## Program Requirements

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGL 104 or ENGL 103</td>
<td>Composition and Rhetoric or Introduction to Rhetoric and Composition</td>
<td>3</td>
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<tr>
<td></td>
<td>MATH 171</td>
<td>Calculus I</td>
<td>4</td>
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<td></td>
<td>University Core Curriculum</td>
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<tr>
<td></td>
<td>Freshman Science elective</td>
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<tr>
<td></td>
<td>General elective</td>
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<td>Spring</td>
<td>MATH 172</td>
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<td>Select one of the following:</td>
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<td>CSCE 110</td>
<td>Programming I</td>
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<td>CSCE 111</td>
<td>Introduction to Computer Science Concepts and Programming</td>
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<tr>
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<td>CSCE 206</td>
<td>Structured Programming in C</td>
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<td>University Core Curriculum</td>
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<tr>
<td></td>
<td>Freshman Science elective</td>
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### Second Year

<table>
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<th>Semester</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>Fall</td>
<td>MATH 221</td>
<td>Several Variable Calculus</td>
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<tr>
<td></td>
<td>MATH 300</td>
<td>Foundations of Mathematics</td>
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<tr>
<td></td>
<td>STAT 211</td>
<td>Principles of Statistics I</td>
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<tr>
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<td>University Core Curriculum</td>
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<td>Semester Credit Hours</td>
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<tr>
<td>Spring</td>
<td>MATH 308</td>
<td>Differential Equations</td>
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<td>MATH 323</td>
<td>Linear Algebra</td>
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<td>Select one of the following:</td>
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<tr>
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<td>COMM 203</td>
<td>Public Speaking</td>
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<td>COMM 205</td>
<td>Communication for Technical Professions</td>
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<td>COMM 243</td>
<td>Argumentation and Debate</td>
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### Third Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>MATH 409</td>
<td>Analysis on the Real Line</td>
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<tr>
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<td>PHYS 206 &amp; PHYS 226</td>
<td>Newtonian Mechanics for Engineering and Science and Physics of Motion Laboratory for the Sciences</td>
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<td>Semester Credit Hours</td>
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<td>Spring</td>
<td>Select one of the following:</td>
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<tr>
<td></td>
<td>MATH 415</td>
<td>Modern Algebra I</td>
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<td></td>
<td>MATH 423</td>
<td>Linear Algebra II</td>
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<td>MATH 433</td>
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### Fourth Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>University Core Curriculum</td>
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<tr>
<td></td>
<td>MATH elective</td>
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<tr>
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<td>Minor elective</td>
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<td></td>
<td>Semester Credit Hours</td>
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<td>Spring</td>
<td>University Core Curriculum</td>
<td></td>
<td>3</td>
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<tr>
<td></td>
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<tr>
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<td>General elective</td>
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</tr>
<tr>
<td></td>
<td>Semester Credit Hours</td>
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<td>15</td>
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</tbody>
</table>

### Total Semester Credit Hours

120

1. Of the 21 hours shown as University Core Curriculum, 3 must be from language, philosophy and culture, 3 from creative arts, 3 from social and behavioral sciences, 6 from American history, 6 from Government/Political Science.
2. Select 4 hours from: ASTR 111, BIOL 111, BIOL 112, CHEM 119, CHEM 120, CHEM 107/108, CHEM 109/119, PHYS 207/208/209. The remaining 4 hours may be selected from: ASTR 111, ATMO 201/202, BIOL 111, BIOL 112, CHEM 119, CHEM 120, CHEM 107/117, GEOL 101/102, OCN 251/252, PHYS 207/208/209.
3. MATH 170 is highly recommended for math majors co-enrolled in MATH 150, MATH 151, MATH 152, MATH 171 or MATH 172.
4. Select from any 100-499 course not used elsewhere, (except ALED 125, ASCC 102, ASCC 119/120, BIOL 111, CHEM 107/117, GEOL 101/102, MATH 102-148, MATH 150-151, MATH 171-172, MATH 205-212, MATH 221-231, MATH 300-323, MATH 400-499, MATH 500-599, MATH 600-699, MATH 700-799, MATH 800-899, MATH 900-999).
MATH 151 - 168 (http://catalog.tamu.edu/undergraduate/course-descriptions/math/), MATH 304, MATH 309, MATH 311, MATH 365, MATH 366, MATH 367, MATH 375, MATH 376, PBSI 301, PHYS 109/ASTR 109, PHYS 119/ASTR 119, PHYS 201, PHYS 202, PHYS 205; STAT 201, STAT 301, STAT 302, STAT 303).

5 A 15-18-hour minor field of study should be selected in conference with a departmental advisor.

6 Three hours can be from any 400-level MATH (excluding MATH 401), STAT 335 - STAT 482 (http://catalog.tamu.edu/undergraduate/course-descriptions/stat/), CSCE 210 - CSCE 470 (http://catalog.tamu.edu/undergraduate/course-descriptions/csce/) (excluding CSCE 222/ECEN 222, CSCE 285, CSCE 289, CSCE 291), or ISEN 320 - ISEN 430, (http://catalog.tamu.edu/undergraduate/course-descriptions/isen/) excluding any 485 course in any department without permission of a departmental advisor. Students seeking secondary certification must take MATH 403, MATH 467, and either MATH 415 or MATH 433. Students who plan to attend graduate school are encouraged to take MATH 416, MATH 447.

7 Nine hours of math elective courses are to be from any 400-level MATH, excluding MATH 401.

Maximum of 3 hours of MATH 300 or CSCE 222/ECEN 222 may be used in this degree program.

Maximum of 3 hours of MATH 411 or STAT 414 may be used in this degree program.

Maximum of 4 hours of MATH 417, MATH 437, or CSCE 442 may be used in this degree program.

If a grade of D or F is earned in any of the following courses, MATH 151/MATH 171, MATH 152/MATH 172, MATH 221/MATH 251/MATH 253, MATH 300, MATH 323 or MATH 308, this course must be immediately retaken and a grade of C or better earned. The department will allow at most two Ds in upper-level (325-499) courses. If a third D is earned, one of the three courses in which a D was earned must be retaken and a grade of C or better earned.

Students desiring teacher certification should consult the requirements for certification before registering for electives.

Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) courses and 3 hours of Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/) courses. A course satisfying a Core category, a college/department requirement, or a general elective can be used to satisfy this requirement. See academic advisor.