UNIVERSITY STUDIES - BS, MATHEMATICS FOR PRE-PROFESSIONALS CONCENTRATION

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 251</td>
<td>Engineering Mathematics III ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 300</td>
<td>Foundations of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 304</td>
<td>Linear Algebra ¹</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or MATH 323 or Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 308</td>
<td>Differential Equations ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 409</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 415</td>
<td>Modern Algebra I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 414</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or MATH 411 or Mathematical Probability</td>
<td></td>
</tr>
<tr>
<td>MATH 407 - MATH 499 (<a href="http://catalog.tamu.edu/undergraduate/course-descriptions/math/)%C2%B2">http://catalog.tamu.edu/undergraduate/course-descriptions/math/)²</a></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

University and College Requirements

ENGL 103  Introduction to Rhetoric and Composition or ENGL 10  Composition and Rhetoric | 3 |
POLS 206  American National Government ³ | 3 |
POLS 207  State and Local Government ³ | 3 |
Communication: Select one of the following:
COMM 203  Public Speaking |
COMM 205  Communication for Technical Professions |
COMM 243  Argumentation and Debate |
Mathematics: Select one of the following:
MATH 147  Calculus I for Biological Sciences ¹ |
MATH 151  Engineering Mathematics I ¹ |
MATH 171  Calculus I ¹ |
Select one of the following:
MATH 148  Calculus II for Biological Sciences ¹ |
MATH 152  Engineering Mathematics II ¹ |
MATH 172  Calculus II ¹ |
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) | 6 |
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) | 3 |
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) | 3 |

Life and physical sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences) | 9 |
Social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences) | 3 |

Minor 1 | 15-18 |
Minor 2 | 15-18 |
General Electives ⁴ | 16-22 |
Total Semester Credit Hours | 120 |

1. Must make a grade of C or better.
2. MATH 433 will not fulfill this requirement.
3. Completion of four semesters of upper-level ROTC may be substituted for three hours of this requirement.
4. Select from any 100-499 course not used elsewhere, (except ALED 125; ASCC 102; ASTR 109/PHYS 109, ASTR 119/PHYS 119; BMEN 101; ISEN 101; KINE 199; LAND 101; MATH 102-148, 151-166 (http://catalog.tamu.edu/undergraduate/course-descriptions/math/), MATH 304, MATH 309, MATH 311, MATH 365, MATH 366, MATH 367, MATH 375, MATH 376; PHYS 109/ASTR 109, PHYS 119/ASTR 119, PHYS 201, PHYS 202, PHYS 205, PSYC 301; STAT 201, STAT 301-303 (http://catalog.tamu.edu/undergraduate/course-descriptions/stat/); WFSC 101).

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.

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.