

## Degree Pathway

### A.A.S. in Computer Engineering Technology – Catalog Year 2020-21

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 **MA-114**. Additional Degree Pathways are available for students who place into other levels of mathematics. Please see the degree website or your advisor for more information.

Courses in **Bold Text** are prerequisites for later courses or only offered in the Fall or Spring semester and should be taken where indicated in the sequence.

#### Fall Semester #1

Courses	Credits	Prerequisites and Corequisites <sup>1</sup>
<b>ENGL-101 English Composition I</b> (Required Core 1A - English Composition)	3	Prerequisite: Complete developmental requirements in English
<b>MA-114 College Algebra and Trigonometry for Technical Students<sup>2</sup></b> (Required Core 1B - Mathematical & Quantitative Reasoning)	4	Prerequisite: Complete developmental requirements in math
<b>ET-110 Electric Circuit Analysis</b>	4	Corequisite: MA-114
<b>ET-540 Digital Computer Theory</b>	4	None
<b>TECH-100 Introduction to Engineering and Technology</b>	1	None
<b>Total credits for the term</b>	<b>16</b>	

#### Spring Semester #1

Courses	Credits	Prerequisites and Corequisites <sup>1</sup>
<b>ENGL-102 English Composition II</b> (Required Core 1A - English Composition)	3	Prerequisite: ENGL-101 or placement
<b>MA-128 Calculus for Technical and Business Students<sup>2</sup></b>	4	Prerequisite: MA-114 (C or better)
<b>ET-210 Electronics I</b>	4	Prerequisite: ET-110 (C or better)
<b>ET-509 Programming for Embedded Systems</b>	1	Prerequisite: TECH-100
<b>ET-704 Networking Fundamentals I</b>	4	None
<b>Total credits for the term</b>	<b>16</b>	

### Fall Semester #2

Courses	Credits	Prerequisites and Corequisites <sup>1</sup>
ET-502 Introduction to Computer Programming	1	None
ET-504 Operating Systems and System Deployment	2	None
<b>ET-560 Microprocessors and Microcomputers</b>	4	Prerequisites: ET-210, ET-509, and ET-540
ET Elective: Choose from: ET-140, ET-220, ET-230, ET-231, ET-232, ET-305, ET-360, ET-375, ET-481, ET-506, ET-570, ET-580, ET-585, ET-705, ET-706, ET-707, ET-710, ET-712, ET-725, ET-841, ET-842, ET-880, ET-991, ET-992, or ET-993	2	Check individual courses for prerequisites and corequisites
<b>PH-201 General Physics I<sup>3,4</sup></b> (Required Core 1C – Life and Physical Sciences)	4	Prerequisites: MA-114 or MA-119 and MA-121
One History or Social Science course from Flexible Core 2A, 2B, 2D, or 2E – (HIST-100 series, ANTH, CRIM-101 or 102, ECON, PLSC, PSYC, or SOCY) <sup>3</sup>	3	Check individual courses for prerequisites and corequisites
<b>Total credits for the term</b>	<b>16</b>	

### Spring Semester #2

Courses	Credits	Prerequisites and Corequisites <sup>1</sup>
ET-575 Introduction to C++ Programming Design & Implementation	3	Corequisite: MA-114, MA-119, or MA-440
ET-350 Computer Control Systems	4	Corequisite: ET-560
ET-420 Computer Project Laboratory	1	Prerequisite: ET-560
ET-542 Computer and Electrical Device Applications	1	Prerequisite: ET-540
<b>PH-202 General Physics II<sup>3,4</sup></b> (Flexible Core 2E – Scientific World)	4	Prerequisites: PH-201 (C or better)
One History or Social Science course from Flexible Core 2A, 2B, 2D, or 2E – (HIST-100 series, ANTH, CRIM-101 or 102, ECON, PLSC, PSYC, or SOCY) <sup>3</sup>	3	Check individual courses for prerequisites and corequisites
<b>Total credits for the term</b>	<b>16</b>	
<b>Total credits required for the A.A.S. degree</b>	<b>64</b>	

#### 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 may substitute MA-440 and MA-441 for MA-114 and MA-128
3. Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements.
4. Students may substitute PH-301 and PH-302 or PH-421 and PH-422 for PH-201 and PH-202.

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