

Occupational Associate Degree and Certificate Curricula

Accounting

Career Cluster—Business, Management, and Administration

Accounting personnel compile and analyze business records and prepare financial reports, such as profit and loss statements, balance sheets, cost studies, and tax reports. The major opportunity fields are public, management, and government accounting.

This curriculum leads to an Associate in Applied Science and is designed for career entry and/or advancement. Students interested in a four-year accounting degree should follow the Business Administration curriculum.

Prerequisites

Strong mathematical and reading skills are recommended prior to attempting courses in this area. Students must possess the ability to analyze numbers and make logical decisions. Recommended high school units of study are shown at the end of this catalog.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many different problem-solving and task-oriented situations. Skills are also provided to enhance the student's global awareness and knowledge of healthy living.

CREDITS

Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Creativity Elective ^o	2-3
Critical Thinking Elective ^o	3-4
Economics 201 , Principles of Economics – MACRO	3

CREDITS

English 151 , Freshman Composition . . .	3
Psychology 201 , Introduction to Psychology	3
	17-19

^oFor options to fulfill the Creativity and Critical Thinking Electives, see page 49.

Accounting Degree

code 203

CREDITS

Accounting 101 , General Accounting . . .	4
Accounting 102 , General Accounting . . .	4
Accounting 205 , Computerized Accounting	4
Accounting 211 , Intermediate Accounting	4
Accounting 251 , Cost Accounting	4
Accounting 252 , Income Taxation	4
Business Administration 101 , Introduction to Business	3
Business Administration 112 , Business Statistics	3
Business Administration 201 , Business Law	3
Business Administration 202 , Business Law	3
Economics 202 , Principles of Economics – MICRO	3
Office Information Technology 160 , Applications Software	3
	42

Accounting Electives

Choose one or more courses from the following:

CREDITS

Business Administration 200A , Cooperative Education I or 200B , Cooperative Education II or 200C , Cooperative Education III . . .	3
Business Administration 104 , Business Correspondence	3

CREDITS

Business Administration 121 , Principles of Advertising	3
Business Administration 131 , Principles of Management	3
Business Administration 132 , Human Resource Management	3
Business Administration 223 , Developing an E-Commerce/E-Business Plan	3
Business Administration 251 , Principles of Marketing	3

The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
ACCO 101	ACCO 102
BUAD 101	Accounting Elective
ECON 201	BUAD 112
ENGL 151	ECON 202
Creativity Elective	OIT 160

Fall	Spring
ACCO 211	ACCO 205
ACCO 251	ACCO 252
BUAD 201	BUAD 202
COMM 101 or 111	Critical Thinking
PSYC 201	Elective

Accounting Certificate *code 104*

This curriculum leads to a certificate and focuses upon specialty courses for job entry and/or occupational upgrading. The courses are:

CREDITS

Accounting 101 , General Accounting . . .	4
Accounting 102 , General Accounting . . .	4
Accounting 205 , Computerized Accounting	4
Accounting 211 , Intermediate Accounting	4
Accounting 251 , Cost Accounting	4
Accounting 252 , Income Taxation	4

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Apprenticeship

Career Cluster—Manufacturing

The Federal Bureau of Apprenticeship and Training (U.S. Department of Labor) recognizes Kellogg Community College as the agency approved for delivery of trade-related instruction for local registered apprenticeship programs. The majority of this instruction is delivered through the Regional Manufacturing Technology Center. If you are enrolled in apprenticeship training, you must be sponsored by a company that has programs approved by and registered with the USDOL Office of Apprenticeship. These programs generally consist of four years of on-the-job training that is typically accompanied by 576 contact hours of formal training through KCC/RMTC, and 8,000 hours of on-the-job training. Successful completion of these programs will result in an apprenticeship certificate from the Office of Apprenticeship.

Shown below is a representative sample of the types of apprenticeship programs available through Kellogg Community College and the RMTC, but it should be noted that a wide variety of other programs can also be tailored to fit an individual company's needs.

Programs

Automation Technician
Electrician
Instrumentation Technician
Machine Repair
Maintenance Electrician
Maintenance Machinist
Maintenance Mechanic
Millwright
Mold Maker
Pipefitting
Refrigeration Mechanic
Tool and Die Maker

Many other programs are available. The specific topics and hours of related trade instruction may vary by employer and nature of the job. Kellogg Community College will assist companies in developing a quality program or upgrading existing programs to meet today's changing industrial standards. For more information contact the Director of the Regional Manufacturing Technology Center.

Industrial Trades Certificate

The Industrial Trades certificate is designed for students who are currently in a registered apprenticeship program or individuals who are interested in entering an apprenticeship program. For this certificate, a student must take a minimum of 25 Industrial Trades credit hours. These credit hours may be selected from any of the following Industrial Trades Programs: Industrial Machine Tool (INMT), Industrial Robotics (INRO), Industrial Electricity/Electronics (INEL, WBEL), Industrial Welding (INWE), Industrial Millwright (INMW), Industrial Pipefitting (INPF), Industrial Heating/Ventilation/Air Conditioning and Refrigeration (INHR), Industrial Machine Tool (INTD) and Industrial Instrumentation (INST). Other miscellaneous Industrial Trades credits may be applied to the Industrial Trades certificate with authorization from the Director of the RMTC. For assistance outlining a pre-apprenticeship program, contact the Director of the RMTC at (269) 965-4137, ext. 2800.

Art

Career Cluster— Arts, Audio-Video Technology, and Communications

This is a special program designed for the person seeking an experience and certificate in the visual arts, yet prefers not to pursue a four-year degree program. A total of 20 credit hours from the following courses must be completed successfully to fulfill the certificate requirements. A student must have taken at least five different courses.

Art Enrichment Certificate *code 107*

CREDITS

Animation 103 , Introduction to Video Art	3
Animation 104 , Introduction to Sound, Recording, and Editing.	3
Animation 233 , Introduction to 2-D Animation Techniques	3
Animation 234 , Introduction to 3-D Animation Techniques	3
Animation 235 , Intermediate Animation.	3
Art 103 , Two-Dimensional Design.	3
Art 105 , Contemporary Art Survey.	2
Art 110 , Drawing I	3
Art 141 , Art for Elementary Teachers.	3
Art 160 , Painting and Illustration I.	2
Art 201 , Painting and Illustration II	2
Art 210 , History of Photography and Film	3
Art 211 , Art Appreciation	3
Art 212 , Art History	3
Art 213 , Art History	3
Art 215 , Art Seminar I	3
Art 216 , 4-D Studio Art Seminar II	3
Art 221 , Photography Basics	2
Art 222 , Introduction to Photography.	3
Art 223 , Intermediate Photography.	3
Art 224 , Advanced Photography.	3
Art 225 , Landscape Photography	2
Art 227 , Digital Color Photography	3
Art 229 , Studio Photography	3
Art 230 , Digital Color Photography II	3
Art 245 , Introduction to Ceramics	2

CREDITS

Art 246 , Intermediate Ceramics	2
Art 295 , Photography and Multimedia Special Topics.	3
Art 296 , Internship and Career Development.	3
Art 297 , Art Special Topics.	1-3
Art 298 , Independent Study	1-4

Business Management

Career Cluster—Business, Management and Administration

Managerial personnel oversee, direct, and plan the work of others, as well as determine business policy. Supervisors, the largest managerial group, direct the activities of workers in such areas as sales, production, and purchasing. Entry-level management positions are typically supervisory or trainee in nature. Some employers have indicated that Business Management graduates with specific skills, such as accounting, e-commerce, management information systems, marketing, and human resources, may have an employment advantage. Additionally, individuals enter the Business Management Program with diverse goals.

“Netpreneurial” opportunities are also increasing and will require strength in Business Management. Please note that most courses in the Business Management program also offer an online form of delivery in addition to the traditional “face-to-face” class.

Therefore, several options have been developed to guide students in their selection of electives. This curriculum leads to an Associate in Applied Science. While this curriculum has been designed for career entry and/or advancement, Kellogg Community College does have articulation agreements with Miller College, Siena Heights University, Davenport University, Tri-State University, and Walsh College. Interested students should contact the admissions office of the appropriate institution.

Prerequisites

Strong reading skills and some background in mathematics are recommended prior to attempting courses in this area. Recommended high school units of study are shown at the end of this catalog.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. Skills are also provided to enhance the student’s global awareness and knowledge of healthy living.

CREDITS

Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
Critical Thinking Elective ^o	3-4
Economics 201 , Principles of Economics – MACRO	3
English 151 , Freshman Composition . . .	3
Psychology 201 , Introduction to Psychology	3
	<hr/>
	17-19

^oFor options to fulfill the Creativity and Critical Thinking Electives, see page 50.

Business Management Degree

code 213

To obtain an associate degree in Business Management, students must have a minimum of 64 credits: 17-19 credits must be from the General Education requirements; 35 credits from the Business Management Major; and 11-13 credits from one of the elective options.

CREDITS

Accounting 101 , General Accounting. . .	4
Accounting 102 , General Accounting. . .	4
Business Administration 101 , Introduction to Business	3
Business Administration 104 , Business Correspondence	3
Business Administration 115 , Global Business	3
Business Administration 131 , Principles of Management.	3
Business Administration 132 , Human Resources Management	3

	CREDITS
Business Administration 201,	
Business Law	3
Business Administration 202,	
Business Law	3
Business Administration 251, Principles	
of Marketing	3
Economics 202, Principles of Economics—	
MICRO	3
	35

The candidate for an associate degree in Business Management may select from the following four elective options: Business Management, Human Resources Management, Marketing, or Electronic Commerce.

Business Management-Elective Option 1

Required courses

	CREDITS
Office Information Technology 160,	
Applications Software	3
Office Information Technology 182,	
Intermediate Excel	2
Business Management Electives, (Listed	
below)	6
	11

The Business Management Elective option student must select six or more credits from the following courses:

	CREDITS
Accounting 205, Computerized	
Accounting	4
Accounting 211, Intermediate	
Accounting	4
Accounting 251, Cost Accounting	4
Accounting 252, Income Taxation	4
Business Administration 112, Business	
Statistics	3
Business Administration 121, Principles	
of Advertising	3
Business Administration 200A,	
Cooperative Education I	3
Business Administration 200B,	
Cooperative Education II	3

	CREDITS
Business Administration 200C,	
Cooperative Education III	3
Business Administration 212, Personal	
Finance	3
 <i>Human Resources Management-</i>	
<i>Elective Option 2</i>	
Required courses	

	CREDITS
Business Administration 273, Labor	
Relations	3
Business Administration 274,	
Organizational Behavior	3
Office Information Technology 160,	
Applications Software	3
Office Information Technology 182,	
Intermediate Excel	2
	11

Marketing-Elective Option 3

Required courses

	CREDITS
Business Administration 271, Consumer	
Behavior	3
Business Administration 272, Marketing	
Management	3
Office Information Technology 160,	
Application Software	3
Office Information Technology 182,	
Intermediate Excel	2
	11

E-commerce-Elective Option 4

Required courses

	CREDITS
Business Administration 223, Developing	
an E-Business Plan	3
Database Administrator 110,	
Introduction to Relational Databases .	3
Graphic Design 167, Dreamweaver	4
Office Information Technology 100,	
Introduction to Computer Information	
Systems	3
	13

*Management Information System-
Elective Option 5*

Required courses

	CREDITS
Computer Programming 102, Visual Basic I	3
Computer Programming 202, Visual Basic II	3
Information Technology 110, Introduction to Management Information Systems.	3
Information Technology 210, Introduction to System Analysis and Design	3
	12

The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
ACCO 101	ACCO 102
BUAD 101	BUAD 104
ECON 201	BUAD 131
ENGL 151	BUAD 201
Creativity Elective	ECON 202
Fall	Spring
BUAD 132	BUAD 115
BUAD 202	Business Mgmt Elective
BUAD 251	COMM 101
OIT Course	Creativity Elective
PSYC 201	OIT Course
Business Mgmt Elective	Critical Thinking Elective

Certificate in Business Management
code 164

The Business Management Certificate is designed for individuals currently in the business field who, because of added responsibilities, realize a need to develop skills of leadership, organization, and communication. The courses required are:

	CREDITS
Accounting 101, General Accounting or Business Administration 112, Business Statistics	3-4

CREDITS

Business Administration 131, Principles of Management.	3
Business Administration 132, Human Resources Management	3
Economics 201, Principles of Economics— MACRO or 202, Principles of Economics— MICRO.	3
Office Information Technology 160, Applications Software	3
Office Information Technology 182, Intermediate Excel	2
Office Information Technology 183, Advanced Excel	2
	19-20

Certificate in Entrepreneurship

code 132

The Entrepreneurship Certificate is designed to provide individuals who are interested in starting their own business with the basic tools and knowledge they need to succeed. The curriculum is designed to encompass a variety of practical information that can be utilized by students who have selected or are considering a new business venture. The required courses are:

	CREDITS
Business Entrepreneurship 100, Introduction to Entrepreneurship	1
Business Entrepreneurship 101, Entrepreneurship—Developing a Business Plan	2
Business Entrepreneurship 102, Entrepreneurship—Business Management.	3
Business Entrepreneurship 103, Applying Technology to Business Needs.	3
Business Entrepreneurship 104, Presentation Skills	2
Business Entrepreneurship 105, Entrepreneurship—Marketing/ Advertising	2
Business Entrepreneurship 106, The Marketing/Sales Plan	2

CREDITS

Business Entrepreneurship 107,	
Entrepreneurial Finance	3
Business Entrepreneurship 108, Legal	
Issues and Ethics	1
Business Entrepreneurship 109, Basic	
Economic Concepts	3
Business Entrepreneurship 110, Risk	
Management for Entrepreneurs	1
	<hr/>
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Computer-Aided Drafting and Design Technology

Career Cluster—Architecture and Construction

Every manufactured product in the world must be defined in the form of solid models and/or engineering drawings performed by a drafter or designer. In defining a product, an extensive process of design and evaluation must take place before it is ready to be manufactured. The drafter, who is the key link in the design engineering and manufacturing steps, must possess a working knowledge of design principles, material properties, and manufacturing processes to bring together the final product design using models and working drawings. The drafter uses CAD (Computer-Aided Drafting) technology to produce the necessary design models and detail drawings. At KCC, CAD technology is introduced at the very beginning of the curriculum and is used throughout the program for the completion of drawings and models. The Computer-Aided Drafting and Design program uses two of the most popular CAD packages in industry, AutoCAD® and SolidWorks®, to produce all models and drawings. As reflected in the curriculum, CAD majors are required to complete a variety of technical subjects relating to design including materials science, manufacturing processes, mathematics, and physics. This provides the student with the foundation of knowledge needed to successfully function in an engineering environment. The drafting and design curriculum leads to an Associate in Applied Science, and the recommended high school units of study for the program are outlined at the end of the catalog. Students interested in transferring to a four-year institution should see a drafting and design advisor for information on the transfer programs.

General Education

The following courses provide skills that are necessary in carrying out normal job-oriented functions, as well as helping to develop an articulate, healthy, well-informed citizen.

CREDITS

Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Creativity Elective °	2-3
English 151 , Freshman Composition . . .	3
Global Awareness Elective °	3
Healthy Living Elective °	2-3
Mathematics 118 , Applied Algebra/Trigonometry I	3
Mathematics 119 , Applied Algebra/Trigonometry II	3
	19-21

°For options to fulfill the Creativity, Global Awareness, and Healthy Living Electives, see pages 49-50.

Related Specialties

CREDITS

Computer Engineering Technology 110 , Principles of Electricity and Electronics	3
Engineering Technology 160 , Manufacturing Processes	3
Engineering Technology 215 , Material Science	3
Engineering Technology 220 , Statics and Strengths of Materials . . .	3
Office Information Technology 160 , Applications Software	3
Physics 111 , Introductory Physics I or 114 , Applied Physics	4
	19

Drafting and Design Technology

Degree

code 220

CREDITS

Drafting 101 , Engineering Graphics . . .	4
Drafting 120 , Machine Drafting	3
Drafting 141 , Descriptive Geometry . . .	3
Drafting 181 , Applications in AutoCAD®	3
Drafting 211 , Dimensioning and Tolerancing	3
Drafting 221 , Architectural Drafting . . .	3
Drafting 234 , SolidWorks®	3
Drafting 251 , Advanced Modeling and CAM	3
Drafting 261 , Manufacturing Design . . .	3

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The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
CET 110	DRAF 120
COMM 101 or 111	DRAF 181
DRAF 101	DRAF 234
ENGL 151	MATH 118
OIT 160	General Education Elective

Fall	Spring
DRAF 141	DRAF 211
DRAF 221	DRAF 261
DRAF 251	ENTE 220
ENTE 215	PHYS 111 or 114
MATH 119	General Education Elective

It is recommended that ENTE 160 and one general education elective be taken during the summer semester of the first year.

Computer Engineering Technology

Career Cluster—Information Technology

No industry drives the rapid changes in new technology as completely as the computer and networking sectors. There are both local and worldwide employment opportunities for knowledgeable and skilled technicians, who possess computer troubleshooting/repair skills; network installation/management skills; computer programming skills; database administration skills; and computer-related, industry-endorsed certifications. With an increasing world emphasis on computer technology, the projected demand for computer, programming, database administrators, and network administrators will remain exceptionally high.

The Computer Engineering Technology Program emphasizes the state-of-the-art knowledge and skills needed to prepare students for a challenging and exciting career in this fast-paced, high-tech, rapidly growing industry. These programs are also designed to prepare students to take the industry-based certification exams, including A+, Net+, Novell CNA and CNE, Microsoft MCP and MCSE Security, Oracle Database Administration, and Cisco CCNA.

The Computer Technology degree and certificate programs are designed for individuals just beginning training to pursue a career in computer servicing, programming, database administration, and networking, as well as those already working in industry who need to upgrade their skills for new responsibilities or career growth.

General Education

For students pursuing an Associate of Applied Science, the following required courses provide general skills in writing and speaking that are necessary in carrying out normal,

job-orientated functions, as well as helping to develop an articulate, healthy, well-informed citizen.

CREDITS

Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Healthy Living Elective ^o	2-3
Mathematics 118 , Applied Algebra/Trigonometry I	3
	16-18

^oFor options to fulfill the Creativity, Global Awareness, and Healthy Living Electives, see pages 49-50.

For an Associate of Applied Science in Computer Engineering Technology, students have four choices of a major. These majors are Computer Technology, Computer Networking, Computer Programming, or Management Information Systems. You will need to complete the courses listed above in the General Education, as well as the courses listed in your choice of the Computer Technology, Computer Networking, Computer Programming, or Management Information Systems major areas, to receive an Associate of Applied Science in Computer Engineering Technology.

Computer Engineering Technology Degree

code 221

CREDITS

Computer Engineering Technology 110 , Principles of Electricity and Electronics	3
Computer Engineering Technology 125 , Digital Logic I	3
Computer Engineering Technology 140 , Microcomputers—Introduction	3

CREDITS

Computer Engineering Technology 185, Introduction to Operating Systems . . .	2
Computer Engineering Technology 230, Local Area Networking I—Network+ . . .	3
Computer Engineering Technology 235, Cisco Networking I	3
Computer Engineering Technology 250, Security+	3
Computer Engineering Technology 260, A+ Computer Diagnostics and Repair . . .	3
Computer Engineering Technology 270, Local Area Networking II—Server+ . . .	3
Computer Engineering Technology 278, Fundamentals of Wireless LANs	3
Computer Engineering Technology 279, Network Wiring, Design and Installation	3
Computer Engineering Technology 281, Operating Systems—Windows System Administration	3
Computer Engineering Technology 282, Operating Systems—UNIX	3
Computer Programming 101, C++ Programming I	3
Information Technology 110, Information Technology and Project Management. . .	3
Mathematics 119, Applied Algebra/ Trigonometry II	3

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The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
CP 101	CET 140
CET 110	CET 235
CET 125	ENGL 151
CET 185	MATH 118
Creativity Elective	Global Awareness Elective

Fall	Spring
CET 230	CET 250
CET 260	CET 270
CET 278	CET 279
CET 282	CET 281
MATH 119	COMM 101 or 111 IT 110 Healthy Living Elective

Computer Networking Degree

code 216

These graduates are trained for entry-level positions in the computer-networking field. They are trained to operate, maintain, and troubleshoot local area networks, servers, switches, and hubs.

