

## Quality Technician

The program is structured to prepare individuals to perform inspection techniques and assure quality in manufacturing and service industries. The trained individual will have the skills to assist a Quality Engineer in inspecting, gathering, and analyzing data pertinent to products and services to maintain the desired quality. The program will prepare the individual to work as a Quality Technician, Quality Inspector, and Quality Analyst.

---

## Suggested Order of Study

---

### Quality Technician

Course		Hours
Math 030	Intermediate Algebra*	3
Math 130	College Algebra	3
CAMT 160	Inspection and Gaging	3
GB 321	Business Statistics I	3
MIMS 320	Applied Quality Control	3
		<b>15</b>

\* or Placement Test or acceptable ACT Score

### For additional information contact:

Dr. Tia M. Strait, Dean  
School of Technology  
Office: Justice Center 126  
Phone: 417.625.3155  
Email: strait-t@mssu.edu



**Faculty** Oakes - Head, Collins, Earney, Herr, Mays, Pinet, Schiavo, Tunnell

The Computer Information Science (CIS) Department provides opportunities for a broad undergraduate education in the many aspects of computer hardware and software. The faculty's main objective is to offer courses of instruction that develop a thorough understanding of methods for utilizing computer technology in the design and implementation of solutions to complex management, scientific, and engineering problems. Within this context, the Department offers the following curricula options:

- Bachelor of Science in CIS - Information Technology
- Bachelor of Science in CIS - Information Systems
- Bachelor of Science in CIS - Computational Mathematics
- Bachelor of Science in CIS - Bioinformatics
- Bachelor of Science in CIS - Computer Forensics
- Bachelor of Science in CIS - Computer Technology

- Minor in CIS - Network Systems Administration
- Minor in CIS - Information Systems
- Minor in CIS - Website Administration
- Associate of Science in CIS - Network Systems Administration
- Associate of Science in CIS - Information Systems
- Associate of Science in CIS - Website Administration

The six **Bachelor of Science in CIS** alternatives prepare the student for graduate school or entry-level positions such as systems programmer, systems analyst, applications programmer, database administrator, bioinformatics specialist, computer forensics analyst, user support specialist, network administrator, or website administrator. **Information Technology** and **Information Systems** are distinguished by selected courses that develop the student's understanding of an organization's information requirements and procedures for designing and implementing an information system that will facilitate its management.

**Computational Mathematics** meets the requirements for a double major in Computer Information Science and Mathematics. The student takes CIS and mathematics classes that develop an expertise in applied mathematics and the theoretical foundations of computer science. Such knowledge is required to design and implement computer solutions for a wide range of problems encountered in science and engineering.

**Bioinformatics** provides for a double major in Computer Information Science and Biology. Bioinformatics is an emerging discipline that is concerned with designing and implementing computational algorithms for managing, processing, and analyzing databases of genetic sequences.

**Computer Forensics** fulfills the requirements for a double major in Computer Information Science and Criminal Justice Administration. Cyber attacks, hacking, and other computer-based criminal activities cost businesses and government organizations billions of dollars each year. Computer Forensics involves techniques for securing computer networks as a precaution against criminal threat. In addition, it includes the identification, extraction, preservation, and documentation of computer evidence for the purpose of identifying and prosecuting perpetrators of computer-based crime.

The **Computer Technology** option not only meets the requirements for a Bachelor of Science in CIS, but also qualifies the student for an Associate of Science degree in Computer Aided Drafting and Design (CADD).

A **Minor** or **Associate of Science** provides the student pursuing some other major with a credential and expertise in computing, an enhancement that is becoming increasingly important in almost every area of science, education, business, and the arts. The **Network Systems Administration** alternatives are designed to provide the student with the knowledge base necessary for managing local/wide area computer networks, as well as being able to provide user support and training in the area of personal computer hardware and

# 218 / Computer Information Science

application software. The **Website Administration** curriculum focuses on the knowledge and skills needed to build and provide on-going support for an Internet website.

In addition to these options, the Computer Information Science Department and the School of Business Administration have developed a curriculum alternative that will qualify the student for a Bachelor of Science in CIS, along with a Bachelor of Business Administration degree with a selected emphasis such as accounting, finance and economics, marketing, management, international business, or general business.

The nature of Computer Information Science is such that a student selecting this major should enjoy and have a talent for solving problems. The effectiveness of the CIS curricula is measured by the success of our graduates. Their average starting salaries are among the highest when compared to other majors, and placement records indicate that they have enjoyed an excellent placement rate. Many hold positions as middle and upper-level managers for a wide range of organizations, and several have earned graduate degrees.

Only courses in which a student has earned a grade of "C" or above will satisfy departmental requirements for the major or minor in Computer Information Science.

## Computer Information Science

	Semester Hours
<b>Core Requirements:</b>	
CIS 110 Programming I . . . . .	3
CIS 210 Programming II . . . . .	3
CIS 302 Information System I . . . . .	3
CIS 310 Database Management System. I . . . . .	3
CIS 315 Computer Networks . . . . .	3
CIS 345 UNIX System Administration . . . . .	3
CIS 350 Data Structures . . . . .	3
CIS 410 Information System II (WI). . . . .	3
CIS 425 Database Management II (WI). . . . .	3
CIS 435 Data Mining* . . . . .	3
CIS 450 Operating Systems (WI) . . . . .	3
<b>Total CIS Core</b> . . . . .	<b>33</b>

\*Students choosing the Computer Forensics option will take CIS 440 instead of CIS 435.

## Bachelor of Science in CIS – Information Technology Option

Major Code 5110

<b>Core Requirements (p.32) 51*</b> . . . . .	<b>48</b>
<b>CIS Core</b> . . . . .	<b>33</b>
<b>Professional Electives</b> . . . . .	<b>12</b>
(Select from)	
CIS 230 Program with RPG and . . . . .	6
CIS 321 Advanced RPG . . . . .	6
CIS 234 Program with COBOL and . . . . .	6
CIS 334 Advanced COBOL. . . . .	6
CIS 308 Website Administration I and . . . . .	6
CIS 340 Website Administration II . . . . .	6

CIS 370 Program with Java and . . . . .	6
CIS 380 Program with MFC . . . . .	6
CIS 325 Windows LAN Administration and . . . . .	6
CIS 440 Computer Forensics . . . . .	6
<b>Supporting Concentration**</b> . . . . .	<b>18</b>
<b>Supporting Requirements</b> . . . . .	<b>6</b>
Math 130 College Algebra. . . . .	3
GB 321 Business Statistics I . . . . .	3
OR	
Math 310 Elementary Statistics . . . . .	3
OR	
Math 361 Probability and Statistics I . . . . .	3
<b>General Electives</b> . . . . .	<b>7</b>
<b>Total</b> . . . . .	<b>124</b>

\*Math course in major requirements satisfies three hours of the Core.

