psychology	3
		*Oral Communications course	3
NRS	101	Nursing Care I	9
NRS	102	Nursing Care II	10
		Total CREDITS:	**42**

*General Education course

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first nursing course.

Note: Proof of active status on the Kentucky Medicaid Nurse Aide Registry or its equivalent is required prior to enrolling in the first nursing course. CPR certificate for Health Care Providers/Professional Rescuer must be obtained prior to enrolling in the first nursing course and certification must be kept current throughout the program.

Suggested Electives:

NRS	100	Enhancing Nursing Student Success	(3)
AHS	115	Medical Terminology	(3)
NSG	126	Pharmacology in Nursing	(3)

Nursing - Integrated Nursing

The Integrated Nursing Program provides a seamless educational pathway in nursing which allows students to choose multiple career options. The Integrated Nursing program is designed to deliver nursing education to a cohort group of students with the opportunity to complete the Practical Nursing level after one year or to complete the Associate Degree in Nursing after two years of nursing education. The curriculum is structured around a clearly defined organizing framework and provides the foundation for a competency-based approach to nursing education through the utilization of interactive and student-focused learning strategies. Content and performance-based outcomes for the nursing courses are selected, developed, and leveled from simple to complex. Classroom instruction in theory and basic nursing skills is provided on campus. Under the guidance of program faculty, students gain valuable experience in the care of clients across the lifespan in a variety of health care settings and/or community agencies: hospitals, long-term care facilities, clinics and child care centers. (Transportation to the community agencies is the responsibility of each student.)

Intrinsic to the three roles of the nurse -- provider of care, manager of care, and member of the discipline are the eight components of nursing practice. The eight core components are: professional and ethical behaviors, communication and collaboration, critical thinking, safety, human caring phenomenon, teaching and learning, management and collaboration, and health promotion. These core components are introduced, developed, and built upon throughout the curriculum.

The Associate Degree Nursing option prepares graduates to provide and manage client care and to become members within the discipline of nursing. Nursing is the application of a specialized body of knowledge and skills obtained from social and biological sciences in providing evidenced-based clinically competent care to individuals across the life span. The nursing process is utilized for clinical decision making, to guide care and client interactions. The goals of nursing are to promote autonomy, respect for human dignity, restore and promote optimal health, and assure clients' right to self-determination.

The Practical Nursing option prepares individuals to practice within the legal scope of practical nursing under the supervision of a registered nurse or physician. Use of the nursing process at the practical nursing level toward the maintenance of health and prevention of illness, the observation and nursing care of persons experiencing changes in their health processes, and the evaluation of health practices of clients are emphasized.

Students who choose practical nursing as a career can complete the components in one year and are eligible to apply for licensure as a practical nurse. Graduates are eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN). Students choosing the Associate in Applied Science degree in Nursing can complete the requirements in two years. Graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Acceptance into the Integrated Nursing program is based on a selective admissions process. In order to be considered for admission, applicants must comply with college and program admission requirements prior to March 1 for admission to a fall first semester NIP course (July 1 for admission to a spring first semester NIP course).

Qualified Licensed Practical Nurses may earn credit for the first and second semester of nursing courses based upon specific college offerings, work experience, and active licensure status.

Progression in the Integrated Nursing program is contingent upon achievement of a grade of "C" or better in each biological science, nursing and mathematics course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale). Students select their career preference upon admission to the program, but may choose to change their career plan while in the program without reapplying for admission.

CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, and proof of active status on the Medicaid Nurse Aide Registry is required prior to enrolling in the first nursing course.

The Kentucky Board of Nursing may deny a nursing graduate admission to the NCLEX Exam if an individual has been convicted of a misdemeanor or felony which involves acts that bear directly on the qualifications of the graduate to practice nursing.

The Madisonville Community College Associate Degree Nursing program is currently accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, Georgia 30326.

Note: Hours Exception (69-72 for the A.A.S.) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Nursing - 5116017069

(Offered at HZC, MDC)

General Education:

BIO	135	Basic Anatomy and Physiology with Laboratory*	4
PSY	110	General Psychology	3
COM	181	Basic Public Speaking	3
ENG	101	Writing I	3
CIS	100	Introduction to Computers OR demonstrated competency	0-3
ENG	102	Writing II	3
MAT	150	College Algebra	3
		Heritage/Humanities/Foreign Language	3

Technical or Support Courses:

NIP	102	Introduction of Pharmacology	3
NIP	116	Fundamentals of Nursing	10
AHS	100	Human Growth and Development	2
NIP	120	Care of the Childbearing Family	3
NIP	128	Medical Surgical Alteration	10
NIP	205	Pathophysiology for Nursing Practice	4
NIP	210	Advanced Nursing Practice	8
NIP	215	Leadership and Specialty Practice	7
		Total Credits	**69-72**

NOTE: CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout

the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, is required prior to enrolling in the first nursing course.

*BIO 137 and BIO 139 may be substituted for BIO 135.

Diploma

Practical Nursing - 5116134049

(Offered at HZC, MDC)

General Education:

BIO	135	Basic Anatomy and Physiology with Laboratory*	4
PSY	110	General Psychology	3
COM	181	Basic Public Speaking	3
ENG	101	Writing I	3
CIS	100	Introduction to Computers OR Demonstrate competency	0-3

Technical or Support Courses:

NIP	102	Introduction of Pharmacology	3
NIP	116	Fundamentals of Nursing	10
AHS	100	Human Growth and Development	2
NIP	120	Care of the Childbearing Family	3
NIP	128	Medical Surgical Alteration	10
NIP	140	Practical Nursing Role Transition	6
		Total Credits	**47-50**

Note: CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of successful completion of a minimum 75-hour nursing assistant course, or its equivalent, is required prior to enrolling in the first nursing course.

*BIO 137 and BIO 139 may be substituted for BIO 135.

Certificate

Kentucky Medication Aide - 5116132030

NOTE: After the student completes the second semester of the Integrated Nursing program, the student is eligible to sit for the KMA exam.

Nursing - Practical Nursing

The Practical Nursing program prepares individuals to practice within the legal scope of practical nursing under the supervision of a registered nurse or physician. Use of the nursing process at the practical nursing level toward the maintenance of health and prevention of illness, the observation and nursing care of persons experiencing changes in their health processes, and the evaluation of health practices of patients are emphasized.

Classroom instruction in theory and basic nursing skills is provided on campus. Under the guidance of program faculty, students gain valuable experience in the care of all ages in a variety of health care settings and/or community agencies - hospitals, long-term care facilities, clinics and child care centers. (Transportation to the community agencies is the responsibility of each student.)

Acceptance in the Practical Nursing program is based on a selective admission process.

Progression in the Practical Nursing program is contingent upon achievement of a grade of "C" or better in each course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

CPR requirements must be successfully completed prior to enrolling in the first nursing course and must be kept current throughout the program. Documentation of active status on the Medicaid Nurse Aide Registry or successful completion of an equivalent course within the previous three years is required prior to enrolling in the first nursing course.

Note: The Kentucky Board of Nursing (KBN) may deny a nursing graduate admission to the NCLEX-PN Exam if an individual has been convicted of a misdemeanor or felony that involves acts that bear directly on the qualifications of the graduate to practice nursing.

Diploma

Practical Nurse

(Offered at ASC, BLC, BGT, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SMC,WKC)

Practical Nurse Option 1 – Traditional - 511613401

(Offered at BGT, BLC, ELC, GTW, JFC, SMC)

General Education:

Area 1 =

TEC	200	Technical Communications OR	3
ENG	101	Writing I OR	(3)
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

BIO	135	Basic Anatomy & Physiology with Laboratory OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
		Subtotal	**7-11**

Technical Core:

AHS	100	Human Growth & Development OR	2
PSY	110	General Psychology AND	(3)
PSY	223	Developmental Psychology	(3)
NPN	100	Introduction to Nursing & Health Care System AND	2
NPN	105	Development of Care Giver Role AND	6
NPN	110	Pharmacology I OR	2
NPN	115	*Practical Nursing Bridge Course	(6)
NPN	125	Mental Health	3
NPN	130	Pharmacology II	3
NPN	135	Introduction to Health Deviations	6
NPN	200	Med Surg I	5
NPN	201	Child Bearing Family	3
NPN	205	Med Surg II	5
NPN	210	Clinical Practicum	4
NPN	215	Nursing Trends & Issues	1
		Subtotal	**38-46**
		Total Credits:	**45–57**

*Taken by advanced nursing assistant and allied health graduates.

Practical Nurse – Option 2 – Traditional Modified - 511613402

(Offered at ASC, BSC, HEC, HPC, MYC, OWC, WKC)

General Education:

Area 1 =

TEC	200	Technical Communications OR	3
ENG	101	Writing I OR	(3)
COM	181	Basic Public Speaking OR	(3)
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

BIO	135	Basic Anatomy & Physiology with Laboratory OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
		Subtotal	**7-11**

Technical Core:

AHS	100	Human Growth & Development OR	2
PSY	110	General Psychology AND	(3)
PSY	223	Developmental Psychology	(3)
AHS	120	Medical Terminology OR	1
AHS	115	Medical Terminology OR	(3)
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
NPN	101	Nursing Fundamentals AND	6
NPN	111	Pharmacology OR	3
NPN	115	*Practical Nursing Bridge Course	(6)
NPN	125	Mental Health	3

NPN	135	Introduction to Health Deviations	6
NPN	201	Child Bearing Family	3
NPN	202	Med-Surg I Alterations	6
NPN	206	Med-Surg II Alterations	6
NPN	210	Clinical Practicum	4
NPN	215	Nursing Trends & Issues	1
		Subtotal	**38-47**
		Total Credits	**45-58**

Recommended Electives:

FHM	100	Dosage Calculations	(2)
MAT	110	Applied Math	(3)
AHS	105	Introductions to Health Occupations	(3)
AHS	130	Infection Control	(2)
NSG	299	Selected Topics in Nursing: (Topic)	(1-4)

*Taken by advanced nursing assistant and allied health graduates.

Practical Nurse – Option 3 – Modular - 511613403

(Offered at JFC)

General Education:

Area 1 =

ENG	101	Writing I	3

Area 2 =

BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
MAT	110	Applied Mathematics	3
PSY	110	General Psychology	3
		Subtotal	**17**

Technical Core:

PSY	223	Developmental Psychology	3
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin	(3)
NPN	106	Fundamentals of Nursing Care	6
NPN	108	Pharmacology in Nursing	3
NPN	125	Mental Health	3
NPN	140	Nursing Care I	3
NPN	201	Child Bearing Family	3
NPN	208	Nursing Care II	10
NPN	210	Clinical Practicum	4
NPN	215	Nursing Trends & Issues	1
		Subtotal	**39**
		Total Credits:	**56**

Certificates

Medicaid Nurse Aide - 5116132020

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

Available Completely Online

MNA	100	Medicaid Nurse Aide OR	3
NAA	100	Nursing Assistant Skills I OR	(3)
NAA	125	Advanced Nursing Assistant	(6)
		Total Credits	**3-6**

Kentucky Medication Aide - 5116132030

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

KMA	100	Kentucky Medication Aide	5
		Total Credits	**5**

Occupational Therapy Assistant

The Occupational Therapy Assistant Program is designed to provide a quality educational experience that will train prospective professionals in the art and science of promoting and maintaining the holistic health and wellness of people, organizations, and populations through engagement in occupation. Graduates will be able to perform/engage as entry level professionals under the supervision of an Occupational Therapist (OT). Graduates will develop skills necessary for employment as Certified Occupational Therapy Assistants, thereby meeting the students' individual needs and the expressed health-care needs of the local and extended communities served by the Colleges. The program strives to fill a growing need for professionals able to contribute to all facets of occupational therapy, from community-based programs to client-centered intervention. The program promotes the value and professional importance of life-long learning.

A basic background in natural sciences, mathematics, communication, and behavioral sciences undergirds the specialized course work. Specialized course work prepares students for the certification examination they will take to become Certified Occupational Therapy Assistants (COTA). Employment may be in hospitals, rehabilitation facilities, nursing homes, clinics, and other health care facilities, as well as within pediatric, community, or educational settings.

Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first OTA course.

The Occupational Therapy Assistant Program is accredited by the Accreditation Council on Occupational Therapy Education (ACOTE), of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Associate in Applied Science

Occupational Therapy Assistant - 5108037009

(Offered at JFC, MDC)

General Education Core:

ENG	101	Writing I	3
PSY	110	General Psychology	3
PSY	223	Developmental Psychology	3
COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)
		Heritage/Humanities/Foreign Language	3
		Total	**15**

Option 1 - 510803701

(Offered at MDC)

Additional General Education (MDC Only):

BIO	135	Basic Anatomy and Physiology with Laboratory**	4
MAT	150	College Algebra	3

Additional Technical Support Course (MDC Only):

AHS	120	Medical Terminology	1
		Subtotal	**23**

Technical Core :

OTA	101	Introduction to Occupational Therapy	3
OTA	126	Level IA Fieldwork	1
OTA	146	Occupational Therapy in Mental Health	3
OTA	136	Physical Dysfunction	4
OTA	226	Level IB Fieldwork	1
OTA	246	Pediatric Issues in Occupation Therapy	3
OTA	256	Elder Issues in Occupational Therapy	2
OTA	206	Community Practice	2
OTA	236	Professional Transitions and Management	2
OTA	266	Level IIA Fieldwork	5
OTA	276	Level IIB Fieldwork	5
		Subtotal	**31**

Additional Technical Courses (MDC only):

OTA	113	Applied Anatomy and Kinesiology	2
OTA	115	Skills and Interventions I	2
OTA	125	Assistive Technology and Documentation	2
OTA	225	Skills and Interventions II	2
OTA	286	Clinical Seminar	2
		Subtotal	**10**
		MDC Option 1 Total	**64**

**(BIO 137 & BIO 139) will be accepted as equivalent for BIO 135 required course.

Option 2 - 510803702

(Offered at JFC)

Additional General Education (JFC Only):

BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
MAT	110	Applied Mathematics OR	3
MAT	150	College Algebra	(3)
SOC	101	Introduction to Sociology	3
ENG	102	Writing II	3
		Subtotal	**32**

Technical Core:

OTA	101	Introduction to Occupational Therapy	3
OTA	126	Level IA Fieldwork	1
OTA	146	Occupational Therapy in Mental Health	3
OTA	136	Physical Dysfunction	4
OTA	226	Level IB Fieldwork	1
OTA	246	Pediatric Issues in Occupation Therapy	3
OTA	256	Elder Issues in Occupational Therapy	2
OTA	206	Community Practice	2
OTA	236	Professional Transitions and Management	2
OTA	266	Level IIA Fieldwork	5
OTA	276	Level IIB Fieldwork	5
		Subtotal	**31**

Additional Technical Courses (JFC only):

OTA	116	Media Principles & Procedures I	2
OTA	216	Media Principles & Procedures II	2

Recommended Additional Technical Courses (JFC only):

OTA	286	Clinical Seminar	(2)
		Subtotal Additional Technical Credit	**4**
		JFC Option 2 Total	**67**

Paramedic Technology

This program will prepare students to function as a paramedic to deliver emergency care in a variety of environments. The paramedic primarily provides pre-hospital emergency care to acutely ill or injured patients. This care is delivered in a variety of environments including: ambulance, mobile advanced life support units, industrial on site units, fire departments, and other sites. The curriculum is designed to provide the student with the didactic knowledge and clinical skills to deliver emergency care. Graduates are eligible to take the Emergency Medical Technician-Paramedic (EMT-P) National Registry Examination upon completion of the program. This program meets the standards set forth by the U.S. Department of Transportation National Standard Training and KCTCS – Kentucky Board of Emergency Medical Services (KBEMS). Students in this program may earn either a certificate or Associate in Applied Science Degree. Credit may be awarded to currently practicing paramedics toward the Associate in Applied Science degree. Enrollment in this program is limited, therefore a selective admissions process is followed. Students are required to be a certified EMT upon acceptance into the program.

Associate in Applied Science

Paramedic Technology - 5109047010

(Offered at OWC)

General Education:

BIO	135	Basic Anatomy and Physiology with Laboratory OR	4
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
		Mathematics	3
ENG	101	Writing I	3
		Oral Communication	3
		Computer Literacy *	0-3
PSY	110	General Psychology	3
		Heritage/Humanities/Foreign Language	
		Subtotal	**19-26**

Technical Courses:

CLA	131	Medical Terminology from Greek and Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
PAR	110	Introduction to Paramedic Practice	8
PAR	120	Paramedic Practice II	8
PAR	220	Paramedic Practice III	5
PAR	230	Clinical Practicum I	7
PAR	240	Field Internship I	7
AHS	201	Management Principles for Health Care Providers	3
		Subtotal	**41**
		Total Credits	**60-67**

*Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.

NOTE: 1. Entering students must be EMT certified prior to entering paramedic program coursework. 2. A student who has passed the EMT-P National Registry Examination or a state licensure or certification examination for Paramedic and is currently practicing as a paramedic and holds a paramedic license/certification may be awarded thirty-five (35) semester credit hours upon the completion of twelve (12) college credit hours from the degree-granting institution and acceptance into a KCTCS paramedic program. Credit will be awarded as follows: eight (8) credit hours for Introduction to Paramedic Practice, eight (8) credit hours for Paramedic Practice II, five (5) credit hours for Paramedic Practice III, seven (7) credit hours for Clinical Practicum I and seven (7) credit hours for Field Internship I. 3) Students must meet residency requirements of the degree-granting institution.

