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.

**BS – Applied Math (SC-B/S/AMPA)**

2021 Catalog year: College of Science and Engineering

**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
  - Su: Summer Session I or II
- Required WI courses: ENG 3303
- Additional WI courses: MATH 4337A, 4337B, 4337C

**Core courses must be completed:**
- US 1100
- _HIST 1310
- _ANTH 1312/ECO 2301/2314
- _ENG 1310
- _HIST 1320
- _GEO 1310/PSY 1300/SOCI 1310
- _ENG 1320
- _POSI 2310
- _COMM 1310 or ENG 2310-2360
- _PHIL 1305 or 1320
- _POSI 2320
- _ART/DAN/MU/TH 2313

US 1100 & ENG 1310 recommended for first semester. _HIST 1310/1320 not recommended for first semester.

- 3 hours of natural science (see advisor for options)
- MATH 2358 (F,S,Su) Discrete Math I
  - TCCNS: MATH 2305
- MATH 2393 (F,S,Su) Calculus III
  - TCCNS: MATH 2358
- MATH 2471 (F,S,Su) Calculus I
  - TCCNS: MATH 2472
- MATH 2472 (F,S,Su) Calculus II
  - TCCNS: MATH 2471
- MATH 3208 (F,S,Su) Foundations of Computer Science II
  - TCCNS: COSC 2436/2336
- MATH 3305 (F,S,Su) Intro to Advanced Math
- MATH 3330 (F,S,Su) Intro to Probability & Statistics
- MATH 3336 (see dept)
- MATH 3376 (F,S) Applied Linear Algebra (preferred)
  - MATH 3377 Linear Algebra (student may not receive credit for both)
- ENG 3303 Technical Writing
- MATH 3383 (F) Numerical Analysis II
- MATH 4315 (F,S) – Analysis II
- MATH 4327 – Introduction to Complex Analysis & App
- MATH 4336 (see dept) – Studies in Applied Math
- MATH 4337B – Research in Discrete Mathematics
- MATH 4338 – Numerical Analysis II
- MATH 4393 – Intro to Finite Element Methods

- 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 dept) – Studies in Applied Math
  - MATH 4337A – Topological Data Analysis
  - MATH 4377 – Research in Discrete Mathematics
  - MATH 4378C – Numerical Methods for Ordinary Diff Eq
  - MATH 4350 (S) – Combinatorics
  - MATH 4383 – Numerical Analysis II
  - MATH 4393 – Intro to Finite Element Methods

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.