CREDITS

Computer Engineering Technology 210, Installing, Configuring, and Administering Windows XP Professional	3
Computer Engineering Technology 227, Microsoft Internet Security and Acceleration (ISA) Server 2000, Enterprise Edition.	3
Computer Engineering Technology 235, Cisco Networking I	3
Computer Engineering Technology 236, Cisco Networking II.	3
Computer Engineering Technology 275, Cisco Networking III	3
Computer Engineering Technology 276, Cisco Networking IV	3
Computer Engineering Technology 279, Network Wiring, Design, and Installation	3
Computer Engineering Technology 282, Operating Systems—UNIX	3
Computer Engineering Technology 290, Managing and Maintaining a Windows Server 2003 Environment.	3
Computer Engineering Technology 291, Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure	3
Computer Engineering Technology 293, Planning and Maintaining a Windows Server 2003 Network Infrastructure. . .	3
Computer Engineering Technology 294, Planning, Implementing, and Maintaining a Windows Server 2003 Active Directory Infrastructure	3
Computer Engineering Technology 298, Designing Security for a Windows Server 2003 Network	3

	CREDITS
Computer Engineering Technology	
299 , Implementing and Administering Security in a Microsoft Server 2003 Network	3
Mathematics 119 , Applied Algebra/Trigonometry II	3
Information Technology 110 , Information Technology and Project Management. . .	3
	48

The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
CET 210	CET 227
CET 290	CET 294
CET 291	CET 298
CET 293	CET 299
COMM 101 or 111	MATH 118

Fall	Spring
CET 235	CET 275
CET 236	CET 276
CET 282	CET 279
ENGL 151	IT 110
Creativity Elective	Global Awareness
MATH 119	Elective
	Healthy Living
	Elective

Computer Programming Degree *code 214*

In this evolving world of information technology, there has been a growing need for those who have the skills to do programming in a variety of languages and environments. This degree establishes a core of the skills needed as a programmer in the most widely used languages that are being used currently. We will emphasize the development of fundamental logic and problem-solving skills in the 32 credits of core curriculum courses. Through the elective courses the student may choose to emphasize additional skills in application use, application programming, networking, or operating systems.

	CREDITS
Accounting 101 , General Accounting. . .	4
Computer Engineering Technology 185 , Introduction to Operating Systems . .	2
Computer Engineering Technology 235 , Cisco Networking I	3
Computer Programming 100 , Introduction to the Programming and Systems Environment	2
Computer Programming 101 , C++ Programming I	3
Computer Programming 102 , Visual Basic I	3
Computer Programming 201 , C++ Programming II	3
Computer Programming 202 , Visual Basic II	3
Computer Programming 210 , Java Programming	3
Information Technology 110 , Introduction to Management Information Systems.	3
Mathematics 119 , Applied Algebra/Trigonometry II	3
	32

Choose thirteen credits from the following electives:

	CREDITS
Computer Engineering Technology 140 , Microcomputers—Introduction	3
Computer Engineering Technology 260 , A+ Computer Diagnostics and Repair. .	3
Computer Engineering Technology 281 , Operating Systems—Windows Systems Administration	3
Computer Engineering Technology 282 , Operating Systems—UNIX	3
Computer Programming 212 , Java Programming II	3
Computer Programming 220 , Visual Basic for Applications.	3
Computer Programming 245 , Programming for WIN32 API	2
Computer Programming 272 , CGI/PERL Programming	3

	CREDITS
Computer Programming 280, Web Development with Visual Basic.NET.	3
Database Administrator 110, Introduction to Relational Databases .	3
Information Technology 200, Cooperative Education I.	3
Office Information Technology 181, Beginning Excel	2
Office Information Technology 182, Intermediate Excel	2
Office Information Technology 187, Introduction to Access	2
Office Information Technology 188, Intermediate Access	2

The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
CET 185	IT 110
CP 100	CP 201
CP 101	CP 202
CP 102	CP 210
MATH 118	Creativity Elective
Healthy Living Elective	

Fall	Spring
CET 235	COMM 101 or 111
CP Elective	CP Elective
ENGL 151	Global Awareness Elective
MATH 119	
ACCO 101	

Management Information Systems Degree *code 262*

The Management Information System (MIS) degree, concentrating on database management, equips students with the necessary skills for employment in a variety of information system positions in business and industry that may involve database administration, database development, the analysis and design of computerized information, and management decision systems. The management information system degree concentrating on database management is designed to provide students with

the technical skills needed for database administration, database developer, database applications design, and programming with database management systems, as well as system design and analysis. The material presented in the required courses will prepare a student to take the certification exams for Microsoft SQL Server (Microsoft Certified IT Professional—(MCITP): Database Administrator) and Oracle (Oracle Certified Professional—OCP).

Core Courses CREDITS

Computer Engineering Technology 185, Introduction to Operating Systems. . .	2
Computer Engineering Technology 230, Local Area Networking I or 235, Cisco Networking I	3
Computer Engineering Technology 281, Windows System Administration or 282, Operating System—UNIX. . .	3
Computer Programming 101, C++ Programming I or 102, Visual Basic I.	3
Computer Programming 201, C++ Programming II or 202, Visual Basic II or 210, Java Programming	3
Computer Programming 280, Web Application Development with Visual Basic.NET.	3
Database Administrator 110, Intro to Relational Databases	3
Database Administrator 231, Microsoft SQL Server 2005—I.	3
Database Administrator 243, Microsoft SQL Server 2005—II	3
Database Administrator 244, Microsoft SQL Server 2005—III	3
Database Administrator 251, Oracle Database Administration I	3
Database Administrator 252, Oracle Database Administration II.	3
Information Technology 110, Intro to Management Information Systems . . .	3
Information Technology 210, Intro to System Analysis and Design	3

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Choose three credits from the following Business Management electives:

CREDITS

Business Administration 112 , Business Statistics	3
Business Administration 115 , Global Business	3
Business Administration 223 , Developing an E-Commerce/E-Business Plan.	3
Business Administration 251 , Principles of Marketing.	3
Business Administration 274 , Organizational Behavior.	3

The four-semester sequence of courses recommended for the full-time student is:

Fall	Spring
CET 185	CET 281 or 282
COMM 101 or 111	CP 201 or 202 or 210
CP 101 or 102	DBA 231
DBA 110	IT 210
IT 110	MATH 118
Fall	Spring
CET 230 or 235	DBA 244
CP 280	DBA 252
DBA 243	ENGL 151
DBA 251	Business Management Elective
Creativity Elective	Global Awareness Elective
Healthy Living Elective	

Computer Engineering Technology Certificates

Database Management Certificate

code 133

The huge volumes of data generated in industry or business requires it to be organized to store, manage, and retrieve effectively. Database management systems provide a solution for such management. The tasks of a Database Administrator (DBA) in a database management system include designing and implementing the database, administering user privileges and security, routine backup and restoration, disaster recovery planning and restoration, and performance tuning.

This one-year certificate prepares students for employment in database administration and database development in a variety of industries. The program provides knowledge of relational database systems using either Oracle or Microsoft SQL Server as examples. Students will also learn other disciplines, such as database programming and related operating systems. The Database Management Certificate exposes students to a wide variety of database systems and prepares them for the more traditional roles of Database Administrator and Database Developer in activities that are centered on support of the Client/Server model of enterprise computing systems. The courses for this certificate are designed to prepare students for a role either as an Oracle DBA or a Microsoft SQL Server DBA, but the concepts learned can be applied to a wide range of database systems.

Twenty-nine (29) or thirty-two (32) credit hours must be completed to be awarded this KCC Database Management Certificate. There are two tracks for this certificate, one is the Microsoft SQL Server track and the other is the Oracle (OCP) track.

If a student only wishes to prepare for the Oracle Certified Associate (OCA) exam, the course DBA 251 is designed to prepare for the Oracle Certified Associate exam 1Z0-042. The Oracle Certified Professional (OCP) requires exam 1Z0-043 in which the student is prepared by the course DBA 252. Because KCC is a partner of Oracle, students receive a 40% discount on Oracle Certification exams and receive their certificates directly from the Oracle Company after passing the exams.

If a student only wishes to sit for the Microsoft Certified IT Professional (MCITP): Database Administrator exam, three Microsoft exams will be required to be passed. They are 70-431, 70-443, and 70-444 which students

can prepare for by taking these courses: DBA 231, DBA 243, and DBA 244. Students may also obtain their Microsoft Certified Technology Specialist (MCTS) by passing 70-431.

Core Courses

	CREDITS
Computer Engineering Technology 185 , Introduction to Operating Systems... 2	2
Computer Engineering Technology 281 , Windows System Administration or 282 , Operating System—UNIX... 3	3
Computer Programming 101 , C++ Programming I or 102 , Visual Basic I. 3	3
Computer Programming 201 , C++ Programming II or 202 , Visual Basic II or 210 , Java Programming 3	3
Computer Programming 280 , Web Application Development with Visual Basic.NET 3	3
Database Administrator 110 , Intro to Relational Databases 3	3
Information Technology 110 , Intro to Management Information Systems ... 3	3
Information Technology 210 , Intro to System Analysis and Design 3	3
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Choose one of the following database options:

Database Option A: Oracle Certificate Professional (OCP) Track

	CREDITS
Database Administrator 251 , Oracle Database Administration I 3	3
Database Administrator 252 , Oracle Database Administration II. 3	3
	6

OR

Database Option B: Microsoft Certified IT Professional (MCITP): Database Administrator

	CREDITS
Database Administrator 231 , Microsoft SQL Server 2005 - I: Implementation and Maintenance. 3	3
Database Administrator 243 , Microsoft SQL Server 2005 - II: Designing a Database Server Infrastructure. 3	3
Database Administrator 244 , Microsoft SQL Server 2005 - III: Optimizing and Maintaining a Database Administration Solution. 3	3
	9

Computer Programming Certificate

code 103

There is a growing need for those who have the skills to do programming in a variety of languages and environments. This KCC certificate establishes a core of the skills needed as a programmer in the most current and widely-used languages. We will emphasize the development of fundamental logic and problem-solving skills in the core curriculum courses. Through the electives the student may choose to emphasize additional skills in application use, application programming, networking, or operating system programming.

A minimum of 32 credit hours must be completed in this KCC certificate program, 19 credits from the core courses and 13 credits from the elective courses, to be awarded a KCC Computer Programming Specialist Certificate.

Core Courses

	CREDITS
Computer Engineering Technology 185 , Introduction to Operating Systems . . . 2	2
Computer Programming 100 , Introduction to the Programming and Systems Environment 2	2

	CREDITS
Computer Programming 101,	
C++ Programming I	3
Computer Programming 102,	
Visual Basic I	3
Computer Programming 201,	
C++ Programming II	3
Computer Programming 202,	
Visual Basic II	3
Computer Programming 210,	
Java Programming	3
	19

Choose thirteen credits from the following electives:

	CREDITS
Computer Engineering Technology 140,	
Microcomputers—Introduction	3
Computer Engineering Technology 235,	
Cisco Networking I	3
Computer Engineering Technology 260,	
A+ Computer Diagnostics and Repair	3
Computer Engineering Technology 271,	
Website Design and Maintenance	3
Computer Engineering Technology 281,	
Operating Systems —Windows System Administration	3
Computer Engineering Technology 282,	
Operating Systems—UNIX	3
Computer Programming 212,	
Java Programming II	3
Computer Programming 220,	
Visual Basic for Applications	3
Computer Programming 245,	
Programming for WIN32 API	2
Computer Programming 272,	
CGI/PERL Programming	3
Database Administrator 110,	
Intro to Relational Databases	3
Information Technology 200,	
Cooperative Education I	3
Office Information Technology 181,	
Beginning Excel	2
Office Information Technology 182,	
Intermediate Excel	2
Office Information Technology 187,	
Beginning Access	2

	CREDITS
Office Information Technology 188,	
Intermediate Access	2

Computer Engineering Technology Certifications

There are several industry-endorsed certifications offered in the Computer Engineering Technology Program at KCC. The courses in these certification programs prepare the student to take examinations that have been prepared by hardware and software manufacturers. These examinations and resulting certifications have been validated and endorsed by business and industry. A student who passes the examinations and receives certification will have shown that they have the knowledge, skills, and competencies that are necessary to be successful in that field. KCC offers preparatory course work for several industry-endorsed certifications.

Network+ Certification

KCC offers preparatory course work for the Computer Technology Industry Association's Network+ certification. This certification assures the skills and competencies of network service technicians in the computer/networking industry. Students can study for the nationally-recognized Net+ credential as a networking technician by taking CET 230 to prepare for the Net+ certification test.

The CET 230 class is suitable for students with medium to advanced computer hardware/software skills and knowledge. For current detailed information on the Net+ certification, please see the www.comptia.com website.

Microsoft Certified Systems Engineer Certification (MCSE)

The Microsoft Certified Systems Engineer Certification is designed for individuals looking to pursue a career in the area of computer administration and networking with Microsoft products. This industry-endorsed

certificate prepares students for Microsoft developed certification exams by providing knowledge and skills through the teaching of theory, practical application, and hands-on experience. The courses provide an industry standard of technical training in a relatively short period of time.

CREDITS

Computer Engineering Technology 210, Installing, Configuring, and Administering Windows XP Professional 3

Computer Engineering Technology 227, Microsoft Internet Security and Acceleration (ISA) Server 2000, Enterprise Edition. 3

Computer Engineering Technology 290, Managing and Maintaining a Windows Server 2003 Environment. 3

Computer Engineering Technology 291, Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure 3

Computer Engineering Technology 293, Planning and Maintaining a Windows Server 2003 Network Infrastructure. . . 3

Computer Engineering Technology 294, Planning, Implementing, and Maintaining a Windows Server 2003 Active Directory Infrastructure 3

Computer Engineering Technology 298, Designing Security for a Windows Server 2003 Network 3

Computer Engineering Technology 299, Implementing and Administering Security in a Microsoft Server 2003 Network 3

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Students may obtain their Microsoft Certified Professional Certification (MCP) by passing just one of the Microsoft exams. To obtain their Microsoft Certified Systems Administrator Certification (MCSA), students will need to pass four Microsoft exams (70-270, 70-290, 70-291, 70-227). The Microsoft Certified Systems Engineer

Certification (MCSE) will require the students to pass seven Microsoft exams (70-270, 70-290, 70-291, 70-293, 70-294, 70-298, 70-227). The Microsoft Certified Systems Engineer Certification (MCSE): Security will require the students to pass seven Microsoft exams (70-270, 70-290, 70-291, 70-293, 70-294, 70-298, 70-299, 70-227). For current detailed information on the MCSE, MCSA and MCP certifications, please see the www.microsoft.com/mcse website.

Certified Novell Administrator (CNA) and Certified Novell Engineer (CNE) Certifications

The Certified Novell Engineer Certification is designed for individuals looking to pursue a career in the area of computer administration and networking with Novell products. This industry-endorsed certification prepares students for Novell developed certification exams by providing knowledge and skills through the teaching of theory, practical application, and hands-on experience. The courses provide an industry standard of technical training in a relatively short period of time.

CREDITS

Computer Engineering Technology 201, Foundations of Novell Networking . . 3

Computer Engineering Technology 202, Novell Network Management 3

Computer Engineering Technology 203, Advanced Novell Network Management 3

Computer Engineering Technology 204, Novell E-Directory Design and Implementation. 2

Computer Engineering Technology 205, Desktop Management with Novell ZENWorks for Desktops 4 3

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Students may obtain their Certified Novell Administrator Certification (CNA) by passing the Novell exam 050-677 Foundations of Novell Networking. To obtain their Certified Novell Engineer Certification, students will need to pass four additional Novell examinations (050-681, 050-682, 050-664, and 050-683). For current detailed information on the CNA and CNE certifications, please see the www.novell.com website.

A+ Certification

The Computing Technology Industry Association's A+ certification program assures the competency of hardware service technicians in the computer industry. Students can study for the nationally recognized A+ credential as a computer service technician by taking CET 260 to prepare for the A+ certification examination.

CET 260 is a three (3) credit class. It is suitable for students with medium to advanced computer hardware/software skills and knowledge. For current detailed information on the A+ certification, please see the www.comptia.com website.

Security+ Certification

CompTIA Security+ is a foundation-level certification for the Information Technology professional who has day-to-day information security responsibilities. The certification exam tests a broad range of security knowledge expected of entry-level security professionals. The following course prepares a student for the CompTIA Security+ exam.

CREDITS

Computer Engineering Technology 250, Security+	3
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For current detailed information about this certification, see www.comptia.org.

Cisco Certified Network Administrator Certification (CCNA)

Cisco Systems is a world leader in networking equipment for the Internet and has created the Cisco Networking Academies Program to train and certify IT professionals to build and maintain complex LAN and WANs. There are four courses in the Cisco Certified Network Administrator (CCNA) program. These courses will prepare students to take the industry-endorsed CCNA certification examination.

CREDITS

Computer Engineering Technology 235, Cisco Networking I	3
Computer Engineering Technology 236, Cisco Networking II	3
Computer Engineering Technology 275, Cisco Networking III	3
Computer Engineering Technology 276, Cisco Networking IV	3
	12

For current detailed information on the CCNA certification, please see the www.cisco.com website.

Cisco Wireless LAN Support Specialist Certification

As organizations adopt wireless LAN technology, they require qualified professionals who can design, install, support, and operate a wireless LAN solution. The following course prepares a student for the CCNA + Cisco 9EO-581 certification exam and to achieve the Cisco Wireless LAN Support Specialist designation. To obtain this certification, you must also possess a Cisco Certified Network Administrator certification.

CREDITS

Computer Engineering Technology 278, Fundamentals of Wireless LANs	3
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For current detailed information about this certification, see www.cisco.com.

Panduit Authorized Installer (PAI) and BICSI Level 1 Installer Certifications

The Network Wiring, Design, and Installation course, sponsored by Panduit and Cisco, is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its world-wide standards, types of media and cabling, physical and logical networks, as well as signal transmission. Students will develop skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel installation and termination, as well as installing jacks and cable testing. This course also includes an introduction to fiber optic cabling. This hands-on, lab-oriented 80-hours course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments. The following course will prepare students for the industry-recognized Panduit Authorized Installer (PAI) Certification and/or the BICSI Level I Installer Exam:

CREDITS

Computer Engineering Technology 279,	
Network Wiring, Design, and	
Installation	3

For current detailed information about the voice and data network cabling certification exams, see www.panduit.com, cisco.netacad.net, or www.bicsi.org.

Corrections

Career Cluster—Law, Public Safety, Corrections, and Security

This curriculum is designed for career entry and/or advancement with the Michigan Department of Corrections or local correctional facilities, such as the sheriff’s department.

Corrections Degree code 230

General Education

Students who graduate with an associate degree will have successfully completed the following general education core courses in communicating, global awareness, creativity, critical thinking, and healthy living. Students must complete a minimum of 62 credit hours to qualify for a degree.

	CREDITS
English 151 , Freshman Composition . . .	3
English 152 , Freshman Composition . . .	3
Communication 101 , Interpersonal Communication	3
Creativity Elective ^o	2-3
Critical Thinking Elective ^o	3-4
Psychology 201 , Introduction to Psychology	3
Physical Education Activity 121, 150-156, 159-161 or Criminal Justice 110 , Physical Training for Law Enforcement Personnel	2-3
Sociology 201 , Introduction to Sociology	3
	22-25
Electives	12
	Total credits 34-37

^oFor options to fulfill the Creativity and Critical Thinking Electives, see page 50.

