### BS – Applied Math

**(SC-BS/APMA)**

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
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<tbody>
<tr>
<td>Fall Semester</td>
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<td>Spring Semester</td>
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#### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Semester</th>
</tr>
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<tbody>
<tr>
<td>MATH 2471 (F,S,Su)</td>
<td>Calculus I</td>
<td>Fall</td>
</tr>
<tr>
<td>MATH 2472 (F,S,Su)</td>
<td>Calculus II</td>
<td>Fall</td>
</tr>
<tr>
<td>MATH 2393 (F,S,Su)</td>
<td>Calculus III</td>
<td>Fall</td>
</tr>
<tr>
<td>MATH 2305 (F,S,Su)</td>
<td>Intro to Probability &amp; Statistics</td>
<td>Fall</td>
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<tr>
<td>MATH 3305 (F,S,Su)</td>
<td>Intro to Advanced Math</td>
<td>Spring</td>
</tr>
<tr>
<td>MATH 3330 (F,S,Su)</td>
<td>Linear Algebra</td>
<td>Spring</td>
</tr>
</tbody>
</table>

#### Advanced Electives

- **6 hours MATH advanced electives:**
  - (check prerequisites)
  - ENGR 2301 – Engineering Mechanics (replaced ENGR 3375)
  - MATH 3348 (F) – Deterministic Operations Research
  - MATH 3398 (F,S,Su) – Discrete Math II
  - MATH 4305 (S) – Probability & Statistics
  - MATH 4306 (S) – Fourier Series
  - MATH 4307 (F,S) – Modern Algebra
  - MATH 4315 (F,S) – Analysis II
  - MATH 4327 – Introduction to Complex Analysis & App
  - MATH 4336 (see dpt) – Studies in Applied Math
  - MATH 4371A – Topological Data Analysis
  - MATH 4372 – Research in Discrete Mathematics
  - MATH 4337C – Numerical Methods for Ordinary Diff Eq
  - MATH 4350 (S) – Combinatorics
  - MATH 4383 – Numerical Analysis II
  - MATH 4393 – Intro to Finite Element Methods

### Technical Writing

- ENG 3303 – Technical Writing

### Additional Notes

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

- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Arrows with dashed lines are recommended prerequisites.
- Courses taught in specific semesters are indicated with the following codes:
  - F: Fall
  - S: Spring
  - SS: Su-Summer Session I or II
- Required WI courses: ENG 3303
- Additional WI courses: MATH 4337A, 4337B, 4337C

### Core Courses Must Be Completed:

- 6 credits Core 010
- 3 credits Core 020
- 6 credits Core 030
- 3 credits Core 040
- 3 credits Core 050
- 6 credits Core 060
- 6 credits Core 070
- 3 credits Core 080
- 6 credits Core 090

- TXST options: ENG 1301, ENG 1320, ENG 1321
- APMA required course: MATH 2471
- TXST options: See catalog for options
- TXST options: MATH 1312/SOC 1310

- APMA required course: MATH 2471

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

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*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.*