\*\*Must be approved by the student's adviser and the CIS department head.

## Bachelor of Science in CIS – Information Systems Option and Minor in General Business

Major Code 5105

<b>Core Requirements (p. 32) 51*</b> . . . . .	<b>45</b>
<b>CIS Core</b> . . . . .	<b>33</b>
<b>Business Core</b> . . . . .	<b>31</b>
Acct 201 Accounting I . . . . .	3
Acct 202 Accounting II . . . . .	3
Econ 201 Principles of Economics (Macro) . . . . .	3
Econ 202 Principles of Economics (Micro). . . . .	3
Econ 350 Financial Management . . . . .	3
GB 301 Legal Environment of Business I . . . . .	3
GB 320 Business Communication (WI). . . . .	3
GB 321 Business Statistics I . . . . .	3
MM 300 Principles of Marketing . . . . .	3
MM 350 Principles of Management (WI) . . . . .	3
MM 490 Career Portfolio Development . . . . .	1
<b>Supporting Requirement</b> . . . . .	<b>3</b>
Math 130 College Algebra. . . . .	3
<b>Professional Electives</b> . . . . .	<b>12</b>
(Select from)	
CIS 230 Program with RPG and . . . . .	6
CIS 321 Advanced RPG . . . . .	6
CIS 234 Program with COBOL and . . . . .	6
CIS 334 Advanced COBOL. . . . .	6
CIS 308 Website Administration I and . . . . .	6
CIS 340 Website Administration II . . . . .	6
CIS 370 Program with Java and . . . . .	6
CIS 380 Program with MFC . . . . .	6
CIS 325 Windows LAN Administration and . . . . .	6
CIS 440 Computer Forensics . . . . .	6
CIS 401 CIS Internship . . . . .	1-3
Acct 419 Accounting Information Systems . . . . .	3
<b>Total</b> . . . . .	<b>124</b>

\*Math and economics courses in major requirements satisfy six hours of the Core.

**Bachelor of Science in CIS and Bachelor of Science in Math – Computational Math Option**

Major Code 5107

<b>Core Requirements (p. 32) 51*</b> .....	<b>43</b>
<b>CIS Core</b> .....	<b>33</b>
<b>Mathematics Core</b> .....	<b>33</b>
Math 150 Calculus I .....	5
Math 250 Calculus II .....	5
Math 260 Calculus III .....	5
Math 300 Fundamentals of Math Thought .....	3
Math 350 Introduction to Numerical Analysis .....	3
Math 351 Linear Algebra .....	3
Math 361 Probability and Statistics I .....	3
Math 371 Operations Research (WI) .....	3
Math Electives above 320 .....	3
<b>Supporting Requirements</b> .....	<b>10</b>
Phys 250 General Physics I .....	2
Phys 260 General Physics II .....	3
Chem 101 General Chemistry I .....	5
<b>General Electives</b> .....	<b>5</b>
<b>Total</b> .....	<b>124</b>

\*Math and physics courses in major requirements satisfy eight hours of the Core.

**Bachelor of Science in CIS and Bachelor of Science in Biology – Bioinformatics Option**

Major Code 5111

<b>Core Requirements (p. 32) 51*</b> .....	<b>39</b>
<b>CIS Core</b> .....	<b>33</b>
<b>Biology Core</b> .....	<b>33</b>
Bio 101 General Biology .....	4
Bio 210 Molecular Biology (WI) .....	4
Bio 231 General & Medical Microbiology .....	5
Bio 305 Genetics (WI) .....	4
Bio 405 Bioinformatics .....	3
Bio Upper Division Electives** .....	13
<b>Supporting Requirements</b> .....	<b>18</b>
Bio 290 Research Methods in Biology (WI) .....	3
Chem 100 Introductory Chemistry .....	5
Math 140 College Algebra & Trigonometry .....	5
Phys 151 Elementary College Physics .....	5
<b>General Elective</b> .....	<b>1</b>
<b>Total</b> .....	<b>124</b>

\*Math, physics, and biology courses in major requirements satisfy twelve hours of the Core.

\*\*Choose from the following courses: Bio 301, Bio 304, Bio 308, Bio 350, Bio 362, Bio 364, Bio 371, Bio 431, Bio 440, Bio 442, Bio 450, Bio 456, Bio 499.

**Bachelor of Science in CIS and Bachelor of Science in Criminal Justice Administration - Computer Forensics Option**

Major Code 5112

<b>Core Requirements (p. 32) 51*</b> .....	<b>48</b>
<b>CIS Core**</b> .....	<b>33</b>
<b>CJAd Core</b> .....	<b>33</b>
LE 200 Criminal Investigation I .....	3
LE 210 Criminal Procedure .....	3
LE 250 Criminal Law .....	3
LE 280 Interview & Report Writing (WI) .....	3
CJAd 300 Criminal Investigation II (WI) .....	3
CJAd 330 Asset Protection .....	3
CJAd Upper Division Electives .....	15
<b>Supporting Requirement</b> .....	<b>3</b>
Math 130 College Algebra .....	3
<b>General Electives</b> .....	<b>7</b>
<b>Total</b> .....	<b>124</b>

\*Math course in major requirements satisfies three hours of the Core.

\*\*CIS 440–Computer Forensics should be taken in place of CIS 435.

**Bachelor of Science in CIS and Associate of Science in CADD Computer Technology Option**

Major Code 5108

<b>Core Requirements (p. 32) 51*</b> .....	<b>48</b>
<b>CIS Core</b> .....	<b>33</b>
<b>CAMT/CADD Core</b> .....	<b>30</b>
CADD 110 Engineering Graphics I .....	3
CADD 115 Introduction to CADD .....	3
CADD 120 Descriptive Geometry .....	3
CADD 130 Engineering Graphics II .....	3
CADD 204 Industrial Statics .....	3
CADD 210 Technical Illustration .....	3
CADD 230 Elementary Surveying .....	3
CADD 260 Engineering Graphics .....	3
CAMT 100 Introduction to Machine Tools .....	3
CAMT 150 Materials and Processes .....	3
<b>Supporting Requirements</b> .....	<b>8</b>
Math 150 Calculus I .....	5
Math 310 Elementary Statistics	
OR	
GB 321 Business Statistics I .....	3
<b>General Electives</b> .....	<b>5</b>
<b>Total</b> .....	<b>124</b>

\*Math course in major requirements satisfies three hours of the Core.