Professional Development Courses

	CREDITS
Criminal Justice 101 , Introduction to Criminal Justice	3
Criminal Justice 104 , Introduction to Corrections	3
Criminal Justice 105 , Institutional Corrections	3
Criminal Justice 106 , Correctional Law	3
Criminal Justice 107 , Client Growth and Development.	3
Criminal Justice 108 , Client Relations in Corrections	4
	19

Choose nine credits from the following electives:

	CREDITS
Criminal Justice 111 , Local Correctional Academy.	10
Criminal Justice 112 , Local Correctional Re-Entry Academy	6
Criminal Justice 202 , Criminal Law	3
Criminal Justice 203 , Crime and Delinquency	3
Criminal Justice 204 , Criminal Procedures	3
Criminal Justice 210 , Criminal Justice Practicum	3
Criminal Justice 211 , Criminal Justice Practicum	3
Criminal Justice 220 , Management Principles for Criminal Justice Supervisors	3
Criminal Justice 221 , Ethical Problem Solving in Policing	3
Criminal Justice 222 , Reserve Officer Training	3
Psychology 275 , Criminal Psychology	3
Sociology 202 , Social Problems	3

Certificate in Corrections code 118

This Corrections Certificate is designed for students planning careers in corrections and for correctional officers who are interested in furthering their education. The courses

within this certificate program comply with the Michigan Corrections Officers Training Council's fifteen semester credit hour requirement for employment as a Michigan correctional officer. Credits earned may be applied toward an Associate in Corrections.

Certification requirements:*

	CREDITS
Criminal Justice 104 , Introduction to Corrections	3
Criminal Justice 105 , Institutional Corrections	3
Criminal Justice 106 , Correctional Law.	3
Criminal Justice 107 , Client Growth and Development.	3
Criminal Justice 108 , Client Relations in Corrections	4
	16

*A grade of 2.0 ("C") or better is required in each of the above courses.

Local Correctional Academy

Prerequisites

For certification by the Michigan Sheriffs' Coordinating and Training Council (MSCTC), candidates must meet the employment standards for a local correctional officer as mandated by law. Those include being a United States citizen, 18 years of age or older, have a high school diploma or GED, and pass a background investigation.

The Local Correctional Academy is a MSCTC approved 160-hour training program for correctional personnel supervising inmates in county jails. It fulfills the educational requirements for county correctional officers as mandated by law. Credits earned in this program may be applied toward an Associate in Applied Science in Corrections. For certification by the MSCTC, learners must meet attendance and grade requirements and receive a conditional offer of employment as a corrections officer within 12 months of completing the academy.

CREDITS

Criminal Justice 111 , Local Correctional Academy	10
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Local Correctional Re-Entry Academy

Prerequisites

In order to enter this program you must have approval from the Criminal Justice Chair.

The Local Correctional Re-Entry Academy is a Michigan Sheriffs' Coordinating and Training Council (MSCTC) approved 96-hour core training program for candidates eligible for waiver of mandatory training requirements as outlined in the MSCTC Recognition of Prior Training and Experience policy. For certification by the MSCTC participants must meet grade and attendance requirements. Credits earned in this program may be applied toward an Associate of Applied Science in Corrections.

CREDITS

Criminal Justice 112 , Local Correctional Re-entry Academy	6
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Criminal Justice

code 314

Career Cluster—Law, Public Safety, Corrections, and Security

The Associate in Criminal Justice is a program designed to prepare students for immediate entry into a career in Criminal Justice or to provide students with a degree that will meet the MACRAO for transfer to a bachelor degree program. Please carefully consider course requirements for chosen majors at your transfer institution and work with an academic advisor to select appropriate courses from the available transfer guides or from the courses that meet the MACRAO. See pages 18-19 for MACRAO information.

General Education

Students who graduate with an associate degree will have successfully completed the following general education core courses in communicating, global awareness, creativity, critical thinking, and healthy living.

CREDITS

Communication 101 , Interpersonal Communication	3
Critical Thinking Elective ^o	4
English 151 , Freshman Composition . . .	3
English 152 , Freshman Composition . . .	3
Healthy Living Elective ^o	2
Humanities 150 , Encounter with the Arts	2
Philosophy 202 , Introduction to Ethics . .	3

^oFor options to fulfill the Critical Thinking and Healthy Living Electives, see pages 49-50.

Choose one course that is a different subject area from your Critical Thinking elective from the following courses:

Science and Mathematics	4
ASTR 104; BIOL 101, 105, 109, 110, 111, 112, 116, 140, 200, 201, 202, 205; CHEM 100, 110, 111, 201, 202, 210; GEOG 100; PHYS 111, 112, 114, 201, 202; SCIE 102, 103	

Choose a minimum of eight credit hours from the following courses. Courses must be taken in more than one subject area.

Social Science	8
ANTH 200; ECON 201, 201H, 202; HIST 103, 104, 104H, 106, 151, 151H, 152, 152H, 201, 202, 211, 260; PHIL 250; PSYC 201, 220, 232, 250; POSC 200, 200H, 201, 202, 210, 211; SOCI 201, 201H, 202, 203, 204	

Choose a minimum of six credit hours from the following courses. Courses must be taken in more than one subject area.

Humanities	6
ARAB 101, 102; ART 103, 105, 106, 110, 141, 204, 206, 211, 212, 213, 215, 222, 227; FREN 101, 102, 201, 202; GERM 101, 102, 201, 202; HIST 103, 104, 104H, 106, 151, 151H, 152, 152H, 201, 202, 210, 211, 220, 240, 285; HUMA 200, 205; INTL 210; JAPA 101, 102; LITE 105, 205, 206, 211, 212, 213, 216, 222, 223, 230, 240, 285; MUSI 109, 130, 131, 141, 211, 232, 233, 240, 250, 251, 298; PHIL 201, 201H, 230, 250, 298; SPAN 101, 102, 131, 201, 202, 203; THEA 121, 122	

Professional Development Courses

Required Courses

CREDITS

Criminal Justice 101 , Introduction to Criminal Justice	3
Criminal Justice 202 , Criminal Law . . .	3
Criminal Justice 221 , Ethical Problem Solving in Policing	3
	<hr/>
	9

Choose five courses from the following elective courses:

CREDITS

Criminal Justice 104 , Introduction to Corrections	3
Criminal Justice 105 , Institutional Corrections	3
Criminal Justice 106 , Correctional Law	3
Criminal Justice 107 , Client Growth and Development.	3
Criminal Justice 108 , Client Relations in Corrections	4
Criminal Justice 201 , Criminal Investigation	3
Criminal Justice 203 , Crime and Delinquency	3
Criminal Justice 204 , Criminal Procedures	3
Criminal Justice 205 , Traffic Control	4
Criminal Justice 210 , Criminal Justice Practicum	3
Criminal Justice 211 , Criminal Justice Practicum	3
Criminal Justice 220 , Principles of Management for Criminal Justice Supervisors	3
Criminal Justice 222 , Reserve Officer Training	3
Psychology 250 , Abnormal Psychology	3
Psychology 275 , Criminal Psychology	3
Service Learning 200 , Service Learning	3
Sociology 202 , Social Problems	3

Dental Hygiene

Career Cluster—Health Science

Dental hygienists are oral health care professionals who provide educational, preventive, and therapeutic services in a variety of health care settings: private practices, school systems, hospitals, long-term care facilities, HMOs, research centers, industry, dental supply companies, veterinarian dentistry, military bases, government agencies, and higher education. Dental hygienists are also in demand in other countries.

The dental hygiene profession, as an integral part of the health care team, demands individuals who have been instructed in the psychosocial, biophysical, and technical elements of the dental hygiene process of care. Dental hygiene practitioners must be able to effectively interact with patients, other professionals, and the community. They must be able to apply current concepts to changing societal and oral health needs. The Kellogg Community College Department of Dental Hygiene Education is committed to educating dental hygienists who will provide quality oral health services and education to and for the public; foster leadership and innovation in health promotion issues; appreciate cultural diversity and respect for the individual; and demonstrate the highest standards of honesty, integrity, accountability, and ethics.

The goals of our department are stated here and reflect our commitment to the dental hygiene student and to the professional development of the registered dental hygienist, as well as to advancing the profession of dental hygiene.

The KCC Department of Dental Hygiene Education will:

1. Prepare a competent, entry-level dental hygienist as defined by the KCC Dental Hygiene Competency statement.
2. Maintain a contemporary dental hygiene

program that reflects relevant and current dental hygiene theories, practices, and educational methods.

3. Provide a student-centered learning environment that integrates general education, biomedical sciences, dental sciences, and dental hygiene sciences.
4. Maintain an admission policy which provides for a diverse and qualified student body.
5. Provide opportunities to the dental hygienist for professional growth and development through lifelong learning experiences.
6. Respond to the oral health needs of the community by providing therapeutic, educational, and preventive dental hygiene services.

Dental hygienists provide the following oral health services: review medical and dental health histories, blood pressure screenings; oral cancer screenings, oral health instruction; dental charting, periodontal assessment, non-surgical periodontal therapy, oral prophylaxis, fluoride therapies, pit and fissure sealants, nutritional counseling, tobacco cessation program, radiographs, and athletic mouth protectors.

Our program is designed to prepare a competent dental hygienist within two years as a full-time student. Because of space limitations, enrollment is selective and restricted to 20 applicants each fall. Although personal interviews are not required, many applicants like to arrange for a visit to see our facility. Please contact the Enrollment Services office or the Program director if you would like to arrange for a visit.

Students receive their clinical education in a well-equipped, modern facility located on the KCC campus. They are also given the opportunity to develop course projects which provide educational and preventive services for the community.

The Dental Hygiene Program at KCC is fully accredited by the Commission on Dental Accreditation. Students are eligible to take the National Dental Hygiene Examination and the North East Regional Board Examination in their second clinical year. At the completion of the program, students receive the Associate in Applied Science.

Prerequisites

Formal admission into the Dental Hygiene Program is required for registration. Recommended high school units of study are shown at the end of this catalog. There are no prerequisite courses required at this time. In order to register for Chemistry 100, which must be completed in the fall semester of the first year, the student must achieve one of the following:

- COMPASS algebra assessment with score of at least 40

OR

- Grade of “C” or better in Chemistry 10, Mathematics 101, or other college-level mathematics course

Our program is designed so that a newly-graduated high school student may enter the program in the fall and successfully complete the program within two years. However, many students have previous college experiences that make the program easier to complete. Students with previous college courses of “C” or better may be able to transfer those credit hours into the program. Once admitted, students must maintain a minimal college grade point average of 2.00 in order to remain in the program and may not fail any dental hygiene designated courses. Students who have completed related science courses more than seven years ago may be advised by the Program director to retake them.

Admissions Criteria

The admissions selection criteria include the following:

1. High school or GED grade point average
2. ACT/SAT score
3. Previous college grade point average, if applicable
4. Specific college courses with a “C” or better: BIOL 201, 202, 205; CHEM 100 or 110; ENGL 151; PSYC 201; and SOCI 201.
5. Submit application by March 1

Completing the following KCC courses with a “C” or better makes the Dental Hygiene Program easier to complete, especially completion of anatomy, physiology, or chemistry. For transfer equivalents from other colleges or universities, contact the Registrar’s office. Please note, these are suggestions only and are not required for admission into the program.

- Biology 201, Human Anatomy
- Biology 202, Human Physiology
- Biology 205, Microbiology
- Chemistry 100, Fundamentals of Chemistry I
OR Chemistry 110, General Chemistry I
- Communication 101, Foundations of Interpersonal Communication
- Creativity Elective^o
- English 151, Freshman Composition
- Psychology 201, Introduction to Psychology
- Sociology 201, Introduction to Sociology

^oFor options to fulfill the Creativity Elective, see page 49.

Admission to the Dental Hygiene Program is selective due to space and equipment limitations, and enrollment limitations imposed by regulatory bodies. Please refer to page 13 for more specific information related to the admission process for the Dental Hygiene Program.

Requirements for Taking Dental Hygiene Courses

Criminal Background Checks

Some clinical sites require pre-placement criminal background checks on students. Students assigned to these particular sites will be required to complete the appropriate paperwork allowing the background check to be done. Should there be a conviction noted, it will be left to the determination of the clinical site as to whether the student will be allowed to complete their clinical education at their facility. If it is determined that the student will not be allowed at the facility, the student will be withdrawn from the program.

Drug Screens

Some clinical sites require a pre-placement drug screen. Students who have been assigned to those sites must provide a drug screen according to the specific standards the clinical site has defined.

Some clinical sites require a drug screen based on behavior exhibited by the student while at the site. When requested by officials at the site, students must provide a drug screen according to the specific standards the clinical site has defined. A student referred to a drug screen will be temporarily suspended from clinical work until the results of the drug screen are reported. The Program director will advise the student where and when to have the drug screen completed to ensure compliance.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. These courses may be taken prior to being admitted to the program.

CREDITS

Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Psychology 201 , Introduction to Psychology	3
Sociology 201 , Introduction to Sociology	3
	14-15

^oFor options to fulfill the Creativity Elective, see page 49.

Dental Hygiene Degree code 228

CREDITS

Biology 201 , Human Anatomy	4
Biology 202 , Human Physiology	4
Biology 205 , Microbiology	4
Chemistry 100 , Fundamentals of Chemistry	4
Dental Hygiene 110 , Pre-Clinical Dental Hygiene	6
Dental Hygiene 111 , Dental Hygiene Clinic I	3
Dental Hygiene 112 , Medical Emergency in Dental Practice	2
Dental Hygiene 114 , Oral Anatomy . . .	3
Dental Hygiene 121 , Dental Hygiene Clinic II	2
Dental Hygiene 123 , Radiography	2
Dental Hygiene 130 , Community Dentistry I	1
Dental Hygiene 135 , Dental Materials . .	3
Dental Hygiene 143 , Histology	2
Dental Hygiene 222 , Oral Pathology . . .	2
Dental Hygiene 231 , Dental Hygiene Clinic III	5
Dental Hygiene 232 , Community Dentistry II	2
Dental Hygiene 233 , Nutrition	2
Dental Hygiene 234 , Pharmacology	2
Dental Hygiene 241 , Dental Hygiene Clinic IV	5
Dental Hygiene 242 , Periodontics	2
Dental Hygiene 244 , Pain Control	2

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The four-semester plus summer sequence of courses required for the full-time student is:

Fall

BIOL 201
CHEM 100
DEHY 110
DEHY 112
DEHY 114
DEHY 130

Spring

BIOL 202
BIOL 205
DEHY 111
DEHY 135
ENGL 151

Summer

DEHY 121
DEHY 123
DEHY 143

Fall

COMM 101
DEHY 222
DEHY 231
DEHY 233
DEHY 234
DEHY 242

Spring

DEHY 232
DEHY 241
DEHY 244
PSYC 201
SOCI 201
Creativity Elective

Early Childhood Education

Career Cluster—Education and Training

The Early Childhood Education Program prepares individuals to work in the child care field as preschool teachers, child care providers, licensed home child care providers, early childhood paraprofessionals, program directors, and assistant teachers. Students learn how to design, manage, and apply age-appropriate programming for children ages birth to eight years. Some field work experience is required. This curriculum leads to an Associate in Applied Science and is designed for career entry and/or educational advancement. **All students are encouraged to meet with the Early Childhood Education Program Manager before registering for classes. Students registered in Early Childhood Education courses are required to submit an approved Child Abuse and Neglect Form (CA/NR) from the Michigan Department of Human Services. This form must be renewed every five years. For more information call (269) 965-3931, ext. 2399.**

Prerequisites

Students should see the individual course descriptions section of this catalog for specific prerequisite information. Some early childhood course prerequisites may be waived, based on an individual's experience with approval from the Early Childhood Education Program Manager.

General Education

The following courses provide general skills in speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations.

CREDITS

Communication 101 , Foundations of Interpersonal Communication	
or 111 , Business and Technical Communication	3

CREDITS

Critical Thinking Elective ^o	4
Creativity Elective ^o	2-3
English 151 , Freshman Composition	3
Psychology 201 , Introduction to Psychology	3
Sociology 201 , Introduction to Sociology	3
	<hr/> 18-19

^oFor options to fulfill the Critical Thinking and Creativity Electives, see page 49.

Early Childhood Education Degree

code 215

CREDITS

Early Childhood Education 201 , Early Childhood Health, Safety, and Nutrition	3
Early Childhood Education 210 , Child Growth and Development	3
Early Childhood Education 214 , Appropriate Assessment with Young Children	3
Early Childhood Education 215 , Positive Child Guidance	3
Early Childhood Education 218 , Anti-Bias Curriculum in Early Childhood Settings	3
Early Childhood Education 221 , Early Childhood Internship I	3
Early Childhood Education 224 , Introduction to Child Care	3
Early Childhood Education 231 , Early Childhood Literacy	3
Early Childhood Education 232 , Infant and Toddler Care	3
Early Childhood Education 233 , Early Childhood Environments	3
Early Childhood Education 237 , Young Children with Special Needs	3
Early Childhood Education 240 , Child Care Administration	3
Early Childhood Education 250 , Intentional Teaching in Early Childhood	3
	<hr/> 39

and five credits selected from the following electives:

	CREDITS
Early Childhood Education 209, Fundamentals of Early Childhood Education	3
Early Childhood Education 212, Selected Topics in Child Care	1-6
Early Childhood Education 217, School-Age Learning Environments	3
Early Childhood Education 219, Creative Arts and Movement for Young Children.	3
Early Childhood Education 220, Early Childhood Education Topics	1-6
Early Childhood Education 228, Early Childhood Curriculum Development.	1-4
Early Childhood Education 260, Positive Relationships with Families	3
Human Services 210, Child Psychology	3
Human Services 225, Culturally-Sensitive Practice in Social Work	3
Human Services 230, Nutrition	3
Literature 213, Children’s Literature	3
Physical Education Professional 290, Preschool and Elementary Physical Education	3
Service Learning 200, Service Learning.	3

NOTE: In order for work experience to be used toward completing the requirements of the Early Childhood internships, it must be currently observable and in a licensed early childhood setting. Call the Early Childhood Education Program Manager for more information at (269) 965-3931, ext. 2399.

Recommended Course Sequence

Students should work with the Early Childhood Education Program Manager to individualize their education plans for this program.

Certificate in Early Childhood Education

code 108

This curriculum teaches students the skills and knowledge they need to know how to design and implement quality, age-appropriate learning activities for children ages birth to eight years. One internship experience is required. The Early Childhood Education Certificate option is designed as a potential second step of training between the CDA option and the associate degree in Early Childhood Education option.

Prerequisites

Students should see the individual course descriptions section of this catalog for specific prerequisite information. Some early childhood course prerequisites may be waived, based on an individual’s experience, with approval from the Early Childhood Education Program Manager.

Requirements for Early Childhood Education Certificate

	CREDITS
Early Childhood Education 201, Early Childhood Healthy, Safety, and Nutrition	3
Early Childhood Education 210, Child Growth and Development	3
Early Childhood Education 214, Appropriate Assessment with Young Children	3
Early Childhood Education 215, Positive Child Guidance.	3
Early Childhood Education 218, Anti-Bias Curriculum in Early Childhood Settings	3
Early Childhood Education 221, Early Childhood Internship I	3
Early Childhood Education 224, Introduction to Child Care	3
Early Childhood Education 231, Early Childhood Literacy.	3
Early Childhood Education 232, Infant and Toddler Care	3

CREDITS

Early Childhood Education 233, Early	
Childhood Environments	3
Early Childhood Education 237, Young	
Children with Special Needs	3
Early Childhood Education 240, Child	
Care Administration	3
	36

Recommended Course Sequence

Some courses do not require prerequisites and can be taken at any time. Please review the course descriptions for further information. If you desire to take 12 or more credit hours of instruction at any one time, it is recommended that you pursue the Early Childhood Education Associate in Applied Science curriculum, which requires some general education courses. You should work with the Early Childhood Education Program Manager to individualize your education plans for this program.

Child Development Associate (CDA) Training

The Child Development Associate (CDA) is a credential awarded by the Council for Early Childhood Professional Recognition headquartered in Washington, DC. The CDA recognizes skills of early care givers and education professionals. *It is designed for individuals who have work experience in early child care settings. The CDA represents a national effort to credential qualified caregivers who work with children ages birth to five.*

The CDA is different from the associate degree and certificate in Early Childhood Education conferred by KCC. KCC provides classes for academic credit that may be applied toward the completion of CDA education and training requirements. KCC does NOT award the CDA credential.

