

# COMPUTER INFORMATION SYSTEMS, BS

The Bachelor of Science in Computer Information Systems (CIS) degree develops employable technologists who apply what they have learned to solve practical business problems. Students gain a solid IT foundation.

The curriculum helps students develop five areas of employment competencies: management, team building, communication, critical-thinking, and technical skills. Students hone business and soft skills and are encouraged to benefit from field experiences and obtain IT certifications.

The program level objectives for students completing the BS in Computer Information Systems are as follows:

- To build and strengthen students' competencies, qualifications and marketability in four (4) areas:
  - Technical / Practical Skills
  - Business / Soft Skills
  - Industry Training / Experience
  - Certification Preparation
- To cultivate problem-solving and critical thinking skills to solve complex computing problems through identification, assessment and evaluation of business and information systems; effectively design and develop diverse software applications and implement well-secured systems
- To promote students' leadership and decision-making skills; and ability to work with others to function effectively as business solution providers
- To strengthen students' awareness in conducting themselves in a manner that is professional ethical, and social
- To adequately prepare students for rewarding careers in computer and information technology related fields

## Requirements

Code	Title	Credits
<b>Major-Related Courses</b>		
IT-100	Introduction to Information Technology	3
IT-127	Computer Hardware and Software	3
IT-130	Database	3
IT-135	CCNA I: Introduction to Networks	3
IT-150	Web Design Technology	3
IT-235	CCNA II: Switching, Routing & Wireless Essentials	3
IT-280	Object Oriented Programming	3
IT-373	Network Security	3
IT-376	Wireless Technology	3
IT-390	Internship Seminar I	3
IT-440	Cloud Foundations	3
IT-495	Senior Seminar	3
Major Area Elective, Open Electives, or Minor Courses		21
Major-Related Courses Subtotal		57
<b>General Education and Related Courses</b>		
IT-160	Programming Logic	3
IT-260	Advanced Programming	3
IT-295	Systems Analysis & Design	3

IT-320	Operating Systems	3
IT-330	Database Management Systems	3
IT-396	Management Information Systems	3
IT-494	IT Project Management	3
English Credits <sup>1</sup>		12
LA-122	Fundamentals of Communication	3
MA-115	Quantitative Reasoning	3
MA-120	Finite Mathematics & Linear Modeling	3
MA-142 or MA-235	Precalculus Statistics for Business Decisions I	3
Liberal Arts Electives (including IT-Liberal Arts Courses)		18
General Education and Related Courses Subtotal		63
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> LA-205 Professional Communication may substitute for one EN (English) course.

## Recommended Sequence

Course	Title	Credits
<b>Semester 1</b>		
IT-100	Introduction to Information Technology	3
EN-111	College Writing and Critical Analysis	3
LA-122	Fundamentals of Communication	3
LA-ELE	Liberal Arts Elective	3
MA-115	Quantitative Reasoning	3
<b>Credits</b>		<b>15</b>
<b>Semester 2</b>		
IT-127	Computer Hardware and Software	3
IT-130	Database	3
IT-135	CCNA I: Introduction to Networks	3
EN-121	Analytical Thinking, Writing & Research	3
MA-120	Finite Mathematics & Linear Modeling	3
<b>Credits</b>		<b>15</b>
<b>Semester 3</b>		
IT-150	Web Design Technology	3
IT-160	Programming Logic	3
IT-235	CCNA II: Switching, Routing & Wireless Essentials	3
IT-ELE	IT Elective	3
EN-206	Professional Writing and Presentation	3
<b>Credits</b>		<b>15</b>
<b>Semester 4</b>		
IT-295	Systems Analysis & Design	3
IT-ELE	IT Elective	3
IT-ELE	IT Elective	3
LA-ELE	Liberal Arts Elective	3
MA-142 or MA-235	Precalculus or Statistics for Business Decisions I	3
<b>Credits</b>		<b>15</b>
<b>Semester 5</b>		
IT-280	Object Oriented Programming	3
IT-330	Database Management Systems	3
IT-ELE	IT Elective	3
IT-ELE	IT Elective	3
EN-221 or LA-205	Literary Criticism and Analysis or Professional Communication	3
<b>Credits</b>		<b>15</b>
<b>Semester 6</b>		
IT-320	Operating Systems	3

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IT-373	Network Security	3
IT-396	Management Information Systems	3
IT-ELE	IT Elective	3
LA-ELE	Liberal Arts Elective	3
<b>Credits</b>		<b>15</b>
<b>Semester 7</b>		
IT-376	Wireless Technology	3
IT-390	Internship Seminar I	3
IT-440	Cloud Foundations	3
IT-494	IT Project Management	3
IT-ELE	IT Elective	3
<b>Credits</b>		<b>15</b>
<b>Semester 8</b>		
IT-260	Advanced Programming	3
IT-495	Senior Seminar	3
LA-ELE	Liberal Arts Elective	3
LA-ELE	Liberal Arts Elective	3
LA-ELE	Liberal Arts Elective	3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>120</b>

Open Electives should be used for courses in the technology area you would like to concentrate, such as Networking, Web and Database, Security or Programming.