Certificate

Paramedic Technology - 5109043020

(Offered at JFC, OWC)

FHM	100	Dosage Calculations OR	2
MAT	110	Applied Mathematics	(3)
BIO	135	Basic Anatomy and Physiology with Laboratory OR	4
BIO	137	Human Anatomy and Physiology I AND	(4)
BIO	139	Human Anatomy and Physiology II	(4)
CLA	131	Medical Terminology Greek/Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
PAR	110	Introduction to Paramedic Practice	8
PAR	120	Paramedic Practice II	8
PAR	220	Paramedic Practice III	5
PAR	230	Clinical Practicum I	7
PAR	240	Field Internship I	7
		Total Credits	**44-49**

NOTE: Students must be EMT certified prior to entering paramedic program coursework.

Pharmacy Technology

The pharmacy technician performs technical functions under the direction of a Registered Pharmacist; including prescription preparation, inventory, repackaging, and compounding. The essential elements of this program include the history of pharmacy, pharmacy law, medical terminology, drug classification and prescription preparation. Laboratory experience and an externship under the supervision of a licensed pharmacist are required components of the program.

Progression in the Pharmacy Technician program is contingent upon achievement of a grade of "C" or above in each required course and maintenance of a 2.0 cumulative grade-point average or above (on a 4.0 scale).

Diploma

Pharmacy Technician II - 5108054029

(Offered at ASC, JFC, SMC)

General Education:

Area 1 =

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication	(3)

Area 2 =

BIO	130	Aspects of Human Biology OR	3
BIO	135	Basic Anatomy and Physiology with Laboratory OR	(4)
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)

Area 3 =

		Computer Literacy course or demonstrated competency	0-3
		Subtotal	**6-14**
EFM	100	Personal Financial Management OR	3
BAS	120	Personal Finance OR	(3)
WPP	200	Workplace Principles	(3)
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
PHA	110	Pharmacy Procedures and Skills	5
PHA	125	Pharmaceutical Calculations	2
PHA	136	Pharmacology	3
PHA	200	Admixtures for IV Therapy	3
PHA	205	Admixture Preparations	1
PHA	210	Drug Classifications	6
PHA	250	Pharmacy Experience	2-8
		Subtotal	**28-34**
		Total Credits	**34-48**

Certificates

Pharmacy Technician I - 5108053029

(Offered at ASC, JFC, OWC, SMC,WKC)

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication OR	(3)
COM	101	Introduction to Communications*	(3)
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
PHA	110	Pharmacy Procedures and Skills	5
PHA	125	Pharmaceutical Calculations	2
PHA	136	Pharmacology	3
PHA	104	Parenterals**	2
PHA	250	Pharmacy Experience	2
		Computer Literacy	0-3
		Total Credits	**20-23**

Retail Pharmacy Technician - 5108053039

(Offered at ASC, JFC, SMC)

COM	181	Basic Public Speaking OR	3
COM	252	Introduction to Interpersonal Communication OR	(3)
COM	101	Introduction to Communications*	(3)
AHS	115	Medical Terminology OR	3
CLA	131	Medical Terminology from Greek and Latin OR	(3)
OST	103	Medical Office Terminology	(3)
PHA	110	Pharmacy Procedures and Skills	5
PHA	125	Pharmaceutical Calculations	2
PHA	136	Pharmacology	3
		Computer Literacy	0-3
		Total Credits	**16-19**

*COM 101 may be used in certificates. If taken in the diploma, an additional three (3) credits will be needed to meet Area 1 requirements.

**PHA 200 and PHA 205 may substitute for PHA 104 but PHA 104 will not substitute for PHA 200 and PHA 205.

Physical Therapist Assistant

This program prepares the individual to become a physical therapist assistant (PTA) who is able to perform selected components of interventions and data collection under the direction and supervision of a physical therapist. The program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE*). The curriculum combines general education and physical therapy courses. Various facilities are utilized for clinical experiences. The graduate is eligible to sit for the national licensing examination for the physical therapist assistant. Enrollment in this program is limited; therefore, a selective admissions process is followed. Students enrolled in the Physical Therapist Assistant program must achieve a minimum grade of "C" in each required general education course; a minimum grade of "C" in each required PTA didactic course; and a grade of pass in each clinical practicum course to complete the program.

*The Physical Therapist Assistant programs at Hazard Community and Technical College/Southeast Kentucky Community and Technical College, Jefferson Community and Technical College, Madisonville Community College, Somerset Community College, and West Kentucky Community and Technical College are accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA), 1111 North Fairfax Street, Alexandria, VA 22314; telephone: 703-706-3245; email accreditation@apta.org; website: www.capteonline.org.

Associate in Applied Science

Physical Therapist Assistant

(Offered at HZC, JFC, MDC, SEC, SMC,WKC)

Option 1 - 5108067029

(Offered at HZC, JFC, SEC, SMC,WKC)

General Education:

ENG	101	Writing I	3
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
		Heritage/Humanities/Foreign Language	3
PSY	110	General Psychology	3
PSY	223	Developmental Psychology	3
		Computer Literacy	0-3
MAT	150	College Algebra OR	3
MAT	110	Applied Mathematics	(3)
		Oral Communications	3
		Subtotal	**26-29**

NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.

Technical Support Courses:

CPR	100	CPR for Healthcare Professionals OR	1
		CPR certification	(0)
		Subtotal	**0-1**

Technical Courses:

PTA	100	Orientation to Physical Therapy Practice	4
PTA	150	Functional Anatomy and Kinesiology	6
PTA	160	Medical and Surgical Conditions in Physical Therapy	3
PTA	170	Clinical Practicum I	1
PTA	200	Modalities and Procedures in Physical Therapy	5
PTA	220	Physical Therapy Principles and Procedures	5
PTA	240	Clinical Practicum II	2
PTA	250	Neurological Rehabilitation in Physical Therapy	5
PTA	260	Seminar in Physical Therapy	2
PTA	280	Clinical Practicum III	5
		Subtotal	**38**
		Total Credits	**64-68**

Option 2- 5108067039

(Offered at MDC)

General Education:

ENG	101	Writing I	3
BIO	137	Human Anatomy and Physiology I	4
BIO	139	Human Anatomy and Physiology II	4
		Heritage/Humanities/Foreign Language	3
PSY	110	General Psychology	3
PSY	223	Developmental Psychology	3
		Computer Literacy	0-3
MAT	150	College Algebra	3
COM	181	Basic Public Speaking	3
		Subtotal	**26-29**

NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.

Technical Support Courses:

AHS	105	Introduction to Allied Health Occupations	3
		Subtotal	**3**

Technical Courses:

PTA	1501	Functional Anatomy & Kinesiology Lab	3
PTA	1502	Functional Anatomy & Kinesiology Lecture	3
PTA	120	Basic Skills for the PTA	2
PTA	121	Basic Skills for the PTA Lab	2
PTA	170	Clinical Practicum I	1
PTA	222	Pathology & Rehabilitation of Orthopedic Conditions	2
PTA	223	Pathology & Rehabilitation of Orthopedic Conditions Lab	2
PTA	232	Pathology & Rehabilitation of Neurological & Pediatric Conditions	3
PTA	233	Pathology & Rehabilitation of Neurological & Pediatric Conditions Lab	2
PTA	202	Therapeutic Modalities in Physical Therapy	2
PTA	203	Therapeutic Modalities in Physical Therapy Lab	2
PTA	240	Clinical Practicum II	2
PTA	254	Pathology & Rehabilitation of Special Populations & Conditions	1
PTA	255	Pathology & Rehabilitation of Special Populations & Conditions Lab	1
PTA	260	Seminar in Physical Therapy	2
PTA	280	Clinical Practicum III	5
		Subtotal	**35**
		Total	**64-67**

Plastics Processing

The Plastics Processing certificate will prepare students for an entry-level position in plastics processing companies.

Certificate

Plastics Processing - 1506073049

(Offered at MYC)

INDT	233	Statistical Process Control	3
ET	107	Computer Applications for Technicians	4
IS	100	Introduction to Industrial Safety	3
PL	101	Plastic Processes and Materials	4
PL	151	Polymer Science & Testing	4
PL	251	Injection Molding OR	4
PL	261	Plastics Extrusion	(4)
		Total Credits	**22**

Plumbing Technology

Installing water supply and waste disposal systems in residential, commercial, and highly complex industrial sites is the focus of the plumbing program. In addition to practical experiences, instruction is given in laws and codes, blueprint reading, drawing, special equipment and other related areas.

Progression in the Plumbing technology program is contingent upon achievement of a grade of "C" or better in each PLB and BRX course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

Associate in Applied Science

Plumbing Technology - 1605037019

(Offered at ELC)

General Education:

ENG	101	Writing I	3
		Mathematics	3
		Social Interaction	3
		Heritage/Humanities	3
		Science	3
		Oral Communications	3
		Computer Literacy	3
		Subtotal	**21**

Technical Courses:

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
PLB	260	Service AND	2
PLB	261	Advanced Plumbing Lab OR	2
PLB	265	Valve & Faucet Repairs AND	(1)
PLB	267	Water Heater Service & Replacement AND	(1)
PLB	269	Sewer & Drain Cleaning	(1)
PLB	262	Back Flow Prevention	3
PLB	270	License Preparation for Journeyman Exam	3
PLB	298	Plumbing Practicum/Repairs & Maintenance OR	4
PLB	299	Plumbing Cooperative Education	(4)
BRX	220	Blueprint Reading for Construction	3
BAS	120	Personal Finance OR	3

EFM	100	Personal Financial Management	(3)
WPP	200	Workplace Principles OR	3
BAS	250	Business Employability Seminar	(1)
IS	100	Introduction to Industrial Safety OR	3
ISX	100	Industrial Safety	(3)
		Subtotal	**39-42**
		Total	**60-63**

Diploma

Plumber Mechanic - 4605034019

(Offered at ELC, JFC, MYC, SMC)

General Education: 6-9 credit hour requirement for diplomas in areas 1 – 3.

Area 1 =	Writing/Accessing Information, Oral Communication, Humanities, or Heritage	3
Area 2 =	Mathematics	3
Area 3 =	Computer Literacy course or demonstrated competency	0-3
	Subtotal	**6-9**

Technical Courses:

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
PLB	260	Service AND	2
PLB	261	Advanced Plumbing Lab OR	2
PLB	265	Valve & Faucet Repairs AND	(1)
PLB	267	Water Heater Service & Replacement AND	(1)
PLB	269	Sewer & Drain Cleaning	(1)
PLB	262	Back Flow Prevention	3
PLB	270	License Preparation for Journeyman Exam OR	3
PLB	298	Plumbing Practicum/Repairs & Maintenance OR	4
PLB	299	Plumbing Cooperative Education	(4)
BRX	220	Blueprint Reading for Construction	3
EFM	100	Personal Financial Management OR	3
BAS	120	Personal Finance	(3)
WPP	200	Workplace Principles OR	3
BAS	250	Business Employability Seminar	(1)
IS	100	Introduction to Industrial Safety OR	3
ISX	100	Industrial Safety	(3)
		Subtotal	**39-42**
		Total	**45 - 51**

Certificates

Certified Backflow Tester* - 4605033079

(Offered at BSC, ELC, JFC, MYC)

PLB	262	Backflow Prevention	3
		Total	**3**

*Requires that the graduate pass a written test with 80% accuracy and a 3-part performance test

Finish Plumber - 5603033069

(Offered at BSC, ELC, JFC, MYC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
		Electives (Technical Core)	6
		Total	**17**

Maintenance Plumber - 4605033049

(Offered at BSC, ELC, JFC, MYC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	115	Plumbing Applications	4
IS	100	Introduction to Industrial Safety OR	3
ISX	100	Industrial Safety	(3)
		Total	**13**

1st Year Plumber Mechanic - 4605033109

(Offered at BSC, ELC, JFC, MYC, SMC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
		Total	**16**

2nd Year Plumber Mechanic* - 4605033119

(Offered at BSC, ELC, JFC, MYC, SMC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
PLB	262	Backflow Prevention	3
PLB	260	Service AND	2
PLB	261	Advanced Plumbing Lab AND	2
PLB	270	License Preparation for Journeyman Exam OR	3
PLB	260	Service AND	(2)
PLB	265	Valve & Faucet Repairs AND	(1)
PLB	267	Water Heater Service & Replacement AND	(1)
PLB	269	Sewer & Drain Cleaning	(1)
		Total	**24-26**

*Requires that the graduate pass a written test with 80% accuracy and a 3-part performance test

Plumber Estimator - 4605033099

(Offered at BSC, ELC, JFC, MYC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water AND	3
PLB	161	Rough-In of Plumbing Fixtures OR	2
PLB	250	Plumbing Appliances & Fixtures AND	(3)
PLB	251	Pumps & Water Heaters	(2)
PLB	261	Advanced Plumbing Lab OR	2
PLB	265	Valve & Faucet Repairs AND	(1)
PLB	267	Water Heater Service & Replacement AND	(1)
PLB	269	Sewer & Drain Cleaning	(1)
PLB	270	License Preparation for Journeyman Exam	3
BRX	220	Blueprint Reading for Construction	3
WPP	200	Workplace Principles OR	3
BAS	250	Business Employability Seminar	(1)
		Mathematics	3
		Computer Literacy	0-3
		Total	**23-29**

Plumber's Helper - 4605033129

(Offered at ELC, GTW, JFC, MYC, SMC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
		Elective (Technical Core)	3
		Total	**9**

Rough Plumber - 4605033059

(Offered at ELC, JFC, MYC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
		Electives (Technical Core)	6
		Total	**17**

Service & Repair Plumber - 4605033089

(Offered at ELC, JFC, MYC)

PLB	150	Plumbing, Introduction to the Trade AND	3
PLB	151	Basic Plumbing Skills OR	3
PLB	100	Basic Theory of Plumbing AND	(3)
PLB	105	Plumbing Principles	(3)
PLB	160	Plumbing Systems, DWV & Water	3
PLB	161	Rough-In of Plumbing Fixtures	2
PLB	250	Plumbing Appliances & Fixtures	3
PLB	251	Pumps & Water Heaters	2
PLB	260	Service & Code Review	2
PLB	261	Advanced Plumbing OR	2
PLB	265	Valve & Faucet Repairs AND	(1)
PLB	267	Water Heater Service & Replacement AND	(1)
PLB	269	Sewer & Drain Cleaning	(1)
		Total	**20-21**

Professional Craft: Pottery

This program is designed to prepare individuals for employment as professional potters or in pottery-related fields. The curriculum introduces both traditional and contemporary concepts of pottery. The program provides training in technical skills, design skills, and marketing and business essentials. Course work includes development of basic and advanced throwing skills with emphasis on form and design. Study will include pottery studio design and marketing procedures for the professional potter. Graduates will be able to open and operate their own pottery, work for existing pottery businesses, or transfer to a four-year degree program. Upon completion, graduates will receive an Associate in Applied Science degree.

Kiln Building for Professional Potters Certificate:

Includes instruction in the methods of kiln construction, the principles used in designing kilns, and instruction in how to prepare layouts for building kilns. Topics include safety, historical and perspective, materials, design, type, fuels, and firing process. The program will also provide students with hands on experience in the building of kilns for use by professional potters. Students will participate in the building of two different types of kilns using two different types of fuels. Upon successful completion of the program, students will be able to supervise the construction of kilns for use by professional potters.

Professional Raku Pottery Certificate:

Provides students with advanced instruction in the techniques of producing and firing raku pottery. The program provides instruction in advanced shapes and decoration; constructing, loading, and firing a personal raku kiln; and the creation of a body of work for a one-person show and sale.

Certificates

Kiln Building for Professional Potters - 5007113029

(Offered at SEC)

PC	110	Introduction to Pottery	7
PC	250	Professional Kiln Design	5
PC	252	Professional Kiln Building	5
		Total	**17**

Professional Raku Pottery - 5007113019

(Offered at SEC)

PC	110	Introduction to Pottery	7
PC	254	Professional Raku Pottery I	5
PC	256	Professional Raku Pottery II	5
		Total	**17**

Professional Studio Artist

The Professional Studio Artist (PSA) program prepares individuals for careers as independent studio artists and business owners, designers, performers and studio technicians. The curriculum offers technical, design, product development and performance classes in a variety of disciplines coupled with business, marketing and management courses. Class work covering the history and traditions of each discipline, basic studio development and technology requirements will be a vital part of the student's education. Students will complete an option of study and acquire the necessary technical proficiencies, creative problem solving, business skills, production processes and the knowledge to apply these aspects to careers in the craft, music, theater, or applied arts fields.

The AAS Specialization in Wood/Furniture Design prepares a student to start a business in studio furniture design and manufacturing, begin employment as a designer/maker for a small to mid-size woodworking company, work as a model maker/prototype builder for the wood/furniture industry, work as a furniture maker/technician, start a career as a furniture conservationist, or pursue a four-year degree. The program of study will offer a diverse and comprehensive study in furniture design and making; the technology of wood as a material; the technical aspects of wood machinery and hand tool usage; the importance and applications of drawing and design; and the practicality of business ownership, craft marketing and business management.

