ENGINEERING - A.S. Degree Program – Effective Catalog Year 2014-2015

The Associate in Science Engineering program is designed to prepare beginning engineering students to successfully transfer to baccalaureate engineering programs. Participants in the associate program will enroll in science, mathematics, and engineering courses that provide serious students with the knowledge and background necessary to take upper level courses in their chosen field of study.

FIRST SEMESTER
CHEM 181 General Chemistry I 4 cr.
PHYS 281 General Physics I 4 cr.
MATH 265 Calculus I 4 cr.
ENGR 181 Graphics for Engineers 2 cr.
ENGL 151 English I 3 cr.
17 cr.

SECOND SEMESTER
CHEM 182 General Chemistry II 4 cr.
PHYS 282 General Physics II 4 cr.
MATH 266 Calculus II 4 cr.
________ Humanities Gen Ed Requirement 3 cr.
ENGL 152 English II 3 cr.
18 cr.

THIRD SEMESTER
MATH 267 Calculus III 4 cr.
ENGR 221 Engineering Statics 3 cr.
CSIT 165 Programming I 4 cr.
________ Engineering Elective 3-4 cr.
14-15 cr.

FOURTH SEMESTER
________ Social Science or Humanities Gen Ed Requirement 3 cr.
ENGR 222 Engineering Dynamics 3 cr.
________ Elective 2 cr.
________ Engineering Elective 3-4 cr.
________ Social Science Gen Ed Requirement 3 cr.
14-15 cr.

TOTAL CREDITS 64

* Students may attempt to “test out” of the technology requirement. If they succeed, they must take an additional course(s) to meet the required 64 total credits.

Note: Transfer students are strongly advised to take MATH 280: Differential Equations.

Note: cr. (credit) = semester credit hour

Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

Students should check with their Engineering Advisor and with transfer institutions in selecting their engineering electives.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIT 166</td>
<td>Programming II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHYS 283</td>
<td>General Physics III</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ENGR 225</td>
<td>Design of Material Structures</td>
<td>3 cr.</td>
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<tr>
<td>ENGR 251</td>
<td>Electrical Engineering I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ENGR 252</td>
<td>Electrical Engineering II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ENGR 290</td>
<td>Engineering Internship</td>
<td>3 cr.</td>
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<tr>
<td>MATH 280</td>
<td>Differential Equations</td>
<td>3 cr.</td>
</tr>
</tbody>
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Board of Trustees Approval Dates:
- January 24, 2005
- August 27, 2007
- July 28, 2008
- December 1, 2008
- August 24, 2009
- November 2, 2009
- December 6, 2010
- August 27, 2012
- August 26, 2013