CURRICULA

ARCHITECTURAL TECHNOLOGY

The Architectural Technology program provides instruction in the concepts and skills required for careers in architectural and related professions. Areas of study develop skills necessary for the preparation of construction documents from schematic design approval into design development, contract documents and contract administration phases for the built environment. Emphasis is placed on quality graphic communication. Graduates are prepared to find employment in architectural and related professions including positions in computer and board drafting, estimating, construction management, plan code review, building inspection, graphics, specification writing, urban planning, contracting, sub-contracting, building material sales and management.

For more information, visit the Architectural Technology program Web site: www.uky.edu/LCC/ARCH.

Course ..... Credits

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 185
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..... 8
ENG 101 Writing I*..... 3
ENG 102 Writing II* 3
MAH 125 Technical Mathematics* 3
Heritage/Humanities Course* 3
Oral Communication Course* 3
Science Course* .....
3
Social Interaction Course* 3
Elective Course(s) 1-3

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Total

70 - 72

**General Education Course*

Technical Courses

ACH 180
Selected Topics in Arch Technology: (Topic) 1-3
ACH 194
Visual Composition I 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 293
Presentation Techniques.....3
ACH 294
Specification Writing.....3
ACH 297
Estimating Techniques.....3
ACH 298 Computer 3D Modeling.....3
COE 199 Cooperative Education: Arch Tech.....1-3

BUSINESS TECHNOLOGY

With options in Equine Business Management, Management, Marketing and Retailing, and Real Estate Management

The Business Technology 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. Students select an area of specialty from one of four options: equine business management, management, marketing and retailing, and real estate management.

The curriculum is designed for those who seek entry-level jobs as well as for currently employed individuals wishing to enhance their skills. Students specialize by choosing from the following options:

The **Equine Business Management option** provides the knowledge and skills students need to take advantage of various employment opportunities within the horse industry.

The **Management option** prepares students 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. For more information, visit the Business Technology program Web site at www.uky.edu/LCC/BUS.

Core

Course			Credits
BE	160	Introduction to Business	3
BE	267	Introduction to Business Law	3
	OR		
RE	230	Real Estate Law	(3)
BE	282	Principles of Marketing	3
BE	283	Principles of Management	3
ACC	201	Financial Accounting I	3
ACC	202	Managerial Uses of Accounting Information	3
CIS	105	Introduction to Computing	3
	AND		
CIS	130	Microcomputer Applications	3
	OR		
IMD	100	Introduction to Information Systems	(3)
	AND		
IMD	210	Integrated Information Processing	(3)
COM	181	Basic Public Speaking*	3
	OR		
COM	252	Interpersonal Communications*	(3)
ENG	101	Writing I*	3
ENG	102	Writing II*	3
ENG	203	Business Writing	3
ECO	201	Principles of Economics I*	3
MA	109	College Algebra*	3
MAH	121	Mathematics for Business	3
QT	101	Quality Management Principles	3
Heritage/Humanities/Foreign Language Course*			3
Science Course *			3
		Subtotal	54

**General Education Course*

Management Option

Required:

BE	200	Small Business Management	3
	OR		
BE	256	Operations Management	(3)
BE	274	Human Resource Management	3
	OR		
BE	287	Supervisory Management	(3)
BE	284	Applied Management Skills	3

Choose a total of 6 hours from the following:

BE	120	Personal Finance	3
BE	288	Self Management	3
BE	291	Retail Management	3
BE	298	Principles of Statistical Process Control	3
BE	299	Selected Topics in Business Technology: (Option Topic)	1-3
IMD	275	Workplace Management	3
ACT	277	Managerial Accounting	3
ACT	280	Cost Accounting	3
COE	199	Cooperative Education: Business Technology	1-4
ECO	202	Principles of Economics II+	3
QT	102	Quality Improvement Skills	3
QT	202	Performance Management	3
RE	100	Real Estate Principles I	3
RE	120	Real Estate Marketing	3
		Subtotal	**15**
		Total	**69**

Marketing and Retailing Option

Required:

BE	155	Personal Selling	3
BE	290	Advertising and Promotion	3
BE	291	Retail Management	3
BE	293	Buying and Merchandising	3

Choose 3 hours from the following:

BE	120	Personal Finance	3
BE	200	Small Business Management	3
BE	288	Self Management	3
BE	299	Selected Topics in Business Technology: (Option Topic)	1-3
COE	199	Cooperative Education: Business Technology	1-4
ECO	202	Principles of Economics II	3
		Subtotal	**15**
		Total	**69**

Real Estate Management Option

Required:

RE	100	Real Estate Principles I	3
RE	121	Appraising	3
RE	225	Real Estate Finance	3

Choose 6 hours from the following:

RE	120	Real Estate Marketing	3
RE	122	Construction and Blueprints	3
RE	200	Real Estate Principles II	3
RE	201	Property Management	3
RE	202	Real Estate Investments I	3
RE	220	Real Estate Brokerage Management	3
COE	199	Cooperative Education: Business Technology	1-4
		Subtotal	**15**
		Total	**69**

Equine Business Management Option

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 72

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; construction estimation; construction documentation; construction sight design and waste-water management.