The diploma in Wood Studio Technician and the certificate in Furniture Making Fundamentals will afford students the opportunity to acquire specialized and basic technical skills as furniture makers. The Wood Studio Certificate will give the student an intensive foundation in woodworking techniques and studio practice. The diploma and certificate programs signify that the student possesses a basic understanding of woodworking and furniture making procedures necessary for entry level positions in the custom furniture industry.

The AAS Specialization in Jewelry/Metals prepares a student to start a business in studio jewelry design, producing one-of-a-kind and limited production works for the private market; work in a commercial studio as a professional jeweler or as a model designer/fabricator; or to enter into the field of jewelry/metal conservation. Creative problem solving and functional design are essentials to the program as well as extensive laboratory coursework in all aspects of bench jewelry repair, the metallurgical science of precious metals, traditional and non-traditional metal processes, processes of jewelry mass production, silversmithing, goldsmithing and work in new technologies such as computer-aided jewelry design.

The diploma in Jewelry/Metals Studio Technician and the certificate in Jewelry/ Metals Fundamentals will afford students the opportunity to acquire specialized and basic technical skills as jewelry makers and tech-

nicians. The Jewelry Studio Certificate will give the student an intensive foundation in metals technique and studio practice. The diploma and certificate programs signify that the student possesses a basic understanding of jewelry design and making procedures necessary for entry level positions in the custom or commercial jewelry industry.

The AAS Specialization in Bluegrass & Traditional Music prepares a student to begin work as a professional bluegrass and traditional musician in the areas of performance, touring, studio recording, studio engineering, and song writing. The option also provides training in music business, management and event promotion while providing the student preparation to pursue a four year degree. Program studies will offer in-depth mentoring and "real world" performance situations for solo, ensemble, and instrumental musicians as well as recording session set-up, sound enhancement and band management.

The diploma in Bluegrass & Traditional Studio Artist and the certificate in Bluegrass & Traditional Music Fundamentals will afford students the opportunity to acquire training in the basics of performance, recording, songwriting and management. The diploma and certificate programs signify that the student possesses a basic understanding of the major components necessary for an entry level career in Bluegrass and Traditional Music.

The AAS specialization in Ceramics prepares a student to start a business in studio production for pottery, tiles, slip casting, mold making and/or kiln building; begin employment as a studio technician to maintain equipment and manage various kinds of kiln firings; work for commercial ceramics businesses as a production designer, decorator, mold-maker, decal maker, conservationist, kiln and/or glaze technician; or to pursue higher degrees in the field of ceramics. The program is design to prepare students to become independent and self-reliant ceramicists in creative and functional design.

The diploma in Ceramics Studio Technician and the certificate in Ceramics Fundamentals will afford students the opportunity to acquire specialized and basic technical skills as a ceramicist and technician. The Ceramics Studio Certificate will give the student an intensive foundation in ceramics technique and studio practice. The diploma and certificate programs signify that the student possesses a basic understanding of ceramic object design and making necessary for entry level positions in custom or commercial ceramic industry. Documentation of computer literacy as defined by KCTCS is required prior to enrolling in the first PSA course.

Associate in Applied Science

Professional Studio Artist - 5002017019

(Offered at HZC)

ENG	101	Writing I	3
MAT	110	Applied Mathematics OR	3
		Any higher level mathematics course	(3)
COM	252	Introduction to Interpersonal Communications OR	3
COM	181	Basic Public Speaking	(3)
		Heritage/Humanities**	3
		Natural/Applied Science	3-4
		Behavioral Science/Social Interaction	3
		Subtotal	**18-19**

**HUM 202 for Bluegrass and Traditional Music Specialization

Wood/Furniture Design Specialization - 500201701

(Offered at HZC)

ART	110	Drawing I	3
ART	120	2-Dimensional Design	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
ACT	101	Fundamentals of Accounting I	3
PSW	111	Introduction to Furniture Making	3
PSW	115	Furniture Making II	3
PSW	116	Wood Finishing	2
PSW	117	Wood Turning for Furniture	3
PSW	210	Furniture Making III	3
PSW	211	Wood Bending and Veneering	3
PSW	212	Chair Design	3
PSW	215	Furniture Making IV	3
PSW	220	Furniture/Wood Product Development	2
PSA	240	Professional Artist Seminar	3
		Sub-Total	**43**
		Total Credits	**61-62**
PSW	230	Furniture Making V (Optional)	(6)

Jewelry/Metals Specialization - 500201702

(Offered at HZC)

ART	110	Drawing I	3
ART	120	2-Dimensional Design	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
ACT	101	Fundamentals of Accounting I	3
PSJ	110	Jewelry/Metals I	3
PSJ	115	Jewelry/Metals II	3
PSJ	116	Ancient Techniques	3
PSJ	117	Metal Casting /Finishing Techniques	2
PSJ	210	Jewelry/Metals III	3
PSJ	211	Hollowware and Metal Forming	3
PSJ	212	Metallurgy of Precious Metals	2
PSJ	215	Jewelry/Metals IV	3
PSJ	216	Stone Setting	3
PSJ	220	Jewelry/Metals Product Development	2
PSA	240	Professional Artist Seminar	3
		Sub Total	**45**
		Total Credits	**63-64**
PSJ	230	Jewelry/Metals IV (Optional)	(6)

Bluegrass and Traditional Music Specialization - 500201703

(Offered HZC)

BAS	200	Small Business Management	3
ACT	101	Fundamentals of Accounting I	3
MUS	174	Theory for Non-Music Majors	3
MUS	150	Classic Instruction to Piano **OR**	0-1
		Competency by audition	
PSM	101	Bluegrass & Traditional Music History I	3
PSM	105	Recording I	1
PSM	108	Songwriting I	1
PSM	110	Individual String Instrument Instruction x 3-4	3-4
PSM	111	Guitar I **OR**	0-1
		Competency by audition	
PSM	115	Bluegrass & Traditional Band/Ensemble x4	8
PSM	116	Bluegrass & Traditional Harmony/Part Singing	3
PSM	121	Bluegrass & Traditional Music History II	3
PSM	125	Recording II **OR**	1
PSM	128	Songwriting II	(1)
PSM	231	Bluegrass & Traditional Music III	3
PSM	235	Recording III **OR**	2
PSM	238	Songwriting III	(2)
PSM	245	Recording IV **OR**	2
PSM	248	Songwriting IV	(2)
PSA	240	Professional Artist Seminar	3
		Subtotal	**42-45**
		Total Credits	**60-64**
PSM	250	Bluegrass & Traditional Music IV (Optional)	3

Ceramics Specialization - 500201704

(Offered HZC)

ART	110	Drawing I	3
ART	120	2-Dimensional Design	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
ACT	101	Fundamentals of Accounting I	3
PSC	112	Ceramics I	3
PSC	115	Ceramics II	3
PSC	117	Glaze Calculations	3
PSC	210	Ceramics III	3
PSC	211	Kiln Operation and Design	3
PSC	212	Ceramic Production Techniques	3
PSC	215	Ceramics IV	3
PSC	220	Ceramics Product Development	3
PSC	230	Ceramics V	3
PSA	240	Professional Artist Seminar	3
		Sub Total	**45**
		Total Credits	**63-67**

Diplomas

Wood Studio Technician - 5002014019

(Offered at HZC)

ENG	101	Writing I	3
MAT	110	Applied Mathematics OR	3
		Any higher level mathematics course	(3)
CIS	100	Introduction to Computers OR	0-3
		Computer competency by exam	
		Subtotal	**6-9**

Technical/Support Courses

ART	110	Drawing I	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
PSW	111	Introduction to Furniture Making	3
PSW	115	Furniture Making II	3
PSW	116	Wood Finishing	2
PSW	117	Wood Turning for Furniture	3
PSW	211	Wood Bending and Veneering	3
PSW	215	Furniture Making IV	3
PSW	220	Furniture/Wood Product Development	2
		Subtotal	**28**
		Total Credits	**34-37**

Jewelry/Metals Technician - 5002014029

(Offered at HZC)

ENG	101	Writing I	3
MAT	110	Applied Math OR	3
		Any higher level math	
CIS	100	Introduction to computers OR	0-3
		Computer competency by exam	
		Subtotal	**6-9**

Technical/Support Courses

ART	110	Drawing I	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
PSJ	110	Jewelry/Metals I	3
PSJ	115	Jewelry/Metals II	3
PSJ	117	Metal Casting /Finishing Techniques	2
PSJ	210	Jewelry/Metals III	3
PSJ	211	Hollowware and Metal Forming	3
PSJ	212	Metallurgy of Precious Metals	2
PSJ	215	Jewelry/Metals IV	3
PSJ	216	Stone Setting	3
		Subtotal	**31**
		Total Credits	**40-43**

Bluegrass & Traditional Studio Artist - 5002014039

(Offered at HZC)

ENG	101	Writing I	3
MAT	110	Applied Math OR	3
		Any higher level math	(3)
CIS	100	Introduction to computers OR	0-3
		Computer competency by exam	
COM	181	Basic Public Speaking	3
		Subtotal	**9-12**

Support Courses

BAS	200	Small Business Management	3
MKT	282	Principles of Marketing	3
HUM	202	Survey of Appalachian Studies I	3
MUS	174	Theory for Non-Music Majors	3
		Subtotal	**12**

Technical Courses

PSM	101	Bluegrass & Traditional Music History I	3
PSM	111	Guitar I OR	0-1
		Competency by audition	
PSM	105	Recording I	1
PSM	108	Songwriting I	1
PSM	110	Individual String Instrument Instruction x4	4
PSM	115	Bluegrass & Traditional Band/Ensemble x4	8
PSM	241	Bluegrass & Traditional Music IV	0-3
PSM	250	Field Experience/Production/Business	0-3
		Subtotal	**17-24**
		Total Credits	**38-48**

Ceramics Studio Technician - 5002014049

(Offered at HZC)

ENG	101	Writing I	3
MAT	110	Applied Mathematics OR	3
		Any higher level mathematics course	(3)
CIS	100	Introduction to Computers OR	0-3
		Computer competency by exam	
		Subtotal	**6-9**

Technical/Support Courses

ART	110	Drawing I	3
ART	130	3-Dimensional Design	3
BAS	200	Small Business Management	3
PSC	112	Ceramics I	3
PSC	115	Ceramics II	3
PSC	117	Glaze Calcuations	2
PSC	210	Ceramics III	3
PSC	211	Kiln Operation and Design	3
PSC	212	Ceramic Production Techniques	3
PSC	215	Advanced Ceramics IV	3
		Subtotal	**30**
		Total Credits	**36-39**

Certificates

Furniture Making Fundamentals - 5002013029

(Offered at HZC)

ART	110	Drawing I	3
PSW	111	Introduction to Furniture Making	3
PSW	115	Furniture Making II	3
PSW	116	Wood Finishing	2
PSW	211	Wood Bending and Veneering	3
		Total Credits	**14**

Furniture Studio - 5002013059

(Offered at HZC)

PSW	111	Introduction to Furniture Making	3
PSW	116	Wood Finishing	2
PSW	117	Wood Turning for Furniture	3
PSW	115	Furniture Making II	3
PSW	211	Wood Bending and Veneering	3
		Total Credits	**14**

Jewelry/Metals Fundamentals - 5002013019

(Offered at HZC)

ART	110	Drawing I	3
ART	120	2-Dimensional Design	3
PSJ	110	Jewelry/Metals I	3
PSJ	115	Jewelry/Metals II	3
PSJ	210	Jewelry/Metals III	3
		Total Credits	**15**

Jewelry Studio - 5002013069

(Offered at HZC)

PSJ	110	Jewelry/Metals I	3
PSJ	116	Ancient Techniques	3
PSJ	212	Metallurgy of Precious Metals	2
PSJ	115	Jewelry/Metals I	3
PSJ	211	Hollowware and Metal Forming	3
PSJ	117	Metal Casting/Finishing Techniques	2
		Total Credits	**16**

Bluegrass & Traditional Music Fundamentals - 5002013039

(Offered at HZC)

BAS	200	Small Business Management OR	3
MKT	282	Principles of Marketing	(3)

Technical Courses

PSM	101	Bluegrass & Traditional Music History I	3
PSM	105	Recording I	1
PSM	108	Songwriting I	1
PSM	110	Individual String Instrument Instruction x2	2
PSM	111	Guitar I OR	0-1
		Competency by audition	
PSM	115	Bluegrass & Traditional Band/Ensemble x2	4
		Total Credits	**14-15**

Ceramics Fundamentals - 5002013049

(Offered at HZC)

ART	110	Drawing I	3
ART	120	2-Dimensional Design	3
PSC	112	Ceramics I	3
PSC	115	Ceramics II	3
PSC	117	Glaze Calculations	3
PSC	211	Kiln Operation and Design	3
		Subtotal	**18**

Ceramics Studio -5002013079

(Offered at HZC)

PSC	112	Ceramics I	3
PSC	117	Glaze Calculations	3
PSC	211	Kiln Operation and Design	3
PSC	115	Ceramics II	3
PSC	212	Ceramics Production Techniques	3
		Subtotal	**15**

Project Lead the Way

Project Lead the Way complements traditional college-preparatory academic studies with challenging career/technical studies, providing students with hands-on exposure to real-life engineering challenges.

Certificate

Engineering Related – PLTW – 1515993019

(Offered at OWC, SEC)

PLW	100	Introduction to Engineering Design	4
PLW	125	Principles of Engineering	4
PLW	150	Digital Electronics	4
PLW	200	Aerospace Engineering or	4
PLW	225	Civil Engineering and Architecture or	(4)
PLW	250	Computer Integrated Manufacturing	(4)
PLW	295	Engineering Design and Development	4

Quality Management Systems

The Quality Management Systems program prepares students to analyze and implement systems for continuous improvement of functions and processes for the manufacturing, government, and service sectors. Students are taught to analyze and solve quality problems, prepare inspection plans and instructions, and select sampling plan applications. Emphasis is placed on learning the tools and techniques for controlling processes, improving process reliability, improving efficiencies, and eliminating defects. Upon completion of the program, graduates are qualified for employment in entry-level managerial or supervisory positions. Course work uses and reflects the body of knowledge found in professional quality certifications such as offered by the American Society for Quality.

Associate in Applied Science

Quality Management Systems - 1507027019

(Offered at ELC)

Available Completely Online

General Education

ENG	101	Writing I	3
ENG	102	Writing II	3
ENG	203	Business Writing OR	3
ENG	204	Technical Writing	(3)
COM	181	Basic Public Speaking	3
MA	109	College Algebra OR	3
MAT	150	College Algebra	(3)
		Computer Literacy	0-3
		Social Interaction Course	3
		Heritage/Humanities course	3
		Science Course	3
		Elective	3
		Subtotal	**27-30 hrs.**

Technical Core—18 hrs.

QMS	101	Introduction to Quality Systems	3
QMS	201	Customer Service Improvement Skills	3
QMS	202	Performance Management	3
QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
		Subtotal	**18 hrs.**

Technical Support Courses—15 -17 hrs.