# 220 / Computer Information Science

## Bachelor of Science in CIS – Information Systems Option and Bachelor of Science in Business Administration Selected Business Emphasis

<b>Core Requirements (p. 32) 51*</b>	<b>45</b>
<b>CIS Core</b>	<b>33</b>
<b>Business Core</b>	<b>34</b>
Acct 201 Accounting I	3
Acct 202 Accounting II	3
Econ 201 Principles of Economics (Macro)	3
Econ 202 Principles of Economics (Micro)	3
Econ 350 Financial Management	3
GB 301 Legal Environment of Business I	3
GB 320 Business Communication (WI)	3
GB 321 Business Statistics I	3
MM 300 Principles of Marketing	3
MM 350 Principles of Management (WI)	3
MM 452 Strategic Management (WI)	3
MM 490 Career Portfolio Development	1
<b>Business Emphasis Area</b>	<b>18-27</b>
(Select one)**	
Accounting	27
Finance and Economics	24
General Business	18
International Business	18
Marketing	18
Management	18
<b>Supporting Requirement</b>	<b>3</b>
Math 130 College Algebra	3
<b>Total</b>	<b>133-142</b>

\*Math and economics courses in major requirements satisfy six hours of the Core.

\*\*See adviser for course requirements.

### Minor in CIS – Network Systems Administration

<b>CIS Core</b>	<b>21</b>
CIS 110 Programming I	3
CIS 210 Programming II	3
CIS 315 Computer Networks	3
CIS 320 NetWare LAN Administration	3
CIS 325 Windows LAN Administration	3
CIS 345 UNIX System Administration	3
CIS 355 Enter Network Administration	3
<b>Total</b>	<b>21</b>

### Minor in CIS – Information Systems

<b>CIS Core</b>	<b>24</b>
CIS 110 Programming I	3
CIS 210 Programming II	3
CIS 230 RPG	
OR	
CIS 234 Program with COBOL	3
CIS 302 Information Systems I	3
CIS 310 Database Management System I	3

CIS 321 Advanced RPG	
OR	
CIS 334 Advanced COBOL	3
CIS 410 Information Systems II	3
CIS 425 Database Management System II	3
<b>Total</b>	<b>24</b>

### Minor in CIS – Website Administration

<b>CIS Core</b>	<b>21</b>
CIS 110 Programming I	3
CIS 210 Programming II	3
CIS 308 Website Administration I	3
CIS 310 Database Management System I	3
CIS 340 Website Administration II	3
CIS 345 UNIX System Administration	3
CIS 370 Program with Java	3
<b>Total</b>	<b>21</b>

### Associate of Science in CIS – Network Systems Administration Option

Major Code 5102

<b>Core Requirements (p. 33) 25-26*</b>	<b>22-23</b>
<b>CIS Core</b>	<b>27</b>
CIS 110 Programming I	3
CIS 210 Programming II	3
CIS 310 Database Management System. I	3
CIS 315 Computer Networks	3
CIS 320 NetWare LAN Administration	3
CIS 325 Windows LAN Administration	3
CIS 345 UNIX System Administration	3
CIS 355 Enterprise Network Administration	3
CIS 370 Program with Java	3
<b>Mathematics Core</b>	<b>3</b>
Math 130 College Algebra	3
<b>General Electives</b>	<b>11-12</b>
<b>Total</b>	<b>64</b>

\*Math course in major requirements satisfies three hours of the Core.

### Associate of Science in CIS – Information Systems Option

Major Code 5103

<b>Core Requirements (p. 33) 25-26*</b>	<b>22-23</b>
<b>CIS Core</b>	<b>27</b>
CIS 110 Programming I	3
CIS 210 Programming II	3
CIS 230 Program with RPG	
OR	
CIS 234 Program with COBOL	3
CIS 302 Information Systems I	3
CIS 310 Database Management System I	3
CIS 321 Advanced RPG	
OR	
CIS 334 Advanced COBOL	3
CIS 370 Program with Java	3

CIS 410	Information Systems II . . . . .	3
CIS 425	Database Management Systems II . . . .	3
<b>Business Core . . . . .</b>		<b>6</b>
Acct 201	Principles of Accounting I . . . . .	3
Acct 202	Principles of Accounting II . . . . .	3
<b>Mathematics Core . . . . .</b>		<b>3</b>
Math 130	College Algebra . . . . .	3
<b>General Electives . . . . .</b>		<b>5-6</b>
<b>Total . . . . .</b>		<b>64</b>

\*Math course in major requirements satisfies three hours of the Core.

**Associate of Science in CIS –  
Website Administration Option**

Major Code 5104

<b>Core Requirements (p. 33) 25-26* . . . . .</b>		<b>22-23</b>
<b>CIS Core . . . . .</b>		<b>27</b>
CIS 110	Programming I . . . . .	3
CIS 210	Programming II . . . . .	3
CIS 308	Website Administration I . . . . .	3
CIS 310	Database Management Systems I . . . .	3
CIS 315	Computer Networks . . . . .	3
CIS 325	Windows LAN Administration . . . . .	3
CIS 340	Website Administration II . . . . .	3
CIS 345	UNIX System Administration . . . . .	3
CIS 370	Programming with Java . . . . .	3
<b>Mathematics Core . . . . .</b>		<b>3</b>
Math 130	College Algebra . . . . .	3
<b>General Electives . . . . .</b>		<b>11-12</b>
<b>Total . . . . .</b>		<b>64</b>

\*Math course in major requirements satisfies three hours of the Core.