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

For more information, visit the Civil Engineering Technology Web site: http://www.uky.edu/LCC/ET/CET.

Required:

ENG 101 Writing I*..... 3
ENG 102 Writing II* 3
CAD 100
Introduction to Computer-Aided Design..... 3
OR
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*..... 3
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 3
CET 280 Highway Design 3
COE 199 Cooperative Education: CET 3
GIS 120 Introduction to Geographic Information Systems.....3

** General Education Course*
***Other course(s) approved by program coordinator*

COMPUTER INFORMATION SYSTEMS

With options in Applications, Network Technology, and Programming

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

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

The **Network Technology 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 an introduction to at least two programming languages with at least one of the languages studied at the intermediate level. Students completing this option are prepared for entry-level positions in computer programming.

The Computer Information Systems program has a selective admissions policy. In order to be considered for admission to the Computer Information Systems program, each

applicant must be admitted to Lexington Community College and file a letter of intent with the Computer Information Systems Program Coordinator. For admission in the summer or fall semester classes, the letter of intent must be filed by February 15 and for the spring semester class by October 1. Exceptions to the February 15 and October 1 dates can only be granted by the President of Lexington Community College after consultation with the Computer Information Systems Program Coordinator. To be considered for admission to the program, a student must also:

1. Successfully complete CIS 105, CIS 110, CIS 120, and CIS 130. "Successful completion" is defined as:
   - earning a "C" grade or better in the course,
   - passing the exam for credit for a course, or
   - transferring credit from an accredited institution and earning at least a 2.0 on a 4.0 scale for the course.
2. Complete MA 108R with a "C" grade or better, or have a math ACTE score of at least 18 and have completed two years of high school algebra, or have completed the Math Placement Test with a resulting score indicating preparedness for MA 109; or successfully complete MA 109 or higher-level MA course.
3. Complete the orientation program for Computer Information Systems.
4. Attend a pre-admission conference with a CIS advisor.

See Guidelines for Admission to the Computer Information Systems Program, page 68, or consult an academic advisor for more details. For more information, visit the Computer Information Systems program Web site at www.uky.edu/LCC/CIS.

Core

General Education

ENG	101	Writing I*	3
ENG	102	Writing II*	3
MA	109	College Algebra*	3
Heritage/Humanities/Foreign Language Course*			3
Oral Communication Course*			3
Science Course *			3
Social Interaction Course*			3

**General Education Course*

Premajor Requirements

CIS	105	Introduction to Computing	3
CIS	110	Operating Systems Concepts	3
CIS	120	Program Design	3
CIS	130	Microcomputer Applications	3

Major Requirements

CIS	150	Internet Technologies	3
CIS	160	Data Communications and Networking	4
ET	134	Computer Hardware Maintenance	3
Approved Level I Programming Language			3
Approved Technical Course(s)			3

Subtotal _____ **49**

Applications Option

CIS	170	Introduction to Database Design	3
CIS	220	Systems Analysis and Design	3
CIS	290	Information Systems Design and Implementation	3
Approved Applications Specialization			9
Approved Management Course			3
Approved Accounting Course			3

Subtotal _____ **24**

Network Technology Option

CIS	260	Network Hardware Installation and Troubleshooting	3
CIS	269	Internet Protocols	3
CIS	292	Designing Network Solutions	3
Approved Level I Network Technology Specialization			6
Approved Level I or II Network Technology Specialization			6
Approved Scripting Language Course			3

Subtotal ..... _____ **24**

Programming Option

CIS	170	Introduction to Database Design	3
CIS	220	Systems Analysis and Design	3
CIS	290	Information Systems Design and Implementation	3
Approved Level I Programming Language (beyond the Core)			3
Approved Level II Programming Language			3-4
Approved Level I or II Programming Language			3-4
Approved Management Course			3
Approved Accounting Course			3

Subtotal _____ **24-25**

Total **73-74**

Course Choice Lists

Accounting Courses**

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

Management Courses**

BE	200	Small Business Management	3
BE	283	Principles of Management	3
BE	287	Supervisory Management	3
BE	291	Retail Management	3
QT	101	Quality Management Principles	3

Applications Specialization**

Productivity Software Specialization

IMD 235 Advanced Word Processing..... 3
CIS 234 Advanced Spreadsheet Applications..... 3
CIS 236 Advanced Database Applications..... 3

