A.A.S. in Computer Engineering Technology – Catalog Year 2019-20

Two Year Degree Pathway for Students Starting in MA-10

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-10. 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**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE-102, BE-112, or BE-122</td>
<td>0 (4 eq.)</td>
<td>Choice of course depends on placement</td>
</tr>
<tr>
<td>MA-10 Elementary Algebra</td>
<td>0 (5 eq.)</td>
<td>None</td>
</tr>
<tr>
<td>TECH-100 Introduction to Engineering and Technology</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>ET-540 Digital Computer Theory</td>
<td>4</td>
<td>None</td>
</tr>
<tr>
<td><strong>Total credits for the term</strong></td>
<td><strong>5 + 9 eq.</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring Semester #1**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-101 English Composition I (Required Core 1A - English Composition)</td>
<td>3</td>
<td>Prerequisite: BE-112/205 and 122/226, placement, or exemption</td>
</tr>
<tr>
<td>MA-114 College Algebra and Trigonometry for Technical Students² (Required Core 1B - Mathematical &amp; Quantitative Reasoning)</td>
<td>4</td>
<td>Prerequisite: MA-10 or placement</td>
</tr>
<tr>
<td>ET-110 Electric Circuit Analysis</td>
<td>4</td>
<td>Corequisite: MA-114</td>
</tr>
<tr>
<td>ET-704 Networking Fundamentals I</td>
<td>4</td>
<td>None</td>
</tr>
<tr>
<td><strong>Total credits for the term</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Fall Semester #2**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-102 English Composition II (Required Core 1A - English Composition)</td>
<td>3</td>
<td>Prerequisite: ENGL-101 or placement</td>
</tr>
</tbody>
</table>
### Spring Semester #2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET-502 Introduction to Computer Programming</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>ET-542 Computer and Electrical Device Applications</td>
<td>1</td>
<td>Prerequisite: ET-540</td>
</tr>
<tr>
<td>ET-560 Microprocessors and Microcomputers</td>
<td>4</td>
<td>Prerequisites: ET-210, ET-509, and ET-540</td>
</tr>
<tr>
<td>PH-201 General Physics 1³ ⁴</td>
<td>4</td>
<td>Prerequisites: MA-114 or MA-119 and MA-121</td>
</tr>
<tr>
<td>(Required Core 1C – Life and Physical Sciences)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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)³</td>
<td>3</td>
<td>Check individual courses for prerequisites and corequisites</td>
</tr>
</tbody>
</table>

**Total credits for the term**: 15

### Fall Semester #3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET-575 Introduction to C++ Programming Design &amp; Implementation</td>
<td>3</td>
<td>Corequisite: MA-114, MA-119, or MA-440</td>
</tr>
<tr>
<td>ET-350 Computer Control Systems</td>
<td>4</td>
<td>Corequisite: ET-560</td>
</tr>
<tr>
<td>ET-420 Computer Project Laboratory</td>
<td>1</td>
<td>Prerequisite: ET-560</td>
</tr>
<tr>
<td>PH-202 General Physics 2³ ⁴</td>
<td>4</td>
<td>Prerequisite: PH-201 (C or better)</td>
</tr>
<tr>
<td>(Flexible Core 2E – Scientific World)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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)³</td>
<td>3</td>
<td>Check individual courses for prerequisites and corequisites</td>
</tr>
</tbody>
</table>

**Total credits for the term**: 15
## Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
<th>Prerequisites and Corequisites(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total credits for the term</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total credits required for the A.A.S. degree</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

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.