QMS	151	Metrology and Inspection	3
QMS	210	Lean Processes	3
QMS	212	Project Management	3

QMS	251	Strategic Quality Planning	3
QMS	262	Design of Experiments	4
QMS	299	Topics in Quality Management Systems: (Topic)	1-6
BAS	212	Introduction to Financial Management	3
BRX	120	Basic Blue Print reading	3
CAD	100	Introduction to Computer-Aided Design	3
CAD	150	Introduction to Programming	4
CAD	200	Intermediate Computer-Aided Design	4
CAD	201	Advanced Computer-Aided Design	3
COE	199	Cooperative Education	1-4
ECO	101	Contemporary Economic Issues	3
ELT	110	Circuits I	5
ELT	114	Circuits II	5
ENV	110	Introduction to Environmental Technology	4
ELT	102	Blue Print Reading	2
ET	115	Manufacturing I, Shop and Tools	3
ELT	261	Instrumentation and Measurement	3
IS	100	Introduction to Industrial Safety	3
IS	201	Occupational Health and Industrial Hygiene Methods	4
ISX	100	Industrial Safety	3
ME	105	Basic Engineering Graphics	3
MFG	145	Manufacturing Process	3
MFG	256	Production Management	3
MFG	265	Robotics Fundamentals	3
		Total	**60 - 65**

Diploma

Quality Technician - 1507024029

(Offered at ELC, HPC)

General Education

ENG	101	Writing I	3
MAT	150	College Algebra	3
		Computer Literacy	0-3
		Subtotal	**6-9**

Technical Component

BRX	120	Basic Blue Print Reading	3
QMS	101	Introduction to Quality Systems	3
QMS	151	Metrology and Inspection	4
QMS	201	Customer Service Improvement Skills	3
QMS	202	Performance Management	3
QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
		Subtotal	**28**

Technical Course form AAS List	3
Total	**34-37**

Certificates

Lean Manufacturing Facilitator – 150723119

(Offered at BGT)

QMS	101	Introduction to Quality Systems	3
QMS	210	Lean Processes	3
QMS	220	Quality Audits	3
		Computer Literacy	0-3
		Total Credits	**9-12**

Quality Support - 1507023059

(Offered at ELC)

Available Completely Online

MA	109	College Algebra OR	3
MAT	150	College Algebra	(3)
QMS	101	Introduction to Quality Systems	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
		Total	**12**

Quality Monitor - 1507023069

(Offered at ELC, HPC)

Available Completely Online

ENG	101	Writing I	3
MA	109	College Algebra OR	3
MAT	150	College Algebra	(3)
QMS	101	Introduction to Quality Systems	3
QMS	201	Customer Service Improvement Skills	3
QMS	202	Performance Management	3
QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
		Total	**24**

Quality Leader - 1507023079

(Offered at ELC)

Available Completely Online

QMS	101	Introduction to Quality Systems	3
QMS`	201	Customer Service Improvement Skills	3
QMS	202	Performance Management	3
QMS	251	Strategic Quality Planning	3
		Total	**12**

Quality Specialist I - 1507023089

(Offered at ELC)

Available Completely Online

QMS	101	Introduction to Quality Systems	3
QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
		Total	**12**

Quality Specialist II - 1507023099

(Offered at ELC)

QMS	220	Quality Audits	3
QMS	240	Statistics for Quality I	3
QMS	242	Statistics for Quality II	3
QMS	262	Design of Experiments	4
		Total	**13**

Quality Auditor - 1507023109

(Offered at ELC)

ENG	101	Writing I	3
ENG	102	Writing II	3
ENG	203	Business Writing OR	3
ENG	204	Technical Writing	(3)
QMS	201	Customer Service Improvement Skills	3
QMS	220	Quality Audits	3
		Total	**15**

Radiography

Advanced Imaging in Radiography focuses on the areas of Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) in the Radiological Sciences. Didactic instruction prepares the technologist to work in the areas of CT and MRI in the healthcare setting and to sit for the Advanced Board Exams given by the American Registry of Radiologic Technologists. These courses are offered for technologists who are currently registered by the American Registry of Radiologic Technologists in Radiography or the Nuclear Medicine Technology Certification Board in Nuclear Medicine, or students who have completed one year and are currently enrolled in an accredited radiography or nuclear medicine program, or by consent of the instructor. The core curriculum courses are intended to provide the student with an overall knowledge of advanced patient care and sectional anatomy. The CT and MRI options focus on

the physics, instrumentation and imaging techniques of these modalities. The student may choose CT or MRI or both. Although these courses are organized in a hierarchical pattern, depending on the entry-level knowledge and the needs of the student, they may be taken out of sequence with consent of the instructor.

Note: Hours Exception (71-75 for the A.A.S. and 56-62 for the Diploma) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Radiography - 5109077029

(Offered at ASC, BGT, BLC, ELC, HZC, JFC, MDC, OWC, SEC, SMC,WKC)

General Education:

		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
		Oral Communication	3
ENG	101	Writing I	3
MAT	150	College Algebra OR	3
		Higher Level Mathematics Course	(3)
BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
PHY	172	Physics for Health Sciences OR	2
PHY	152	Introduction to Physics OR	(3)
PHY	171	Applied Physics	(4)
		Subtotal	**25-27**

Support Course:

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology	(3)
		Subtotal	**3**

Option 1 - 510907701

Technical Courses:

IMG	100	Radiography I	7
IMG	101	Clinical I	4
IMG	110	Radiography II	7
IMG	111	Clinical II	4
IMG	201	Clinical III	3
IMG	210	Radiography IV	4
IMG	211	Clinical IV	6
IMG	220	Radiography V	4
IMG	221	Clinical V	6
		Subtotal	**45**
		Total Credits Option 1	**73-75**

Option 2 - 510907702

Technical Courses:

IMG	104	Introduction to Radiography	2
IMG	106	Patient Care in Radiography*	2
IMG	108	Radiographic Procedures I	4
IMG	109	Clinical Practice I	1
IMG	114	Image Production and Acquisition	2
IMG	116	Advanced Patient Care in Radiography	2
IMG	118	Radiographic Procedures II	4
IMG	119	Clinical Practice II	3
IMG	209	Clinical Practice III	3
IMG	214	Imaging Equipment	2
IMG	216	Basic Computed Tomography	1
IMG	219	Clinical Practice IV	6
IMG	224	Radiation Protection & Biology	2
IMG	226	Radiography Pathology	1
IMG	228	Radiography Seminar	2
IMG	229	Clinical Practice V	6
		Subtotal	**43**
		Total Credits Option 2	**71-73**

*NAA 100 may be substituted for IMG 106.

Diploma

Radiography - 5109074029

(Offered at SEC)

General Education:

TEC	200	Technical Communications OR	3
		Oral Communications	(3)
BIO	137	Human Anatomy & Physiology I AND	4
BIO	139	Human Anatomy & Physiology II OR	4
BIO	135	Basic Anatomy and Physiology with Laboratory	(4)
MAT	150	College Algebra OR	3
MAT	110	Applied Mathematics	(3)
		Subtotal	**10-14**

Support Course:

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology	(3)
		Subtotal	**3**

Option 1 - 510907401

Technical Courses:

IMG	100	Radiography I	7
IMG	101	Clinical I	4
IMG	110	Radiography II	7
IMG	111	Clinical II	4
IMG	201	Clinical III	3
IMG	210	Radiography IV	4
IMG	211	Clinical IV	6
IMG	220	Radiography V	4
IMG	221	Clinical V	6
		Subtotal	**45**
		Total Credits Option 1	**58-62**

Option 2 - 510907402

Technical Courses:

IMG	104	Introduction to Radiography	2
IMG	106	Patient Care in Radiography*	2
IMG	108	Radiographic Procedures I	4
IMG	109	Clinical Practice I	1
IMG	114	Image Production and Acquisition	2
IMG	116	Advanced Patient Care in Radiography	2
IMG	118	Radiographic Procedures II	4
IMG	119	Clinical Practice II	3
IMG	209	Clinical Practice III	3
IMG	214	Imaging Equipment	2
IMG	216	Basic Computed Tomography	1
IMG	219	Clinical Practice IV	6
IMG	224	Radiation Protection & Biology	2
IMG	226	Radiography Pathology	1
IMG	228	Radiography Seminar	2
IMG	229	Clinical Practice V	6
		Subtotal	**43**
		Total Credits Option 2	**56-60**

*NAA 100 may be substituted for IMG 106.

Certificate

Advanced Imaging in Radiography- 519073029

Core

IMG	230	Sectional Anatomy for Advanced Imaging	3
IMG	240	Pathology for Advanced Medical Imaging Modalities	**3**
		Subtotal	**6**

Computed Tomography Option – 51907301

(Offered at HZC, OWC, SEC)

IMG	250	Computed Tomography Physics and Instrumentation	3
IMG	260	Computed Tomography Imaging Procedures	3
		Subtotal	**6**
		Total Credits	**12**

Advanced Imaging in Radiography -Magnetic Resonance Imaging Option – 510907302

(Offered at HZC, OWC, SEC)

IMG	255	Magnetic Resonance Physics and Instrumentation	3
IMG	265	Magnetic Resonance Imaging Technology	3
		Subtotal	**6**
		Total Credits	**12**

Real Estate

This program has several purposes: (1) to prepare the student for entry into the real estate field; (2) to provide continuing education for the individual already licensed in real estate; (3) to provide an educational opportunity for persons wanting to fulfill professional or general interest needs; and (4) to provide a foundation for those planning to pursue the specialized fields of appraising, property management, commercial and industrial site selection, consulting, and urban and land use planning.

The curriculum covers such areas as real estate principles and practices, appraisal, finance, marketing, management, construction, and blueprints. Additional courses in real estate, business, and general education complete the program.

Individuals who complete the program may enter public or private employment in such real estate areas as sales, finance, development, management valuation, and market analysis. With experience, the individual may opt for positions in appraising, consulting, brokerage, and property management.

The Real Estate Program also offers two Real Estate Certificate programs: the Real Estate Pre-Licensing Certificate requiring 6 hours and the Residential Real Estate Certificate requiring 12 hours. The Real Estate Pre-Licensing Certificate provides the information students need to prepare for the Real Estate License exam. The Residential Real Estate Certificate provides students the information needed to enhance their abilities as residential real estate agents.

Associate in Applied Science

Real Estate - 5215017000

(Offered at JFC)

General Education

ENG	101	Writing I	3
ENG	102	Writing II	3
		Computer Literacy	3
		Heritage/Humanities	3
		Mathematics	3
		Oral Communications	3
		Science	3
		Social Interaction	3-4
		Elective(s)	1-3
		Economics	3
		Subtotal	**28-31**

Program Requirements

REA	100	Real Estate Principles I	3
REA	120	Real Estate Marketing	3
REA	121	Appraising	3
REA	122	Construction & Blueprints OR	3
ACH	100	Construction Documents	(3)
REA	201	Property Management	3
REA	202	Real Estate Investments 1	3
REA	220	Real Estate Brokerage Management	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
ACC	201	Financial Accounting I OR	3
ACT	101	Fundamentals of Accounting I	(3)
BAS	267	Introduction to Business Law	3
		Technical Course	1-3
		Subtotal	**34-36**

Technical Courses (Choose one of the following)

CIS	130	Microcomputer Applications	3
REA	203	Commercial & Industrial Property	3
REA	204	Land Planning & Development	3
REA	205	Farm Brokerage	3
REA	212	Real Estate Investment II	3
REA	299	Selected Topics in Real Estate	1-3
REA	221	Basic Income Approach to Property Valuation	1
REA	222	Uniform Standards of Professional Appraisal Practice	1
		Total Credits	**62-67**

Certificates

Real Estate Pre-Licensing - 5215013029

(Offered at BLC, ELC, JFC, MYC)

REA	100	Real Estate Principles I	3
		Subtotal	**3**

Choose one from the following (3 credits)

REA	120	Real Estate Marketing	3
REA	200	Real Estate Principles II	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
		Subtotal	**3**
		Total Credits	**6**

Residential Real Estate - 5215013019

(Offered at ELC, JFC)

REA	100	Real Estate Principles I	3
REA	120	Real Estate Marketing	3
		Subtotal	**6**

Choose two from the following (6 credit hours)

REA	121	Appraising	3
REA	122	Construction and Blueprints	3
REA	200	Real Estate Principles II	3
REA	201	Property Management	3
REA	225	Real Estate Finance	3
REA	230	Real Estate Law	3
		Subtotal	**6**
		Total Credits	**12**

Respiratory Care

The Respiratory Care program prepares the graduate to take an active role in the maintenance and/or restoration of cardiopulmonary homeostasis. The curriculum includes intensive course work in the supporting sciences and general education areas. Classroom instruction is supplemented with learning experiences in the campus laboratory and in area clinical affiliates. Students enrolled in the Respiratory Care program are required to achieve a minimum grade of "C" in each Respiratory Care course.

Although hospitals employ the majority of respiratory therapists, other employers include home care providers, medical clinics, nursing homes, and industry. Graduates are qualified to take the National Board for Respiratory Care examination in order to receive the Certified Respiratory Therapist (C.R.T.) credential. Graduates who successfully completed the CRT examination may additionally write the advanced practice examinations and receive the Registered Respiratory Therapist (RRT) credential.

*Note: The Kentucky Board for Respiratory Care may deny mandatory certification for convicted felons. Questions should be directed to the Kentucky Board for Respiratory Care.

* Note: Computer literacy must be documented by competency exam or by completing a computer literacy course.

Note: Hours Exception (67-70 for the A.A.S) approved by the KCTCS Board of Regents in June 2010.

Associate in Applied Science

Advanced Practice Respiratory Therapist

(Offered at ASC, BGT, BLC, BSC, ELC, JFC, MDC, MYC, SEC, SMC,WKC)

BIO	137	Human Anatomy & Physiology I*	4
BIO	139	Human Anatomy & Physiology II*	4
MAT	150	College Algebra* OR	3
MAT	110	Applied Mathematics* OR	(3)
MAT	146	Contemporary College Mathematics*	(3)
		Oral Communications*	3
		Social Interaction*	3
		Writing I/Accessing Information *	3
		Heritage/Humanities*	3
		General Education Total	**23**

Recommended Additional Course(s)

ENG	102	Writing II	(3)
BIO	226	Principles of Microbiology OR	(3)
BIO	225	Medical Microbiology	(4)

Technical Courses

RCP	110	Cardiopulmonary Anatomy & Physiology	3
RCP	120	Theory & Principles of Respiratory Care OR	4
RCP	122	Fundamentals of Respiratory Care**	(4)
RCP	125	Cardiopulmonary Evaluation OR	4
RCP	140	Cardiopulmonary Assessment**	(2)
RCP	130	Pharmacology	3
RCP	150	Clinical Practice I OR	2
RCP	121	Respiratory Care Practice I **	(1)
RCP	175	Clinical Practice II OR	3
RCP	176	Respiratory Care Practice II **	(2)
RCP	180	Ventilatory Support AND	3
RCP	190	Advanced Ventilitory Support OR	2
RCP	185	Introduction to Mechanical Ventilation** AND	(2)
RCP	195	Patient-Ventilator System Management**	(4)
RCP	200	Clinical Practices III OR	3
RCP	201	Respiratory Care Practice III**	(2)
RCP	204	Emergency and Special Procedures AND	3
RCP	214	Advanced Diagnostic Procedures OR	3
RCP	240	Advanced Cardiopulmonary Evaluation** AND	(3)
RCP	245	Advanced Cardiac Life Support**	(2)
RCP	210	Cardiopulmonary Pathophysiology	3
RCP	212	Neonatal/Pediatric Respiratory Care	3
RCP	225	Clinical Practice IV OR	3
RCP	226	Respiratory Care Clinical Practice IV**	(4)
RCP	228	Preventive and Long Term Respiratory Care	2
RCP	250	Clinical Practice V OR	3
RCP	251	Respiratory Care Practice V**	(4)
		Elective (BCTC requires RCP 260)	0-1
		Technical Course Credit Total	47
		Technical Course Credit Total	45
		Total Credits	**67-70**

*General Education Course

**RCP courses currently only offered and required at BCTC for degree completion at that college.

Certificates

Electrocardiographic and Cardiac Monitoring Technician - 5109083049

(Offered at BLC, BGT, BSC, JFC,WKC)

BIO	137	Human Anatomy & Physiology I*	4
BIO	139	Human Anatomy & Physiology II*	4
MT	150	College Algebra* OR	3
MAT	146	Contemporary College Mathematics* OR	(3)
MAT	110	Applied Mathematics*	(3)

Technical Courses

RCP	110	Cardiopulmonary Anatomy & Physiology	3
RCP	125	Cardiopulmonary Evaluation OR	4
RCP	140	Cardiopulmonary Assessment #	(2)
RCP	150	Clinical Practice I ** OR	2
RCP	121	Respiratory Care Practice I **	(I)
		Total Credits	**17-20**

* General Education Course

** In addition Twenty (20) hours of documented clinical electrocardiographic experience or documented Electrocardiographic & Cardiac Monitoring Competence is required.

RCP courses currently only offered and required at BCTC to complete certificate.

Polysomnographic Technologist - 5109083069

(Offered at BLC, BGT,WKC)

BIO	137	Human Anatomy & Physiology I*	4
BIO	139	Human Anatomy & Physiology II*	4
ENG	101	Writing I	3
MT	150	College Algebra* OR	3
MAT	146	Contemporary College Mathematics* OR	(3)
MAT	110	Applied Mathematics*	(3)

Technical Courses

PSG	100	Introduction to Polysomnography	1
PSG	110	Polysomnography Level I	3
PSG	111	Polysomnography Lab I	1
PSG	115	Polysomnography Practice I	3
PSG	130	Polysomnography Level II	3
PSG	131	Polysomnography Lab II	1
PSG	135	Polysomnography Practice II	3
		Total Credits	**29**

Security Management

The Security Management Coordinator program provides a comprehensive overview of physical security policies, procedures and techniques. Topics covered are perimeter protection, intrusion detection, access control, CCTV, locks and locking devices, lighting, security design and surveys, contingency planning, and acts of violence. Instruction in all types of security hardware: electronic and mechanical door locks, access control systems and their devices, as well as intrusion detection systems and cameras, safes and safe hardware is available.

The Supply Chain Security program provides an overview of the needs and requirements for a safe, secure supply chain. The program looks at threats, and offers solutions. The House Select Committee on Homeland Security issued a comprehensive assessment (February 2004) on the United State's levels of preparation against terrorist activity. The Committee concluded in part "Pathways to the United States by land, sea and air are insecure." Security throughout transportation, storage, shipping and receiving of cargo is addressed in this program. The concept of proactive verses reactive, planning and the overall needs of a security operation are discussed. Specific security systems are discussed, as well as the creation and implementation of security policies. Basic security equipment and procedures, including perimeter protection, intrusion detection, security surveys and CCTV systems are covered, as well as management issues to include terrorism, crisis management and basic guard force management. A Security Design section of the program looks at ways to maximize the security benefit within operational (financial and aesthetic) constraints.

The Antiterrorism Physical Security Specialist program provides a comprehensive overview of a physical security program. Topics covered are access control systems; intrusion detection, both interior and exterior; crisis management; national incident management systems; contracting guard forces; international and domestic terrorism and their threat to America; security surveys/security audits; managing a security operation; IT security; CCTV; contingency planning; locks and locking devices; workplace violence; and perimeter security.