Database Developer Specialization

CIS 171 SQL I..... 3
CIS 271 SQL II..... 3
CIS 236 Advanced Database Applications..... 3

Level I Network Technology Specialization**

Windows 2000 Specialization

CIS 211 Windows 2000 Professional and Server..... 3
CIS 212 Supporting Windows 2000 Network Infrastructure..... 3

Netware Specialization

CIS 213 NetWare System Administration..... 3
CIS 214 Advanced NetWare Administration..... 3

CISCO Specialization

CIS 281 Routing and Switching..... 3
CIS 282 Advanced Routing and Switching..... 3

NOTE: Students pursuing the Cisco Specialization should also take CIS 283, Wide Area Network Management and Design, in order to complete their Cisco Certified Network Administrator (CCNA) preparation.

Unix Specialization

CIS 217 Unix Administration..... 3
CIS 218 Advanced Unix Administration..... 3

Level II Network Technology Specialization**

Advanced Windows 2000 Specialization

CIS 261 Windows 2000 Directory Service Administration..... 3
CIS 262 Windows 2000 Directory Services Infrastructure Design..... 3

Level I Programming Languages**

CIS 140 JavaScript I: JavaScript and the Web..... 3
CIS 143 COBOL I..... 3
CIS 145 Perl I: Perl Fundamentals..... 3
CIS 148 Visual Basic I..... 3
CIS 149 Java I: Java Fundamentals..... 3
CIS 171 SQL I..... 3
CS 115 Introduction to Computer Programming..... 3

Level II Programming Languages**

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

Scripting Languages**

CIS 140 JavaScript I: JavaScript and the Web..... 3
CIS 145 Perl I: Perl Fundamentals..... 3

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: CIS.....3
ET 112 Digital Logic Circuits 4
ET 256 Microprocessor Fundamentals.....4
GIS 120 Introduction to Geographic Information Systems 3
IMD 126 Introduction to Desktop Publishing 3
IMD 226 Advanced Desktop Publishing.....3
Additional CIS Course(s) (EXCEPT CIS 103) 1-3
Additional CS Course(s) (EXCEPT CS 100 and CS 101).....3-4
Approved Accounting Courses.....3

*** Or other courses approved by Computer Information Systems Program Coordinator*

Note:

- *Students may not use one course to fulfill multiple requirements.*
- *Students may choose CIS 280 or COE 199 for a maximum of 3 credit hours.*
- *Non-general education course credits more than 10 years old cannot be used to fulfill graduation requirements.*
- *Only CIS and CS courses in which a student earned a "C" or higher (or "Pass" for Pass/Fail courses) may be used to fulfill graduation requirements.*

DENTAL HYGIENE

This program prepares students to function as dental hygienists on a dental auxiliary team under the supervision of a dentist. The curriculum includes courses in general education and in dental hygiene as required by the Commission on Dental Accreditation. 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.

Upon completion, graduates are eligible to take the state licensing examinations for dental hygienists. As the only licensed dental auxiliaries, dental hygienists may be employed in dentist offices, clinics, dental schools, public health and governmental agencies, industry and educational institutions. For more information about admission to the Dental Hygiene Program, please see the guidelines for the selective admission requirements on page 62 or visit the Dental Hygiene program Web site at www.uky.edu/LCC/DHY.

First Year

Summer Sessions
Credits
First Six Weeks

BSL 110 Human Anatomy and Physiology I*.....4

Second Six Weeks
BSL 111 Human Anatomy and Physiology II 4

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8

Fall Semester
DHY 120
Dental Hygiene I..... 5
DHY 121
Oral Biology I 3
ENG 101 Writing I*..... 3
BSL 214 Medical Microbiology **or**..... 4
BIO 208 Principles of Microbiology ..... (3)

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14-15

Spring Semester
DHY 130
Dental Hygiene II 4
DHY 131
Oral Biology II..... 5
DHY 135
Dental Radiology 3
DHY 136
Periodontics for the Dental Hygienist I..... 2
ENG 102 Writing II* 3

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17

Second Year

Summer Sessions
Credits
First Six-Weeks
PY 110 General Psychology* 3
Oral Communication Course* 3
Second Six Weeks
NFS 101 Human Nutrition and Wellness..... 3

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9

Fall Semester
DHY 220
Dental Hygiene III 4
DHY 221
Special Needs Patients..... 2
DHY 224
Dental Materials 2
DHY 226
Periodontics for the Dental Hygienist II 2
SOC 101 Introductory Sociology 3

___

13
Spring Semester
DHY 230
Dental Hygiene IV 4
DHY 235
Principles of Practice 1
DHY 238
Community Dental Health.....4
Heritage/Humanities Course*.....3-4
Mathematics Course* 3-4

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15-17

Total Credits 76 - 79

**General Education Course*
The Dental Hygiene Program at Lexington Community College requires that BSL 110 be successfully completed prior to beginning DHY 120.

