Degree Pathway

A.S. in Computer Information Systems - Catalog Year 2023-24

The number of credits you take each year will determine when you graduate. To graduate on time, you are strongly encouraged to enroll in at least 30 credits toward your degree during the calendar year, including fall and spring semesters and winter and summer sessions. This Degree Pathway is designed for students who place into **developmental English and math**. Additional Degree Pathways are available for students who start at other levels. Please see the degree website or your advisor for more information.

Courses in **Bold Text** are prerequisites for later courses and should be taken where indicated in the sequence.

Fall Semester #1

Courses	Credits	Prerequisites and Corequisites[1]
MA-119 College Algebra or MA-114 College Algebra and Trigonometry for Technical Students (Required Core 1B: Mathematics and Quantitative Reasoning)	3-4	Corequisite: for MA-114: MA-114 ALP Corequisite: for MA-119: MA-10 ALP
MA-10 ALP Elementary Algebra OR **MA-114 ALP Mathematics in Contemporary Society**	0 (2-3 eq.)	Corequisite: for MA-10 ALP: MA-119 Corequisite: for MA-114 ALP: MA-114
MA-121 Elementary Trigonometry (only for students taking MA-119)	0-1	Corequisite: MA-119
BU-201 Business Organization and Management	3	None
CIS-101 Introduction to Computing and Information Systems	3	None but a student with both Word and Excel Microsoft Office Specialist Certifications may take CIS-206 in place of CIS-101
Total credits for the term	**10 + 2-3 eq.**	

Spring Semester #1

Courses	Credits	Prerequisites and Corequisites[1]
ENGL-101 English Composition I (ALP section) (Required Core 1A - English Composition)	3	Corequisite: BE-102
ENGL-99 Developing Competence in College Reading, Writing, & Study Skills	0 (4 eq.)	Corequisite: ENGL-101
CIS-102 Computer Programming Fundamentals for Business (Flexible Core 2E: Scientific World)	3	None
CIS-153 Operating Systems	3	Prerequisite: CIS-101
One course from Flexible Core 2A, 2B, or 2C[2]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**10 + 4 eq.**	

Summer Session

Courses	Credits	Prerequisites and Corequisites[1]
MA-128 Calculus for Technical and Business Students or MA-440 Pre-Calculus Mathematics. (Additional Flexible Core course)	4	Prerequisite for MA-128: MA-114 with a C or better Prerequisite for MA-440: MA-119 and MA-121 with a C or better
ENGL-102 English Composition II (Required Core 1A: English Composition)	3	Prerequisite: ENGL-101 or placement
Total credits for semester	**7**	

Fall Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
BU-101 Principles of Accounting I	4	None
CIS-152 Computer Programming for Business I	3	Prerequisite: CIS-102
CIS-201 Local Area Network Management	3	Prerequisite: CIS-153
CIS-208 Database Management Systems	3	Prerequisite: CIS-101
One course from Flexible Core 2A, 2B, or 2C[2]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**16**	

Spring Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
CIS Electives	5	Check individual courses for prerequisites and corequisites
ECON-101 Intro. to Macroeconomics OR ECON-102 Intro to Microeconomics (Flexible Core 2D)	3	Pre/corequisite: Complete developmental requirements in English or co-enroll in ENGL-101
One course from Required Core 1C: Life & Physical Sciences	3-4	Check individual courses for prerequisites and corequisites
Science Laboratory course[3]	0-1	Corequisite: 3-credit Science course in Required Core 1C
One course from Flexible Core 2A, 2B, or 2C[2]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**15**	
Total credits required for the A.S. in Computer Information Systems	**60**	

Notes:

1. Prerequisites for a course must be passed before taking the course. Corequisites must be passed before taking the course or taken in the same term as the course.
2. Students must complete one course each from Flexible Core categories 2A, 2B, and 2C. The course from Flexible Core 2D is required to be ECON-101 or ECON-102. The course from Flexible Core 2E is required to be CIS-102 and the additional flexible core course is required to be MA-128 or MA-440.
3. The laboratory science elective is not required for students who take a 4 credit STEM Variant course in Required Core 1C.

All students must complete two (2) WI designated classes to fulfill degree requirements.

Major Elective Courses

Major Elective Courses	Credits	Prerequisites and Corequisites
BU-203 Principles of Statistics	3	Prerequisite: MA-114 or MA-119 or MA-321
CIS-202 Computer Programming for Business II	3	Prerequisite: CIS-152 and completion of any developmental requirements in math
CIS-203 Object-Oriented Programming for Business	3	Prerequisite: CIS-152 and completion of any developmental requirements in math
CIS 204 Web Design	3	Prerequisite: CIS-102 and completion of any developmental requirements in math
CIS 206 Spreadsheet Business Applications and Data Analytics	3	Prerequisite: CIS-101 and completion of any developmental requirements in math
CIS 251 Analysis and Design of Systems Projects	3	Prerequisite: CIS-152, CIS-153, and CIS-208 and completion of any developmental reqs in math
CIS-252 Application Development for Mobile Devices	3	Prerequisite: CIS-152 and completion of any developmental requirements in math
CIS 254 Data Security for Business	3	Prerequisite: CIS-153 and completion of any developmental requirements in math