The Council for Early Childhood Professional Recognition sets CDA assessment procedures

and candidate require-ments. KCC offers training toward the completion of the Direct Assessment CDA credential procedure. **All interested students need to meet with the Early Childhood Education Program Manager prior to registering for classes. For more information call (269) 965-3931, extension 2399.**

Recommended Courses for CDA Training

These courses are recommendations. Other early childhood courses may be able to apply toward the completion of CDA training requirements.

CREDITS

Early Childhood Education 209,	
Fundamentals of Early Childhood	
Education	3
Early Childhood Education 210, Child	
Growth and Development	3
Early Childhood Education 215, Positive	
Child Guidance.	3
Early Childhood Education 232, Infant	
and Toddler Care	3
Early Childhood Education 233, Early	
Childhood Environments.	3
	15

If you need work experience, you may need to take ECE 221, Early Childhood Internship I. A CDA candidate may choose to register for ECE 216, CDA Advisor Seminar, with approval from the Early Childhood Education Program Manager. This seminar class is designed to help students progress successfully through the CDA process.

Michigan School-Age Credential (MI SAC) Training

NOTE: As of January 2007, the Michigan SAC has been placed in a moratorium status and is not available. For more information contact the ECE Program Manager at (269) 965-3931, ext. 2399.

The Michigan School-Age Credential (MI SAC) is a credential awarded by the Michigan 4C Association—Child Advocacy Program.

The MI SAC recognizes qualified caregivers who work with school-age children and can demonstrate their ability to nurture the social, emotional, physical, and intellectual growth of children ages 5 to 12 years.

It is designed for individuals who currently work in licensed school-age settings. MI SAC is different from the associate degree in Early Childhood Education, the Early Childhood Education Certificate, and the Child Development Associate (CDA). Kellogg Community College provides classes that may be used toward the completion of the MI SAC training requirements. It does not award the MI SAC credential.

Individuals who are interested in applying for the MI SAC must meet the requirements set forth by the Michigan 4C Association—Child Advocacy Program. All interested students need to meet with the Early Childhood Education Program Manager. For more information call 269-965-3931, ext. 2399.

Recommended courses

	CREDITS
Early Childhood Education 210 , Child Growth and Development	3
Early Childhood Education 215 , Positive Child Guidance	3
Early Childhood Education 217 , School-Age Learning Environments . .	3
Early Childhood Education 233 , Early Childhood Environments	3
Early Childhood Education Elective ^o . .	3

^oRequired to meet the state of Michigan Child Care Licensing Requirements for Directors. The elective course needs to be chosen with the help of the Early Childhood Education Program Manager.

Emergency Medical Services

Career Cluster—Law, Public Safety, Corrections, and Security

Emergency Medical Services is a rapidly changing field. As this area continues to upgrade and expand, there will be an increasing demand for trained personnel, especially at the advanced and associate degree levels. Because the EMS field is broad, students completing this program may work in a variety of different fields, such as industrial, safety, ambulance (private and public), fire, and emergency room.

The Kellogg Community College Emergency Medical Services Program offers several levels of study through which students can meet their future job needs. Study is available at the certificate level in First Responder, Basic Emergency Medical Technician, Intermediate Emergency Medical Technician (Specialist), and Advanced Emergency Medical Technician (Paramedic). Also available is the Associate in Applied Science in Emergency Medical Services with either a management or education option.

IN ORDER TO RECEIVE CERTIFICATION OR AN ASSOCIATE DEGREE, STUDENTS MUST COMPLETE ALL COURSE WORK WITH A GRADE OF “C-” OR BETTER AND A CUMULATIVE GRADE POINT OF AT LEAST 2.0. Supportive courses, such as anatomy, may require a higher grade as a prerequisite. Please check the course descriptions for prerequisites (pages 175-180).

The EMT certificate programs allow a student to complete the training necessary to obtain licensure at the designated level of certification. All certificate programs are currently approved by the Michigan Department of Consumer and Industry Services. The EMS Associate in Applied Science and the Advanced EMT Certificate are approved for

federal occupational education funding with the Michigan Department of Education.

Listed here are the curriculums at the time of this catalog printing. For more information on any of the programs, contact the EMS Education Director or an advisor.

Admission Requirements

Medical First Responder/ Basic EMT Programs

Both the Medical First Responder and Basic EMT programs are open admission courses. There are no prerequisites beyond college admission for Medical First Responder level. Basic EMT requires an eight-hour CPR card (ARC-Professional Rescuer or AHA Healthcare Providers card and COMPASS test). No academic advisor or program director’s signature is required to enroll in these courses.

Advanced EMT Certificate/ Associate Degree Programs

The requirements for admission to the advanced EMT certificate or associate degree programs are:

1. Application and acceptance to the College
2. Current Basic EMT license
3. Application to the AEMT (Paramedic) Program
4. COMPASS testing and minimum proficiencies scores of 50 in Writing, 73 in Reading, and 40 in Algebra
5. Admission meeting with EMS Program director or designee

Associate Degree Program

(if not part of above certificate)

The requirements for admission to the associate degree program are:

1. Application and acceptance to the College
2. Current Advanced EMT license or department permission

3. Application to the program
4. Completion of a “credit evaluation” form in the Registrar’s office for credits earned at other institutions
5. COMPASS testing. Depending on past course work, this requirement may be waived
6. Admission meeting with EMS Program director or designee

Guaranteed Admission Policy for Advanced EMT Program

If you apply to the Advanced EMT program during the fall or spring semester in which you are taking your Basic EMT training at KCC, you are eligible for guaranteed admission. You will have a place reserved for you in the fall Advanced EMT program based on the following conditions:

1. You pass the MDPH BEMT licensure exam prior to the start of your Advanced EMT program.
2. There is sufficient space within the Advanced EMT program (you will be admitted based on the order in which completed files are received).
3. You complete the above admission requirements prior to the end of your first year spring semester.
4. Admission priority will be given to students who successfully complete BIOL 105 or 202.

Emergency Medical Services Degree code 239

The Associate of Applied Science Program allows students who pursue the Basic and Paramedic Certificate Programs the option of completing an associate degree. The addition of several supportive and core competency courses in English, psychology, sociology, and humanities help the student achieve a more rounded education. Students may use this degree as a starting point for higher level studies at the baccalaureate level and beyond.

General Education

	CREDITS
Biology 105 , Essentials of Human Anatomy and Physiology	4
Communication 111 , Business and Technical Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Psychology 201 , Introduction to Psychology	3
	18-19

^oFor a list of options for the Creativity and Global Awareness Electives, see pages 49-50.

Emergency Medical Services Major

	CREDITS
Emergency Medical Technician 120 , Basic Emergency Medical Technician Didactic.	8
Emergency Medical Technician 121 , Basic Emergency Medical Skills Lab . . .	2.25
Emergency Medical Technician 122 , Defensive Emergency Driving/ All Safe.	1
Emergency Medical Technician 123 , Basic Medical Technician Clinical Internship	0.75
Emergency Medical Technician 162A , Pharmacology I	2
Emergency Medical Technician 162B , Pharmacology II	2
Emergency Medical Technician 163A , Skills Lab I	2
Emergency Medical Technician 163B , Skills Lab II	2
Emergency Medical Technician 164A , Paramedic Clinical Internship I	5
Emergency Medical Technician 164B , Paramedic Clinical Internship II	5
Emergency Medical Technician 165 , Paramedic Pediatric Advanced Life Support	2
Emergency Medical Technician 166A , Cardiology I	2

	CREDITS
Emergency Medical Technician 166B, Cardiology II	2
Emergency Medical Technician 167A, Advanced EMT I	4
Emergency Medical Technician 167B, Advanced EMT II	4
Emergency Medical Technician 168, Advanced Practice	4
	48

Emergency Medical Services Certificates

The EMT certificate programs allow a student to complete the training necessary to obtain licensure at the designated level of certification.

Medical First Responder **code 160**
CREDITS

Emergency Medical Technician 110,
Medical First Responder Training 3

Basic Emergency Medical Technician
code 127
CREDITS

Emergency Medical Technician 120, Basic
Emergency Medical Technician
Didactic 8

Emergency Medical Technician 121,
Basic Emergency Medical Technician
Skills Lab 2.25

Emergency Medical Technician 122,
Defensive Emergency Driving/
AllSafe 1

Emergency Medical Technician 123,
Basic Emergency Medical Technician
Clinical Internship 0.75
12

*Advanced Emergency Medical
Technician (Paramedic)* **code 128**

General Education
CREDITS

Biology 105, Essentials of Human
Anatomy and Physiology 4

	CREDITS
Emergency Medical Technician 162A, Pharmacology I	2
Emergency Medical Technician 162B, Pharmacology II	2
Emergency Medical Technician 163A, Skills Lab I	2
Emergency Medical Technician 163B, Skills Lab II	2
Emergency Medical Technician 164A, Paramedic Clinical Internship	5
Emergency Medical Technician 164B, Paramedic Clinical Internship II	5
Emergency Medical Technician 165, Pediatric Advanced Life Support	2
Emergency Medical Technician 166A, Cardiology I	2
Emergency Medical Technician 166B, Cardiology II	2
Emergency Medical Technician 167A, Advanced EMT I	4
Emergency Medical Technician 167B, Advanced EMT II	4
Emergency Medical Technician 168, Advanced Practice	4
	40

NOTE: Students must receive a “C-” grade or better in each of the above courses to be eligible for the certificate.

The sequence of courses is:

Fall	Spring
BIOL 105	EMT 122
EMT 122	EMT 162B
EMT 162A	EMT 163B
EMT 163A	EMT 164B
EMT 164A	EMT 165
EMT 166A	EMT 166B
EMT 167A	EMT 167B
	EMT 168

English

Career Cluster—Arts, Audio-Video Technology, and Communications

Persons interested in learning new writing techniques or discussing various authors may plan a program in consultation with the department chairperson. The certificate is earned upon completion of 18 credits selected from the courses listed below.

English for Enrichment Certificate

code 130

CREDITS

English 201 , Advanced Composition . . .	3
English 203 , Introduction to Creative Writing	3
English 204 , Advanced Creative Writing	3
Literature 105 , Introduction to Literature	3
Literature 205 , World Literature	3
Literature 206 , World Literature	3
Literature 211 , American Literature . . .	3
Literature 212 , American Literature . . .	3
Literature 213 , Children’s Literature . . .	3
Literature 216 , Film Interpretation . . .	3
Literature 223 , Shakespeare.	3
Literature 240 , African-American Literature	3
Literature 285 , Interdisciplinary Humanities	3

Fire Science

Career Cluster—Law, Public Safety, Corrections, and Security

The Fire Science Program is designed to prepare students for career and promotional opportunities. The courses are focused on the roles and responsibilities of municipal firefighters and fire officers.

Kellogg Community College is a member of a five-college Fire Science Consortium that serves students in southwest Michigan and northern Indiana. Glen Oaks Community College (GOCC), Kalamazoo Valley Community College (KVCC), Kellogg Community College (KCC), Lake Michigan College (LMC), and Southwestern Michigan College (SMC) are current consortium members. KVCC serves as the administrative host for the program and confers all Fire Science certificates and degrees.

The consortium agreement provides significant advantages to students in the Fire Science Program. The ability to offer Fire Science classes at multiple sites throughout southwest Michigan enhances the accessibility of the program and reduces travel requirements. Financial advantages are achieved by allowing students to register and pay for Fire Science classes at their in-district consortium college at in-district rates, regardless of where the classes are being held. Required general education classes can be taken at KCC, transferred to KVCC, and applied toward graduation. Contact a counselor at KVCC for transferability of classes from colleges other than GOCC, KVCC, KCC, LMC, and SMC. Students must apply for admission to KVCC prior to transferring transcripts from other colleges. As you near graduation, you are strongly encouraged to meet with a counselor at KVCC.

NOTE: Students must accumulate a minimum of 15 credit hours from at least one fire science consortium college to be eligible for graduation.

FIRE 102 - Firefighter I & II is offered once a year in the winter semester. The eligibility process for FIRE 102 is conducted during the fall semester. Students wishing to pursue Firefighter I & II certification are encouraged to contact the Fire Science Program Manager in early August.

The program can recognize a limited number of training certifications issued by the state of Michigan and the state of Indiana. Students possessing state certifications should contact the **Fire Science Program Manager at 269-488-4202** for transferability.

The Fire Science Program is not designed as a transfer program; however, it has transfer capability into the Open-Learning Fire Science program of the National Fire Academy, Spring Arbor College's Management of Human Resources, and Lake Superior State University.

General Education

CREDITS

Business Administration 274,	
Organizational Behavior	3
Chemistry 100, Fundamentals of	
Chemistry	4
English 151, Freshman Composition . . .	3
English 153, Technical English	
or Communication 111, Business and	
Technical Communication	3
Mathematics 118, Applied Algebra/	
Trigonometry I	
or 121, Intermediate Algebra	
or Office Information Technology 160,	
Applications Software	3-4
Physical Education 121, Healthy Lifestyle	
Practices	2
Political Science 200, American System of	
Government	
or 201, American Government - Federal	
or 202, American Government - State	
and Local	3
Psychology 201, Introduction to Psychology	
or Sociology 201, Introduction to	
Sociology	3

24-25

Fire Science Degree	code 245
	CREDITS
Emergency Medical Technician 120, Basic EMT Didactic	8
Emergency Medical Technician 121, Basic EMT Skills Lab	2.25
Emergency Medical Technician 122, Defensive Emergency Driving/ All Safe	1
Emergency Medical Technician 123, Basic EMT Clinical Internship	0.75
Fire Science 102, Firefighter II °	12
Fire Science 110, Fire Prevention	3
Fire Science 111, Building Construction	3
Fire Science 112, Fire Service Tactics	3
Fire Science 210, Fire Cause Determination	3
Fire Science 211, Instructional Techniques	3
Fire Science 212, Incident Management	3
	<u>42</u>

°Firefighter II certification is a prerequisite for FISC 110-112.

Fire Science Certificate	code 137
	CREDITS
Chemistry 100, Fundamentals of Chemistry	4
Emergency Medical Technician 120, Basic EMT Didactic	8
Emergency Medical Technician 121, Basic EMT Skills Lab	2.25
Emergency Medical Technician 122, Defensive Emergency Driving/ All Safe	1
Emergency Medical Technician 123, Basic EMT Clinical Internship	0.75
English 151, Freshman Composition	3
Fire Science 102, Firefighter II °	12
Physical Education 121, Healthy Lifestyle Practices	2
	<u>33</u>

°Firefighter II certification is a prerequisite for FISC 110-112.

For more information on the Fire Science Program, call 269-488-4202, e-mail fire@kvcc.edu, or visit our website at <http://puma.kvcc.edu/fire>.

Graphic Design

Career Cluster—Arts, Audio-Video Technology, and Communications

The Associate in Applied Science in Graphic Design prepares students to provide creative solutions to visual communications by emphasizing computer graphics training; relevant field experience; and a strong, diversified portfolio. Students are encouraged to develop their conceptual and design ability while working in a modern graphic design environment that includes a fully equipped, graphic design computer lab. By taking advantage of course offerings in Graphic Design, students ready themselves for entry-level positions at advertising agencies, publishing corporations, print shops, and design departments in business and industry. For more information contact the Information Technology department.

Graphic Design Degree *code 244*

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. Skills are also provided to enhance the student's global awareness and knowledge of healthy living.

	CREDITS
Communication 111 , Business and Technical Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Healthy Living Elective ^o	2-3
Mathematics 135 , Math for Liberal Arts. .	4
	17-19

^oFor a list of options for the Creativity, Global Awareness and Healthy Living Electives, see pages 49-50.

Core Courses

	CREDITS
Art 103 , Two-Dimensional Design	3
Art 110 , Drawing I	3
Graphic Design 100 , Introduction to Graphic Design	3
Graphic Design 105 , Using and Troubleshooting the Macintosh	3
Graphic Design 130 , QuarkXPress	4
Graphic Design 140 , FreeHand	4
Graphic Design 170 , Photoshop.	4
Graphic Design 200 , Design Lab.	4
Graphic Design 201 , Design Practicum . .	4
Graphic Design 207 , Advertising Design	4
Graphic Design 260 , Graphic Design Field Experience	3
Graphic Design 270 , Graphic Design Internship	3
Graphic Design 297 , Graphic Design—Special Topics.	4
	46

The four-semester sequence of courses recommended for the Graphic Design full-time student is:

Fall	Spring
ART 103	ART 110
ENGL 151	GRDE 140
GRDE 100	GRDE 170
GRDE 105	GRDE 297
GRDE 130	
Fall	Spring
COMM 111	GRDE 201
GRDE 200	GRDE 270
GRDE 207	MATH 135
GRDE 260	Creativity Elective
	Global Awareness

Certificate in Graphic Design code 142

The Graphic Design Certificate is designed for individuals either working or seeking employment in the Graphic Design field. The certificate provides a well-rounded curriculum concentrating on both course specific and general education requirements. The courses provide an industry standard of technical training in a relatively short period of time. These courses will transfer into the Associate in Applied Science.

Core Courses

	CREDITS
Art 103 , Two-Dimension Design	3
Art 110 , Drawing I	3
Graphic Design 100 , Introduction to Graphic Design.	3
Graphic Design 105 , Using and Troubleshooting the Macintosh	3
Graphic Design 130 , QuarkXPress	4
Graphic Design 140 , FreeHand	4
Graphic Design 170 , Photoshop.	4
Graphic Design 200 , Design Lab.	4
Graphic Design 207 , Advertising Design	4
Graphic Design 297 , Graphic Design—Special Topics.	4
	36

The two-semester sequence of courses recommended for the full-time student is:

I	II
GRDE 100	ART 103
GRDE 105	ART 110
GRDE 130	GRDE 200
GRDE 140	GRDE 207
GRDE 170	GRDE 297

Web Design Certificate code 190

The Web Design Certificate is designed for individuals looking to pursue a career in the area of web page designing and development. The certificate provides a well-rounded curriculum concentrating on web page design, computer graphics, user interface design, database, and programming to create dynamic web application. The courses provide an industry standard of technical training in a relatively short period of time.

Core Courses

	CREDITS
Computer Programming 102 , Visual Basic I	3
Computer Programming 202 , Visual Basic II	3
Computer Programming 210 , Java Programming	3
Computer Programming 212 , Java Programming II	3
Computer Programming 280 , Web Development with Visual Basic.NET	3
Graphic Design 161 , Flash.	4
Graphic Design 167 , Dreamweaver.	4
Graphic Design 170 , Photoshop.	4
Database Administrator 110 , Intro to Relational Databases	3
Information Technology 110 , Intro to Management Information Systems.	3
Information Technology 210 , Intro to System Analysis and Design	3
	36

The three-semester sequence of courses recommended for the full-time student is:

I	II	III
GRDE 167	GRDE 161	CP 280
GRDE 170	CP 202	IT 210
CP 102	IT 110	CP 212
DBA 110	CP 210	

Human Services

Career Cluster—Human Services

The human services worker utilizes a knowledge, skill, and value-based educational training program with an integration of psychology, social work, and advising. The worker is a generalist who holds professional and paraprofessional jobs in diverse settings. The primary purpose of the human services worker is to assist individuals, groups, and communities to function as effectively as possible. Some of the work settings include group homes and halfway houses; correctional, mental retardation, and community mental health centers; family, child, and youth services agencies; and programs concerned with alcoholism, drug abuse, family violence, and aging. This curriculum leads to an Associate in Applied Science and is designed for career-entry and/or educational advancement.

Human Services Degree code 242

Prerequisites

Recommended high school units of study are shown at the end of this catalog. Certain competencies are essential for success in this curriculum and must be demonstrated prior to being accepted for admission to the program. Students who complete three units of high school English and two units of mathematics with a grade of “C” or better will have fulfilled the requirement. Students who do not have the above qualifications will be admitted to the College, but must then complete Study Skills 110 or English 120 or verify an acceptable level of competency through testing.

General Education

The following courses provide general skills in speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations.