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 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. Students enrolled in the Dental Laboratory Technology Program must achieve a GPA of 2.0 in the Dental Laboratory Technology program. Upon completion, graduates are eligible to take the National Board for Certification Recognized Graduate Examination and the Certified Dental Technician exam.

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. Please see the guidelines for the selective admission requirements to the Dental Laboratory Technology Program, page 63.

For more information, visit the Dental laboratory Technology program Web site at www.uky.edu/LCC/DLT.

First Year

Fall Semester
ENG 101 Writing I* 3
DN 101 Dental Morphology I.....2
DN 111 Dental Materials I 2
DN 121 Complete Dentures I.....2
DN 131 Removable Partial Dentures I 2
DN 141 Occlusion I 2
DN 151 Fixed Prosthodontics I.....2

15

Spring Semester

ENG	102	Writing II*	3
DN	102	Dental Morphology II	2
DN	112	Dental Materials II	2
DN	122	Complete Dentures II	2
DN	132	Removable Partial Dentures II	2
DN	142	Occlusion II	2
DN	152	Fixed Prosthodontics II	2

15

Summer Session

Social Interaction Course*	3
Heritage/Humanities/Foreign Language Course*	3

6

Second Year

Fall Semester

Oral Communication Course*			3
Mathematics Course*			3
DN	261	Applied Laboratory Techniques	8
DN	281	Orthodontic Laboratory Techniques	2

16

Spring Semester

Science Course*			3
DN	262	Advanced Specialty Laboratory Techniques	8
DN	291	Dental Laboratory Management, History and Ethics	2

13

TOTAL

65

EARLY CHILDHOOD EDUCATION

The goal of the Early Childhood Education program is to prepare students for employment as professionals in a number of settings. These may include nursery schools, preschools, child care centers, after school and school age programs, family child care homes, Home Visiting programs and family service agencies. Students will acquire a core of knowledge that includes a general education component, child development; a philosophy of teaching and learning; and the theory and practices necessary to implement high quality care and curriculum planning for individual children and groups. A variety of community settings will provide selected experiences for appropriate interactions with young children, opportunities for planning and implementing curriculum ideas and applying theory to practice in a classroom setting, culminating in a supervised practicum and a professional portfolio of learning experiences. A Child Development Associate Credential (CDA) may be earned by taking courses in this program and meeting separate eligibility requirements set forth by the National Council for Professional Recognition.

In order to have contact with children, state licensing regulations require that all students have a current TB skin test and criminal records check. In addition, students must purchase liability insurance in order to take part in field experiences. For more information, visit the Early Childhood Education web site at www.uky.edu/LCC/ECE.

Curriculum Outline

1st Year Summer I (6-7)

ENG	101	Writing I*	3
PY	110	General Psychology	3
	OR		
PSY	100	Intro to Psychology*	(4)

1st Year Summer II (6)

ENG	102	Writing II*	3
COM	181	Basic Public Speaking*	3

1st Year Fall (15)

Elective			3
MA	109	College Algebra*	3
HIS	108	History of the U.S. through 1865*	3
SOC	101	Introductory Sociology	3
EC	120	Introduction to Early Childhood Education	3

1st Year Spring (12)

BIO	102	Human Ecology*	3
FAM	255	Child Development	3
EC	130	Observing Young Children	3
EC	170	Learning Activities and Materials	3

2nd Year Fall (13)

HIS	109	History of the U.S. since 1865	3
	OR		
BIO	103	Basic Ideas of Biology	3
EDP	202	Human Development and Learning	3
EC	200	Curriculum Development for Early Childhood Education	4
FAM	256	Guidance Strategies for Working with Young Children	3

2nd Year Spring (12)

NFS	101	Human Nutrition and Wellness	3
FAM	252	Introduction to Family Science	3
EC	220	Children with Exceptionalities	3
EC	260	Practicum in Early Childhood Education	3
		Total Hours	**64-65**

**General Education Course*

ENGINEERING TECHNOLOGY

This program gives individuals the background to work as assistants to engineers or as liaisons between engineers and skilled craftsmen. The curriculum combines specialized and related science courses with course work in general education.

The Electrical specialization prepares students to seek employment in an engineering office in the areas of electrical design, maintenance, and repair. In addition, the technician may be involved in research, development, production or sales. Career opportunities are often found in consulting, manufacturing or power distribution.

For more information, visit the Engineering Technology program Web site at www.uky.edu/LCC/ET.