<b>2nd Semester</b>		
CIS 210	Programming II	3
CORE	[Area 2A Fine Art]	3
CORE	[Eng 102 Eng Comp II (WI)]	3
CORE	[Bio 101 General Biology]	4
Supporting Concentration		3
		<b>16</b>

<b>Sophomore Year</b>		
<b>1st Semester</b>		
CIS 310	Database Management Systems I	3
CIS	Professional Elective (1A)	3
CORE	[Psy 100 Gen Psychology]	3
CORE	[Phys 100 Fund of Phys Sci]	5
Supporting Concentration		3
		<b>17</b>

<b>2nd Semester</b>		
CIS 302	Information Systems I	3
CIS 350	Data Structures	3
CIS	Professional Elective (1B)	3
GB 321	Business Statistics	3
Supporting Concentration		3
		<b>15</b>

<b>Junior Year</b>		
<b>1st Semester</b>		
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II (WI)	3
CORE	[Area 2C Lit/Humanity]	3
CORE	[Hist 110 US History]	3
Supporting Concentration		3
		<b>15</b>

<b>2nd Semester</b>		
CIS 315	Computer Networks	3
CIS	Professional Elective (2A)	3
CORE	[Econ 180 American Econ System]	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
Supporting Concentration		3
		<b>15</b>

<b>Senior Year</b>		
<b>1st Semester</b>		
CIS 435	Data Mining	3
CIS 450	Operating Systems (WI)	3
CORE	[Hist 120 US History]	3
CORE	[Area 5A International]	3

General Elective		3
		<b>15</b>

<b>2nd Semester</b>		
CIS 425	Database Management Systems II (WI)	3
CIS	Professional Elective (2B)	3
CORE	[Area 2B Literature]	3
Supporting Concentration		3
General Elective		3
		<b>15</b>

***Suggested Order of Study***

**Bachelor of Science in CIS –  
Information Technology Option**

Major Code 5110

**Freshman Year**

<b>1st Semester</b>		
Course		Hours
CIS 110	Programming I	3
Math 130	College Algebra	3
CORE	[Comm 100 Oral Communication]	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Kine 101 Physical Activity]	1
CORE	[Kine 103 Lifetime Wellness]	2
Psy 120	College Orientation	1
		<b>16</b>

## 222 / Computer Information Science

### Bachelor of Science in CIS and Minor in General Business – Information Systems Option

Major Code 5105

#### Freshman Year

1st Semester		Hours
Course		
CIS 110	Programming I	3
Math 130	College Algebra	3
CORE	[Comm 100 Oral Communication]	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Kine 101 Physical Activity]	1
CORE	[Kine 103 Lifetime Wellness]	2
Psy 120	College Orientation	1
		<b>16</b>

#### 2nd Semester

CIS 210	Programming II	3
CIS 302	Information Systems I	3
Econ 201	Principles of Economics (Macro)	3
CORE	[Eng 102 Eng Comp II (WI)]	3
CORE	[Bio 101 General Biology]	4
		<b>16</b>

#### Sophomore Year

1st Semester		Hours
CIS 310	Database Management Systems I	3
CIS	Professional Elective (1A)	3
Acct 201	Principles of Accounting I	3
Econ 202	Principles of Economics (Micro)	3
CORE	[Phys 100 Fund of Phys Sci]	5
		<b>17</b>

#### 2nd Semester

CIS 350	Data Structures	3
CIS 315	Computer Networks	3
CIS	Professional Elective (1B)	3
Acct 202	Principles of Accounting II	3
Econ 350	Financial Management	3
		<b>15</b>

#### Junior Year

1st Semester		Hours
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II(WI)	3
CORE	[Psy 100 General Psychology]	3
CORE	[Area 2C Lit/Humanity]	3
CORE	[Hist 110 US History]	3
		<b>15</b>

#### 2nd Semester

CIS	Professional Elective (2A)	3
MM 300	Principles of Marketing	3
GB 321	Business Statistics I	3
GB 320	Business Communication (WI)	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
		<b>15</b>

#### Senior Year

1st Semester		Hours
CIS 435	Data Mining	3
CIS 450	Operating Systems (WI)	3
CIS	Professional Elective (2B)	3
MM 350	Principles of Management	3
CORE	[Hist 120 US History]	3
		<b>15</b>

#### 2nd Semester

CIS 425	Database Management Systems II (WI)	3
GB 301	Legal Environment of Business I	3
MM 490	Career Portfolio Development	1
CORE	[Area 5A International]	3
CORE	[Area 2A Fine Art]	3
CORE	[Area 2B Literature]	3
		<b>16</b>

### Bachelor of Science in CIS and Bachelor of Science in Math – Computational Mathematics Option

Major Code 5107

#### Freshman Year

1st Semester		Hours
Course		
CIS 110	Programming I	3
Math 150	Calculus I	5
CORE	[Psy 100 Gen Psychology]	3
CORE	[Eng 101 Eng Comp I (WI)]	3
Psy 120	College Orientation	1
		<b>15</b>

#### 2nd Semester

CIS 210	Programming II	3
Math 250	Calculus II	5
Phys 250	General Physics I	2
Phys 260	General Physics II	3
CORE	[Eng 102 Eng Comp II (WI)]	3
		<b>16</b>

#### Sophomore Year

1st Semester		Hours
CIS 310	Database Management Systems I	3
CIS 315	Computer Networks	3
Math 260	Calculus III	5
Chem 101	General Chemistry I	5
		<b>16</b>

#### 2nd Semester

CIS 302	Information Systems I	3
CIS 350	Data Structures	3
Math 300	Fund of Math Thought	3
CORE	[Kine 103 Lifetime Wellness]	2
CORE	[Kine 101 Physical Activity]	1
CORE	[Area 2A Fine Art]	3
		<b>15</b>

#### Junior Year

1st Semester		Hours
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II (WI)	3
Math 361	Probability and Statistics I	3
Math 371	Introduction to Operation Research (WI)	3
CORE	[Comm 100 Oral Communication]	3
		<b>15</b>

#### 2nd Semester

Math 350	Introduction to Numerical Analysis	3
CORE	[Bio 101 General Biology]	4
CORE	[Area 5A International]	3
CORE	[PSc 120 Gov't: US/St/Loc]	3
General Elective		3
		<b>16</b>

**Senior Year**

1st Semester		
CIS 435	Data Mining	3
CIS 450	Operating Systems (WI)	3
Math 351	Linear Algebra	3
CORE	[Econ 180 American Econ System]	3
CORE	[Hist 110 US History]	3
General Elective		1
		<b>16</b>

2nd Semester		
CIS 425	Database Management Systems II (WI)	3
Math Elective (Numbered above 320)		3
CORE	[Hist 120 US History]	3
CORE	[Area 2B Literature]	3
CORE	[Area 2C Lit/Humanity]	3
		<b>15</b>

**Bachelor of Science in CIS and Bachelor of Science in Biology – Bioinformatics Option**

Major Code 5111

**Freshman Year**

1st Semester		
Course		Hours
CIS 110	Programming I	3
Math 140	College Algebra & Trigonometry	5
Bio 101	General Biology	4
CORE	[Eng 101 Eng Comp I (WI)]	3
Psy 120	College Orientation	1
		<b>16</b>