Students interested in the MACRAO option must meet with the program coordinator.

	CREDITS
Biology 101 , Biological Science or Mathematics 135 , Math for Liberal Arts	4
Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
English 152 , Freshman Composition . . .	3
Psychology 201 , Introduction to Psychology	3
Sociology 201 , Introduction to Sociology	3
	21-22

^oFor options to fulfill the Creativity Elective, see page 49.

Core Courses

	CREDITS
Human Services 101 , Introduction to Human Services	3
Human Services 184 , Practicum in Human Services	3
Human Services 185 , Human Service Internship	3
Human Services 186 , Human Service Internship	3
Human Services 204 , An Introduction to Report Writing Techniques for the Human Service Worker	3
Human Services 220 , Communication Skills in Helping Relationships	3
Human Services 225 , Culturally-Sensitive Practice	3
Human Services 251 , Human Services and Behavior Modification	3
Human Services 260 , Family Dynamics	3
	27

Choose a minimum of 14 credits from the following electives:

	CREDITS
Human Services 183 , Practicum in Human Services	3

	CREDITS
Human Services 200 , Psychosocial Approach to Aging	3
Human Services 203 , Introduction to Substance Abuse	3
Human Services 230 , Nutrition	3
Human Services 240 , Basic Concepts in Social Work	3
Human Services 250 , Group Techniques	3
Human Services 270 , Selected Topics in Human Services	3
Human Services 272 , Substance Abuse, Co-Dependency, and the Family	3
Human Services 280 , Death and Dying	3
Human Services 290 , Social Welfare . . .	3

The four-semester sequence of courses recommended for the full-time student is:

I	II
ENGL 151	ENGL 152
HUSE 101	HUSE 184
HUSE 220	HUSE 204
HUSE 251	HUSE 260
Elective	SOCI 201

III	IV
BIOL 101	HUSE 186
or MATH 135	HUSE 225
COMM 101	Elective (2)
HUSE 185	PSYC 201
Elective (2)	Creativity Elective

Human Services Technician Certificate
code 140

Students completing this certificate will have a knowledge base and a skill base to obtain an entry-level position in the field of Human Services. Specific areas for employment opportunities include: group homes and half-way house; correctional, mental retardation, and community mental health centers; family, child, and youth service agencies; and programs concerned with alcoholism, drug abuse, family violence, and aging. Students will also have the opportunity for personal development and to assist in the personal development of others.

	CREDITS
English 151 , Freshman Composition . . .	3
Human Services 101 , Introduction to Human Services	3
Human Services 184 , Practicum in Human Services	3
Human Services 185 , Human Services Internship	3
Human Services 204 , An Introduction to Report Writing Techniques for the Human Services Worker	3
Human Services 220 , Communications Skills in Helping Relationships	3
Human Services 225 , Culturally-Sensitive Practice	3
Human Services 251 , Human Services and Behavior Modification	3
Human Services 260 , Family Dynamics	3
	27

Choose a minimum of three credits from the following electives:

	CREDITS
Human Services 183 , Practicum in Human Services	3
Human Services 200 , Psychosocial Approach to Aging	3
Human Services 203 , Introduction to Substance Abuse	3
Human Services 230 , Nutrition	3
Human Services 240 , Basic Concepts in Social Work	3
Human Services 250 , Introduction to Group Techniques	3
Human Services 270 , Selected Topics in Human Services	1-3
Human Services 272 , Substance Abuse, Co-Dependency and the Family	3
Human Services 273 , Youth and Substance Abuse	3
Human Services 280 , Death and Dying.	3
Human Services 290 , Social Welfare . .	3

Industrial Trades

Career Cluster—Manufacturing

Industrial Trades represents a broad range of skilled maintenance and repair people working for manufacturers or private contractors. Courses are held at the Regional Manufacturing Technology Center (RMTC), 405 Hill Brady Road, Battle Creek.

Kellogg Community College has developed a delivery system for these areas that individualizes instruction, is competency based, and features flexible scheduling to meet the needs of students and industry. You may enroll at any time during the year and may be given credit for previously learned skills. To enroll, contact the Industrial Trades office at the RMTC, 269-965-4137.

Credits earned in the Industrial Trades Programs can lead to an Associate Degree in Applied Science or a certificate.

Industrial Trades Degree

Students who complete a certificate program may apply all of their credits earned in that program toward an Associate in Applied Science. The following courses are outlined as minimum requirements to be completed in addition to the certificate requirements.

Students interested in the associate degree program should have their choice of curriculum approved by the Director of the RMTC or an Industrial Trades instructor prior to enrolling.

General Education

The following courses provide the competencies needed to carry out typical job-related functions and will help the student to develop into an articulate, healthy, and informed citizen.

CREDITS

Communicating	6
English 151 , Freshman Composition AND Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	
Critical Thinking Electives °	3
Creativity Electives °	2
Global Awareness Electives °	3
Healthy Living Electives °	2

°For options to fulfill the Creativity, Critical Thinking, Global Awareness, and Healthy Living Electives, see pages 53-54.

Technical Electives

In addition to the certificate and general education requirements, students must complete enough technical electives to accumulate a total of 62 credits.

Technical electives may be selected from any of the Industrial Trades courses or courses from the following areas: Accounting (ACCO), Business Administration (BUAD), Office Information Technology (OIT), Computer-Aided Drafting and Design Technology (DRAF), Computer Engineering Technology (CET), Engineering Technology (ENTE), or Physics (PHYS).

Technical electives should be approved by the Director of the RMTC or an Industrial Trades instructor prior to enrollment.

Certificate Programs

Each of the nine major industrial areas is divided into instructional units. Each unit is subdivided into modules that develop a specific skill. The time required for mastery of a module(s) or a unit(s) is estimated in contact hours. Twenty-four contact hours equate to one credit hour.

Avionics Technician (INEL and INAV)

code 210 and 101

All of the following modules (totaling 42.41 credit hours) must be completed in order to be awarded a certificate in the Avionics Technician Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Electrical Safety	4	.17
Unit 2, Mathematics for Electricians	14	.58
Unit 3, Electrical Theory	125	5.19
Unit 5, Electrical Schematic Drawings.	40	1.67
Unit 6, Motor Controls	2	.08
Unit 11, Industrial Electronics	140	5.83
Unit 1, General Aircraft Knowledge	60	2.51
Unit 2, Aircraft Power Sources and Distribution Systems	48	1.99
Unit 3, Aircraft Wiring and Connectors.	24	1.00
Unit 4, Instrument, Display, and Warning Systems	64	2.66
Unit 5, Radio Theory	70	2.91
Unit 6, Aircraft Communications Systems.	37	1.54
Unit 7, Aircraft Navigation Systems.	84	3.52
Unit 8, Aircraft Pulse and Radar Systems	42	1.76
Unit 9, Automatic Flight Control Systems.	16	.67
Unit 10, Rules and Regulations for Avionics Technicians	32	1.33
Unit 11, FCC Licensing	216	9.00

**Industrial Electricity/Electronic
(WBEL and INEL)**

code 251 and 150

A minimum of 30 credit hours must be completed in order to be awarded a certificate in the Industrial Electricity/Electronics Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Electrical Safety	4	.17
Unit 2, Mathematics for Electricians	14	.58
Unit 3, Electrical Theory	125	5.19
Unit 4, National Electrical Code (NEC)	94	3.90
Unit 5, Electric Motor Control 1.	110	4.59
Unit 7, Rotating Electric Machines.	54	2.24
Unit 8, Power Distribution Systems.	62	2.58
Unit 9, Facility Maintenance .	76	3.16
Unit 10, Electrical Control Wiring.	34	1.42
Unit 11, Industrial Electronics	154	6.41
Unit 12, PLC 1	54	2.24

Industrial Machine Tool (INMT)

code 252 and 151

A minimum of 30 credit hours must be completed in order to be awarded a certificate in the Industrial Machine Tool Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Machine Tool Basics	4	.17
Unit 2, Machine Tool Safety	4	.17
Unit 3, Blueprint Reading . . .	28	1.16
Unit 4, Fundamental Skills . .	48	1.98
Unit 5, Precision Measurement	65	2.75
Unit 6, Drill Press and Band Saw	60	2.51
Unit 7, Turning on Lathe	110	4.61
Unit 8, Electronic Discharge Machining.	19	.79
Unit 9, Vertical/Horizontal Milling	140	5.84
Unit 10, Surface Grinding . . .	66	2.75
Unit 11, Cylindrical Grinding	36	1.50
Unit 12, Tool and Cutter Grinding	72	3.00
Unit 13, CNC Programming and Machining.	150	6.25

	CONTACT HOURS	CREDIT HOURS
Unit 14, Machine Tool		
Projects	134	5.58

*Industrial Heating/Ventilation/
Air Conditioning/Refrigeration (INHR)*

code 248 and 156

A minimum of 25 credit hours must be completed in order to be awarded a certificate in the Industrial Heating/Ventilation/Air Conditioning/Refrigeration Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Refrigeration		
Fundamentals	24	.99
Unit 2, Refrigeration Systems	32	1.33
Unit 3, Compressors and Compression Systems	40	1.66
Unit 4, Electrical Control Systems	44	1.82
Unit 5, Refrigerants	48	2.00
Unit 6, Hermetic Systems	56	2.33
Unit 7, 608 EPA Certification	48	1.99
Unit 8, Commercial Refrigeration	54	2.25
Unit 9, Special Refrigeration Systems	82	3.40
Unit 10, Fundamentals of Air Movement	64	2.66
Unit 11, Basic Heating and Air Conditioning Systems	60	2.50
Unit 12, Ammonia Refrigeration Systems	60	2.50

Credits already earned in INRA (Refrigeration/Air Conditioning) modules may be applied toward either a KCC certificate or Associate in Applied Science in the Industrial Heating/Ventilation/Air Conditioning/Refrigeration Program.

*Industrial Millwright/
Maintenance Mechanic (INMW)*

code 253 and 152

A minimum of 25 credit hours must be completed in order to be awarded a certificate

in the Industrial Millwright/Maintenance Mechanic Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Plant Safety	37	1.57
Unit 2, Basic Shop Math	32	1.35
Unit 3, Measurement	30	1.28
Unit 4, Basic Blueprint Reading	99	4.13
Unit 5, Schematics and Symbols	16	.69
Unit 6, Hand Tools	11	.46
Unit 7, Power Tools	54	2.28
Unit 8, Elements of Mechanics	17	.73
Unit 9, Drive Components	41	1.72
Unit 10, Lubrication	23	.99
Unit 11, Bearings	29	1.22
Unit 12, Rigging	41	1.74
Unit 13, Equipment Installation	14	.59
Unit 14, Metallurgy	22	.95
Unit 15, Non-metal Materials	21	.91
Unit 16, Troubleshooting	18	.77
Unit 17, Industrial Hydraulics	64	2.64
Unit 18, Industrial Pneumatics	56	2.31
Unit 19, Strength of Materials	19	.82
Unit 20, Pumps	27	1.15
Unit 21, Carpentry	48	2.02
Unit 22, Concrete and Block Construction	40	1.68
Unit 23, Packaging Machine Repair	106	4.42

Industrial Welding (INWE)

code 259 and 155

A minimum of 25 credit hours must be completed in order to be awarded a certificate in the Industrial Welding Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Basics of Welding	10	.43

	CONTACT HOURS	CREDIT HOURS
Unit 2, Oxyacetylene		
Welding.....	37	1.54
Unit 3, Cutting Processes ...	19	.79
Unit 4, Brazing and		
Soldering.....	22	.92
Unit 5, Shielded Metal Arc		
Welding.....	96	4.02
Unit 6, Advanced Arc		
Welding.....	138	5.74
Unit 7, Welding Metallurgy..	30	1.27
Unit 8, Gas Metal Arc		
Welding.....	67	2.80
Unit 9, Gas Tungsten Arc		
Welding.....	120	5.01
Unit 10, Pipe Welding.....	105	4.37
Unit 11, Special		
Applications.....	40	1.68

Industrial Pipefitting (INPF)

code 250 and 153

A minimum of 20 credit hours must be completed in order to be awarded a certificate in the Industrial Pipefitting Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Plant Safety.....	21	.88
Unit 2, Mathematics for		
Pipefitting.....	36	1.51
Unit 3, Introduction to		
Pipefitting.....	156	6.50
Unit 4, Code and the		
Pipefitting Trade.....	84	3.49
Unit 5, Piping Diagrams ...	18	.75
Unit 6, Thermodynamics and		
Heating Theory.....	50	2.09
Unit 7, Fluid and Gas		
Properties.....	10	.42
Unit 8, Industrial Flow		
Control.....	91	3.80
Unit 9, Boilers.....	80	3.33
Unit 10, Steam.....	49	2.05
Unit 11, Piping Applications	8	.33
Unit 12, Special Piping		
Applications.....	14	.57
Unit 13, Piping System		
Maintenance.....	18	.75

Industrial Robotics (INRO)

code 260 and 157

A minimum of 16 credit hours must be completed in order to be awarded a certificate in the Industrial Robotics Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Introduction to Computer Integrated		
Manufacturing.....	30	1.25
Unit 2, Fundamentals of		
Robotics.....	48	2.01
Unit 3, Power and Drive		
Systems.....	65	2.72
Unit 4, Controls and Sensors	65	2.70
Unit 5, Programming Robots		
.....	90	3.75
Unit 6, Interfacing and		
Work Cells.....	44	1.83
Unit 7, Maintenance, Repair, and		
Troubleshooting.....	60	2.49

Industrial Instrumentation and Process (INST)

code 149

A minimum of 8 credit hours must be completed in order to be awarded a certificate in the Industrial Instrumentation and Process Program.

	CONTACT HOURS	CREDIT HOURS
Unit 1, Introduction to		
Process Control.....	24	1.01
Unit 2, Measurement		
Instrumentation.....	22	.91
Unit 3, Pressure		
Measurement.....	26	1.08
Unit 4, Force, Weight,		
and Motion.....	32	1.33
Unit 5, Flow Measurement..	36	1.50
Unit 6, Level Measurement..	24	1.00
Unit 7, Temperature		
Measurement.....	28	1.17
Unit 8, Analytical Measurement		
.....	14	.59
Unit 9, Final Control		
Elements.....	28	1.17

Non-Certificate Programs

Modules in the following non-certificate Industrial Trade programs may be taken as technical electives.

	CONTACT HOURS	CREDIT HOURS
Plasma Cutter (INPC)	44	1.84
Statistical Process		
Control (INSP)	12	0.50
Blue Print Reading (INBR)	34	1.45
Shop Math (INMA)	76	3.18
Tool and Die (INTD)		
Unit 2, Heat Treating Steel for Machine Tools	72	3.00
Unit 3, Design Various Jigs and Fixtures	144	6.00
Unit 4, Design Various Gages	144	6.00
Unit 5, Design Various Dies	144	6.00
Unit 6, Making Various Jigs and Fixtures	144	6.00
Unit 7, Making Various Gages	144	6.00
Unit 8, Making Various Dies	144	6.00
Unit 9, Mold Design	144	6.00
Unit 10, Mold Making	144	6.00

Law Enforcement

Career Cluster—Law, Public Safety, Corrections, and Security

Michigan Commission on Law Enforcement Standards (MCOLES) approved pre-service police training academy. Law enforcement personnel are responsible for conscientiously and ethically preserving order in a community. They resolve conflict, provide emergency services, identify criminal activity and offenders, investigate traffic violations and accidents, and protect constitutional guarantees in a culturally and economically diverse society. Graduates who successfully complete the state licensing examination and obtain employment with a police agency within established time lines will become licensed police officers. This curriculum leads to an Associate in Applied Science and is designed for career entry and/or advancement. Students must complete a minimum of 62 credit hours to qualify for a degree.

Pre-service Police Academy Program Requirements

Students following this degree program must complete a Michigan Commission on Law Enforcement Standards (MCOLES) application before beginning their first police academy course (CRJU 110, 200, 201, 202, 204, 205, 207, 208, 212, 213; EMT 110). **Applications will be distributed by the Criminal Justice office on or after March 1 of any given year for entry into the academy for the coming fall semester. Applications will be screened for compliance with state standards, and students will be accepted on a first-come, first-served basis until maximum capacity is reached.** Police Academy students are required to purchase and wear uniform clothing. They must adhere to rules of behavior above and beyond the student code and achieve state-mandated attendance and grade requirements.

Law Enforcement Degree code 255

General Education

Students who graduate with an associate degree will have successfully completed the following general education core courses in communicating, global awareness, creativity, critical thinking, and healthy living.

CREDITS

Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
Criminal Justice 101 , Introduction to Criminal Justice	3
Criminal Justice 221 , Ethical Problem Solving in Policing	3
Critical Thinking Elective ^o	3-4
English 151 , Freshman Composition . . .	3
Psychology 201 , Introduction to Psychology	3
Sociology 201 , Introduction to Sociology	3
	23-25

^oFor options to fulfill the Creativity and Critical Thinking Electives, see page 49.

Pre-Service Police Academy Track Courses

The following courses (except CRJU 212 and 213) are open to any student. For students working toward licensing as a police officer, **state law requires:**

1. Completion of the MCOLES application before beginning your first police academy course.
2. Possession of a minimum of an associate degree when the last police academy class is finished.
3. All police academy classes (listed below) must be completed with 90% attendance and a “C” or better within a one-year time frame to remain eligible for state licensing.

CREDITS

Criminal Justice 110 , Physical Training	3
Criminal Justice 200 , Police Operations I	4
Criminal Justice 201 , Criminal Investigation	3
Criminal Justice 202 , Criminal Law	3
Criminal Justice 204 , Criminal Procedures	3
Criminal Justice 205 , Traffic Control	4
Criminal Justice 207 , PPCT Defensive Tactics	4
Criminal Justice 208 , Police Operations II	3
Criminal Justice 212 , Emergency Driving	3
Criminal Justice 213 , Firearms Training	4
Criminal Justice 299 , MCOLES Review	1
Emergency Medical Technician 110 , Medical First Responder	3
	<hr/>
	38

Admission to the Associate Degree Program in Law Enforcement

Admission to or continuation in the Law Enforcement Associate in Applied Science may be denied on the basis of unique limitations of employment and/or on the basis of conviction of a felony pursuant to Section 9 of Act No. 203 of the Public Acts of 1965, as amended being Section 28.609 of the Michigan Compiled Laws and set forth in subrules (a) through (f) of Rule 28.4102 (minimum employment standards).

Medical Laboratory Technology

Career Cluster—Health Science

The medical laboratory technician works under the supervision of the medical technologist and/or a pathologist or other qualified scientist, performing routine laboratory procedures in microbiology, blood banking, chemistry, hematology, immunology, and urinalysis. Specific tasks might include collecting blood specimens; grouping and typing blood; preparing, staining, and identifying microorganisms; analyzing blood and body fluids for chemical components; and microscopic examination of urine, blood, and body fluids. Positions are available in all parts of the country in hospitals, clinics, physicians' offices, public health agencies, the armed services, industrial and pharmaceutical laboratories, and public and private medical research programs.

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 8410 W. Bryn Mawr Ave., Suite 670, Chicago, IL 60631, 773-714-8880. Graduates are encouraged to seek professionally recognized credentials, such as those provided by the National Credentialing Agency for Laboratory Personnel or the American Society for Clinical Pathology. Graduates receive the Associate in Applied Science.

Prerequisites

Recommended high school units of study are shown at the end of this catalog. Graduation from an accredited high school, ability and interest in laboratory sciences (especially chemistry or biology), and three years of mathematics are recommended for admission to the program. Students must achieve one of the following prior to beginning the Medical Laboratory Technology Program:

- COMPASS algebra assessment with score of at least 40
- OR

- Grade of “C” or better in Mathematics 101, or other college-level mathematics course

OR

- Grade of “C” or better in Chemistry 10, AND a grade of “C” or better in Mathematics 100.

Admissions Criteria

Admission to the Medical Laboratory Technology Program is selective. See page 13 for the admission process. The following factors are considered in the selection process:

1. High school or college grade point average
2. ACT or SAT score
3. Grades in specific science courses taken in college:
Biology 201 and 202, Chemistry 100 or 110, and Chemistry 111 or 210
4. Completion of general education courses with at least a “C”:
English 151, Communication 101 or 111. While not required for the MLT program, completion of PSYC 201 and SOCI 201 will earn points in the admission process.