ENG	101	Writing I*	3
ENG	102	Writing II*	3
Oral Communication Course*			3
Social Interaction Course*			3
Heritage/Humanities/Foreign Language Course*			3
MA	109	College Algebra*	3
	AND		
MA	112	Trigonometry	2
	OR		
MA	110	Analytical Geometry and Trig	(4)
MA	123	Elementary Calculus & its Applications	3
	OR		
MA	113	Calculus I	(4)
PHY	211	General Physics*	5

Core

			Credits
ET	110	Electrical Circuits I	4
ET	111	Electrical Circuits II	4
ET	112	Digital Logic Circuits	4
ET	241	Electronics I	4
ET	253	Industrial Electronics	4
ET	256	Microprocessor Fundamentals	4
ET	262	Measurement and Instrumentation	4
Technical Courses			8
CAD	100	Intro to Computer-Aided Design	3
Coordinator Approved CS/CIS course			3
		Total	**69 - 71**

**General Education Course*

Technical Courses

CAD	200	Intermediate Computer-Aided Design.	3
COE	199	Cooperative Education: Engineering Tech	3

ET	134	Computer Hardware Maintenance	3
ET	244	Electrical Machinery and Controls	4
ET	250	Programmable Logic Controllers	4
ET	251	Electronics II	4
ET	254	(Electrical) Instrumentation and Measurements	4
ET	290	Selected Topics in Engineering Technology: (Topic)	1-4
ET	295	Independent Problems	1-6
MFG	265	Industrial Automation and Robotics	4
PHY	213	General Elementary Physics	5
Other course approved by Program Coordinator			3-4

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.

For more information, visit the Environmental Science Technology program Web site at www.uky.edu/LCC/EST.

Curriculum Outline

First Semester/Fall

ENG	101	Writing I*	3
MA	109	College Algebra*	3
CIS	105	Intro to Computing	3
BIO	103	Basic Ideas of Biology*	3
BIO	111	Intro to Biology Lab	1
EST	150	Introductory Ecology	4

Second Semester/Spring

ENG	102	Writing II*	3
CIS	130	Microcomputer Applications	3
CHE	105	General College Chemistry I	3
CHM	105	General College Chemistry Lab I	2
EST	160	Hydrolic Geology	3
EST	170	Environmental Sampling Laboratory	2

Third Semester/Fall

COM	181	Basic Public Speaking*	3
	OR		
COM	252	Intro to Interpersonal Communications*	(3)
Social Interaction Course*			3
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

Fourth Semester/Spring

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
Technical Elective			3
Heritage/Humanities Course			3
Total Credits			**66**

Technical Electives

PHY	151	Introduction to Physics	3
COE	199	Cooperative Education (Internship)	1-3
EST	299	Selected Topics in EST	1-3
STA	200	Statistics: A Force in Human Judgement	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	107	General College Chemistry II	3
CHM	107	General College Chemistry Lab II	2
GEO	210	Pollutions, Hazards, and Environmental Mngmt.	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.

**General Education Course*

INFORMATION MANAGEMENT AND DESIGN

With options in Computer Office Technologies, Graphic Design, Library Information Technology, and Web Design

The Information Management & Design program prepares students to work in an integrated workplace of people, processes, and technologies. In response to the challenging technology-based work environment, this program requires students to become proficient in using computer technology for multifaceted workplace productivity. The program combines cutting-edge computer applications courses with additional curriculum courses for an area of expertise that is chosen by the student. Graduates also complete general education courses in writing, oral communications, economics, heritage/

humanities/foreign languages, science, and mathematics. Prior to graduation, students enjoy a supervised work experience, giving them the experience that is often invaluable to land the right job.

Students may choose from four options within the Information Management & Design program to specialize their degree.

The **Computer Office Technologies** option prepares graduates to work in a multitasking environment utilizing skills in electronic commerce, web authoring, project management, workplace management, information management, and employing various industry-standard office applications.

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 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 **Library and Information Technology** option prepares graduates for paraprofessional library work.

Graduates may choose to sit for the Certified Administrative Professional Exam and/or the Microsoft Office User Specialist Exam for computer office applications certifications. Graduates from the Graphic Design option would be prepared to sit for Adobe Certified Expert Exam. The Web Design option graduates would be qualified to sit for three of the five parts of the Certified Internet Webmaster (CIW) certification exam. The Library and Information Technology option courses may be used to meet Kentucky public library certification requirements.