The Safe & Lock Technician program provides a comprehensive hands-on knowledge of safes and locks. This program will provide the technician with the training to service, maintain and troubleshoot safes and locks. Topics covered are electronic access control systems, safe lock servicing – electronic and mechanical, combination lock manipulation, basic safe penetration, locks and locking devices, safe and safe hardware, security hardware, electronic and mechanical door locks.

For all programs: Students will be required to undergo a criminal background investigation. If a student is presently employed by a law enforcement or federal agency that requires criminal checks, this requirement may be waived by LSI.

Certificates

Security Management Coordinator - 4301123010

(Offered at BLC)

LSI	120	Comprehensive Security Specialist	4
LSI	140	Managing Terrorism & Other Crises	1
LSI	150	Professional Locksmithing	4
		Electives	3
		Total Credits	**12**

Electives: A minimum of 3 credit hours must be taken from this list of electives:

LSI	100	Fundamental Principles of Physical Security	2
LSI	105	Force Protection	3
LSI	110	Security Surveys	2
LSI	115	Command Security Officer Training	4
LSI	130	GSA: Locks, Vaults & Containers	4
LSI	131	GSA: Locks, Vaults & Containers Certified Inspector Training	1
LSI	151	Basic Safe Penetration	1
LSI	152	Combination Lock Manipulation	1
LSI	153	Safe Lock Servicing - Mechanical and Electronic	2
LSI	160	Fundamentals of Electricity	2
LSI	170	Electronic Access Control	2
LSI	180	Security and Crime Prevention Management	1
LSI	185	Security and Crime Prevention Countermeasures	1
LSI	190	Security Hardware & Bypass Techniques	1
LSI	195	Tactical Lock (restricted enrollment)	8

Safe & Lock Technician - 4301123040

(Offered at BLC)

LSI	150	Professional Industrial Locksmithing	4
LSI	153	Safe Lock Servicing	2
		Electives	10
		Total Credits	**16**

Electives: A minimum of 10 credit hours must be taken from this list of electives.

LSI	110	Security Surveys	2
LSI	130	GSA: Lock, Vault & Container	4
LSI	151	Basic Safe Penetration	1
LSI	152	Combination Lock Manipulation	1
LSI	160	Fundamentals of Electricity	2
LSI	170	Electronic Access Control	2
LSI	182	Managing Security Operations	2

Surgical First Assisting

The Surgical First Assistant provides aid in exposure, hemostasis, and other technical functions that will help the surgeon carry out a safe operation with optimal results for the patient. This role will vary considerably with the surgical operation, specialty area, and type of facility. Clinical skills performed under direct supervision of the surgeon include the following: positioning the patient, preparing the skin, providing visualization of the operative site, utilizing appropriate techniques to assist with hemostasis, participating in volume replacement or auto transfusion techniques as appropriate, utilizing appropriate techniques in the closure of body planes, selecting and applying appropriate wound dressings and providing assistance in securing drainage system to tissue.

This program provides clinical experience built upon classroom instruction in the basic sciences, patient care, aseptic techniques and surgical procedures. Students enrolled in the Surgical First Assistant Program are required to achieve a minimum grade of "C" in each Surgical First Assistant course. Graduates from the program are eligible to take the certifying exams offered by the National Surgical Assistant Association (CSA) or the National Board of Surgical Technologists and Surgical Assistants (CFA).

Associate in Applied Science

Surgical First Assisting - 5109097039

(Offered at MDC)

BIO	135	Basic Anatomy and Physiology with Laboratory	4
		Computer Literacy	0-3
ENG	101	Writing I	3
		Heritage/Humanities/Foreign Language	3
MAT	150	College Algebra OR	3
MAT	110	Applied Mathematics	(3)
		Social Interaction course	3
		Subtotal	**16-19**

Technical Courses:

SUR	109	Introduction to Surgical Technology AND	3
SUR	110	Surgical Technology Fundamentals OR	9
SUR	101	Surgical Technology Fundamentals/Lab	1
SUR	125	Surgical Technology Skills Practicum I	2
SUR	126	Surgical Technology: Introduction to Skills and Practicum	1
SUR	202	Surgical Technology Clinical	1
SUR	130	Principles of Surgical Pharmacology	2
SUR	200	Surgical Technology Advanced Theory	9
SUR	201	Surgical Technology Skills Practicum II	6
SUR	280	Surgical Anatomy	6
SUR	282	Perioperative Bioscience	3
SUR	284	Principles of Surgical Assisting	3

SUR	295	Surgical First Assistant Clinical	1
	296	Surgical First Assistant Practicum	2
		Subtotal	**49**
		Total Credit Hours	**65-68**

For program admission, student must be a certified Surgical Technologist or an RN with operating room experience OR consent of instructor. For program admission, CPR or BLS certificate must be obtained prior to enrolling in the course; certification must be kept current throughout the program. NOTE: SUR 109 and SUR 110 are equivalent to SUR 100 and AHS 130. SUR 126 and SUR 202 are equivalent SUR 275. BIO 137 & BIO 139 may be substituted for BIO 135.

Certificate

Surgical First Assisting - 5109093020

(Offered at MDC,WKC)

SUR	280	Surgical Anatomy	6
SUR	282	Perioperative Bioscience	3
SUR	284	Principles of Surgical Assisting	3
SUR	295	Surgical First Assistant Clinical	1
	296	Surgical First Assistant Practicum	2
		Total Credit Hours	**15**

CPR or BLS certificate must also be obtained prior to enrolling in the program; certification must be kept current throughout the program. For program admission, student must be a certified Surgical Technologist or an RN with operating room experience. Student must provide current documentation of certificate/licensure.

Surgical Technology

(Curriculum Revision Pending)

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings such as medical offices, out-patient clinics, and the operating room.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic techniques and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

This program provides clinical experience built upon classroom instruction in the basic sciences, patient care, aseptic techniques and surgical procedures. Students enrolled in the Surgical Technology Program are required to achieve a minimum grade of "C" in each course.

Graduates of programs accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) are eligible to take the certifying examination offered by the National Board on Certification for Surgical Technology and Surgical Assisting (NBSTSA)".

The following programs hold accreditation from the Commission on Accreditation of Allied Health Education Programs (CAAHEP) who accredits programs upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA), 6 West Dry Creek Circle, Suite 110; Littleton, CO 80120; Phone: 303-694-9262. Ashland Community and Technical College, Bluegrass Community and Technical College, Bowling Green Technical College, Hazard Community and Technical College, Jefferson Community and Technical College, Madisonville Community College, Maysville Community and Technical College, Owensboro Community and Technical College, Somerset Community College, Southeast Kentucky Community and Technical College, and West Kentucky Community and Technical College.

Associate in Applied Science

Surgical Technology - 5109097019

(Offered at BGT, BLC, BSC, HZC, JFC, MDC, SMC,WKC)

General Education:

BIO	137	Human Anatomy & Physiology I AND	4
BIO	139	Human Anatomy & Physiology II	4
MAT	110	Applied Mathematics OR	3
MAT	150	College Algebra	(3)
ENG	101	Writing I	3
		Social Interaction	3
		Heritage/Humanities	3
		Computer Literacy	0-3
		Subtotal	**20-23**

Technical Courses:

Choose Option 1 or Option 2

Option 1

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
SUR	100	Surgical Technology Fundamentals/Theory	12
BIO	225	Medical Microbiology OR	4
BIO	227	Principles of Microbiology with Laboratory OR	(5)
BIO	118	Microbes and Society	(3)
SUR	101	Surgical Technology Fundamentals Lab	1
SUR	125	Surgical Technology Skills Practicum I	2
SUR	130	Principles of Surgical Pharmacology	2
SUR	200	Surgical Technology Advanced Theory	9
SUR	201	Surgical Technology Skills Practicum II	6
SUR	275	Surgical Technology Advanced Clinical Practicum OR	2
SUR	126	Surgical Technology Introduction to Skills and Practicum AND	(1)
SUR	202	Surgical Technology Clinical	(1)
		Option 1:	**40-42**

Option 2

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
BIO	225	Medical Microbiology OR	4
BIO	227	Principles of Microbiology with Laboratory OR	(5)
BIO	118	Microbes andSociety	(3)
SUR	109	Introduction to Surgical Technology	3
SUR	110	Surgical Technology Fundamentals	9
SUR	101	Surgical Technology Fundamentals Lab	1
SUR	125	Surgical Technology Skills Practicum I	2
SUR	130	Principles of Surgical Pharmacology	2
SUR	200	Surgical Technology Advanced Theory	9
SUR	201	Surgical Technology Skills Practicum II	6
SUR	275	Surgical Technology Advanced Clinical Practicum OR	2
SUR	126	Surgical Technology Introduction to Skills and Practicum AND	(1)
SUR	202	Surgical Technology Clinical	(1)
WPP	200	Workplace Principles	3
		Option 2	**43-45**
		Total Credits for AAS in Surgical Technology	**60-68**

Electives:

SUR	103	Surgical Technology Didactic Practicum	(1)
SUR	270	Pathophysiology for Surgical Technology OR	(2)
MAI	200	Pathophysiology for Medical Assistants	(3)

BAS	120	Personal Finance	(3)
MNA	100	Medicaid Nurse Aide	(3)

Note:

CPR certificate must be obtained prior to enrolling in the first Surgical Technology course and certification must be kept current throughout the Program

Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

SUR 109 and SUR 110 are equivalent to SUR 100 and AHS 130; SUR 126 and SUR 202 are equivalent SUR 275.

Diploma

Surgical Technologist - 5109094019

(Offered at ASC, BGT, BLC, BSC, JFC, MDC, MYC, OWC, SEC,WKC)

General Education: 6-9 credit hour requirement for diplomas in areas 1-3.

Area 1 =		Writing/Accessing Information, Oral Communications, Humanities, Heritage, or Foreign Language	3
Area 2 =			
BIO	135	Basic Anatomy & Physiology with Lab OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II OR	(4)
BIO	130	Aspects of Human Biology	(3)
Area 3 =		Computer Literacy course or demonstrated competency	0-3
		Subtotal	**6-14**

Technical Courses: Choose Option 1 or Option 2

Option 1

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
SUR	100	Surgical Technology Fundamentals/Theory	12
BIO	225	Medical Microbiology OR	4
BIO	227	Principles of Microbiology with Laboratory OR	(5)
BIO	118	Microbes and Society OR	(3)
AHS	130	Infection Control	(2)
SUR	101	Surgical Technology Fundamentals Lab	1
SUR	125	Surgical Technology Skills Practicum I	2
SUR	130	Principles of Surgical Pharmacology	2
SUR	200	Surgical Technology Advanced Theory	9
SUR	201	Surgical Technology Skills Practicum II	6
SUR	275	Surgical Technology Advanced Clinical Practicum OR	2
SUR	126	Surgical Technology Introduction to Skills and Practicum AND	(1)
SUR	202	Surgical Technology Clinical	(1)
WPP	200	Workplace Principles OR	3
BAS	250	Business Employability Seminar	(1)
		Option 1	**40-45**

Option 2

CLA	131	Medical Terminology from Greek & Latin OR	3
AHS	115	Medical Terminology OR	(3)
OST	103	Medical Office Terminology	(3)
SUR	109	Introduction to Surgical Technology	3
SUR	110	Surgical Technology Fundamentals	9
SUR	101	Surgical Technology Fundamentals Lab	1
SUR	125	Surgical Technology Skills Practicum I	2
SUR	130	Principles of Surgical Pharmacology	2
SUR	200	Surgical Technology Advanced Theory	9
SUR	201	Surgical Technology Skills Practicum II	6
SUR	275	Surgical Technology Advanced Clinical Practicum OR	2
SUR	126	Surgical Technology Introduction to Skills and Practicum AND	(1)
SUR	202	Surgical Technology Clinical	(1)
WPP	200	Workplace Principles OR	3
BAS	250	Business Employability Seminar	(1)
		Option 2	**38-40**
		Total Credits for Diploma in Surgical Technologist	**44-59**

Elective(s):

SUR	103	Surgical Technology Didactic Practicum	(1)
SUR	270	Pathophysiology for the Surgical Technologist OR	(2)
MAI	200	Pathophysiology for the Medical Assistant	(3)
EFM	100	Personal Financial Management OR	(3)
BAS	120	Personal Finance	(3)
MNA	100	Medicaid Nurse Aide	(3)

Note:

CPR certificate must be obtained prior to enrolling in the first Surgical Technology course and certification must be kept current throughout the Program.

Computer literacy must be demonstrated either by competency exam or by completing a computer literacy course.

SUR 109 and SUR 110 are equivalent to SUR 100 and AHS 130; SUR 126 and SUR 202 are equivalent SUR 275.

Certificates

Surgical Technology Bridge Program - 5109093019

(Offered at BSC, MDC, OWC)

STN	100	Surgical Technology Fundamentals for Nurses	7
STN	101	Surgical Technology Lab for Nurses	1
STN	102	Surgical Technology Clinical for Nurses	6
STN	110	Surgical Technology Procedures for Nursing	4
		Total Credit Hours	**18**

Surveying and Mapping Technology

The curriculum is arranged for students to gain employment in surveying and mapping. It allows students to gain the educational requirements to sit for the licensing exams in the state of Kentucky. Classes emphasize solving problems encountered in the field of Surveying & Mapping Technology. Students perform routine topographical, boundary and other mapping / surveying projects, as well as Global Positioning (GPS) surveys. Students establish essential data, keep notes, develop preliminary sketches, and prepare working drawings, profile and section maps, volume calculations, and topographic maps. Students use computer mapping and coordinate geometry software to accomplish these tasks.

Associate in Applied Science

Surveying and Mapping Technology - 1511027029

(Offered at BSC)

ENG	101	Writing I	3
		Humanities	3
MAT	116	Technical Mathematics, or	3
		Higher Level Math Course	(3)
		Science	3
		Social Interaction	3
		Subtotal	**15**

Required Technical Courses

		Computer Literacy	3
COM	181	Basic Public Speaking	3
SMT	110	Principles of Surveying	3
SMT	130	Land Surveying Graphics	3
SMT	160	Construction Surveying	3
SMT	210	Advanced Surveying Measurement	3
SMT	220	Surveying Lab	3
SMT	230	Land Boundary Location	3
SMT	250	Mine Surveying	3
SMT	270	Professional Ethics and Conduct for Land Surveyors	3
SMT	290	Boundary Law	3
		Technical Electives Approved by Program Coordinator	12
		Subtotal	**45**
		AAS Total	**60**

Diploma

Surveying Technician III - 1511024019

(Offered at BSC)

Required General Education

ENG	101	Writing I	3
MAT	116	Technical Mathematics	3
		Subtotal	**6**

Required Technical Courses

		Computer Literacy	3
COM	181	Basic Public Speaking	3
SMT	110	Principles of Surveying	3
SMT	130	Land Surveying Graphics	3
SMT	160	Construction Surveying	3
SMT	210	Advanced Surveying Measurement	3
SMT	220	Surveying Lab	3
SMT	230	Land Boundary Location	3
		Technical Electives Approved by Program Coordinator	9
		Subtotal	**33**
		Diploma Total	**39**

Certificate

Surveying Technician II - 1511023029

(Offered at BSC, HZC, SEC)

		Computer Literacy	3
SMT	110	Principles of Surveying	3
SMT	130	Land Surveying Graphics	3
		Technical Electives Approved by Program Coordinator	3
		Certificate Total	**12**

Surveying Technician I - 1511023019

(Offered at BSC, HZC, SEC)

		Computer Literacy	3
SMT	110	Principles of Surveying, or	3
SMT	130	Land Surveying Graphics	(3)
		Certificate Total	**6**

Technical Theatre

The technical Theatre Certificate will prepare students for an entry level position as a theatre technician and/or advanced studies in the areas of lighting, scenery, and sound.

Certificates

Technical Theatre

General Education Courses

THA	101	Introduction to Theatre: Principles and Practice	3
COM	181	Basic Public Speaking (OR)	3
ENG	101	Writing I	(3)

Technical Core

THA	150	Fundamentals of Production	3
THA	250	Stage Electrics	3
THA	260	Stagecraft	3
THA	190	Production Practicum	1

Technical Electives (Select one of the following)

ART	113	3-Dimensional Design	3
ELT	110	Circuits I	5
CAD	102	Drafting Fundamentals	4
WLD	100/101	Oxy-Fuel Systems/ with lab	2/2
CAR	126/127	Introduction to Construction/Intro to Construction Lab	3/1
		Total	**19-21**

Truck Driver Training

Prepares students to drive tractor trailer trucks, apply their knowledge of commercial driving regulations, prepare receipts for loads, maintain truck logs according to state and federal regulations, load and unload trucks, inspect trucks and their equipment. The Transportation Specialist certificate will also include the operation of basic heavy equipment in addition to the routine and minor maintenance and repairs on diesel engines.