Students who completed related science courses more than seven years ago may be advised by the program director to retake them.

Students are expected to have some experience working with computers. Students who did not take computer science in high school or whose personal experiences do not include computer usage are encouraged to take a computer class. OIT 160, Applications Software, is recommended.

Students who need additional college preparatory classes or those who desire a lighter course load may qualify for Provisional Admittance to the program. This is a three-year curriculum. For more information, contact the program coordinator.

Requirements for Taking Medical Laboratory Technology Courses

Criminal Background Checks

Some clinical sites require pre-placement criminal background checks on students. Students assigned to these particular sites will be required to complete the appropriate paperwork allowing the background check to be done. Should there be a conviction noted, it will be left to the determination of the clinical site as to whether the student will be allowed to complete their clinical education at their facility. If it is determined that the student will not be allowed at the facility, the student will be withdrawn from the program.

Drug Screens

Some clinical sites require a pre-placement drug screen. Students who have been assigned to those sites must provide a drug screen according to the specific standards the clinical site has defined.

Some clinical sites require a drug screen based on behavior exhibited by the student while at the site. When requested by officials at the site, students must provide a drug screen according to the specific standards the clinical site has defined. A student referred to a drug screen will be temporarily suspended from clinical work until the results of the drug screen are reported. The program director will advise the student where and when to have the drug screen completed to ensure compliance.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. These courses may be taken prior to being admitted to the program.

CREDITS

Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Healthy Living Elective ^o	2-3
	<hr/> 13-15

^oFor options to fulfill the Creativity, Global Awareness, and Healthy Living Electives, see pages 49-50.

All general education and pre-professional courses can be taken either before admission to the program or concurrently. These courses can be taken at KCC or at one of the community colleges working jointly with the KCC MLT program (Glen Oaks Community College, Jackson Community College, Kalamazoo Valley Community College, or Lake Michigan College). Equivalent course work taken at other accredited transfer institutions will also be considered.

Medical Laboratory Technology Degree code 273

Formal admission to the Medical Laboratory Technology Program is required prior to enrolling in any medical laboratory course.

CREDITS

Biology 201 , Human Anatomy	4
Biology 202 , Human Physiology.	4
Chemistry 100 , Fundamentals of Chemistry I or 110 , General Chemistry I	4
Chemistry 111 , General Chemistry II or 210 , Introduction to Organic and Biochemistry.	4
Medical Laboratory 100 , Fundamentals of Medical Laboratory Technology	4
Medical Laboratory 120 , Hematology . . .	5
Medical Laboratory 135 , Introduction to Medical Microbiology	2
Medical Laboratory 140 , Immunology/ Body Fluid Analysis.	3

	CREDITS
Medical Laboratory 210, Clinical	
Chemistry	5
Medical Laboratory 220,	
Immunohematology	4
Medical Laboratory 235, Advanced	
Clinical Microbiology	3
Medical Laboratory 250, Seminar	1
Medical Laboratory 260, Coordinated	
Clinical Practicum	14
or 265° , Advanced Clinical	
Practicum	10
	53-57

°Students with clinical laboratory work experience may qualify for a shortened clinical training period. See program coordinator for permission to take MELA 265, Advanced Clinical Practicum, instead of MELA 260, Coordinated Clinical Practicum.

The four-semester plus summer sequence of courses recommended below will permit the full-time student to complete the program in two years:

Fall	Spring
BIOL 201	BIOL 202
CHEM 100 or 110	CHEM 111 or 210
ENGL 151	COMM 101 or 111
MELA 100	MELA 120
Global Awareness Elective	Healthy Living Elective

Summer
MELA 135
MELA 140

Fall	Spring
MELA 210	MELA 250
MELA 220	MELA 260 or 265
MELA 235	
Creativity Elective	

Fast-Track Option

The Fast-Track option of the Medical Laboratory Technology Program allows students with significant prior course work to complete the program in 14-16 months. This option is designed as a post-baccalaureate occupational program. The Fast-Track still

results in an Associate of Applied Science being granted by the College. It allows students to enter the program at three different times (August, January, and May) if positions are available. To qualify for the Fast-Track option, students would have to have completed the following minimum course equivalents:

	CREDITS
Biology 201, Human Anatomy	4
Biology 202, Human Physiology	4
Chemistry 100, Fundamentals of Chemistry I or 110, General Chemistry I	4
Chemistry 111, General Chemistry II or 210, Introduction to Organic and Biochemistry	4
Communication 101, Foundations of Interpersonal Communication or 111, Business and Technical Communication	3
Creativity Elective°	2-3
English 151, Freshman Composition . . .	3
Global Awareness Elective°	3
Healthy Living Elective°	2-3
Mathematics 100, Pre-Algebra (or higher)	3

°For options to fulfill the Creativity, Global Awareness, and Healthy Living Electives, see pages 49-50.

Students beginning in August or January would follow the previously described sequence of professional courses. Fast-Track students beginning in May start their clinical training on a part-time basis in the following spring semester and complete their training during the first eight weeks of the second summer semester. A typical sequence of courses for a Fast-Track student would be:

Summer	Fall
MELA 135	MELA 210
MELA 140	MELA 220
	MELA 235

Spring
MELA 120
MELA 250
MELA 260 or 265

Summer
Completion of
MELA 260 or 265

Music

Career Cluster—Arts, Audio-Video Technology, and Communication

This is a special program designed for the person who is seeking an experience and certificate of completion in music, yet prefers not to pursue a four-year degree program. A total of 20 credit hours from the following courses must be completed successfully to fulfill the certificate requirements. No single course shall be repeated for more than four credit hours toward completion of the certificate.

Music Enrichment Certificate

code 171

Required Courses

	CREDITS
Music 130 , Music Theory I	3
Music 131 , Music Theory II	3
Music 132 , Aural Comprehension/ Music Reading I	1
Music 134 , Aural Comprehension/ Music Reading II	1
	8

Complete an additional 12 credits from the following courses:

	CREDITS
Music 105 , Kellogg Singers	1-4
Music 106 , Eclectic Chorale	1-4
Music 107 , Voice Class	2
Music 112-115 , Individualized Voice Lessons	1-2
Music 120 , Beginning Piano Class	2
Music 121 , Intermediate Piano Class	2
Music 122-125 , Individualized Piano Lessons	1-2
Music 125 , Applied Music	1-2
Music 135-138 , Individualized Instrumental Lessons	1-2
Music 141 , Fundamentals of Music for Teaching	3
Music 160 , Concert Band	1-4
Music 161 , Jazz Band	1-4
Music 232 , Music Theory III	3
Music 233 , Music Theory IV	3

Sacred Music Certificate *code 180*

Students who complete this certificate will have the skills and knowledge needed to obtain a church choir director position. Current choir directors from non-choral backgrounds will enhance job performance and satisfaction.

CREDITS

History 106 , Religious History	3
History 206 , Foundations of Religion	2
Music 105 , Kellogg Singers	2
Music 107 , Voice Class	2
Music 112 , Individualized Voice Lessons I	2
Music 120 , Beginning Piano Class	2
Music 121 , Intermediate Piano Class	2
Music 122 , Individualized Piano Lessons I	1
Music 130 , Music Theory I	3
Music 131 , Music Theory II	3
Music 132 , Aural Comprehension/Music Reading I	1
Music 134 , Aural Comprehension/Music Reading II	1
Music 135 , Individualized Instrumental Lessons I	1
Music 260 , Basic Conducting	2
Music 270 , Sacred Choral Literature	3
	30

The two-semester sequence of courses recommended for the full-time student is:

Fall	Spring
HIST 106	HIST 206
MUSI 105	MUSI 105
MUSI 107	MUSI 121
MUSI 112	MUSI 122
MUSI 120	MUSI 131
MUSI 122	MUSI 134
MUSI 130	MUSI 135
MUSI 132	MUSI 270
MUSI 260	

Nursing

Career Cluster—Health Science

Certificate in Practical Nursing (Level I)

Associate Degree in Nursing (Level II)

Registered Nurses (RNs) are health professionals who serve individuals, families, and communities with actual or potential health care needs. They are leaders, communicators, advocates, educators, and care providers in the management of actual and/or potential health problems.

The laddered Associate Degree Nursing Program consists of Level I (Practical Nursing Program) and Level II (Associate Degree Nursing Program) for advancing students and current Licensed Practical Nurses (LPNs). Upon successful completion of Level I, a Practical Nursing Certificate is awarded and graduates are eligible to take the LPN-NCLEX exam. LPNs are qualified for employment in nursing homes, clinics, and primary care agencies.

Students who wish to continue and successfully complete Level II courses will be awarded an Associate of Applied Science Degree in Nursing and be eligible to take the RN-NCLEX examination. Registered Nurses are qualified for employment in hospitals, nursing homes, clinics, home health agencies, and primary care agencies. Graduates may elect to continue their professional development by entering baccalaureate nursing programs that confer BSN degrees.

Admissions

Admission Prerequisites

Laddered Program: Certificate in Practical Nursing (Level I) to Associate Degree in Nursing (Level II)

(Full- and Part-time Options)

Admission to the Nursing Program is selective due to space limitations, enrollment limitations imposed by regulatory bodies,

and program prerequisites. Please refer to page 14 for more specific information related to the admission process for the Nursing Program.

Admission prerequisites must be completed before a student can be admitted to the Nursing Program. 2009-2010 admission prerequisites for the full- and part-time options for the Nursing Program are as follows:

1. Composite ACT score of 19 or higher or equivalent SAT score (waived for applicants who have documentation of a degree from an accredited college), or COMPASS reading score of 78 or higher.[°]
2. Grade point average of 2.5 or higher in each college attended.[†]
3. Prerequisite courses with grade of “B-” (2.67) or higher:
 - Chemistry 100 (Fundamentals of Chemistry I) or equivalent, or higher level chemistry course
 - Mathematics 101 (Beginning Algebra) or equivalent, or higher, or COMPASS algebra score of 40 or higher
4. Prerequisite college courses with grades of “B-” (2.67) or higher:
 - Biology 201 (Human Anatomy) or equivalent, and completed within six years prior to admittance to the program
 - Biology 202 (Human Physiology) or equivalent, and completed within six years prior to admittance to the program

[°] See an academic advisor for ways to improve your COMPASS reading score.

[†] Students with a grade point average of less than 2.5 in college may request an exemption from the Director of Nursing.

Re-Admission

Students who leave the Nursing Program and wish to re-enter the program must inform the Director of Nursing in a letter. Students who are re-admitted are expected to demonstrate knowledge of content and skills gained in previous nursing courses which were completed successfully. Criteria for re-admission

will be determined individually, and acceptance will be on a space available basis. A student not receiving a passing grade related to either a failure or withdrawal may repeat a nursing course only once. This allows for one re-admission only.

Level II—Associate Degree Nursing Program (LPN Advanced Placement Option)

Students successfully completing the Level I program can continue into the Level II program with their cohort without an admission process. LPNs seeking Level II education to qualify and prepare themselves for the RN-NCLEX examination, but who are not part of an ongoing cohort, must apply for admission in the LPN Advanced Placement (Level II) program.

Admission to the Level II Associate Degree Nursing Program is selective due to space limitations, enrollment limitations imposed by regulatory bodies, and program prerequisites. Please refer to page 14 for more specific information related to the admission process for nursing programs.

Admission prerequisites must be completed before a student can be admitted to the Associate Degree Nursing Program. Admission prerequisites for the LPN advanced placement option for the ADN Program are as follows:

1. Grade point average 2.0 or higher at each college attended
2. Prerequisite courses with grades of “C” or higher:
 - English 151 (Freshman Composition) or equivalent
 - Communication 101 (Foundations of Interpersonal Communication) or Communications 111 (Business and Technical Communication) or equivalent
 - Psychology 201 (Introduction to Psychology) or equivalent
 - Psychology 220 (Developmental Psychology) or equivalent
3. Prerequisite courses with grades of “B-” or higher:
 - Chemistry 100 (Fundamentals of Chemistry I) or equivalent, or higher level chemistry course
 - Mathematics 101 (Beginning Algebra) or higher, or equivalent, or COMPASS algebra score of 40 or higher
 - Biology 201 (Human Anatomy) or equivalent
 - Biology 202 (Human Physiology) or equivalent
4. Current Michigan licensure as a LPN

Requirements for Taking Nursing Courses

Criminal Background Check: Consistent with state of Michigan law, a criminal background check is required to verify the individual has no felony convictions within the last fifteen years and no misdemeanor within the last ten years. Some clinical agencies may have more restrictive criminal history criteria. Failure to meet criminal history requirements of the state or a clinical agency will result in withdrawal from nursing courses.

Drug Screening: Some clinical sites require a pre-placement drug screen. Students who have been assigned to those sites must provide a drug screen according to the specific standards the clinical site has defined.

CPR: Basic Cardiac Life Support for Healthcare Providers or Red Cross Professional Rescuer CPR must be completed at least 30 days prior to the first day classes begin.

Health Assessment: A complete health examination is required for each student at the beginning of his or her nursing program. Students who have an alteration in physical mobility, vision, or hearing must assess the ability to perform essential nursing skills in collaboration with his or her healthcare provider. Some tests are required annually. Effective dates for the tests must extend through the entire semester or the student cannot start the semester.

Additional Costs

In addition to tuition, fees, and books, program costs include the purchase of uniforms, equipment, and health examinations.

General Education Courses

General education courses not taken as part of the admission requirements may be taken along with or prior to being admitted to the Nursing Program. These courses focus on development of knowledge, understanding and skills related to communication, critical thinking, creativity, culturally diverse societies, and health principles.

	CREDITS
Biology 201 , Human Anatomy †	4
Biology 202 , Human Physiology †	4
English 151 , Freshman Composition †	3
Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Psychology 201 , Introduction to Psychology †	3
Psychology 220 , Developmental Psychology	3
Creativity Elective ^o	2-3
Global Awareness Elective ^o	3
	25-26

† *Required for Level I completion.*

^o*For options to fulfill the Creativity and Global Awareness Electives, see pages 49-50.*

Degree and Certificate Requirements

Nursing Courses

The Nursing courses must be taken in sequence since each course builds on the knowledge and clinical skills developed in the prior Nursing major course. The Nursing courses focus on development of knowledge, understanding and skills necessary for clinical nursing practice of both the Licensed Practical Nurse and the Registered Nurse.

	CREDITS
Nursing 140 , The Nature/Art of Nursing	2
Nursing 145 , The Science of Nursing	6
Nursing 150 , Chronic Physiologic Integrity	6
Nursing 155 , Family Processes	6
Nursing 160 , Pharmacologic Application in Nursing	3
Nursing 271 , Health Promotion and Maintenance	5
Nursing 276 , Psychosocial Integrity	5
Nursing 280 , Acute Physiologic Integrity	6
Nursing 285 , Management and Leadership in Nursing	6
	45

Nursing Degree (PN/RN)

Full-Time Option **code 278**

The full-time Nursing (PN/RN) program requires two academic years (four semesters) to complete. Students must complete general education courses either prior to or in the semesters indicated in the course sequence to progress in the subsequent Nursing course work. All Nursing course work (general education and Nursing courses) must be completed with grades of “C” (2.0) or better to progress in the subsequent Nursing courses and to meet graduation requirements.

The four-semester sequence of courses recommended for the full-time student is:

Academic Year One (Level I)

I	II
ENGL 151	PSYC 201
NURS 140	NURS 150
NURS 145	NURS 155
NURS 160	Creativity Elective

Eligible for PN-NCLEX

Academic Year Two (Level II)

III	IV
PSYC 220	COMM 101 or 111
NURS 271	NURS 280
NURS 276	NURS 285
Global Awareness Elective	

Eligible for RN-NCLEX

Part-Time Option **code 279**

The curriculum for the part-time Nursing Program is identical to the full-time Program. However, the part-time Program requires two and one-half calendar years (seven semesters) to complete.

Students must complete general education courses either prior to or in the semesters indicated in the course sequence to progress in the subsequent Nursing course work. All Nursing course work (general education and nursing courses) must be completed with grades of “C” (2.0) or better to progress in the subsequent Nursing courses and to meet graduation requirements.

The seven-semester sequence of courses recommended for the part-time student is:

Calendar Year One (Level I)

I	II
ENGL 151	NURS 150
NURS 140	NURS 160
NURS 145	Creativity Elective

III
PSYC 201
NURS 155
Eligible for PN-NCLEX

Calendar Year Two (Level II)

IV	V
PSYC 220	COMM 101 or 111
NURS 271	NURS 276

VI
NURS 280
Global Awareness
Elective

Calendar Year III (Level III)

VII
NURS 285
Eligible for RN-NCLEX

Advanced Placement Option **code 281**

The LPN advanced placement option for an Associate Degree in Nursing requires one calendar year to complete. Admitted students begin nursing course work with Transitional Nursing (NURS 136)^o.

Students must complete the following general education courses either prior to or in the semesters indicated to progress in the subsequent Nursing courses:

- Course from Creativity Electives (see page 49)
- Course from Global Awareness Electives (see page 50)

All Nursing course work (general education and Nursing courses) must be completed with grades of “C” (2.0) or better to progress in the subsequent Nursing courses and to meet graduation requirements.

^oComplete Transitional Nursing (NURS 136) prior to starting the remainder of the course work.

The two-semester sequence of courses recommended for the full-time student is:

I	II
NURS 270	NURS 280
NURS 275	NURS 285
Creativity Elective	Global Awareness Elective

Occupational Education

Career Cluster—Education and Training

There is a growing need for teachers at both the secondary and post-secondary levels who have a technical/occupational background. In response to this need, Kellogg Community College has entered into a partnership with Western Michigan University by creating a 2 + 2 program through General University Studies– Occupational Education Studies that results in a Bachelor of Science and Secondary Teacher Certification/Endorsement from the state of Michigan.

The program begins with an Associate in Applied Science in Occupational Education from KCC. This degree has two major components. First, the General Education Core, designed to match the General Education requirements of WMU, and secondly, the occupational specialty, which can be any 30 credit hours concentrated in a specific occupational area at KCC.

Students who already have an associate degree from an occupational program at KCC may only have to take a few courses in order to receive the Occupational Education A.A.S. degree. It's important to see an academic advisor who can advise you on the specific courses needed in order to transfer to WMU and complete the program in two years.

Occupational Education Degree

code 284

General Education

Students must complete the general education requirements as outlined below.

Take all of the following:

CREDITS

English 151, Freshman Composition . . . 3

Communication 101, Foundations of Interpersonal Communication 3

CREDITS

Humanities 205, Ethical Dilemmas in Modern Society 3

Office Information Technology 160, Applications Software 3

Physics 111, Introductory Physics I 4

Mathematics 122, Trigonometry or **124**, College Algebra 4

Take one of the following:

Physical Education 121 or **150-158** . . . 2

Take three of the following:

History 103, American Foundations or **104**, Modern America 3

Political Science 200, American System of Government 3

Psychology 220, Developmental Psychology 3

Sociology 201, Introduction to Sociology 3

Sociology 250, Multicultural Relations. . 3

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Occupational/Technical Specialty

Students must complete a minimum of 31 credit hours in major courses required by a specific technical/occupational program at KCC. These programs include any of the following:

Business°

Accounting

Business Management

Office Information Technology

Computer-Aided Drafting and Design

Computer Engineering Technology

Graphic Design

Law Enforcement

Industrial Electricity/Electronics

Industrial Heating/Ventilation/

Air Conditioning/Refrigeration

Industrial Machine Tool

Industrial Millwright/Maintenance Mechanic

Industrial Pipefitting

Industrial Robotics

Industrial Welding

°Students interested in teaching in the business area are required to take additional credits in the Occupational Specialty and reduced General Education credits. See an academic advisor for specific details.