Examples of Careers in Information Management & Design:

- Web Designer
- Marketing Coordinator
- Executive/Administrative Assistants
- Information Coordinator
- Workplace Manager
- Web Design Technician
- Graphic Design Manager (or Coordinator)
- Production Artist
- Graphic Production Manager (or Coordinator)
- Graphic Technician
- Media Specialist
- Project Manager
- Library Paraprofessional

For more information, visit the IMD web site at www.uky.edu/LCC/IMD

Core

IMD	100	Introduction to Information Systems	3
IMD	120	Introduction to the Internet	1
OR			
IMD	132	Introduction to Web Page Editors	(1)
IMD	126	Introduction to Desktop Publishing	3
IMD	130	Introduction to Web Pages	2
IMD	150	Effective Presentations	3
IMD	210	Microsoft Office Applicatons	3
IMD	235	Advanced Word Processing	3
IMD	275	Workplace Management	3
COE	199	Cooperative Education or	3
OR			
IMD	271	Office Internship	(3)
ENG	101	Writing I *	3
ENG	102	Writing II *	3
Economics Course*			3
Heritage/Humanities/Foreign Language Course *			3
Mathematics Course *			3
Oral Communications Course *			3
Science Course *			3
		Subtotal	**45**

* *General Education Course*

Computer Office Technologies Option

IMD	118	Document Processing	3
IMD	215	Administrative Office Procedures	3
IMD	220	Administrative Office Simulations	3
Accounting Course			3-4
Computer Office Technologies Option Courses			9
		Subtotal	**21-22**

Graphic Design Option

IMD	115	Introduction to Graphic Design	3
IMD	224	Web Graphics Design	3
IMD	226	Advanced Desktop Publishing	3
IMD	227	Vector and Raster Design	3
IMD	280	Applied Graphic Design	3
Graphic Design Option Courses			6
		Subtotal	**21**

Library Information Technology Option

LIT	115	Introduction to Reference Services*	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 Courses			6
		Subtotal	**15**

Web Design Option

IMD	160	Introduction to E-Commerce	3
IMD	180	Intermediate Web Design	3
IMD	224	Web Graphics Design	3
IMD	225	Applied Web Graphics	3
IMD	230	Advanced Web Design	3
IMD	232	Professional Web Editors	3
Web Design Option Courses			6
		Subtotal	**24**

Grand Total 60 - 69

* *Required Program Course*

** *Select one of these three as a Required Program Course*

Computer Office Technologies Option Courses

IMD majors with the Computer Office Technologies Option choose 9 credit hours from the Computer Office Technologies Option Courses.

ACC	202	Managerial Uses of Accounting Info.	3
BE	120	Personal Finance	3
BE	160	Introduction to Business	3
BE	267	Introduction to Business Law	3
BE	274	Human Resource Management	3
BE	282	Principles of Marketing	3
BE	283	Principles of Management	3
BE	288	Self Management	3
CIS	230	Advanced Microcomputer Applications	3
CLA	131	Medical Terminology from Greek & Latin	3
ECO	202	Principles of Economics II	3
ENG	203	Business Writing	3
IMD	175	Web Usability Design	3
IMD	180	Intermediate Web Design	3
IMD	224	Web Graphics Design	3
IMD	226	Advanced Desktop Publishing	3
IMD	230	Advanced Web Design	3
IMD	232	Professional Web Editors	3
IMD	276	Legal Office Procedures	3
IMD	278	Medical Office Procedures	3
IMD	299	Selected Topics: IMD	1-3
QT	101	Quality Management Principles	3
Social Interaction Course +			3
Other Computer Office Technologies courses approved by Program Coordinator			1-3

\+ *Cannot be used to fulfill core requirement*

Graphic Design Option Courses

Information Management and Design majors with the Graphic Design Option choose 6 credit hours from the Graphic Design Option Courses.

IMD	118	Document Processing	3
IMD	180	Intermediate Web Design	3
IMD	225	Applied Web Graphics	3
IMD	230	Advanced Web Design	3
IMD	232	Professional Web Editors	3
BE	282	Principles of Marketing	3
ENG	203	Business Writing	3
Computer Programming Course Approved By Program Coordinator			3
Other Graphic Design Courses Approved By Program Coordinator			

Library Information Technology Courses

Information Management and Design majors with the Library Information Technology Option choose 16 credit hours from the Library Information Technology Option Courses.

LIT	124	Library Administration	3
LIT	243	Library Services for Children**	3
LIT	245	Library Services for Young Adults**	(3)
LIT	247	Library Services for Adults**	(3)
LIT	299	Selected Topics: LIT	1-3

** *If not used to satisfy other option requirements*

Web Design Option Courses

Information Management and Design majors with the Web Design Option choose 6 credit hours from the Web Design Option Courses.

IMD	175	Web Usability Design	3
IMD	240	Animation for the Web	3
IMD	245	Multimedia for the Web	3
CIS	120	Program Design	3
CIS	140	JavaScript I: JavaScript and the Web	3
CIS	150	Internet Technologies	3
Computer Programming Course Approved By Program Coordinator			3
Other Web Design Courses Approved By Program Coordinator			3

NUCLEAR MEDICINE TECHNOLOGY

The nuclear medicine technology program prepares the individual to become a nuclear medicine technologist. Nuclear medicine 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 sources. The skills of the nuclear medicine technologist complement those of the nuclear medicine physician and other professionals 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, 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 nuclear medicine technology 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 nuclear medicine technology 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 technology program, page 64.