2nd Semester		
CIS 210	Programming II	3
Bio 231	General & Medical Microbiology	5
Chem 100	Introductory Chemistry	5
CORE	[Eng 102 Eng Comp II (WI)]	3
		<b>16</b>

**Sophomore Year**

1st Semester		
CIS 310	Database Management Systems I	3
Bio 210	Molecular Biology (WI)	4
Phys 151	Elem College Physics	5
CORE	[Kine 103 Lifetime Wellness]	2
CORE	[Kine 101 Physical Activity]	1
		<b>15</b>

2nd Semester		
CIS 302	Information Systems I	3
CIS 350	Data Structures	3
Bio 305	Genetics (WI)	4
CORE	[Hist 110 US History]	3
CORE	[Area 2A Fine Art]	3
		<b>16</b>

**Junior Year**

1st Semester		
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II (WI)	3
Bio 290	Research & Statistical Methods (WI)	3
Bio	Upper Division Elective	4
CORE	[Area 2C Lit/Humanity]	3
		<b>16</b>

2nd Semester

CIS 315	Computer Networks	3
Bio	Upper Division Elective	4
CORE	[Comm 100 Oral Communication]	3
CORE	[Econ 180 American Econ System]	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
		<b>16</b>

**Senior Year**

1st Semester		
CIS 435	Data Mining	3
CIS 450	Operating Systems (WI)	3
Bio	Upper Division Elective	4
CORE	[Hist 120 US History]	3
CORE	[Area 5A International]	3
		<b>16</b>

2nd Semester		
CIS 425	Database Management Systems II (WI)	3
Bio 405	Bioinformatics	3
Bio	Upper Division Elective	1
CORE	[Area 2B Literature]	3
CORE	[Psy 100 Gen Psychology]	3
		<b>13</b>

**Bachelor of Science in CIS and Bachelor of Science in Criminal Justice Administration – Computer Forensics Option**

Major Code 5112

**Freshman Year**

1st Semester		
Course		Hours
CIS 110	Programming I	3
LE 200	Criminal Investigation I	3
Math 130	College Algebra	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Kine 103 Lifetime Wellness]	2
Psy 120	College Orientation	1
		<b>15</b>

2nd Semester		
CIS 210	Programming II	3
LE 210	Criminal Procedure	3
CORE	[Econ 180 American Econ System]	3
CORE	[Eng 102 Eng Comp II (WI)]	3
CORE	[Bio 101 Gen Biology]	4
		<b>16</b>

**Sophomore Year**

1st Semester		
CIS 310	Database Management Systems I	3
CIS 315	Computer Networks	3
LE 250	Criminal Law	3
LE 280	Interview & Report Writing (WI)	3
CORE	[Phys 100 Phys Sci]	5
		<b>17</b>

2nd Semester		
CIS 302	Information Systems I	3
CIS 350	Data Structures	3
CJAd 300	Criminal Investigation II (WI)	3
CORE	[Kine 101 Physical Activity]	1
CORE	[Comm 100 Oral Communication]	3
General Elective		3
		<b>16</b>

# 224 / Computer Information Science

## Junior Year

1st Semester		
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II (WI)	3
CJAd 330	Asset Protection	3
CORE	[Area 2C Lit/Humanity]	3
CORE	[Hist 110 US History]	3
		<b>15</b>

## 2nd Semester

CIS 440	Computer Forensics	3
CJAd	Upper Division Elective	3
CJAd	Upper Division Elective	3
CORE	[Area 2B Literature]	3
CORE	[Psy 100 Gen Psychology]	3
		<b>15</b>

## Senior Year

1st Semester		
CIS 450	Operating Systems (WI)	3
CJAd	Upper Division Elective	3
CORE	[Area 5A International]	3
CORE	[Hist 120 US History]	3
General Elective		3
		<b>15</b>

## 2nd Semester

CIS 425	Database Management Systems II (WI)	3
CJAd	Upper Division Elective	3
CJAd	Upper Division Elective	3
CORE	[Area 2A Fine Art]	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
		<b>15</b>

## Bachelor of Science in CIS and Associate of Science in CADD – Computer Technology Option

Major Code 5108

### Freshman Year

1st Semester		
Course		Hours
CIS 110	Programming I	3
CADD 110	Eng Graphics I	3
CORE	[Comm 100 Oral Communication]	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Kine 101 Physical Activity]	1
Psy 120	College Orientation	1
		<b>14</b>

## 2nd Semester

CIS 210	Programming II	3
CADD 115	Introduction to CADD	3
CAMT 100	Introduction to Machine Tool Processes	3
CORE	[Eng 102 Eng Comp II (WI)]	3
CORE	[Bio 101 General Biology]	4
		<b>16</b>

## Sophomore Year

1st Semester		
CIS 310	Database Management Systems I	3
CADD 120	Descriptive Geometry	3
CADD 130	English Graphics II	3
CORE	[Kine 103 Lifetime Wellness]	2
General Elective		3
		<b>14</b>

## 2nd Semester

CIS 302	Information Systems I	3
CIS 350	Data Structures	3
Math 150	Calculus I	5
CORE	[Area 2A Fine Art]	3
		<b>14</b>

## Summer

CADD 210	Technical Illustration	3
		<b>3</b>

## Junior Year

1st Semester		
CIS 345	UNIX System Administration	3
CIS 410	Information Systems II (WI)	3
CADD 204	Industrial Statics	3
CAMT 150	Materials and Processes	3
CORE	[Area 2C Eng 305]	3
		<b>15</b>

## 2nd Semester

CIS 315	Computer Networks	3
CADD 260	Computer Aided Drafting	3
CORE	[Phys 100 Fund of Phys Sci]	5
CORE	[Hist 110 US Hist]	3
Math 310	Elementary Statistics	3
		<b>17</b>

## Senior Year

1st Semester		
CIS 435	Data Mining	3
CIS 450	Operating Systems (WI)	3
CADD 230	Elementary Surveying	3
CORE	[Eng 102 Eng Comp II (WI)]	3
CORE	[Area 2B Literature]	3
		<b>15</b>

## 2nd Semester

CIS 425	Database Management Systems II (WI)	3
CORE	[Psy 100 Gen Psychology]	3
CORE	[Area 5A Upper Division]	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
CORE	[Hist 320 US History]	3
General Elective	(Upper Division)	1
		<b>16</b>

## Associate of Science in CIS

### Network Systems Administration Option

Major Code 5102

### Freshman Year

1st Semester		
Course		Hours
CIS 110	Programming I	3
Math 130	College Algebra	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Comm 100 Oral Communication]	3
CORE	[Area 4A US History]	3
Psy 120	College Orientation	1
		<b>16</b>