Additional Requirements

Admission to the WMU General University Studies — Occupational Education Studies, Bachelor of Science, and Secondary Teaching Certificate program will also include these additional requirements:

1. 2.5 or higher grade point average
2. Satisfactory completion of the state of Michigan Basic Skills Test (math, reading, communication)

Office Information Technology

Career Cluster—Business, Management and Administration

We are living in a time when the key to success in virtually every profession depends on the skillful use of information. Whether one is a teacher, secretary, supervisor, or company president, the main ingredient in the work involved is information—knowing how to get it, how to use it, how to manage it, and how to disseminate it to others.

At the root of information-based work activities are computers and the systems that support them. Few professions remain untouched by computers today or will remain so in tomorrow's world. No matter who you are or what you do for a living, it is likely that computers will somehow impact both the way you work and your success at your work. The following programs in the Office Information Technology area will provide you with information about computers, types of computer systems and their components, principles by which computer systems work, practical applications of computers and related technologies, and ways in which the world is being changed by computers. The goals of these programs are to provide the student with knowledge of computers and software and a framework for using this knowledge effectively in the workplace.

KCC offers several associate of applied science degrees and certificates in the Office Information Technology area. The degrees and certificates offered are:

Associate of Applied Science

- Administrative Assistant
- Medical Administrative Assistant
- Microcomputer Applications Specialist
- Legal Administrative Assistant
- Word/Information Processing

Certificate Programs

- Administrative Assistant
- Legal Administrative Assistant
- Medical Administrative Assistant
- Microcomputer Applications
- MOS Master Preparation
- Word Processing

Prerequisites

Recommended high school units of study are shown at the end of this catalog. Certain competencies are essential for success in this curriculum. Prior to enrollment students should have completed the following high school courses with a grade of “C” or better:

1. basic typing
2. one-half unit of mathematics
3. two units of English with one unit in composition

Students who do not have the above qualifications should develop competencies by enrolling in Office Information Technology 109 and/or courses offered in reading, writing, study skills, and mathematics.

NOTE: Advanced placement in the following courses may be made on the basis of skills acquired prior to attending Kellogg Community College. It is assumed that students have attained the basic keyboarding skills. If not, Office Information Technology 109 should be completed upon entering the program. In addition, individuals who have qualified as a Certified Professional Secretary are exempt from taking certain Office Information Technology courses. See department director for details. Students who have passed a Microsoft Office Specialist certification may be exempt from certain OIT courses.

Office Information Technology Degrees

Office Information Technology Core Courses

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating and creating that are required in many

problem-solving and task-oriented situations.

	CREDITS
Accounting 101 , General Accounting . . .	4
Business Administration 104 , Business Correspondence	3
Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
Critical Thinking Elective ^o	3-4
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Healthy Living Elective ^o	2
Office Information Technology 100 , Introduction to Computer Information Systems	3
Office Information Technology 110 , Keyboarding II	2
Office Information Technology 111 , Keyboarding III	2
Office Information Technology 116 , Office Procedures	3
Office Information Technology 176 , Beginning Word	2
Office Information Technology 181 , Beginning Excel	2
Office Information Technology 193 , Beginning Project	2
	40-41

^oFor options to fulfill the Creativity, Critical Thinking, Global Awareness, and Healthy Living Electives, see pages 49-50.

Specialty Areas

All of the Information Technology core courses must be completed along with the course specialties listed as associate degree programs.

Administrative Assistant Degree

code 206

CREDITS

Business Administration 131 , Principles of Management or Information Technology 200 , Cooperative Education I	3
--	---

CREDITS

Office Information Technology 112 , Keyboarding IV	2
Office Information Technology 177 , Intermediate Word	2
Office Information Technology 178 , Advanced Word	2
Office Information Technology 182 , Intermediate Excel	2
Office Information Technology 187 , Beginning Access	2
Office Information Technology 192 , Beginning Publisher	2
Office Information Technology 197 , Proofreading	2
Office Information Technology 241 , General Machine Transcription	3
Limited Electives (See end of OIT section)	2
	22

The four-semester sequence of courses required for the full-time student is:

Fall	Spring
ACCO 101	BUAD 104
ENGL 151	OIT 100
OIT 110	OIT 111
OIT 116	OIT 177
OIT 176	OIT 181
OIT 187	Creativity Elective
	Healthy Living
	Elective

Fall	Spring
COMM 101	BUAD 131 or
OIT 112	IT 200
OIT 178	OIT 192
OIT 182	OIT 193
OIT 197	OIT 241
Critical Thinking	Global Awareness
Elective	Elective
	Limited OIT Elective

Legal Administrative Assistant Degree
code 266

CREDITS

Business Administration 131 , Principles of Management or Information Technology 200 , Cooperative Education I	3
Business Administration 201 , Business Law	3
Business Administration 202 , Business Law	3
Office Information Technology 112 , Keyboarding IV	2
Office Information Technology 177 , Intermediate Word	2
Office Information Technology 197 , Proofreading	2
Office Information Technology 226 , Legal Terminology	2
Office Information Technology 241 , General Machine Transcription	3
Office Information Technology 243 , Legal Machine Transcription	2
	<u>22</u>

The four-semester sequence of courses required for the full-time student is:

Fall	Spring
ACCO 101	BUAD 104
BUAD 201	BUAD 202
ENGL 151	OIT 100
OIT 110	OIT 111
OIT 116	OIT 177
OIT 176	OIT 181
Fall	Spring
OIT 112	BUAD 131
OIT 197	or IT 200
OIT 226	COMM 101
OIT 241	OIT 193
Critical Thinking	OIT 243
Elective	Creativity Elective
Healthy Living	Global Awareness
Elective	Elective

Medical Administrative Assistant Degree
code 267

CREDITS

Business Administration 131 , Principles of Management or Information Technology 200 , Cooperative Education I	3
Office Information Technology 112 , Keyboarding IV	2
Office Information Technology 177 , Intermediate Word	2
Office Information Technology 182 , Intermediate Excel	2
Office Information Technology 197 , Proofreading	2
Office Information Technology 227 , Medical Terminology	2
Office Information Technology 228 , Medical Scheduling and Billing	2
Office Information Technology 229 , Medical Coding	2
Office Information Technology 241 , General Machine Transcription	3
Office Information Technology 245 , Medical Machine Transcription I	2
	<u>22</u>

The four-semester sequence of courses required for the full-time student is:

Fall	Spring
ACCO 101	BUAD
104 ENGL 151	OIT 100
OIT 110	OIT 111
OIT 116	OIT 177
OIT 176	OIT 181
OIT 227	OIT 197
	OIT 228
Fall	Spring
COMM 101	BUAD 131
OIT 112	or IT 200
OIT 182	OIT 193
OIT 229	OIT 245
OIT 241	Creativity Elective
Critical Thinking	Global Awareness
Elective	Elective
	Healthy Living
	Elective

Microcomputer Applications Specialist Degree

code 275

CREDITS

Computer Programming 100 , Introduction to Programming	2
Computer Programming 102 , Visual Basic I	3
Office Information Technology 177 , Intermediate Word	2
Office Information Technology 182 , Intermediate Excel	2
Office Information Technology 184 , Beginning PowerPoint	2
Office Information Technology 185 , Intermediate PowerPoint	2
Office Information Technology 187 , Beginning Access	2
Office Information Technology 188 , Intermediate Access	2
Office Information Technology 190 , Microsoft Outlook	3
Office Information Technology 192 , Beginning Publisher	2
	22

The four-semester sequence of courses required for the full-time student is:

Fall	Spring
ENGL 151	BUAD 104
OIT 100	OIT 111
OIT 110	OIT 177
OIT 116	OIT 182
OIT 176	OIT 187
OIT 181	Critical Thinking Elective

Fall	Spring
COMM 101	ACCO 101
CP 100	CP 102
OIT 184	OIT 185
OIT 188	OIT 192
OIT 190	Global Awareness Elective
OIT 193	Healthy Living Elective
Creativity Elective	

Word/Information Processing Degree

code 299

CREDITS

Business Administration 131 , Principles of Management or Information Technology 200 , Cooperative Education I	3
Office Information Technology 112 , Keyboarding IV	2
Office Information Technology 168 , Word Perfect I	2
Office Information Technology 169 , Word Perfect II	2
Office Information Technology 177 , Intermediate Word	2
Office Information Technology 178 , Advanced Word	2
Office Information Technology 184 , Beginning PowerPoint	2
Office Information Technology 192 , Beginning Publisher	2
Office Information Technology 197 , Proofreading	2
Office Information Technology 241 , General Machine Transcription	3
	22

The four-semester sequence of courses required for the full-time student is:

Fall	Spring
ACCO 101	BUAD 104
ENGL 151	OIT 100
OIT 110	OIT 111
OIT 116	OIT 177
OIT 176	OIT 181
Healthy Living Elective	Creativity Elective

Fall	Spring
COMM 101	BUAD 131 or IT 200
OIT 112	OIT 169
OIT 168	OIT 192
OIT 178	OIT 193
OIT 184	OIT 241
OIT 197	Global Awareness Elective
Critical Thinking Elective	

Office Information Technology

Certificates

Administrative Assistant Certificate

code 105

CREDITS

Accounting 101, General Accounting... 4

Business Administration 104, Business
Correspondence 3

Business Administration 131, Business
Management
or **Information Technology 200**,
Cooperative Education I. 3

Office Information Technology 110,
Keyboarding II. 2

Office Information Technology 111,
Keyboarding III 2

Office Information Technology 112,
Keyboarding IV 2

Office Information Technology 116,
Office Procedures 3

Office Information Technology 176,
Beginning Word 2

Office Information Technology 177,
Intermediate Word 2

Office Information Technology 181,
Beginning Excel 2

Office Information Technology 197,
Proofreading 2

Office Information Technology 241,
General Machine Transcription 3

30

Legal Administrative Assistant Certificate

code 182

CREDITS

Office Information Technology 110,
Keyboarding II. 2

Office Information Technology 111,
Keyboarding III 2

Office Information Technology 112,
Keyboarding IV 2

Office Information Technology 116,
Office Procedures 3

Office Information Technology 176,
Beginning Word 2

Office Information Technology 177,
Intermediate Word 2

CREDITS

Office Information Technology 197,
Proofreading 2

Office Information Technology 226,
Legal Terminology 2

Office Information Technology 241,
General Machine Transcription 3

Office Information Technology 243,
Legal Machine Transcription I. 2

22

Medical Administrative Assistant Certificate

code 183

CREDITS

Office Information Technology 110,
Keyboarding II. 2

Office Information Technology 111,
Keyboarding III 2

Office Information Technology 116,
Office Procedures 3

Office Information Technology 176,
Beginning Word 2

Office Information Technology 177,
Intermediate Word 2

Office Information Technology 197,
Proofreading 2

Office Information Technology 227,
Medical Terminology 2

Office Information Technology 228,
Medical Scheduling and Billing. 3

Office Information Technology 241,
General Machine Transcription 3

Office Information Technology 245,
Medical Machine Transcription I. 2

23

Microcomputer Applications Certificate

code 163

CREDITS

Office Information Technology 100,
Introduction to Computers 3

Office Information Technology 176,
Beginning Word 2

Office Information Technology 181,
Beginning Excel 2

	CREDITS
Office Information Technology 184,	
Beginning PowerPoint	2
Office Information Technology 187,	
Beginning Access	2
Office Information Technology 190,	
Microsoft Outlook	3
Office Information Technology 192,	
Beginning Publisher	2
Office Information Technology 196,	
Introduction to Windows	2
	18

MOS Master Certificate (Microsoft Office Specialist)

code 168

	CREDITS
Office Information Technology 176,	
Beginning Word	2
Office Information Technology 177,	
Intermediate Word	2
Office Information Technology 178,	
Advanced Word	2
Office Information Technology 181,	
Beginning Excel	2
Office Information Technology 182,	
Intermediate Excel	2
Office Information Technology 183,	
Advanced Excel	2
Office Information Technology 184,	
Beginning PowerPoint	2
Office Information Technology 185,	
Intermediate PowerPoint	2
Office Information Technology 187,	
Beginning Access	2
Office Information Technology 188,	
Intermediate Access	2
Office Information Technology 190,	
Microsoft Outlook	3
	23

Word/Information Processing Certificate

code 195

	CREDITS
Accounting 101, General Accounting	4
Business Administration 104, Business Correspondence	3

	CREDITS
Office Information Technology 110,	
Keyboarding II	2
Office Information Technology 111,	
Keyboarding III	2
Office Information Technology 116,	
Office Procedures	3
Office Information Technology 168,	
WordPerfect I	2
Office Information Technology 169,	
WordPerfect II	2
Office Information Technology 176,	
Beginning Word	2
Office Information Technology 177,	
Intermediate Word	2
Office Information Technology 178,	
Advanced Word	2
Office Information Technology 197,	
Proofreading	2
Office Information Technology 241,	
General Machine Transcription	3
	29

Limited Electives

	CREDITS
Office Information Technology 168,	
WordPerfect I	2
Office Information Technology 169,	
WordPerfect II	2
Office Information Technology 177,	
Intermediate Word	2
Office Information Technology 178,	
Advanced Word	2
Office Information Technology 182,	
Intermediate Excel	2
Office Information Technology 183,	
Advanced Excel	2
Office Information Technology 184,	
Beginning PowerPoint	2
Office Information Technology 185,	
Intermediate PowerPoint	2
Office Information Technology 187,	
Beginning Access	2
Office Information Technology 188,	
Intermediate Access	2
Office Information Technology 189,	
Advanced Access	2

CREDITS

Office Information Technology 190,
Beginning Outlook 2

Office Information Technology 192,
Beginning Publisher 2

Office Information Technology 193,
Beginning Project 2

Office Information Technology 195,
Introduction to the Internet. 2

Office Information Technology 196,
Introduction to Windows 2

Office Information Technology 197,
Proofreading 2

Office Information Technology 200,
Independent Study 1-3

Office Information Technology 226,
Legal Terminology 2

Office Information Technology 227,
Medical Terminology 2

Office Information Technology 228,
Medical Scheduling and Billing. 2

Office Information Technology 229,
Medical Coding 2

Office Information Technology 241,
General Machine Transcription I 3

Paralegal

Career Cluster—Law, Public Safety, Corrections, and Security

This program is approved by the American Bar Association. A paralegal (legal assistant) applies his or her knowledge of law and legal procedures to: assist attorneys and/or other legal personnel; conduct legal research; prepare and interpret legal documents and correspondence; locate, compile, and use technical information; conduct investigations; organize and manage information and documents; analyze and resolve procedural problems; interview clients and witnesses; calendar deadlines and dates; and manage work flow. Paralegals must possess the following competencies: knowledge of substantive areas of law and legal procedure; a mastery of legal terminology and concepts; critical thinking skills; organizational skills; communication skills; legal research skills; legal writing skills; computer and information management skills; interviewing and investigation skills; and must adhere to high ethical and professional standards of conduct. The paralegal profession is one of the fastest growing and most dynamic professions in the United States. The United States Bureau of Labor Statistics predicts that the paralegal profession will continue to grow at a much faster than average rate, at least through the year 2012. This curriculum leads to an Associate in Applied Science and is designed for career entry and/or advancement.

Paralegals may not provide legal services directly to the public except as permitted by law.

Transfer Policy

A maximum of 60% (16 credit hours) of paralegal specialty course work may be transferred in to meet Paralegal degree/certificate requirements. Courses must meet the competencies of the equivalent KCC course, have a grade of "C" or higher, and be from an institution approved by the American Bar

Association (ABA) at the time the course was taken. Courses completed more than five years prior to evaluation for transfer do not qualify without department exemption.

Program Outcomes

Graduates of the Paralegal Associate in Applied Science and Post-Baccalaureate Certificate Program will be able to:

- Communicate effectively in written, spoken, and non-verbal forms
- Work in collaborative settings while demonstrating individual initiative and responsibility
- Employ effective interpersonal skills in a variety of work-related settings with an emphasis on excellent customer service and treating people with respect and courtesy
- Use critical thinking skills and creativity to solve problems and make well-reasoned, ethical decisions in a legal environment
- Master legal concepts and use legal terminology and resources effectively
- Conduct accurate, effective, and efficient legal research and investigations
- Exhibit professionalism and respect for the legal system
- Value and commit to continually upgrade technical skills and substantive legal knowledge
- Understand the role of paralegals in the legal profession, and observe all appropriate legal codes of ethical conduct
- Use technology effectively and appropriately
- Effectively organize information and demonstrate efficient time management skills

General Education

The following courses provide skills in speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented

situations. Students must complete a minimum of 18 credits of General Education Core Courses. Students seeking MACRAO approval should see page 18 for MACRAO General Education Course Requirements and should consult with an academic advisor.

CREDITS

Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
Critical Thinking Elective ^o	4
English 151 , Freshman Composition . . .	3
Global Awareness Elective ^o	3
Healthy Living Elective	
Psychology 201 , Introduction to Psychology	
or Science 100 , Environmental Science	
or Science 103 , Field Investigation in Environmental Studies	
or Sociology 202 , Social Problems	
or Sociology 203 , Marriage and the Family	3-4
	18-19

^oFor options to fulfill the Creativity, Critical Thinking, and Global Awareness Elective, see page 49.

Paralegal Degree **code 254**
CREDITS

Accounting 101 , General Accounting . . .	4
Business Administration 201 , Business Law	3
Business Administration 202 , Business Law	3
Criminal Justice 202 , Criminal Law . .	3
Office Information Technology 160 , Applications Software	3
Paralegal 110 , Introduction to Paralegalism	3
Paralegal 120 , Basic Legal Research and Writing	4
Paralegal 233 , Wills, Trusts, and Probate Administration	3
Paralegal 234 , Family Law	3
Paralegal 236 , Employment Law	3
Paralegal 237 , Law Office Management	3
Paralegal 240 , Litigation Procedures . . .	3

38

Choose a minimum of six credits from the following electives:

CREDITS

Paralegal 201 , Paralegal Internship	3
Paralegal 202 , Paralegal Internship	3
Paralegal 220 , Cooperative Education . . .	3
Paralegal 221 , Cooperative Education . . .	3
Paralegal 232 , Real Estate Law and Property Transactions	3
Paralegal 245 , Trial Advocacy	3
Paralegal 250 , Administrative Law	3
Paralegal 251 , Advanced Legal Research and Writing	3
Paralegal 252 , Bankruptcy and Creditor-Debtor Law	3
Paralegal 290 , Selected Topics in Paralegalism	1-3

Most general education courses are available all semesters. Required paralegal specialty courses are offered once during the academic year. Elective paralegal courses are offered on a rotating basis.

The four-semester sequence of courses recommended for the full-time student is:

I	II
BUAD 201	ACCO 101
ENGL 151	BUAD 202
OIT 160	CRJU 202
PARA 110	Creativity Elective
Critical Thinking Elective	Healthy Living Elective (from list)
III	IV
COMM 101	PARA 234
PARA 120	PARA 236
PARA 223	PARA 240
PARA 237	PARA Elective
PARA Elective	Global Awareness Elective

Paralegal Post-Baccalaureate Certificate Program **code 167**

Students who have previously earned a bachelor's degree from a regionally-accredited four-year American college may enroll in the Paralegal Post-Baccalaureate Certificate

Program listed below. Please contact the Paralegal Program Coordinator for more information.