Certificates

Tractor Trailer, CDLA I - 4902053010

(Offered at BSC,WKC, MYC)

TRU	100	Truck Driving	6
		Total Credits	**6**

Tractor Trailer, CDLA II - 4902053029

(Offered at JFC)

TNT	110	Basic Operations	3
TNT	120	Safe Operating Practices	3
TNT	210	Advanced Operating Practices	1
TNT	220	Vehicle Systems and Reporting Malfunction	3
TNT	250	Internship	4
		Total Credits	**14**

Tractor Trailer, CDLA III - 4902053039

(Offered at BSC)

TRK	110	Driver Preparation	3
TRK	120	Trucking Safety	3
TRK	130	Instrumentation	3
TRK	140	Systems Check	1
TRK	150	CDL Training	3
TRK	160	Combined Driving	2
TRK	216	Advanced Driver Preparation	1
TRK	220	Advanced Trucking Safety	3
TRK	230	Advanced Controls	1
TRK	240	System Inspections	1
TRK	250	Advanced CDL Preparation	1
TRK	260	Advanced Combined Driving	2
		Total Credits	**24**

Visual Communication

Four programs are offered under the broader heading of Visual Communication. They are Advertising and Design, Multimedia, Printing, and Visual Arts.

Visual Communication: Advertising and Design

The Advertising and Design curriculum emphasizes creative problem solving and insight into the mix of art and technical competence to better prepare students for successful careers in graphic design, advertising design, photography, digital media design, digital video and filmmaking production, and multimedia creation in a highly developed consumer economy driven by sales and marketing activities. Prospective employment opportunities are in advertising agencies, graphic design studios,

news media, photographic studios, film and video production studios, department stores, and other creative services departments and businesses.

The Digital Media Design Certificate has entrance requirements (see catalog) that must be met before being accepted into the program.

All technical courses must be completed with "C" (2.0) or greater to advance in Visual Communication programs.

Associate in Applied Science

Communication Arts Technology - 1001057019

(Offered at JFC)

General Education Requirements

		Computer Literacy*	
ENG	101	Writing I	3
ART	106	Renaissance Through Modern Art History	3
MAT	110	Applied Mathematics OR	3
MAT	146	Contemporary College Mathematics OR	(3)
MAT	150	College Algebra	(3)
		Social Interaction	3
		Science	3
		Total General Education Requirements	**15-18**

Core Communication Art Courses

VCC	100	Introduction to Visual Communication	3
ART	110	Drawing I	3
VCA	132	Illustration for Advertising	3
VCA	170	Advertising Design I	3
VCA	171	Advertising Design II	3
VCA	160	Commercial Photography I	3
VCA	161	Commercial Photography II	3
VCC	166	Digital Imaging	3
		Subtotal	**24**
		Total Core Commercial Art Courses & Gen Ed	**39-42**

Advertising Design Option - 100105701

(Offered at JFC)

VCC	105	Fundamentals Of Typography & Design	3
VCM	115	2-D Animation	3
VCM	220	Webpage Design	3
VCA	270	Advertising Design III	4
VCA	271	Advertising Design IV	4
VCA	290	Folio Seminar	3
VCA	298	Practicum	4
		Subtotal	**24**
		Total Credit Hours for Advertising Design Option	**63-66**

Commercial Photography Option - 100105702

(Offered at JFC)

VCC	266	Advanced Digital Imaging	3
VCM	115	2-D Animation	3
VCM	220	Webpage Design	3
VCA	260	Commercial Photography III	4
VCA	261	Commercial Photography IV	4
VCA	290	Folio Seminar	3
VCA	298	Practicum	4
		Subtotal	**24**
		Total Credit Hours for Commercial Photography Option	**63-66**

Digital Filmmaking Option - 100105712

(Offered at JFC)

ENG	207	Beginning Workshop in Imaginative Writing: Scriptwriting	3
MUS	120	Music Technology I	3
THA	126	Acting I: Fundamentals of Acting	3
VCA	151	Digital Filmmaking I	3
VCA	152	Digital Filmmaking II	3
VCA	251	Digital Filmmaking III	3
VCA	252	Digital Filmmaking IV	3
VCA	290	Folio Seminar	3
VCA	298	Practicum	3
		Subtotal	**26**
		Total Credit Hours for Digital Video Option	**65-68**

*Either successfully passing computer competency exam or taking an approved computer literacy course.

Associate in Applied Science

Design & Technology - 1001057059

Required General Education

MAT	110	Applied Mathematics OR	3
		*Higher Level Mathematics	(3)
		Natural Science	3
		Social Interaction	3
ENG	101	Writing I	3
		Heritage/Humanities/Foreign Language	3
		Computer Literacy	0-3
		Subtotal	**15-18**

*MAT 120 is excluded

Required Technical Core:

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing OR	3
ART	110	Drawing I	(3)
VCC	105	Fundamentals of Typography	3
VCA	108	Digital Color Theory	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	125	Introduction to Computer Graphics	3
VCA	280	Portfolio Development	3
COE	199	Cooperative Education OR	3
VCC	298	Practicum OR	(3)
VCC	297	Internship	(3)
		Subtotal	**27**

Graphic Design Option – 100105713

VCC	260	Digital Prepress	3
VCA	240	Package Design	3
VCA	250	Advertising Design	3
VCA	255	Corporate Design	3
		Approved Electives	9
		Subtotal	**21**
		Total Credits for AAS Graphic Design	**63-66**

Interactive Multimedia Option – 100105714

CIS	120	Program Design and Development OR	3
IMD	133	Beginning Web Design OR	(3)
IT	132	Web Page Development	(3)
VCM	115	2-D Animation OR	3
IT	134	Flash OR	(3)
IMD	240	Web Development with Adobe Flash	(3)
NIS	152	Introduction to JavaScript OR	3
IMD	180	Intermediate Web Design	(3)
VCM	220	Webpage Design	3
		Approved Electives	9
		Subtotal	**21**
		Total Credits for AAS Interactive Multimedia	**63-66**

Production Design Option – 100105715

VCC	212	Vinyl Graphics and Applications	3
VCC	214	Dye-Sublimation Processes	3
VCC	216	Pad Printing	3
VCC	218	Digital Printing	3
		Approved Electives	9
		Subtotal	**21**
		Total Credits for AAS Production Design	**63-66**

Diplomas

Graphic Design - 1001054019

(Offered at BSC, GTW)

Required General Education

		Writing/Accessing Information OR	3
		Oral Communications OR	(3)
		Humanities/Heritage	(3)
		Mathematics OR	3
		Natural/Applied Science OR	(3)
		Behavioral Science/Social Interaction	(3)
		Computer Literacy	0-3
		Subtotal	**6-9**

Required Technical Core:

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing OR	3
ART	110	Drawing I	(3)
VCC	105	Fundamentals of Typography	3
VCA	108	Digital Color Therapy	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	125	Introduction to Computer Graphics	3
VCA	280	Portfolio Development	3
COE	199	Cooperative Education OR	3
VCC	298	Practicum OR	(3)
VCC	297	Internship	(3)
VCC	260	Digital Prepress	3
VCA	240	Package Design	3
VCA	250	Advertising Design	3
		Approved Electives	9
		Subtotal	**48**
		Total Credits for Graphic Design Diploma	**54-57**

Interactive Mulitmedia - 1001054119

Required General Education

		Writing/Accessing Information OR	3
		Oral Communications OR	(3)
		Humanities/Heritage	(3)
		Mathematics OR	3
		Natural/Applied Science OR	(3)
		Behavioral Science/Social Interaction	(3)
		Computer Literacy	0-3
		Subtotal	**6-9**

Technical or Support Courses:

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing OR	3
ART	110	Drawing I	(3)
VCC	105	Fundamentals of Typography	3
VCA	108	Digital Color Therapy	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	125	Introduction to Computer Graphics	3
VCA	280	Portfolio Development	3
COE	199	Cooperative Education OR	3
VCC	298	Practicum OR	(3)
VCC	297	Internship	(3)
CIS	120	Program Design and Development OR	3
IMD	133	Beginning Design and Development OR	(3)
IT	132	Web Page Development	(3)
VCM	115	2-D Animation OR	3
IT	134	Flash OR	(3)
IMD	240	Web Development with Adobe Flash	(3)
NIS	152	Introduction to JavaScript OR	3
IMD	180	Intermediate Web Design	(3)
VCM	220	Webpage Design	3
		Approved Electives	9
		Subtotal	**48**
		Total Credits for Interactive Mulitmedia Diploma	**54-57**

Production Design - 1001054129

Required General Education

		Writing/Accessing Information OR	3
		Oral Communications OR	(3)
		Humanities/Heritage	(3)
		Mathematics OR	3
		Natural/Applied Science OR	(3)
		Behavioral Science/Social Interaction	(3)
		Computer Literacy	0-3
		Subtotal	**6-9**

Technical or Support Courses:

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing OR	3
ART	110	Drawing I	(3)
VCC	105	Fundamentals of Typography	3
VCA	108	Digital Color Therapy	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	125	Introduction to Computer Graphics	3
VCA	280	Portfolio Development	3
COE	199	Cooperative Education OR	3
VCC	298	Practicum OR	(3)
VCC	297	Internship	(3)
VCC	212	Vinyl Graphics and Applications	3
VCC	214	Dye-Sublimation Processes	3
VCC	216	Pad Printing	3
VCC	218	Digital Printing	3
		Approved Electives	9
		Subtotal	**48**
		Total Credits for Production Design Diploma	**54-57**

Certificates

Design Assistant – 1001053239

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing OR	3
ART	110	Drawing I	(3)
VCC	105	Fundamentals of Typography	3
VCA	108	Digital Color Therapy	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	125	Introduction to Computer Graphics	3
		Approved Electives	6
		Total Credits for Design Assistant Certificate	**27**

Digital Photography – 1001053249

VCC	100	Introduction to Visual Communication	3
VCC	260	Digital Prepress	3
VCA	120	Digital Photography	3
VCC	166	Digital Imaging	3
VCC	266	Advanced Digital Imaging	3
VCA	108	Digital Color Theory	3
		Approved Electives	6
		Total Credits for Digital Photography Certificate	**24**

Digital Media Design - 1001053019

(Offered at JFC)

Required:

*Entrance Requirements for Digital Media Design Certificate:

+ Accurately type 30 wpm

+ Completion of 15 hours of Graphic Design courses or

+ Consent of instructor through professional portfolio review or one year work experience in related area Technical or Support Courses

VCM	100	Introduction to Multimedia	3
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	210	Computer Illustration II	3
VCC	166	Digital Imaging	3
VCC	205	Introduction to HTML and Java Script	3
VCM	200	Basic Interactive Multimedia	3
VCM	115	2-D Animation	3
VCM	230	Advanced Webpage Design	3
		Total Credits for Digital Media Certificate	**24**

Layout Artist - 1001053159

(Offered at JFC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCA	102	Fundamentals of Drawing I	3
VCC	105	Fundamentals of Typographic Design	3
VCA	106	Creative Typographic Design OR	3
VCA	108	Color Theory Applications	(3)
VCC	110	Two Dimensional Design	3
VCC	220	Computer Page Layout OR	3
VCC	230	Advanced Computer Page Design	(3)
VCC	200	Computer Illustration I OR	3
VCC	210	Computer Illustration II	(3)
VCC	166	Digital Imaging	3
		Computer Literacy	0-3
		Total Credits for Layout Artist Certificate	**24-27**

Multimedia Certificate in Communication Arts - 1001053049

(Offered at JFC)

Technical or Support Courses

CIS	100	Introduction to Computers (or any Computer Literacy)	3
VCA	170	Advertising Design I	3
VCA	161	Commercial Photography II	
VCM	115	2-D Animation	3
VCC	166	Digital Imaging	3
VCM	220	Webpage Design	3
		Total Credits for MM Certificate in Commercial Art	**18**

Electives for all Visual Communication Options:

VCA	120	Digital Photography	3
VCA	151	Digital Filmmaking I	3
VCA	152	Digital Filmmaking II	3
VCA	160	Commercial Photography I	3
VCA	161	Commercial Photography II	3
VCA	170	Advertising Design I	3
VCA	171	Advertising Design II	3
VCA	240	Package Design	3
VCA	250	Advertising Design	3
VCA	251	Digital Filmmaking III	3
VCA	252	Digital Filmmaking IV	3
VCA	225	Corporate Design	3
VCA	260	Commercial Photography III	4
VCA	261	Commercial Photography IV	4
VCA	270	Advertising Design III	4
VCA	271	Advertising Design IV	4
VCA	280	Portfolio Development	3
VCA	290	Folio Seminar	3
VCA	298	Practicum	4
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration	3
VCC	210	Advanced Computer Illumstration	3
VCC	212	Vinyl Graphics and Applications	3
VCC	214	Dye-Sublimation Processes	3
VCC	216	Pad Printing	3
VCC	218	Digital Printing	3
VCC	220	Computer Page Design	3
VCC	230	Advanced Computer Page Design	3
VCC	260	Digital Prepress	3
VCC	266	Advanced Digital Imaging	3
VCC	270	Portable Document Format (PDF) Basics	3
VCM	110	Fundamentals of Animation	3
VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	210	3-D Animation	3
VCM	215	Advanced 2-D Animation	3
VCM	220	Webpage Design	3
VCM	230	Advanced Webpage Design	3
VCM	240	Advanced Autio/Video	3
VCM	290	Multimedia Production Lab	3
VCP	140	Finishing and Binding Operations	3
VCP	230	Press I	6
VCP	250	Screen Printing	3
IMD	133	Beginning Web Design	3
IMD	180	Intermediate Web Design	3
IMD	230	Advanced Web Design	3
IMD	232	Web Design with Adobe Dreamweaver	3
IMD	240	Web Development with Adobe Flash	3
IMD	250	Digital Video Editing with Final Cut Pro	3
IT	130	Web Site Design and Production	3
IT	132	Web Page Development	3
IT	134	Flash	3
CIS	120	Program Design and Development	3
NIS	152	Introduction to JavaScript	3
ENG	207	Beginning Workshop in Imaginative Writing: Scripwriting	3
MUS	120	Music Technology I	3
THA	126	Acting I: Fundamentals of Acting	3

Visual Communication: Multimedia

The Visual Communication: Multimedia Option provides students the skills necessary to prepare and produce multimedia presentations, web sites, animations, audio/video presentations, etc. In order to advance in a Visual Communication: Multimedia (VCM) course, a student must make a letter grade of "C" or better in all required technical courses.

Associate in Applied Science

Multimedia – 1001057039

(Offered at WKC)

General Education Requirements (15-18 credit hours)

		Math	3
		Science	3
		Social Interaction	3
		Heritage/Humanities	3
ENG	101	Writing I	3
		Computer Literacy	0-3
		Subtotal	**15-18**

Technical Core

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	110	Graphic Design Concepts	3
VCC	115	Strategic Concepts	3
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration I	3

VCA	108	Digital Color Theory	3
VCA	280	Professional Portfolio Development	3
VCM	110	Fundamentals of Animation	3
COE	199	Cooperative Education or	3
VCC	297	Internship or	(3)
VCC	298	Practicum	(3)
		Subtotal	**33**

Animation Option - 100105708

(Offered at WKC)

VCM	115	2-D Animation	3
VCM	215	Advanced 2-D Animation	3
VCM	210	3-D Animation	3
VCM	225	Advanced 3-D Animation	3
		Technical Electives	3
		Subtotal	**15**
		Total Credits for Animation Option	**63-66**

Web Design Option - 100105709

(Offered at WKC)

VCM	115	2-D Animation	3
VCM	220	Webpage Design	3
VCM	230	Advanced Webpage Design	3
		Technical Electives	6
		Subtotal	**15**
		Total Credits for Web Design	**63-66**

Digital Design Option - 100105710

(Offered at WKC)

VCC	220	Computer Page Design	3
VCC	266	Advanced Digital Imaging	3
VCC	200	Computer Illustration II	3
VCC	210	Computer Illustration III	3
		Technical Electives	3
		Subtotal	**15**
		Total Credits for Digital Design	**63-66**

Audio/Video Option - 100105711

(Offered at WKC)

VCM	115	2-D Animation	3
VCM	215	Advanced 2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	240	Advanced Audio and Video	3
		Technical Elective	3
		Subtotal	**15**
		Total Credits for Web Design	**63-66**

Diploma

Multimedia - 1001054099

(Offered at WKC)

General Education Requirements (6-9 credit hours)

Writing/Assessing Information OR	3	
Oral Communications OR	(3)	
Humanities/Heritage	(3)	
Mathematics OR	3	
Natural/Applied Science OR	(3)	
Behavioral Science/Social Interaction	(3)	
Computer Literacy	0-3	
Subtotal	**6-9**	

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	110	Graphic Design Concepts	3
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration	3
VCA	108	Digital Color Theory	3
VCA	280	Professional Portfolio Development	3
VCM	110	Fundamentals of Animation	3
COE	199	Cooperative Education OR	3
VCC	297	Internship OR	(3)
VCC	298	Practicum	(3)
		Subtotal	**30**

Multimedia Option – 100105405

(Offered at WKC)

VCC	220	Computer Page Design	3
VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	220	Webpage Design	3
VCC	266	Adv. Digital Imaging	3
		Technical Electives	3
		Subtotal	**18**
		Total Credits for Multimedia Option	**54-57**

Web Design Option- 100105401

(Offered at GTW, WKC)

VCC	266	Adv. Digital Imaging	3
VCM	115	2-D Animation	3
VCM	220	Webpage Design	3
VCM	230	Advanced Webpage Design	3
		Technical Electives	6
		Subtotal	**18**
		Total for Web Design Option	**54-57**

