### BS – Applied Math

**SC-BS/APMA**

| 2024 Catalog year: College of Science and Engineering |

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Spring semester</th>
<th>Sophomore</th>
<th>Fall semester</th>
<th>Senior</th>
<th>Fall semester</th>
<th>Senior</th>
<th>Spring semester</th>
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</thead>
<tbody>
<tr>
<td>3 hours of natural science</td>
<td>(see advisor for options)</td>
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<td>(see advisor for options)</td>
<td>Minor and/or elective courses</td>
<td>(as needed, see advisor)</td>
<td>ENG 3303</td>
<td>(F,S,Su) Technical Writing</td>
</tr>
<tr>
<td>MATH 2358</td>
<td>(F,S,Su) Discrete Math I</td>
<td>TCCNS: MATH 2105</td>
<td></td>
<td>CS 1428</td>
<td>(F,S,Su) Foundations of Computer Science I</td>
<td>TCCNS: COSC 1437/1337</td>
<td>(Check Prerequisites)</td>
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<tr>
<td>MATH 2393</td>
<td>(F,S,Su) Calculus III</td>
<td>TCCNS: MATH 2315</td>
<td></td>
<td>MATH 2308</td>
<td>(F,S,Su) Foundations of Computer Science II</td>
<td>TCCNS: COSC 2436/2336</td>
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<tr>
<td>MATH 2471</td>
<td>(F,S,Su) Calculus I</td>
<td>TCCNS: MATH 2413</td>
<td></td>
<td>MATH 2472</td>
<td>(F,S,Su) Calculus II</td>
<td>TCCNS: MATH 2414</td>
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<tr>
<td>MATH 3305</td>
<td>(F,S,Su) Intro to Probability &amp; Statistics</td>
<td></td>
<td></td>
<td>MATH 3330</td>
<td>(F,S,Su) Intro to Advanced Math</td>
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<tr>
<td>MATH 3330</td>
<td>(F,S,Su) Numerical Analysis I</td>
<td></td>
<td></td>
<td>MATH 3383</td>
<td>(F,S,Su) Applied Linear Algebra</td>
<td>(preferred)</td>
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<tr>
<td>MATH 3376</td>
<td>(F,S) Applied Linear Algebra</td>
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<td></td>
<td>MATH 3383</td>
<td>(F,S) Numerical Analysis I</td>
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<tr>
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**6 hours MATH advanced electives:**
- ENGR 2301 – Statics (F,S,Su)
- MATH 3324 – Applied Multivariate Statistics
- MATH 3348 – Deterministic Operations Research (F)
- MATH 3398 – Discrete Math II (F,S,Su)
- MATH 4305 – Probability & Statistics (F,S)
- MATH 4306 – Fourier Series (S)
- MATH 4307 – Modern Algebra (F,S)
- MATH 4315 – Analysis II (F,S)
- MATH 4327 – Introduction to Complex Analysis & App (F)
- MATH 4336 – Studies in Applied Math (see dpt)
- MATH 4350 – Combinatorics (S)
- MATH 4383 – Numerical Analysis II (F,S)
- MATH 4393 – Intro to Finite Element Methods (check prerequisites)

This is not an official degree audit and it is subject to change. This chart is intended to be used by students who start out at Texas State. Please contact the College of Science and Engineering Undergraduate Advising Center for advising.

**Note:** In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.

**Key:**
- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Arrows with dash lines are recommended prerequisites.
- Courses taught in specific semesters are indicated with the following codes:
  - F-Fall
  - S-Spring
  - S-Summer Session I or II
- Required WI courses: ENG 3303
- Additional WI courses: Discuss with Advisor to complete WI requirement
- Core courses must be completed:
  - 6 credits Core 010
  - 3 credits Core 020
  - 6 credits Core 030
  - 6 credits Core 040
  - 3 credits Core 050
  - 6 credits Core 060
  - 6 credits Core 070
  - 3 credits Core 080
  - 6 credits Core 090
  - 091, 092, 093, and 094

See catalog for options: http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/

US 1100 may be required for some students. Consult with an advisor regarding course choices.