CREDITS

Business Administration 201 , Business Law	3
Business Administration 202 , Business Law	3
Criminal Justice 202 , Criminal Law . . .	3
Paralegal 110 , Introduction to Paralegalism	3
Paralegal 120 , Basic Legal Research and Writing	4
Paralegal 233 , Wills, Trusts, and Probate Administration	3
Paralegal 234 , Family Law	3
Paralegal 236 , Employment Law	3
Paralegal 237 , Law Office Management	3
Paralegal 240 , Litigation Procedures . . .	3
	31

III
 PARA 233
 PARA 237
 PARA Elective

IV
 PARA 234
 PARA 236
 PARA 240

Choose six credits from the following electives:

CREDITS

Office Information Technology 160 , Applications Software	3
Paralegal 201 , Paralegal Internship	3
Paralegal 202 , Paralegal Internship	3
Paralegal 220 , Cooperative Education . .	3
Paralegal 221 , Cooperative Education . .	3
Paralegal 232 , Real Estate Law and Property Transactions	3
Paralegal 245 , Trial Advocacy	3
Paralegal 250 , Administrative Law	3
Paralegal 251 , Advanced Legal Research and Writing	3
Paralegal 252 , Bankruptcy and Creditor-Debtor Law	3
Paralegal 290 , Selected Topics in Paralegalism	1-3

The four-semester sequence of courses recommended for the full-time student is:

I	II
PARA 110	BUAD 202
BUAD 201	CRJU 202
PARA 120	PARA Elective

Photography and Multimedia

Career Cluster—Arts, Audio-Video Technology, and Communication

This intensive program prepares students for entering the diverse fields of photography and multimedia. Working professionals and employers designed the curriculum to develop individuals who thrive in fast-paced work environments and to prepare students to use state-of-the-art technology with artistic expression. Graduates of this program are well-rounded individuals, with a background adaptable to a variety of media related fields. The program includes four main areas of emphasis: Photography, Multimedia, Animation, and Visual Art. The curriculum blends traditional and digital media technologies while encouraging technical proficiency and aesthetic awareness of photography, multimedia, film animation, visual art, video capture and editing, sound capture and editing, web design, and graphic design as both an art form and a professional medium of communication.

Associate degrees with concentrations in Animation or Photography may transfer to four-year institutions if students take the additional general education courses. Transfer guides are available in the Academic Advising office. If students are interested in a transfer option, they should consider completing the General Education MACRAO courses listed on pages 18-19.

Photography and Multimedia Degree code 274

Prerequisites

Students should possess basic Macintosh operation skills or take Graphic Design 105, Using and Troubleshooting the Macintosh.

General Education

Students must complete the following

general education requirements:

CREDITS

Art 105 , Contemporary Art Survey or Art 210 , History of Photography and Film or Art 213 , Art History	2-3
Communication 111 , Business Communication	3
Communication 241 , Mass Communication	3
Critical Thinking Elective ^o	3-4
English 151 , Freshman Composition . . .	3
Healthy Living Elective ^o	2-3
	16-19

^oFor options to fulfill the Critical Thinking and Healthy Living Electives, see pages 49-50.

The Photography and Multimedia Program emphasizes creativity, and individuals become well-suited for positions requiring artistic design and image development. In a hands-on learning environment, students gain four areas of specialization in the core courses. In the seminars students work with instructors to implement learning through creation of projects designed to display students' artistic abilities, craft, and knowledge. The following courses are required for the program.

Core Courses

CREDITS

Animation 103 , Introduction to Video Art	3
Art 103 , Two-Dimension Design	3
Art 110 , Drawing I	3
Art 215 , Art Seminar I	3
Art 222 , Introduction to Photography . . .	3
Art 227 , Digital Color Photography	3
Art 230 , Digital Color Photography II . .	3
Art 296 , Internship and Career Development	3
Graphic Design 100 , Introduction to Graphic Design	3
Graphic Design 167 , Dreamweaver	4
Graphic Design 170 , Photoshop	4

35

The associate degree in Photography and Multimedia candidates may select from the following two elective options: Photography or Animation.

Photography and Multimedia Option 1 – Photography

	CREDITS
Art 223 , Intermediate Photography.	3
Art 224 , Advanced Photography.	3
Art 229 , Studio Photography	3
Art 295 , Photography and Multimedia Special Topics.	3 <hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> 12

The four-semester sequence of courses suggested for the full-time Photography student is:

I	II
ART 103	ART 110
ART 222	ART 223
GRDE 100	ART 295
GRDE 170	COMM 241
ENGL 151	GRDE 167
III	IV
ANIM 103	ART 105
ART 227	ART 215
ART 229	ART 224
Critical Thinking	ART 230
Elective	ART 296
Healthy Living	COMM 111
Elective	

NOTE: This is a recommended sequence only. Students should work with an academic advisor or the Photography and Multimedia Coordinator to individualize their education plan.

Photography and Multimedia Option 2 – Animation

	CREDITS
Animation 104 , Introduction to Sound, Recording, and Editing.	3 <hr style="width: 100%; border: 0.5px solid black; margin: 0;"/>
Animation 233 , Introduction to 2-D Animation Techniques	3 <hr style="width: 100%; border: 0.5px solid black; margin: 0;"/>
Animation 234 , Introduction to 3-D Animation Techniques	3 <hr style="width: 100%; border: 0.5px solid black; margin: 0;"/>
Animation 235 , Intermediate Animation.	3 <hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> 12

The four-semester sequence of courses suggested for the full-time Animation student is:

I	II
ANIM 103	ANIM 233
ANIM 104	ART 110
ART 103	ART 222
ENGL 151	COMM 241
GRDE 170	GRDE 167
III	IV
ANIM 234	ANIM 235
ART 227	ART 105
GRDE 100	ART 215
Critical Thinking	ART 230
Elective	ART 296
Healthy Living	COMM 111
Elective	

NOTE: This is a recommended sequence only. Students should work with an academic advisor or the Photography and Multimedia Coordinator to individualize their education plan.

Physical Therapist Assistant

Career Cluster—Health Science

Physical therapist assistants function under the direction and supervision of physical therapists, carrying out intervention programs using physical modalities, therapeutic exercises, and activities of daily living. They accept responsibility for the patient's personal care and safety during intervention and carefully observe, record, and report patient conditions, reactions, and responses related to their assignments. The job requires significant physical handling of patients and assuming responsibility for patient safety during the performance of functional activities.

The Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education. The program prepares the graduate to take the licensure examination used by those states which require licensure. The Associate in Applied Science is awarded upon program completion.

Prerequisites

Recommended high school units of study are shown at the end of this catalog. High school algebra, biology, chemistry, and physics course work beyond 9th grade level are recommended. Students weak in arithmetic are encouraged to take developmental course work (Mathematics 97 and 98), and students weak in English skills are urged to take developmental course work before entering the program. Post high school applicants to the program are best advised to take as many as possible of the general course requirements of the curriculum before entering the technical program course work. Biology 99 is recommended prior to Biology 201 and 202 if the applicant has not had biology and

chemistry in high school, but advanced math and science courses are NOT required for admission. Admission to the program will be based on high school and college grades and American College Test (ACT) scores.

Admissions

Admission to the Physical Therapist Assistant Program is selective due to space, clinical site availability, and equipment limitations. Please refer to page 13 for more specific information related to the admission process for the Physical Therapist Assistant Program. The following factors are considered in the selection process:

1. ACT or SAT score
2. High school or college grade point average
3. Specific general education courses taken in college with at least a 2.0 grade:^o
Biology 201; Biology 202; Emergency Medical Technician 110; Psychology 220; Communication 101; English 151; Psychology 201; Sociology 201

Students who have completed related science courses more than seven years ago may be advised by the program director to retake them.

^oThe first four courses listed will secure more points toward admission than the other courses listed. Points toward admission for any of the previous listed courses taken the spring semester, when applying for entry into the program, will not be calculated into the overall point total.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. These courses MAY be taken prior to being admitted to the program.

	CREDITS
Communication 101 , Interpersonal	
Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Psychology 201 , Introduction to	
Psychology	3
Psychology 220 , Developmental	
Psychology [†]	3
Sociology 201 , Introduction to Sociology	3

17-18

^oFor options to fulfill the Creativity Elective, see page 49.

[†]Transfer course must cover development through the entire lifespan.

Requirements for Taking Physical Therapist Assistant Courses

Criminal Background Checks

Some clinical sites require pre-placement criminal background checks on students. Students assigned to these particular sites will be required to complete the appropriate paperwork allowing the background check to be done. Should there be a conviction noted, it will be left to the determination of the clinical site as to whether the student will be allowed to complete his/her clinical education at their facility. If it is determined that the student will not be allowed at the facility, the student will be withdrawn from the program.

Drug Screens

Some clinical sites require a pre-placement drug screen. Students who have been assigned to those sites must provide a drug screen according to the specific standards the clinical site has defined.

Some clinical sites require a drug screen based on behavior exhibited by the student while at the site. When requested by officials at the site, students must provide a drug screen according to the specific standards the

clinical site has defined. A student referred to a drug screen will be temporarily suspended from clinical work until the results of the drug screen are reported. The clinic coordinator will advise the student where and when to have the drug screen completed to ensure compliance.

Physical Therapist Assistant Degree code 283

Formal admission into the Physical Therapist Assistant Program is required for registration of Physical Therapist Assistant (PTA) courses.

	CREDITS
Biology 201 , Human Anatomy	4
Biology 202 , Human Physiology	4
Emergency Medical Technician 110 ^o ,	
Medical First Responder	3
Physical Therapist Assistant 110 ,	
Fundamentals of Physical Therapist	
Assisting	3
Physical Therapist Assistant 112 ,	
Kinesiology I	2
Physical Therapist Assistant 114 ,	
Physical Therapy Modalities	4
Physical Therapist Assistant 116 ,	
Kinesiology II	3
Physical Therapist Assistant 117 ,	
Pathology I	1
Physical Therapist Assistant 118 ,	
Pathology II	1
Physical Therapist Assistant 119 ,	
Orthopedics	3
Physical Therapist Assistant 120 ,	
Neurological Concepts	1
Physical Therapist Assistant 121 ,	
Functional Techniques	2
Physical Therapist Assistant 122 ,	
Pediatrics	1
Physical Therapist Assistant 218 ,	
Focused Neurology	3
Physical Therapist Assistant 219 ,	
Advanced Intervention Techniques . .	3
Physical Therapist Assistant 220 ,	
Concepts in Physical Therapist	
Assisting	2

	CREDITS
Physical Therapist Assistant 221, Clinical Experience	1
Physical Therapist Assistant 223, Seminar in Physical Therapist Assisting	2
Physical Therapist Assistant 224, Coordinated Clinical Experience I	4
Physical Therapist Assistant 225, Coordinated Clinical Experience II	4
Physical Therapist Assistant 226, Clinical Exploration	2
	53

°Transfer course must be exact equivalent.

Because of the sequential nature of the PTA course work, the program requires at least two academic years to complete, including an eight-week summer semester. One suggested sequence is:

I	II
BIOL 201	BIOL 202
EMT 110	PSYC 220
ENGL 151	PTA 114
PSYC 201	PTA 116
PTA 110	PTA 117
PTA 112	Elective
 III°	 IV
PTA 118	COMM 101
PTA 119	PTA 218
PTA 120	PTA 219
PTA 121	PTA 220
PTA 122	PTA 221
	SOCI 201

V°

PTA 223
PTA 224
PTA 225
PTA 226

NOTE: The above sequence is academically challenging. Many students elect to take their general education and Biology 201, 202, and EMT 110 prior to admission into the PTA courses in the program (physical therapy course work). The PTA courses will still require two academic years to complete.

° The eight (8) week summer semester and the final sixteen (16) week semester of clinical experiences require the time commitment of a full-time student.

NOTE: Some of the clinical sites used for student placements during the second year of the Physical Therapist Assistant Program are located at considerable distance from the college. A car will definitely be needed for transportation. In some cases students may need/choose to move (live) closer to their assigned clinical sites for six-week periods, especially during the final spring semester of the program.

Grades of “C” or better are required in all general education, and Physical Therapist Assistant Major courses in the program to qualify a student for graduation.

NOTE: For students needing to complete a program on a part-time basis, the Physical Therapist Assistant Program offers a three-year PTA track option to a LIMITED number of students each year. For further information about this option, contact the program coordinator.

Production Technology

Career Cluster—Manufacturing

Kellogg Community College is introducing an Associate in Applied Science Program in Production Technology as a response to recent demands from industry to place technical personnel into supervisory or management positions. Many of the courses are offered at the Regional Manufacturing Technology Center, a state-of-the-art facility located in the Fort Custer Industrial Park that has the very latest in manufacturing equipment for training purposes.

Students will benefit from increased flexibility in scheduling, with classes being available both during the day and evening for full- and part-time students. They will also have the opportunity to design their own program from a broad “menu” of technical courses that aren’t loaded with prerequisites or heavy sequencing.

The program has been designed to provide students with a broad technical background that enables them to either enter the workforce directly or transfer to a four-year college or university upon graduation. Please contact the Director of the RMTC or your academic advisor for more information about this program.

Production Technology Degree

code 285

Technical Core

Students must complete the following courses:

CREDITS

Business Administration 131, Principles of Management	3
Computer-Aided Drafting 101, Engineering Graphics	4
Office Information Technology 160, Applications Software	3

CREDITS

Physics 111, Introductory Physics or Chemistry 100, Fundamentals of Chemistry I	4
	<u>14</u>

Technical Electives

Students must complete 28 credits from any of the following courses:

CREDITS

Industrial Trades courses including:

Industrial Electricity/ Electronics (INEL)	Variable
Industrial Instrumentation and Process (INST)	Variable
Industrial Machine Tool (INMT) . .	Variable
Industrial Millwright (INMW) . . .	Variable
Industrial Pipefitting (INPF)	Variable
Industrial Heating/Ventilation/Air Conditioning/Refrigeration (INHR)	Variable
Industrial Robotics (INRO)	Variable
Industrial Sheet Metal (INSM) . . .	Variable
Industrial Statistical Process Control (INSP)	Variable
Industrial Welding (INWE)	Variable

CREDITS

Engineering Technology (ENTE) courses including:

160, Manufacturing Processes	3
215, Material Science	3
220, Statics and Strengths of Materials	3

CREDITS

Business Administration (BUAD) courses including:

112, Business Statistics	3
132, Human Resources Management .	3

General Education

These required courses provide general skills in communication, writing, and numerical problem solving that are necessary in carrying out normal job-orientated functions,

as well as helping to develop an articulate, healthy, well-informed citizen.

CREDITS

English 120 , Writing Improvement	3
English 151 , Freshman Composition . . .	3
Communication 101 , Foundations of Interpersonal Communication or 111 , Business and Technical Communication	3
Creativity Elective ^o	3
Global Awareness Elective ^o	3
Healthy Living Elective ^o	2
Mathematics 118 , Applied Algebra/ Trigonometry or 119 , Applied algebra/Trigonometry II or 121 , Intermediate Algebra or 122 , Trigonometry or 124 , College Algebra	3-4
	<hr/> 20-21

^oFor options to fulfill the Creativity, Global Awareness, and Healthy Living Electives, see pages 49-50.

Radiographer

Career Cluster—Health Science

Radiographers operate radiologic imaging equipment under the general direction of a physician to accurately demonstrate anatomical structures of the body. Radiographers apply knowledge of anatomy, positioning, and radiographic technique to acquire quality images that assist in the diagnosis of diseases and injuries of the human body.

The Radiography Program is a two-year program consisting of four academic semesters and two summer sessions. All semesters and sessions consist of classroom lecture and supervised clinical experience in one of our affiliating hospitals. The program's comprehensive curriculum requires the time commitment of a full-time student. The Radiography Program is approved by the Joint Review Committee on Educational Programs in Radiologic Technology (JRCERT). Those who successfully complete the program are awarded an Associate in Applied Science and are eligible to take the national registry exam of the American Registry of Radiologic Technologists (ARRT).

Admission Prerequisites

Recommended high school units of study are shown at the end of this catalog. More specifically, students with a strong foundation in algebra, geometry, physics, biology, and computers, as demonstrated in their high school curriculum or through equivalent college courses, will have an advantage as they work through the radiography curriculum.

Admissions prerequisites must be completed before a student can be admitted to the Radiography Program. Admissions prerequisites are as follows:

1. Mathematics 121, Intermediate Algebra
2. Office Information Technology 227, Medical Terminology

Admission Criteria

Admission to the Radiographer program is selective. For the admission process, see page 13.

Students must be admitted to the Radiographer Program. Application can be made through the Admissions office. The following is considered in the selection process:

1. GED or high school grade point average
2. ACT or SAT score
3. College grade point average
4. Completion of prerequisite courses with a grade of "C" or better in Mathematics 121 and Office Information Technology 227
5. Completion of and a grade of "C" or higher achieved in the following courses: Biology 201, Biology 202, Emergency Medical Technician 110 or 120, English 151, Communication 101, Psychology 201, and Sociology 201°

Students who have completed related science courses more than seven years ago may be advised by the program director to retake them.

°Biology 201, Biology 202, and Emergency Medical Technician 110 or 120 secure more admission points than the remaining four courses. These courses are not required for admission.

Once admitted into the program, the student must maintain a grade of "C" or better in all Radiography designated courses in order to remain in the program. Failure to do so will mean dismissal from the program.

General Education

The following courses provide general skills of speaking, writing, thinking, analyzing, cooperating, making choices and judgments, integrating, and creating that are required in many problem-solving and task-oriented situations. These courses may be taken prior to being admitted to the program.

	CREDITS
Biology 201 , Human Anatomy	4
Biology 202 , Human Physiology.	4
Communication 101 , Foundations of Interpersonal Communication	3
Creativity Elective ^o	2-3
English 151 , Freshman Composition . . .	3
Mathematics 121 , Intermediate Algebra. .	4
Office Information Technology 227 , Medical Terminology	2
Psychology 201 , Introduction to Psychology	3
Sociology 201 , Introduction to Sociology	3
	28-29

^oFor options to fulfill the Creativity Elective, see page 49.

Requirements for Taking Radiography Courses

Age Requirement

Due to possible exposure of ionizing radiation, students must be 18 years of age prior to the start of the program's first semester.

Criminal Background Checks

Some clinical sites require pre-placement criminal background checks on students. Students assigned to these particular sites will be required to complete the appropriate paperwork allowing the background check to be done. Should there be a conviction noted, it will be left to the determination of the clinical site as to whether the student will be allowed to complete their clinical education at their facility. If it is determined that the student will not be allowed at the facility, the student will be withdrawn from the program.

Drug Screens

Some clinical sites require a pre-placement drug screen. Students who have been assigned to those sites must provide a drug screen according to the specific standards the clinical site has defined.

Some clinical sites require a drug screen based on behavior exhibited by the student while at the site. When requested by officials at the site, students must provide a drug screen according to the specific standards the clinical site has defined. A student referred to a drug screen will be temporarily suspended from clinical work until the results of the drug screen are reported. The program director will advise the student where and when to have the drug screen completed to ensure compliance.

The Medical First Responder Training (EMT 110) course must have been completed no more than three years prior to the beginning of the second semester of the Radiography Program, unless the student can provide a current Michigan Medical First Responder's license.

Radiographer Degree code 288

CREDITS

Radiography 100 , Introduction to Radiology Science and Health Care.	2.25
Radiography 111 , Patient Care in Radiologic Science.	2.25
Radiography 112 , Introduction to Imaging Principles75
Radiography 113 , Clinical Orientation .	.75
Radiography 120 , Radiologic Positioning, Procedures and Pathology I.	3
Radiography 121 , Radiologic Physics. . .	3
Radiography 122 , Clinical Practice I. . .	2.5
Radiography 130 , Radiologic Positioning, Procedures and Pathology II	3
Radiography 131 , Principles of Radiologic Imaging I	3
Radiography 132 , Clinical Practice II . .	2.5
Radiography 210 , Clinical Practicum . .	3
Radiography 220 , Radiologic Positioning, Procedures and Pathology III.	1.25
Radiography 221 , Principles of Radiologic Imaging II	3
Radiography 222 , Comprehensive Clinical Experience I	3.75

CREDITS

Radiography 223, Radiobiology and
Protection 1

Radiography 230, Cross Sectional
Anatomy 2

Radiography 231, Radiologic Technology
Special Topics 3

Radiography 232, Comprehensive
Clinical Experience II. 3.75

43.75

The sequence of courses recommended below will allow the full-time student to complete the Radiographer Program in two years (six semesters).

I	II	III
RADI 100	RADI 120	RADI 130
RADI 111	RADI 121	RADI 131
RADI 112	RADI 122	RADI 132
RADI 113		
IV	V	VI
RADI 210	RADI 220	RADI 230
	RADI 221	RADI 231
	RADI 222	RADI 232
	RADI 223	

NOTE: Grades of "C" or better are required in all general education and Radiographer degree courses in the program to qualify students for graduation.