Animation Option- 100105402

(Offered at SMC,WKC)

VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	210	3-D Animation	3
VCM	215	Advanced 2-D Animation	3
VCM	225	Advanced 3-D Animation	3
		Technical Elective	3
		Subtotal	**18**
		Total for Animation Option	**54-57**

Digital Design Option – 100105403

(Offered at WKC)

VCC	210	Advanced Computer Illustration	3
VCC	220	Computer Page Design	3
VCC	266	Adv. Digital Imaging	3
		Approved Electives	6
		Subtotal	**15**
		Total for Digital Design Diploma	**51-54**

Audio/Video Option – 100105404

(Offered at WKC)

VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	240	Advanced Audio and Video	3
VCM	215	Advanced 2-D Animation	3
		Approved Electives	6
		Subtotal	**18**
		Total for Audio/Video Option	**54-57**

Certificates

Multimedia - 1001053059

(Offered at JFC,WKC)

Technical or Support Courses

VCA	108	Digital Color Theory	3
VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography and Design	3
VCC	110	Graphic Design Concepts	3
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration	3
VCC	220	Computer Page Design	3
VCM	110	Fundamentals of Animation	3
VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	220	Webpage Design	3
		Total for Multimedia Certificate	**36**

Animation - 1001053069

(Offered at JFC,WKC)

Technical or Support Courses

VCA	108	Digital Color Theory	3
VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	110	Graphic Design Concepts	3
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration	3
VCM	110	Fundamentals of Animation	3
VCM	115	2-D Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	210	3-D Animation	3
		Total for Animation Certificate	**33**

Web Design - 1001053079

(Offered at BSC, GTW, JFC, SMC,WKC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	110	Graphic Design Concepts	3
VCA	108	Digital Color Theory	3
VCC	150	Computer Fundamentals for Visual Communication OR	3
		Computer Literacy	(3)
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration	3
VCM	115	2-D Animation	3
VCM	220	Webpage Design	3
VCM	230	Adv. Webpage Design	3
		Total	**30**

Audio/Video – 1001053229

(Offered at WKC)

VCA	108	Digital Color Theory	3
VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	150	Computer Fundamentals for Visual communication	3
VCC	166	Digital Imaging	3
VCM	110	Fundamentals of Animation	3
VCM	140	Multimedia Audio and Video	3
VCM	225	Advanced 3-D Animation	3
VCM	240	Adv. Audio and Video	3
		Approved Elective	3
		Total	**30**

Digital Design - 1001053219

(Offered at JFC,WKC)

VCM	100	Introduction to Multimedia OR	3
VCC	100	Introduction to Visual Communication	(3)
VCC	150	Computer Fundamentals for Visual Communication	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration I	3
VCM	200	Basic Interactive Multimedia	3
VCM	220	Webpage Design OR	3
IT	130	Web Site Design and Production	(4)
VCM	115	2-D Animation OR	3
IT	134	Macromedia Flash	(3)
		Approved Elective	3
		Total for Digital Media Certificate	**24-25**

Visual Communication: Printing

Printing is an option under the broader heading of Visual Communication. The Printing curriculum emphasizes technical competence to better prepare students for successful careers in print manufacturing, digital production, and/or printing management in a highly developed consumer economy. Laboratory experiences in page layout, computer illustration, photo imaging, prepress technologies, various printing operations, and finishing and bindery techniques are combined with classroom work. All technical courses must be completed with "C" (2.0) or greater to advance in all Visual Communication programs.

Associate in Applied Science

Printing - 1001057049

General Education Requirements – 15-18 credit hours

MAT	110	Applied Mathematics OR	3
		*Higher Level Mathematics	(3)
		Natural Science	3
		Social Interaction	3
		Heritage/Humanities/Foreign Language	3
ENG	101	Writing I	3
		Computer Literacy	0-3
		Subtotal	**15-18**

*MAT 120 is excluded

Required Core:

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	200	Computer Illustration	3
VCC	166	Digital Imaging	3
VCC	220	Computer Page Design	3
VCP	285	Electronic Prepress	3
VCC	270	Portable Document Format (PDF) Basics	3
COE	199	Cooperative Education OR	3
VCC	297	Internship OR	(3)
VCC	298	Practicum	(3)
		Total	**24**

Print Manufacturing Option - 100105704

VCP	140	Finishing and Binding Operations	3
VCP	230	Press I	6
VCP	274	Press II	6
		Approved Electives	6
		Subtotal	**21**
		Total for Print Manufacturing AAS	**60-63**

Digital Production Artist Option - 100105707

VCA	120	Digital Photography	3
VCC	266	Advanced Digital Imaging	3
VCC	230	Computer Page Design	3
		Approved Electives	12
		Subtotal	**21**
		Total for Digital Production AAS	**60-63**

Diplomas

Digital Production Artist - 1001054069

(Offered at BSC, JFC, SMC,WKC)

General Education Requirements

	Writing/Accessing Information OR	3
	Oral Communications OR	(3)
	Humanities/Heritage	(3)
	Mathematics OR	3
	Natural/Applied Science	(3)
	Behavioral Science/Social Interaction	(3)
	Computer Literacy	0-3
	Subtotal	**6-9**

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCA	120	Digital Photography	3
VCC	166	Digital Imaging	3
VCP	285	Electronic Prepress	3
VCC	200	Computer Illustration	3
VCC	266	Advanced Digital Imaging	3
VCC	220	Computer Page Design	3
VCC	230	Advanced Computer Page Design	3
VCC	270	Portable Document Format (PDF) Basics	3
COE	199	Cooperative Education OR	3
VCC	297	Internship OR	(3)
VCC	298	Practicum	(3)
		Approved Electives	9
		Subtotal	**42**
		Total for Digital Production Artist Diploma	**48-51**

Print Manufacturing- 1001054109

General Education Requirements

	Writing/Accessing Information OR	3
	Oral Communications OR	(3)
	Humanities/Heritage	(3)
	Mathematics OR	3
	Natural/Applied Science	(3)
	Behavioral Science/Social Interaction	(3)
	Computer Literacy	0-3
	Subtotal	**6-9**

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography	3
VCC	200	Computer Illustration	3
VCC	166	Digital Imaging	3
VCC	220	Computer Page Design	3
VCP	285	Electronic Prepress	3
VCP	140	Finishing & Binding Operations	3
VCP	230	Press I	6
VCP	274	Press II	6
VCC	270	Portable Document Format (PDF) Basics	3
COE	199	Cooperative Education OR	3
VCC	297	Internship OR	(3)
VCC	298	Practicum	(3)
		Approved Electives	3
		Subtotal	**42**
		Total for Print Manufacturing Diploma	**48-51**

Certificates

Digital Production Assistant - 1001053109

(Offered at BSC, JFC, SMC,WKC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication OR	3
VCC	105	Fundamentals of Typography and Design	3
VCC	166	Digital Imaging	3
VCC	220	Computer Page Layout OR	3
		Approved Elective	3
		Total	**15**

Print Shop Assistant - 1001053099

(Offered at BSC, JFC,WKC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication OR	3
VCP	140	Finishing and Binding Operations	3
VCP	230	Press I	6
		Total	**12**

Offset Press Operator - 1001053129

(Offered at BSC, JFC,WKC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCP	140	Finishing and Binding Operations	3
VCP	230	Press I	6
VCP	274	Press II	6
		Total	**18**

Specialty Graphics - 1001053169

(Offered at BSC,WKC)

Technical or Support Courses

VCC	100	Introduction to Visual Communication	3
VCC	105	Fundamentals of Typography and Design	3
VCC	110	Two-Dimensional Design	3
VCC	166	Digital Imaging	3
VCC	200	Computer Illustration I	3

Choose 2 from the following list: (6 credits)

VCC	212	Vinyl Graphics and Applications OR	3
VCC	214	Dye Sublimation Process OR	3
VCP	250	Screen Printing AND	3
VCP	216	Pad Printing	3
		Total	**21**

Digital Imaging Assistant - 1001053179

(Offered at BSC, SMC)

Technical or Support Courses

VCC	166	Digital Imaging	3
VCA	120	Digital Photography	3
		Approved Elective	6
		Total	**9-12**

Visual Communication: Visual Arts

The core curriculum of the A.A.S. in Visual Arts and related certificates will provide instruction in the basics of problem solving and will consist of foundation level course studies found in four-year university Visual Arts programs. Courses include instruction in drawing, two-dimensional design, three-dimensional design, painting, sculpture, photography, and the use of digital design software. The Visual Arts/ Transfer program option will prepare students to either work in the field at the conclusion of their studies and/or transfer into a four-year institution to complete a Baccalaureate degree in the above areas.

Students desiring certificates in two-dimensional arts (such as painting or photography), or three-dimensional arts (such as sculpture or ceramics), may select this avenue and/or may participate in the full degree concurrently. The certificates are designed to meet the needs of the many non-traditional and part-time students and artisans of Kentucky. The certificate option will also help introduce the program to students who are not immediately willing to commit to a degree program but whom still desire professional training in the visual arts.

Associate in Applied Science

Visual Communication: Visual Arts - 1001057029

General Education Core

		Writing 6
		Oral Communication 3
		Heritage/Humanities (Includes two AH courses below) 9
		Social Interaction 6
		Science 3
		Science Lab 1
		Math 3
		Computer Literacy 3
		Total General Education **34**

Visual Arts Core

VCC	100	Visual Communication 3
ART	105	Ancient through Medieval Art History 3
		(Humanities General Education)
ART	106	Renaissance through Modern Art History 3
		(Humanities General Education)
ART	110	Drawing I 3
ART	112	2-Dimensional Design 3
ART	113	3-Dimensional Design 3
ART	210	Drawing II OR 3
ART	211	Life Drawing 3
VCA	290	Folio Seminar 3
		Total Visual Arts Core Education
		(Minus Gen Ed AH Courses) **21**

Visual Arts Electives (Choose 9 hours from the following :)

ART	210	Drawing II OR 3
ART	211	Life Drawing 3
ART	220	Painting I 3
ART	221	Painting II 3
ART	240	Ceramics I 3
ART	241	Ceramics II 3
ART	260	Sculpture I 3
VCA	160	Commercial Photography I 3
VCA	161	Commercial Photography II 3
ATS	299	Art Studio Topics 3
		Total Visual Arts Electives Education **9**
		Total AAS in Visual Arts/ Transfer **64**

Certificates

2-Dimensional Studies - 1001053139

(Offered at JFC)

ART	110	Drawing I 3
ART	112	2-Dimensional Design 3
ART	105	Ancient through Medieval Art History OR 3
ART	106	Renaissance through Modern Art History OR
		Approved Art History Course
		2-Dimensional Art Electives 9
		Total 2-Dimensional Studies Certificate **18**

3-Dimensional Studies - 1001053149

(Offered at JFC)

ART	110	Drawing I 3
ART	113	3-Dimensional Design 3
ART	105	Ancient through Medieval Art History OR 3
ART	106	Renaissance through Modern Art History OR
		Approved Art History Course
		3-Dimensional Art Electives 9
		Total 3-Dimensional Studies Certificate **18**

Volumetric Medical Imaging

The Volumetric Medical Imaging (VMI) Certificate is designed for students who are certified radiologic technologists. Students will learn to identify anatomical features in cross section and volume, reconstruct volumetric data from 2D radiological data, recognize pathologic anatomy and manipulate volumes for physicians to review. Graduates will be qualified to seek employment in radiology departments of hospitals or with private companies who contract this service. Academic Program Coordinator permission is required to enter the certificate program. Prerequisites: Basic computer literacy, such as CIS 100 or equivalent, BIO 137, 139.

Certificate

Volumetric Medical Imaging - 5109113019

(Offered at JFC)

BIO	137	Human Anatomy and Physiology I* 4
BIO	139	Human Anatomy and Physiology II* 4
VMI	200	Sectional Anatomy & Pathology I 4
VMI	201	Sectional Anatomy & Pathology II 4
VMI	210	Volumetric Medical Imaging I 4
VMI	211	Volumetric Medical Imaging II 4
		Total Credits **24**

*BIO 137&139 must have been completed within the last 10 years.

Welding Technology

The Welding Technology Program is dedicated to welding education, technology and student success. Students in this program will learn various welding techniques, careers and the skills needed to be successful in the Welding Technology field. Welding occupations are primarily concerned with joining, surfacing, or repairing structures or parts made of metal or other weldable materials. The skills and knowledge needed to determine the appropriate welding technique required for a specific project and to successfully perform that technique are gained through course work and practical experience. The program offers a wide range of credentials including the Associate in Applied Science Degree, Diploma, and eleven certificates in Welding Technology.

Associate in Applied Science

Welding Technology - 4805087019

(Offered at BLC, BSC, ELC, JFC)

ENG	101	Writing I 3
MAT	110	Applied Mathematics OR 3
MAT	116	Technical Mathematics OR ..... (3)
MAT	146	Contemporary College Mathematics OR ..... (3)
MAT	150	College Algebra OR ..... (3)
MA	109	College Algebra ..... (3)
		Heritage/Humanities/Foreign Language 3
		Science OR 3
		Recommended courses of:

PHY	151	Introductory Physics I AND	(3)
PHY	161	Introductory Physics Lab I	(1)
PSY	110	General Psychology OR	3
SOC	101	Introduction to Sociology	(3)
COM	252	Introduction to Interpersonal Communication OR	3
COM	181	Basic Public Speaking	(3)
		Computer Literacy	0-3
		General Education Total Credits	**18 –22**

NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.

Required

WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab	3
WLD	123	Shielded Metal Arc Welding (SMAW) Groove with Backing Lab OR	3
WLD	225	Shielded Metal Arc Welding (SMAW) Open Groove Lab	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab	3
WLD	133	Gas Tungsten Arc Welding (GTAW) Groove Lab	3
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab	3
WLD	143	Gas Metal Arc Welding (GMAW) Groove Lab	3
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	220	Welding Certification	2
WLD	221	Welding Certification Lab	3
WLD	298	Welding Practicum OR	1 - 4
WLD	299	Cooperative Work Experience	(1- 4)
		Technical Electives	3
		Subtotal	**42 - 46**
		Total Credits	**60 – 68**

Diploma

Combination Welder - 4805084029

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

ENG	101	Writing I OR	3
TEC	200	Technical Communications	(3)
MAT	110	Applied Mathematics OR	3
MAT	116	Technical Mathematics OR	(3)
MAT	146	Contemporary College Mathematics OR	(3)
MAT	150	College Algebra OR	(3)
MA	109	College Algebra	(3)
		Computer Literacy	0-3
		General Education Total Credits	**6-9**

NOTE: Computer literacy must be demonstrated either by competency exam or by successfully completing a computer literacy course.

Required

WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab	3
WLD	123	Shielded Metal Arc Welding (SMAW) Groove with Backing Lab OR	3
WLD	225	Shielded Metal Arc Welding (SMAW) Open Groove Lab	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab	3
WLD	133	Gas Tungsten Arc Welding (GTAW) Groove Lab	3
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab	3
WLD	143	Gas Metal Arc Welding (GMAW) Groove Lab	3
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	220	Welding Certification	2
WLD	221	Welding Certification Lab	3
WLD	298	Welding Practicum OR	1-4
WLD	299	Cooperative Work Experience	(1-4)
		Technical Elective	2-3
		Subtotal	**41-46**
		Total Credits	**47-55**

***Technical Electives:**

WPP	200	Workplace Principles	3
WLD	151	Basic Welding A	2
WLD	161	Submerged Arc Welding Lab	1
WLD	181	Advanced Welding Systems Lab	1
WLD	191	Plasma Arc Welding Systems Lab	1
WLD	147	Flux Cored Arc Welding Lab	1
WLD	145	Gas Metal Arc Welding Aluminum Lab	1
WLD	251	Welding Automation Lab	1
WLD	253	Pipe Fitting and Template Development Lab	1
WLD	229	Shielded Metal Arc Welding Pipe Lab B	3
WLD	239	Orbital Tube Welding	1
WLD	240	Materials Technology	2
BEX	100	Basic Electricity for Non-Majors	3
BEX	101	Basic Electricity Lab for Non-Majors	2
FEX	100	Fundamentals of Electricity for Non-Majors	3

*This list is not all inclusive. Other courses may be approved at the discretion of the program coordinator.

