

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.

<u>Course</u>	
<u>Credits</u>	
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

Total

70 - 72

**General Education Course*

Technical Courses

ACH 180	
Selected Topics in Arch Technology: (Topic)	1-3
ACH 194	
Visual Composition I	3
ACT 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: management, marketing and retailing, quality, 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 **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 **Equine Business Management option** provides the knowledge and skills students need to take advantage of various employment opportunities within the horse industry.

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.

<u>Core</u>	
<u>Course</u>	<u>Credits</u>
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	
69	
Total	

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 Finance3
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	
18	
Total	
69	

Real Estate Management Option

Required:

RE 100	Real Estate Principles I.....3
RE 121	Appraising.....3
RE 225	Real Estate Finance3

Choose 6 hours from the following:

RE 120	Real Estate Marketing.....3
RE 122	Construction and Blueprints.....3
RE 200	Real Estate Principles II3
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	
18	
Total	
69	

Equine Business Management Option*

Required:**

EQM 100	Introduction to Equine Studies3
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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

**General Education Course*

***Pending approval of the University of Kentucky Senate.*

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 website: <http://www.uky.edu/LCC/ET/Civil/>

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*	6
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.....	2

Subtotal

40

Total

66

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

CET 280 Highway Design 3

CAD 200

Intermediate Computer-Aided Design 3

GIS 120 Introduction to Geographic Information Systems..... 3

COE 199 Cooperative Education: CET 3

***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 or the coordinator's designee.

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
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Applications Specializations**

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 Specializations**

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 they 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. Please see the guidelines for the selective admission requirements to the Dental Hygiene Program, [page 62](#) or visit the Dental Hygiene program Web site at www.uky.edu/LCC/DHY.

First Year

Summer Credits		Sessions
BSL	110	Human Anatomy and Physiology I* 4
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	212	Medical Microbiology* or..... 4
BIO	208	Principles of Microbiology*..... (3)

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14-15

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

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17

Second Year

First Summer Session Credits		
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 Clinic.....	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

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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*.....	2-4

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14-17

79

Total Credits 75 -

**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 minimum grade of "C" in each Dental Laboratory Technology course. Upon completion, graduates are eligible to take the National Board for Certification Recognized Graduate Examination.

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.....	3
Heritage/Humanities/Foreign Language.....	3

6

Second Year

Fall Semester

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

16

Spring Semester

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

13

TOTAL

65

EARLY CHILDHOOD EDUCATION

The primary 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.

Curriculum Outline

1st Year Summer I (6-7)

ENG	101	Writing I*	3
PY	110	General Psychology	3

OR

PSY	100	Developmental Psychology*	3
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1st Year Summer II (6)

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

1st Year Fall (13-15)

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

1st Year Spring (12)

BIO 102	Human Ecology*	3
FAM 252	Introduction to Family Science*	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
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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 255	Child Development*	3
EC 220	Children with Exceptionalities.....	3
EC 260	Practicum in Early Childhood Education.....	3

Total Hours

62-65

**General Education Course*

***Curriculum change/revision will add an elective to the program in Fall 2001, pending approval by the University of Kentucky Senate*

ENGINEERING TECHNOLOGY WITH Electrical Specialization

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 in 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	Elem. 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 Course			8
CAD	100		
Intro to Computer-Aided Design			3
Coordinator Approved CS/CIS course			3

Subtotal

58 - 62

**General Education Course*

Technical Courses

CAD	200		
Intermediate Computer-Aided Design			3
COE	199	Cooperative Education: Industrial Elec. 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
Other course approved by Program Coordinator			3-4
PHY	213	General Elementary Physics	5

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*			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 (see list)			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.....	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.

INFORMATION MANAGEMENT AND DESIGN

With options in Computer Office Technologies, Graphic Design, Library Information Technology, and Web Design (formerly Office Systems)

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 Career 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

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	Integrated Information Processing.....	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				
				<i>* General Education Course</i>
				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.....	2	
		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

				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

				Library Information Technology Option
				Information Management and Design majors with the Library Information Technology Option choose 15 credit hours from the Library Information Technology Option Courses.
LIT	115	Introduction to Reference Services.....	3	
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.....	(9)	
		(May be repeated for up to 9 hours)		

				Computer Office Technologies Option Electives
				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	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	

**General Education Courses*
+ 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	
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.....	1-3	
		Subtotal		

21

				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.....	1-3	
		Total		

60-69

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.ky.edu/LCC/NMT.

First Year

First Credits	Summer	Session
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

38 - 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 homes, extended care 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 66.

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

First Year

Summer Credits		Sessions
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*	<u>3</u>
		13

- 14

Fall Semester		
NSG 115	Nursing I	9
BSL 111	Human Anatomy & Physiology II*	4
PSY 223	Developmental Psychology*	3
Computer Literacy		<u>1-3</u>

17-19

Spring Semester		
NSG 125	Nursing II	2
NSG 235	Nursing III	4
NSG 245	Nursing IV	4
ENG 102	Writing II*	<u>3</u>

13

Second Year

Fall Semester		
NSG 255	Nursing V	9
BSL 212	Medical Microbiology*	4
Oral Communication*		<u>3</u>

16

Spring Semester		
NSG 265	Nursing VI	9
Heritage/Humanities Course*		3
Elective Course(s)		<u>1-3</u>

13 - 15

71 - 74 **Total**

**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*	<u>4</u>
		Total
		4

Summer Session II

BSL 111	Anatomy & Physiology II	<u>4</u>
		Total
		4

Fall Semester

RAD 100	Radiography I	10
ENG 101	Writing I*	3
MA 109		
College Algebra*		<u>3</u>
		Total

16

Spring Semester

RAD 110	Radiography II	10
ENG 102	Writing II*	3
PHY 172	Physics for Health Sciences	<u>2</u>
		Total

15

Summer Session I

RAD 200	Radiography III	<u>4</u>
		Total
		4

Summer Session II

RAD 205	Radiography IV	<u>3</u>
		Total

3

Fall Semester

RAD 210	Radiography V	9
PY 110	General Psychology*	3
	Computer Literacy.....	1-3
	Total	

12

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 over-all 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. 4100.

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 Technology3
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 the national board examination in Respiratory Therapy in order to receive the Certified Respiratory Therapist (C.R.T.) and 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* or3
MA 109	College Algebra*(3)
BSL 110	Human Anatomy & Physiology I*4

7

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

7

Fall			
ENG	102	Writing II*	3
BSL	212	Medical Microbiology* or.....	4
BIO	208	Principles of Microbiology*	(3)
Heritage/Humanities/Foreign Language*			3-4
Oral Communications Course*			3

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

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

13

Summer I

RCP	131	Respiratory Care Practice II.....	2
RCP	140	Cardiopulmonary Evaluation.....	2

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

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 the summer session.

-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.