## 2nd Semester

CIS 210	Programming II	3
CIS 315	Computer Networks	3
CORE	[Area 2A Hum/Fine Art]	3
CORE	[Phys 100 or Bio 101]	4-5
General Elective		3
		<b>16-17</b>

**Sophomore Year**

1st Semester		
CIS 320	NetWare LAN Administration	3
CIS 345	UNIX System Administration	3
CIS 370	Programming with Java	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
CORE	[Area 4C]	3
		<b>15</b>
2nd Semester		
CIS 310	Database Management Systems I	3
CIS 325	Windows LAN Administration	3
CIS 355	Enterprise Network Administration	3
CORE	[Kine 101 Physical Activity]	1
CORE	[Kine 103 Lifetime Wellness]	2
General Elective		4-5
		<b>16-17</b>

**Associate of Science in CIS  
Information Systems Option**  
Major Code 5103

**Freshman Year**

1st Semester		
Course		Hours
CIS 110	Programming I	3
Math 130	College Algebra	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Area 4C]	3
CORE	[Comm 100 Oral Communication]	3
Psy 120	College Orientation	1
		<b>16</b>
2nd Semester		
CIS 210	Programming II	3
CIS 302	Information Systems I	3
Acct 201	Principles of Accounting I	3
CORE	[PSc 120 Gov't:US/St/Loc]	3
CORE	[Phys 100 or Bio 101]	4-5
		<b>16-17</b>

**Sophomore Year**

1st Semester		
CIS 230	RPG	
OR		
CIS 234	COBOL	3
CIS 370	Prog with Java	3
CIS 310	Database Management Systems I	3
CIS 410	Information Systems II (WI)	3
Acct 202	Principles of Accounting II	3
CORE	[Kine 101 Physical Activity]	1
		<b>16</b>
2nd Semester		
CIS 321	Advanced RPG	
OR		
CIS 334	Advanced COBOL	3
CIS 425	Database Management Systems II (WI)	3
CORE	[Area 4A US History]	3
CORE	[Kine 103 Lifetime Wellness]	2
CORE	[Area 2A Hum/Fine Art]	3
General Elective		1-2
		<b>15-16</b>

**Associate of Science in CIS  
Website Administration Option**  
Major Code 5104

**Freshman Year**

1st Semester		
Course		Hours
CIS 110	Programming I	3
Math 130	College Algebra	3
CORE	[Area 4A US History]	3
CORE	[Eng 101 Eng Comp I (WI)]	3
CORE	[Comm 100 Oral Communication]	3
Psy 120	College Orientation	1
		<b>16</b>
2nd Semester		
CIS 210	Programming II	3
CIS 308	Website Administration I	3
CIS 315	Computer Networks	3
CORE	[Phys 100 or Bio 101]	4-5
CORE	[Area 2A Hum/Fine Art]	3
		<b>16-17</b>

**Sophomore Year**

1st Semester		
CIS 340	Website Administration II	3
CIS 345	UNIX System Administration	3
CIS 370	Programming in Java	3
CORE	[Area 4C]	3
General Elective		3
		<b>15</b>
2nd Semester		
CIS 310	Database Management Systems I	3
CIS 325	Windows LAN Administration	3
CORE	[Kine 101 Physical Activity]	1
CORE	[Kine 103 Lifetime Wellness]	2
CORE	[PSc 120 Gov't:US/St/Loc]	3
General Electives		4-5
		<b>16-17</b>

**For additional information contact:**

Dr. Jack L. Oakes  
Office: Matthews Hall 223E  
Phone: 417.625.9683  
Email: oakes-j@mssu.edu

**Course Descriptions**

CIS 101 (F, S) 3 hrs. cr.  
**Internet Computing: Getting Connected**  
Introduces the student to the effective use of the various resources of the Internet. Topics will include hardware requirements, software setup, browsing, searching, publishing, sharing, and communicating. The course will consider the social issues of using the Internet in a safe and ethically responsible way. The student will develop and post personal web pages. Prerequisite: A basic background in using Windows.