For more information, visit the Nuclear Medicine Technology Web site at www.uky.edu/LCC/NMT.

First Year

First	**Summer**	**Session**	**Credits**
ENG	101	Writing I*	3
BSL	110	Human Anatomy and Physiology I*	4

7

Second Summer Session

MA	109	College Algebra*	3
BSL	111	Human Anatomy and Physiology II	4

7

Fall Semester

CHE	104	Introductory General Chemistry	3
ENG	102	Writing II*	3
Computer Literacy Course			1-3
NMT	140		
		Nuclear Medicine Technology I	5

12 - 14

Spring Semester

CHE	106	Intro to Inorganic, Organic & Biochemistry	4
PH	172	Physics for the Health Sciences	2
NMT	150		
		Nuclear Medicine Technology II	5

11

Second Year

First Summer Session

NMT	230		
		Nuclear Medicine Technology III	6

6

Fall Semester

NMT	240		
		Nuclear Medicine Technology IV	7
Oral Communication Course*			3
Heritage/Humanities Course*			3

13

Spring Semester

NMT	280		
		Nuclear Medicine Technology V	8
PY	110	General Psychology*	3
Elective Course(s)			1-3

12 - 14

Total

68 - 72

This curriculum requires course attendance in the summer session.
**General Education Course*

NURSING

The Associate Degree Nursing Curriculum offered by the Lexington Community College is accredited by the National League for Nursing Accrediting Commission (61 Broadway, New York, New York 10006, (212) 363-5555). 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, page 65.

For more information, visit the Nursing program Web site at www.uky.edu/LCC/NSG.

First Year

Summer Sessions

Credits

Mathematics Course*			3
PY	110	General Psychology* or	3
PSY	100	Introduction to Psychology*	(4)
BSL	110	Human Anatomy & Physiology I*	4
ENG	101	Writing I*	3

13 - 14

Fall Semester

NSG	115	Nursing I	9
BSL	111	Human Anatomy & Physiology II	4
PSY	223	Developmental Psychology	3
Computer Literacy			1-3

17-19

Spring Semester

NSG	125	Nursing II	2
NSG	235	Nursing III	4
NSG	245	Nursing IV	4
ENG	102	Writing II*	3

13

Second Year

Fall Semester

NSG	255	Nursing V	9
BSL	214	Medical Microbiology*	4
Oral Communication*			3

16

Spring Semester

NSG	265	Nursing VI	9
Heritage/Humanities Course/Foreign Language*			3
Elective Course(s)			1-3

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13 - 15

Total

72 - 77

**General Education Course*

-A letter grade of "C" or higher is required for each nursing course, each biological/physical science course, and each math course.
-Each course must be taken prior to or concurrent with the semester sequence in which the student is enrolled in Nursing.
-Successful completion of each course in each semester is required before one may progress to the next semester of the program.
-Failure to complete the delineated sequencing of the courses and curriculum will result in withdrawal from the program.
-Credits earned in biological, social, behavioral, and physical sciences that are 6 years or older will be evaluated on an individual basis and may require a special examination to update concepts.

The Nursing Program at Lexington Community College requires that PY 110 or PSY 100, Math, ENG 101, and BSL 110 be successfully completed prior to beginning NSG 115.

RADIOGRAPHY

This program prepares the graduate to take an active role in the clinical setting of diagnostic imaging. Graduates of the radiography program have an integral role in diagnostic and therapeutic services within the health care industry. The curriculum is comprised of specialized courses in radiography, basic sciences and general education. Emphasis in the radiography courses includes radiation physics, patient care, positioning, technical factors, pathology, and radiation protection. Students enrolled in the radiography program must achieve a minimum grade of "C" in each radiography course. Upon completion of the program, the graduate is eligible to apply to write the examination for registration as a radiographer by the American Registry of Radiologic Technologists.

Radiographers interested in advanced credit in the Radiography Program should contact the program coordinator or the admissions office.

Please see the admission Guidelines for Health Programs listed on page 67, or visit the Radiography program Web site at: www.uky.edu/LCC/RAD.

