UNIVERSITY STUDIES - BS, MATHEMATICS FOR TEACHING CONCENTRATION

The BS in University Studies, Mathematics for Teaching area of concentration consists of courses that are designed to give students desiring a secondary-school teaching credential a solid foundation in mathematics. In particular, the courses chosen encompass the mathematical areas tested by the State of Texas and TExES secondary mathematics examination. These are the courses currently required for the secondary mathematics teaching field at Texas A&M University.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 300</td>
<td>Foundations of Mathematics ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 304</td>
<td>Linear Algebra ¹</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 32</td>
<td>or Linear Algebra</td>
<td></td>
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<tr>
<td>MATH 375</td>
<td>Intermediate Real Analysis ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 376</td>
<td>Intermediate Abstract Algebra ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 403</td>
<td>Mathematics and Technology ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 467</td>
<td>Modern Geometry ¹</td>
<td>3</td>
</tr>
<tr>
<td>STAT 211</td>
<td>Principles of Statistics I ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

University and College Requirements

PHYS 206 Newtonian Mechanics for Engineering and Science 3
POLS 206 American National Government ² 3
POLS 207 State and Local Government ² 3
Select one of the following: 4
  MATH 147 Calculus I for Biological Sciences
  MATH 151 Engineering Mathematics I
  MATH 171 Calculus I

Select one of the following: 4
  MATH 148 Calculus II for Biological Sciences
  MATH 152 Engineering Mathematics II
  MATH 172 Calculus II

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
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication) 6
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) 6

Social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences)

Minor 1 15-18
Minor 2 15-18
General Electives ³ 19-25
Total Semester Credit Hours 120

¹ Must make a grade of C or better.
² Completion of four semesters of upper-level ROTC may be substituted for three hours of the requirement.
³ Select from any 100-499 course not used elsewhere, (except ALED 125; ASCC 102; ASTR 109/PHYS 109, ASTR 119/PHYS 119; BMEN 153; ISEN 101; KINE 199; LAND 101; MATH 102-148, 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; 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/international-cultural-diversity-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.