---

---

## 226 / Computer Information Science

---

- CIS 105 (F, S) 3 hrs. cr.  
**Introduction to Microcomputer Use**  
Instruction in the fundamental use of microcomputers through packaged software and operating systems. The student is introduced to word processing, spreadsheets, and presentation tools to aid in productivity and to develop a degree of confidence in the use of microcomputers.
- CIS 110 (F, S) 3 hrs. cr.  
**Programming I**  
Introduces programming in a personal computer based environment. The student will learn the fundamentals of PC hardware, operating systems, and programming. Special emphasis is placed on proper program style, including modularity and structured design. The language of implementation is C++. Corequisite: Math 130 or above.
- CIS 210 (F, S) 3 hrs. cr.  
**Programming II**  
Continued development of the programming and problem solving skills introduced in CIS 110. Structured programming and the object-oriented paradigm are emphasized. Includes an in-depth coverage of pointers, strings, arrays, structures, and files. Introduces linked lists, stacks, and queues. The language of implementation is C++. Prerequisite: CIS 110 with a grade of "C" or above.
- CIS 230 (S) 3 hrs. cr.  
**Programming with RPG**  
Introduces the programming language RPG in an OS/400 environment. Includes language syntax and practice in preparing, compiling, and executing applications of increasing complexity. Prerequisite: CIS 210 with a grade of "C" or above.
- CIS 234 (F) 3 hrs. cr.  
**Programming with COBOL**  
Methods and techniques for solving business related problems using the business oriented language COBOL. Applications may include payroll processing, inventory control, billing systems. Syntax of the language, report production using both sequential and indexed files, and structured methodologies are major topics. Prerequisite: CIS 210 with a grade of "C" or above.
- CIS 298 (Demand) 1-3 hrs. cr.  
**Topics in Computer Information Science**  
Addresses emerging topics in computer science and management information systems. Each offering will be on a subject not normally included in another course. Prerequisites may be specified in each course syllabus.
- CIS 302 (S) 3 hrs. cr.  
**Information Systems I**  
Introduces students to the art of solving business problems with information. Develops an understanding of an organization's information requirements, and how information systems facilitate the management of the enterprise. Emphasizes the student's ability to clarify problem statements and define specific objectives while introducing standard systems analysis methodologies. Prerequisite: none.
- CIS 305 (F, S) 3 hrs. cr.  
**Microcomputer Applications**  
Provides an overview of the most common environment and software tools for the serious user of microcomputers. Hardware topics are included to allow the student to compare and select from system configurations according to their application's requirements. An introduction to the basic elements of an operating system and a graphic user interface is followed by intensive practice with the major components of an integrated software suite of applications: word processing, spreadsheets, graphics, and presentation software. A variety of data communications topics are included from the use of a local area network through connections to a world-wide system. Prerequisite: CIS 105 (or higher) or MM237 or CADD 115 or consent of the department head.
- CIS 308 (S) 3 hrs. cr.  
**Website Administration I**  
Provides an introduction to the administration of a World Wide Web site. Includes Internet concepts, design strategies, graphic and multimedia construction, legal and ethical implications, dynamic HTML, and client side scripting. Prerequisite: CIS 110 with a grade of "C" or above.
- CIS 310 (F, S) 3 hrs. cr.  
**Database Management Systems I**  
Introduces the fundamentals of database management, relational database management systems, and programming for GUI. Database topics covered include entities, attributes, relationships, transactions, queries, and integrity rules. Server side database concepts are illustrated with MS Access. The client side user interface and business logic is implemented in Visual Basic. Prerequisite: CIS 210 with a grade of "C" or above.
- CIS 315 (F,S) 3 hrs. cr.  
**Computer Networks**  
Introduces the hardware and software that are integrated to form a computer network. Topics include an in-depth look at TCP/IP, data communication hardware, public networks such as the Internet, and LAN and WAN network standards. Corequisite: CIS 110 or CIS 305 or CADD 115 or MM 237.
- CIS 320 (F) 3 hrs. cr.  
**NetWare LAN Administration**  
Provides a thorough introduction to the design, installation, and management of Novell local area networks. Network configuration, security, backup, and recovery are major topics. User rights and privileges, file and device sharing, and printing are also covered. Prerequisite: CIS 315 with a grade of "C" or above.
- CIS 321 (F) 3 hrs. cr.  
**Advanced RPG**  
Emphasizes online programming of business applications. Major topics include file creation and maintenance, structured methodologies, advanced features of RPG 4/ILE, IBM OS/400 environment, CL programming, Queries, DB2/400 and Internet application connectivity. Prerequisite: CIS 230 with a grade of "C" or above.
- CIS 325 (S) 3 hrs. cr.  
**Windows LAN Administration**  
Provides a thorough introduction to the design, installation, and management of Microsoft Server local area networks. Network configuration, security, backup, and recovery are major topics. User rights and privileges, file and device sharing, and Web applications are also covered. Prerequisite: CIS 315 with a grade of "C" or above.
- CIS 330 (Demand) 3 hrs. cr.  
**Assembly Language**  
Provides an introduction to low-level machine architecture and assembly language programming in the microcomputer. The topics include data representation, instruction set, program logic, and problem solving. In addition to the assembly, linking, and execution of programs; debugging, optimization, and interfacing to high-level languages will be practiced. Prerequisite: CIS 210 with a grade of "C" or above.

- CIS 334 (S) 3 hrs. cr.  
**Advanced COBOL**  
On-line programming and special considerations implicit in real-time business applications are studied. Creation and maintenance of indexed and sequential files and advanced features of COBOL are major topics. CICS and mainframe environments are introduced. Prerequisite: CIS 234 with a grade of "C" or above.
- CIS 340 (F) 3 hrs. cr.  
**Website Administration II**  
Continued development of subjects related to the administration of a World Wide Web site. Emphasizes server-side programming issues. Particularly concerned with the creation and maintenance of a commercial site. Includes syntax and practice in ASP, CSS, CGI/Perl, VBScript, JavaScript, and XML. Prerequisite: CIS 308 and CIS 310, with a grade of "C" or above.
- CIS 345 (F) 3 hrs. cr.  
**UNIX System Administration**  
Introduces the UNIX operating system. Topics covered include basic UNIX commands, system configuration, the file system, process control, shell programming, the network file system, CGI programming, and system security. Prerequisite: CIS 210 and CIS 315 with a grade of "C" or above.
- CIS 350 (S) 3 hrs. cr.  
**Data Structures**  
Provides for the continued development of the student's knowledge of data structures and object-oriented programming. Includes an in-depth coverage of pointers, linked lists, stacks, queues, trees, and graphs. Special emphasis is placed on the coverage of algorithms that are designed to efficiently manipulate these structures and techniques for selecting the most appropriate data structures for a given application. The language of implementation is C++. Prerequisite: CIS 210 with a grade of "C" or above.
- CIS 355 (S) 3 hrs. cr.  
**Enterprise Network Administration**  
Covers enterprise inter-networking. Major topics include server and workstation platforms, network operating systems and clients, client/server computing, interconnecting LANs, routing, firewalls and security, performance analysis, communication hardware, and troubleshooting of hardware components. Prerequisite: CIS 315 and CIS 345 with a grade of "C" or above. Corequisite: CIS 320 or CIS 325.
- CIS 360 (Demand) 3 hrs. cr.  
**Computer Graphics**  
Introduces interactive computer graphics programming including windowing, clipping, two and three dimensional transformations, perspective projections, curved surface modeling, light, and color. The functional capabilities of computer graphics systems and their applications will be covered. Prerequisite: Math 150 and CIS 210, with a grade of "C" or above.
- CIS 370 (F) 3 hrs. cr.  
**Programming with Java**  
Introduces the student to the Java programming platform. Applications and problems considered include in-depth object oriented design strategies, graphical user interfaces, exception handling, Internet programming, and multimedia. Prerequisite: CIS 210 with a grade of "C" or above.
- CIS 380 (S) 3 hrs. cr.  
**Windows Programming with Microsoft Foundation Classes**  
Introduces the student to the process of developing Windows programs using the Microsoft Foundation Classes. Topics covered include implementing window elements such as menus, dialog boxes, toolbars, scroll bars, status bars, and tab controls. In addition, techniques for programming graphics applications, thread-based multi-tasking applications, and database management applications will be covered. A thorough knowledge of object-oriented programming with C++ is assumed. Prerequisite: CIS 210 with a grade of C or above.
- CIS 401 (F, S) 1-3 hrs. cr.  
**Internship in Computer Information Science**  
A limited number of computer information science students may serve an internship of 15 to 20 hours per week for up to 16 weeks. Credit hours will be arranged through the coordinator of the internship program. The intern will work for a local-cooperating firm in a production data processing environment gaining valuable experience in programming and/or systems analysis and design. The on-site work will be supervised by a professional employee of the firm and overseen by an MSSU faculty member. Prerequisite: Upper division standing, department head approval, and an overall GPA of 3.0.
- CIS 410 (F) 3 hrs. cr.  
**Information Systems II** *(Writing Intensive)*  
Continued development of the ability to analyze and design computer-based information systems. Includes coverage of analysis and design methodologies, computer-aided software engineering tools, and project management techniques. Topics are illustrated with in-depth case studies. Emphasizes teamwork. Prerequisite: CIS 302 with a grade of "C" or above.
- CIS 425 (S) 3 hrs. cr.  
**Database Management Systems II** *(Writing Intensive)*  
Includes a survey of database management theories with experience in the application of database technology. An emphasis will be placed on the relational model. Functions of database management systems, data modeling, and database systems design and implementation in a client/server environment are stressed through case studies. Prerequisite: CIS 310 and CIS 410, with a grade of "C" or above.
- CIS 430 (Demand) 3 hrs. cr.  
**Introduction to Artificial Intelligence**  
Introduces the process of developing intelligent computer software. Topics covered include knowledge abstraction and representation, heuristic search techniques, game playing, expert systems, and meta-programming. Prerequisite: CIS 350 with a grade of "C" or above.
- CIS 435 (F) 3 hrs. cr.  
**Data Mining**  
Introduces data warehousing and data mining. The former being a standard approach to archiving summary data for analysis; the latter being techniques of analysis intended to discover subtle and unexpected relationships in the historical data, for use in design, marketing, research, and engineering. Topics include concepts, principles, and architectures, and the design and implementation of Data Mining applications. Prerequisite: CIS 310 and (GB 321 or Math 310 or Math 361 or Bio 290) with a grade of C or above.
- CIS 440 (S) 3 hrs. cr.  
**Computer Forensics**  
Introduces the basics of computer forensics. Topics covered include backups and data recovery, hard drive imaging and forensic analysis of recovered data, data hiding and encryption techniques, reconstruction of past events, techniques used to compromise and safeguard computers, surveillance tools, analysis of data, and collection and preservation of electronic evidence. Students will be introduced to forensic techniques and available electronic tools for forensic analysis. A basic knowledge of networks and UNIX/Linux, as well as a thorough knowledge of Windows is assumed. Prerequisite: CIS 315 and CIS 345 with a grade of C or above.