Certificates

Welder Helper - 4805083129

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	151	Basic Welding A OR	2
WLD	120	Shielded Metal Arc Welding (SMAW) AND	(2)
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab OR	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW) AND	(2)
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab OR	(3)
WLD	140	Gas Metal Arc Welding (GMAW) AND	(2)
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab OR	(3)
WLD	152	Basic Welding B OR	(5)
IMT	100	Welding for Maintenance AND	(3)
IMT	101	Welding for Maintenance Lab	(2)
		Total Credits	**2-5**

Gas Welder - 4805083039

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	100	Oxy-Fuel Systems	2
WLD	101	Oxy-Fuel Systems Lab	2
		Total Credits	**4**

ARC Cutter - 4805083099

(Offered at ASC, BGT, BLC, BSC, ELC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	110	Cutting Processes	2
WLD	111	Cutting Processes Lab	3
		Total Credits	**5**

Tack Welder - 4805083119

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	151	Basic Welding A OR	2

WLD	120	Shielded Metal Arc Welding (SMAW) AND	(2)
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab OR	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW) AND	(2)
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab OR	(3)
WLD	140	Gas Metal Arc Welding (GMAW) AND	(2)
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab OR	(3)
WLD	152	Basic Welding B	(5)
		Total Credits	**7-10**

Production Line Welder - 4805083059

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab	3
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab	3
WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab	3
		Total Credits	**19-20**

ARC Welder - 4805083029

(Offered at ASC, BGT, BLC, BSC, ELC, GTW, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab OR	3
WLD	123	Shielded Metal Arc Welding (SMAW) Groove with Backing Lab OR	(3)
WLD	225	Shielded Metal Arc Welding (SMAW) Open Groove Lab	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab OR	3
WLD	133	Gas Tungsten Arc Welding (GTAW) Groove Lab	(3)
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab OR	3
WLD	143	Gas Metal Arc Welding (GMAW) Fillet Groove Lab	(3)
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
		Total	**24-25**

Pipeline Welder - 4805083109

(Offered at ASC, BGT, BLC, BSC, ELC, HZC, JFC, MDC, MYC, OWC, SEC, SMC, WKC)

WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	220	Welding Certification	2
WLD	221	Welding Certification Lab	3
WLD	227	Shielded Metal Arc Welding (SMAW) Pipe Lab A	3
WLD	235	Gas Tungsten Arc Welding (GTAW) Pipe Lab A	3
WLD	245	Gas Metal Arc Welding (GMAW) Pipe Lab A	3

Recommended Electives:

WLD	229	Shielded Metal Arc Welding (SMAW) Pipe Lab B	(3)
WLD	237	Gas Tungsten Arc Welding (GTAW) Pipe Lab B	(3)
WLD	247	Gas Metal Arc Welding (GMAW) Pipe Lab B	(3)
WLD	253	Pipe Fitting and Template Development Lab	(1)
		Total	**29-40**

AWS National Skills Standards Level I - 4805083089

(Offered at ASC, BGT, BLC, BSC, ELC, HEC, HPC, HZC, JFC, MDC, MYC, OWC, SEC, SMC,WKC)

WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Processes	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab	3
WLD	123	Shielded Metal Arc Welding (SMAW) Groove with Backing Lab OR	3
WLD	225	Shielded Metal Arc Welding (SMAW) Open Groove Lab	(3)
WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab	3
WLD	133	Gas Tungsten Arc Welding (GTAW) Groove Lab	3
WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab	3
WLD	143	Gas Metal Arc Welding (GMAW) Fillet Groove Lab	3
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
		Total	**33-34**

Shielded Metal Arc Welding - 4805083139

(Offered at BGT, BLC, BSC, ELC, HEC, HZC, JFC, MDC, MYC, OWC, SEC, SMC)

WLD	120	Shielded Metal Arc Welding (SMAW)	2
WLD	121	Shielded Metal Arc Welding (SMAW) Fillet Lab	3
WLD	123	Shielded Metal Arc Welding (SMAW) Groove with Backing Lab OR	3
WLD	225	Shielded Metal Arc Welding (SMAW) Open Groove Lab	(3)
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Process	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
		Total	**17-18**

Gas Metal Arc Welding - 4805083149

(Offered at BGT, BLC, BSL, ELC, HEC, HZC, JFC, MDC, MYC, OWC, SMC, SEC, WKC)

WLD	140	Gas Metal Arc Welding (GMAW)	2
WLD	141	Gas Metal Arc Welding (GMAW) Fillet Lab	3
WLD	143	Gas Metal Arc Welding (GMAW) Groove Lab OR	3
WLD	245	Gas Metal Arc Welding (GMAW) Pipe Lab A OR	(3)
WLD	147	Flux Cored Arc Welding (FCAW) Lab	(1)
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Process	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
		Total	**15-18**

Gas Tungsten Arc Welding - 4805083159

(Offered at BGT, BLC, BSC, ELC, HEC, HZC, JFC, MDC, MYC, OWC, SMC, SEC, WKC)

WLD	130	Gas Tungsten Arc Welding (GTAW)	2
WLD	131	Gas Tungsten Arc Welding (GTAW) Fillet Lab	3
WLD	133	Gas Tungsten Arc Welding (GTAW) Groove Lab OR	3
WLD	235	Gas Tungsten Arc Welding (GTAW) Pipe Lab A	(3)
WLD	170	Blueprint Reading for Welding	2
WLD	171	Blueprint Reading for Welding Lab	3
WLD	100	Oxy-Fuel Systems OR	2
WLD	110	Cutting Process	(2)
WLD	101	Oxy-Fuel Systems Lab OR	2
WLD	111	Cutting Processes Lab	(3)
		Total	**17-18**

Women and Gender Studies

The Women's and Gender Studies Certificate Program provides an interdisciplinary approach that engages students Win exploring and understanding historical and contemporary social issues with a focus on gender. The courses will require students to read, write, and think critically about such issues as identity, sexuality, the media, family, violence, health care, employment/discrimination, political structures, the intersection of gender, race, and poverty and the representation and participation of women on the world stage in artistic and socio-political spheres.

Certificate

Women's and Gender Studies – 0502073019

(Offered at JFC)

WGS	200	Introduction to Women's and Gender Studies in the Social Sciences OR	3
WGS	201	Introduction to Women's and Gender Studies in the Arts and Humanities	(3)
HIS	266	History of American Women to 1920 OR	3
HIS	267	History of American Women from 1920 OR	(3)
HIS	265	History of Women in America	(3)
		Electives (Selected from the following list or by consent of instructor)	6
		Total Credits	**12**

Note: HIS 265 satisfies general education and cultural studies requirements. HIS 266 and HIS 267 do not meet general education nor cultural studies requirements.

Women's and Gender Studies Electives: (Required: 6 credits)

ANT	160	Cultural Diversity in the Modern World	3
ANT	220	Introduction to Cultural Anthropology	3
BIO	120	Human Ecology	3
COM	299	Special Topics in Communication: Gender and Communication	3
ENG	233	Literature and Identities: (Sexuality & Representation)	3
ENG	232	Literature and Place (Sub-topic required)	3
ENG	234	Introduction to Women's Literature	3
FAM	253	Human Sexuality: Development, Behavior, and Attitudes	3
FLK	276	Introduction to Folk Studies	3
FLK	280	Cultural Diversity in the United States	3
GEO	160	Lands and Peoples of the Non-Western World	3
GEO	240	Geography and Gender	3
HIS	265	History of Women in America	3
HIS	266*	History of American Women to 1920*	3
HIS	267*	History of American Women from 1920*	3
HUM	121	Peace Studies	3
PHI	130	Ethics	3
PHI	110	Medical Ethics	3
REL	101	Introduction to Religious Studies	3
SOC	235	Inequality in Society	3
SWK	275	The Family	3
WGS	200*	Introduction to Women's and Genders Studies in the Social Sciences* (if not taken as core)	3
WGS	201*	Introduction to Women's and Gender Studies in the Arts and Humanities* (if not taken as core)	3
		Total Credits	**12**

Wood Manufacturing Technology

(Under Revision)

This diverse program is designed to provide broad-based training for entry-level employees in the secondary wood processing industry. Students are exposed to an array of tasks ranging from product design to installation of finished products including: furniture, cabinetry, and millwork.

Diploma

Wood Technologist - 4807034019

(Offered at JFC)

Required:

CPU	100#	Introduction to Computers	3
DFT	120	Computer Aided Drafting I OR	4
CAD	100	Introduction to Computer-Aided Design	(3)
EFM	100	Personal Financial Management	3
ISX	100	Industrial Safety	3
		Mathematics	3
WMT	110	Technical Drawing And Blueprint Reading	2
WMT	120	Wood Product Manufacturing	4
WMT	160	Wood Finishing	2
WMT	199	Cooperative Education OR	2
WMT	198	Practicum	(2)
WMT	230	Introduction to Panel Processing	2
WMT	240	Cabinet Making Technology	4
WMT	250	Furniture Technology	4
WMT	260	Millwork Technology	4
WMT	280	Estimating	2
WPP	200	Workplace Principles	3
		Electives	2

Electives:

		All WMT Courses	Variable Credit
CAD	200	Intermediate Computer Aided Design	4
		Total Credits	**46-47**

#This course does not meet computer literacy requirements.

Certificates

Cabinetmaker - 4807033019

(Offered at JFC)

Required:

CPU	100	Introduction to Computers	3
DFT	120	Computer Aided Drafting I OR	4
CAD	100	Introduction to Computer-Aided Design	(3)
MTH	110	Applied Mathematics I*	3
WMT	110	Technical Drawing And Blueprint Reading	2
WMT	120	Wood Product Manufacturing	4
WMT	160	Wood Finishing	2
WMT	230	Introduction to Panel Processing	2
WMT	240	Cabinet Making Technology	4
WMT	280	Estimating	2
		Electives (Technical Course List)	2

Technical Electives:

		All WMT Courses	Variable Credit
CAD	200	Intermediate Computer Aided Design	4
		Total Credits	**27-28**

*Curriculum committee in process of changing mathematics requirements.

Furniture Maker - 4807033029

(Offered at JFC)

Required:

CPU	100	Introduction To Computers	3
DFT	120	Computer Aided Drafting I OR	4
CAD	100	Introduction to Computer-Aided Design	(3)
MTH	110	Applied Mathematics I*	3
WMT	110	Technical Drawing And Blueprint Reading	2
WMT	120	Wood Product Manufacturing	4
WMT	160	Wood Finishing	2
WMT	230	Introduction To Panel Processing	2
WMT	250	Furniture Technology	4
WMT	280	Estimating	2
		Electives (Technical Course List)	2

Technical Electives:

WMT	290	Advanced Wood Processing	4
CAD	200	Intermediate Computer Aided Design	4
		Total Credits	**27-28**

*Curriculum committee is in process of changing mathematics requirements.

Millworker - 4807033039

(Offered at JFC)

Required:

CPU	100	Introduction To Computers	3
DFT	120	Computer Aided Drafting I OR	4
CAD	100	Introduction to Computer-Aided Design	(3)
MTH	110	Applied Mathematics I*	3
WMT	110	Technical Drawing And Blueprint Reading	2
WMT	120	Wood Product Manufacturing	4
WMT	200	Lumber Grading	2
WMT	210	Dry Kiln Operation	2
WMT	260	Millwork Technology	4
WMT	270	Moulder/Grinder Operation	2
		Elective (Technical Course List)	2

Technical Electives:

		All WMT Courses	Variable Credit
CAD	200	Intermediate Computer Aided Design	4
		Total Credits	**27-28**

*Curriculum committee is in process of changing mathematics requirements.

Zoo Animal Technology

The Zoo Technology program prepares students for entry-level positions at zoos and related occupations. The curriculum gives students a background in writing, computer applications, communication skills, animal biology, conservation biology, applied mathematics, and basic zoo operations.

Certificate

Zoo Animal Technician - 2607013019

(Offered at JFC)

BIO	112	Introduction to Biology	3
BIO	120	Human Ecology	3
BIO	122	Introduction to Conservation Biology	3
BIO	143	Zoology with Laboratory	4
ZOO	293	Applied Experiences in Zoo Technology	3-6
MAT	110	Applied Mathematics	3
COM	181	Basic Public Speaking	3
		Total	**22-25**

Associate in Fine Arts (A.F.A.) Curricula

Theatre Arts

The Associate in Fine Arts (AFA) in Theatre degree program is designed for students who plan to transfer to a four-year institution in order to pursue a BFA in the Theatre Arts and/or acquire credentials for a career in arts-related areas. The program includes general education requirements, Theatre foundation courses in acting and stagecraft, as well as a wide variety of performance and production-related electives. Students will focus on the development of performance skills and a basic knowledge of technical theatre, while participating firsthand in fully realized theatrical productions every semester. Classes will also encourage analytical skills and critical analysis. Students will be encouraged to participate in state and regional theatre auditions and festivals with audition pieces prepared specifically with an eye toward securing professional work.

Associate in Fine Arts

Theatre - 5006027019

(Offered at BLC)

General Education Core Requirements **25-28**

Writing/Accessing Information

ENG	101	Writing I	3
ENG	102	Writing I	3
		Oral Communications	3
		Heritage/Humanities/Foreign Language (not including THA classes)	3
		Social Interaction	6
		Science with laboratory	4
MA	109	College Algebra OR	3
MA	111	Contemporary Mathematics OR	(3)
MAT	150	College Algebra OR	(3)
		Higher Level Mathematics course	(3)
		Computer Literacy	0-3

A student must pass an approved three (3) credit hour computer literacy course unless the computer competency exam is successfully completed.

Theatre Core **15**

THA	101	Introduction to Theatre	3
THA	126	Fundamentals of Acting	3
THA	226	Acting II: Scene Study (Realism)	3
THA	227	Acting III: Scene Study (Styles)	3
THA	260	Stagecraft	3

Practicum Core **3**

THA	190	Production Practicum (1)(May be repeated)	
THA	191	Performance Practicum (1)(May be repeated) to equal 3 hours, OR	3
TA	195	Special Projects in Theatre Arts (Project Title) OR	(3)
THA	196	Summer Theatre Workshop	(3)

Concentration (Choose 18 hours from the Approved Theatre Electives) **18**

THA	127	Acting Techniques	3
THA	150	Fundamentals of Production	3
THA	200	Introduction to Dramatic Literature	3
THA	283	American Theatre	3
FLM	110	Filmmaking: Treatment through Storyboard	4
FLM	120	Filmmaking: Storyboard through Production	4
FLM	130	Filmmaking: Editing through Distribution	4

(FLM courses are co-requisites)

MUS	192	University Chorus	1

ART	110	Drawing I	3
ENG	281	Introduction to Film	3
ENG	282	International Film Studies	3
IMD	250	Digital Video Editing Final Cut	3
		Other Courses approved by program coordinator	

Summary

General Education Core Requirements	**25–28**
Theatre Core Requirements	**15**
Practicum Core	**3**
Concentration (Approved Theatre Electives)	**18**
Total	**61-64**

Certificate

Filmmaking – From Script to Screen - 5006023019

(Offered at BLC)

The Filmmaking: Script to Screen certificate program will provide students with a hands-on, practical overview of the filmmaking process. In addition to a working knowledge of the elements of filmmaking, graduates will have a greater understanding of the collaborative process, creative problem solving, and critical thinking. Graduates will have an enhanced level of media literacy and deeper understanding of filmmaking as a communication strategy for dissemination of ideas. The curriculum supports the desire of the film industry for a stronger filmmaking workforce in Kentucky

FLM	110	Filmmaking: Treatment to Storyboard	4
FLM	120	Filmmaking: Storyboard through Production	4
FLM	130	Filmmaking: Editing through Distribution	4
THA	126	Acting I	3
THA	190	Production Practicum OR	1
THA	191	Performance Practicum	(1)
		Total Credits	**16**

Visual Arts

The Associate in Fine Arts degree program (AFA in Visual Art) is designed for students who plan to transfer to a four-year institution in order to pursue a BFA in the Visual Arts and/or a career in arts-related areas requiring pre-professional credentials. The program includes general education requirements, visual arts foundation courses in drawing, design and art history, as well as a wide variety of studio art electives. Students will focus on the development of artistic skills and a visual vocabulary for personal expression, while exploring both traditional and nontraditional art areas. Classes will also encourage analytical and creative problem solving skills and experience in both verbal presentation of ideas and critical concepts. A personal portfolio of artwork will be a tangible result of a student completing this program.

Associate in Fine Arts

Visual Arts - 5007027019

(Offered at WKC)

General Education Core Requirements **25-28**

		Writing/Accessing Information	6
ENG	101	Writing I	3
ENG	102	Writing I	3
		Oral Communications	3
		Heritage/Humanities/Foreign Language (not including ART or AH classes)	3
		Social Interaction	6
		Science with laboratory	4
		Mathematics	3
MAT	146	Contemporary College Math (or) higher level math class	
		Computer Literacy	0-3

A student must pass an approved three (3) credit hour computer literacy course unless the computer competency exam is successfully completed.

Fine Arts Core (Visual Art option) **18**

ART	105	Ancient through Medieval Art History	3
ART	106	Renaissance through Modern Art History	3
ART	110	Drawing I	3
ART	112	2-Dimensional Design	3
ART	113	3-Dimensional Design	3
ART	210	Drawing II	3

Concentration (Choose 18 hours from the Approved Art Studio Electives) **18**

ART	211	Life Drawing	3
ART	220	Painting I	3
ART	221	Painting II	3
ART	240	Ceramics I	3
ART	241	Ceramics II	3
ART	260	Sculpture I	3
ART	261	Sculpture II	3
ART	270	Printmaking I	3
ART	271	Printmaking II	3
ART	280	Beginning Film Photography	3
ART	281	Digital Photography I	3
ART	282	Digital Photography II	3
ART	290	Survival Skills for Artists	3
ART	299	Directed Studies in Art	1-3

Summary

General Education Core Requirements	**25–28**
Fine Arts Core Requirements	**18**
Concentration (Approved Art Studio Electives)	**18**
Total	**61-64**