Summer Session I
BSL 110 Anatomy & Physiology I*..... 4
Total
4

Summer Session II
BSL 111 Anatomy & Physiology II 4
Total
4

Fall Semester
RAD 100 Radiography I 10
ENG 101 Writing I*..... 3
MA 109
College Algebra*.....3
Total
16

Spring Semester
RAD 110 Radiography II.....10
ENG 102 Writing II* 3
PHY 172 Physics for Health Sciences 2
Total
15

Summer Session I
RAD 200 Radiography III 4
Total
4

Summer Session II
RAD 205 Radiography IV.....3
Total
3

Fall Semester
RAD 210 Radiography V.....9
PY 110 General Psychology* 3
Computer Literacy Course.....1-3
Total
13-15

Spring Semester
RAD 220 Radiography VI.....9
Heritage/Humanities/Foreign Language Course* 3-4
Oral Communications Course*.....3
Subtotal
15-16

Total Hours
74-77

**General Education Course*

-CPR certificate must be obtained prior to enrolling in RAD 100 and certification must be kept current throughout the program.
-The Radiography Program at LCC requires that BSL 110 and 111 be successfully completed prior to beginning of RAD 100.
-Prior to enrollment in RAD 100, each student must show evidence of UK Health Services compliance.
-This curriculum requires course attendance in both summer sessions.

ADVANCED IMAGING IN RADIOGRAPHY

Advanced Imaging in Radiography focuses on the areas of Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) in the Radiological Sciences. A combination of clinical and classroom 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 by 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. Individuals interested in these courses should contact the Advanced Imaging Coordinator at (859) 257-4872, ext. 4345.

Core

RAD 230
Sectional Anatomy for Advanced Imaging 3
RAD 240
Advanced Patient Care 3

Computed Tomography Option

RAD 250
Computed Tomography Physics and Instrumentation 3
RAD 260
Computed Tomography Imaging Technology 3
RAD 270
Computed Tomography Clinical Imaging Seminars 3

Magnetic Resonance Imaging Option

RAD 255
Magnetic Resonance Physics and Instrumentation 3
RAD 265
Magnetic Resonance Imaging Technology 3
RAD 275
Magnetic Resonance Imaging Clinical Seminars 3

RESPIRATORY CARE

This program prepares competent practitioners who engage in the prevention, diagnosis and management of cardiopulmonary disorders. 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 hospitals. Students enrolled in the Respiratory Care Program are required to achieve a minimum grade of C in each Respiratory Care course, BSL 110 and BSL 111 Human Anatomy and Physiology I & II, and the math requirement.

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 all of the national board examinations in Respiratory Care, including the Certified Respiratory Therapist (C.R.T.) and Registered Respiratory Therapist (R.R.T.) credentials. Please see the guidelines for the selective admission requirements to the Respiratory Care program, page 69.

For more information, visit the Respiratory Care program Web site at www.uky.edu/LCC/RCP.

First Year

Summer I
MAH 151 Applied Mathematics* or 3
MA 109 College Algebra* .....(3)
BSL 110 Human Anatomy & Physiology I* 4

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7

Summer II
BSL 111 Human Anatomy & Physiology II 4
ENG 101 Writing I* 3

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7

Fall
ENG 102 Writing II* 3
BSL 214 Medical Microbiology or.....4
BIO 208 Principles of Microbiology .....(3)
Heritage/Humanities/Foreign Language Course* 3-4
Oral Communications Course* 3

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12-14

Spring
RCP 110 Cardiopulmonary Anatomy & Physiology 3
RCP 120 Fundamentals of Respiratory Care 4
RCP 121 Respiratory Care Practice I.....1
RCP 130 Cardiopulmonary Pharmacology 2
PY 110 General Psychology* 3

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13

Summer I
RCP 131 Respiratory Care Practice II 2
RCP 140 Cardiopulmonary Evaluation 2

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4

Summer II
RCP 141 Respiratory Care Practice III 2
RCP 150 Intro to Mechanical Ventilation 2

_____

4

Fall
RCP 200 Patient-Ventilator System Management 4
RCP 210 Cardiopulmonary Pathophysiology 3
RCP 220 Neonatal/Pediatric Respiratory Care 3
RCP 221 Respiratory Care Practice IV 4

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14

Spring
RCP 230 Preventive & Long-term Respiratory Care 2
RCP 231 Respiratory Care Practice V.....4
RCP 240 Advanced Cardiopulmonary Evaluation 3

RCP	250	Advanced Cardiac Life Support	2
RCP	260	Respiratory Care Seminar	1
			12
		Total	73-75

**General Education Course*

-This curriculum requires course attendance in both summer sessions.

-A letter grade of "C" or higher is required for each Respiratory Care course, BSL 110, BSL 111, and the course used to satisfy the math requirement.

-The Respiratory Care Program at Lexington Community College requires that MAH 151 or MA 109, BSL 110 & BSL 111 be successfully completed prior to beginning RCP 110, RCP 120, RCP 121, and RCP 130.

-A valid Health Care Provider CPR card must be obtained prior to enrolling in RCP 121 and must be kept current throughout the program.