---

---

## 228 / Computer Information Science, Criminal Justice

---

CIS 450 (F) 3 hrs. cr.  
**Operating Systems** (*Writing Intensive*)  
Fundamental concepts of operating system design. Emphasis is placed on identifying the problems an operating system must solve and considering the range of alternative solutions that may be implemented. Topics include process management, memory management, processor management, auxiliary storage management, and security. The Linux operating system is highlighted. Prerequisite: CIS 350 with a grade of "C" or above. Corequisite: CIS 345.

CIS 498 (Demand) 1-3 hrs. cr.  
**Advanced Topics in Computer Information Science**  
Addresses emerging topics in computer science and management information systems. Each offering will be on a subject not normally included in another course. Prerequisite: May be specified in each course syllabus.

CIS 499 (Demand) 1-3 hrs. cr.  
**Independent Study**  
The adviser, with approval of the department head, structures an independent study course. Prerequisite: Upper division standing with an overall GPA of 3.0 or above. The adviser, the department head, and the dean of the school must approve registration in the course.



**Faculty** Wolf - Head, Hulderman, Scott, Spencer, Spurlin, Thomason

"Justice Through Education" is the motto of the Criminal Justice Administration Department at Missouri Southern State University. The Criminal Justice Administration program offers academic instruction coupled with "real world" practical training for students pursuing careers as criminal justice professionals. The Criminal Justice program provides a varied and flexible curriculum, small classes, faculty who provide individual academic attention, international educational opportunities and a unique learning environment.

The Criminal Justice Administration Department offers two degrees, the Bachelor of Science in Criminal Justice Administration and the Associate of Science in Law Enforcement. Additionally, the Department offers four minors: CSI-Crime Scene Investigation, Criminal Justice Administration, Corrections, and Juvenile Justice.

The Criminal Justice Administration program offers a varied curriculum to meet the needs of a diverse student body. The program prepares students for a wide variety of careers as criminal justice professionals as well as for graduate programs in law, criminal justice and other related fields. The Criminal Justice program prepares students for careers in traditional fields such as law enforcement, juvenile justice, corrections, probation and parole, and private or industrial secu-

urity. The program also prepares students for investigative positions with federal agencies, state and local agencies, insurance companies and other private enterprises. In addition, a Criminal Justice Administration degree will prepare students for the many new opportunities in the areas of safety and security.

The Criminal Justice Department offers a flexible curriculum to serve the needs of the student body. In addition to day, evening, and weekend courses, students can obtain the Bachelor of Science degree and the Associate of Science degree over the Internet. The many hybrid courses combine the benefits of the classroom experience with the flexibility of the Internet courses by meeting on campus weekly, monthly, or at other intervals, but conducting much of the course via the Internet. The Department offers criminal justice professionals who have experience in the field university credit for work experience through the portfolio process. The Department also recommends that all students participate in the internship program, where students receive university credit for working side by side with practicing criminal justice professionals.

The small classes, current technology, and experienced faculty provide for a unique learning environment. Our faculty members are attentive to student needs and strive to prepare students for challenging criminal justice careers. They have over 100 years of combined practical experience in criminal justice fields, including experience as law enforcement officers, juvenile officers, assistant prosecutors, legal advisers, criminal investigators, child abuse investigators, and security administrators.

The Criminal Justice Department emphasizes the international mission and provides students with opportunities to study and travel abroad to view firsthand other criminal justice systems around the globe. Our faculty and students have explored the justice systems in England, France, Australia, New Zealand, Morocco, Italy, Israel, Spain, and Costa Rica. In the first six years since the international mission was implemented, more than 250 criminal justice students have studied abroad.

The state-of-the-art Mills Anderson Justice Center is the busy home of the Criminal Justice Administration Department at Missouri Southern State University. The facility features a modern indoor "live-fire" firearms range and two computerized shooting systems. The auditorium provides a forum for lectures and meetings as well as for advanced training seminars for practicing criminal justice professionals. These seminars are taught by nationally recognized criminal justice professionals, allowing students to learn from the experts and mingle with potential employers.

The Criminal Justice Department at Missouri Southern State University also operates the 600-hour Basic Law Enforcement Training Academy. (See Law Enforcement, page 237.)

The Criminal Justice Administration degree will allow students to take advantage of the many traditional career opportunities