BS – Industrial Engineering with Applied Math minor  
(SC-BS/IE/APMA) 
2019 Catalog year: College of Science and Engineering

**Requirements for graduation**
- Core and minor requirements

**Note**
Undergraduate Advising Center for advising

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.

**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: IE 4392, IE 4393, MFGE 4396
- Additional WI courses: IE 4360

Core courses must be completed:
- **_US 1100_**
- **_PHIL 1305 or 1320_**
- **_ART/DAN/MU/TH 2313_**
- **_ENG 1310_**
- **_ENG 1320_**
- **_ECO 2301 or ECO 2314_**
- **_HIST 1310_**
- **_HIST 1320_**
- **_COMM 1310 or ENG 2310-2360_**

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

**Courses Taught:**
- **MATH 2471 (F,S,Su) Calculus I**
- **MATH 2472 (F,S,Su) Calculus II**
- **MATH 3377 (F,S,Su) Linear Algebra**
- **MATH 3378 (F,S,Su) Differential Equations**
- **ENGR 1313 (F,S,Su) Engineering Design Graphics**
- **CHEM 1335 (F) Engineering Chemistry**
- **CHEM 1141 (F,S,Su) General Chemistry I lab**
- **PHYS 1430 (F) Mechanics**
- **PHYS 2425 (F) Electricity & Magnetism**
- **ENGR 2300 (F) Materials Engineering**
- **MFGE 2332 (F) Material Selection**
- **CS 1342 Programming for Scientists & Engineers**
- **ENGR 3375 (F,S,Su) Engineering Mechanics**
- **ENGR 3311 (F,S) Mechanics of Materials**
- **IE 3340 (F,S) Operations Research**
- **IE 3330 (F,S) Quality Engineering**
- **IE 3360 (F,S) Methods Engineering & Ergonomics**
- **MATH 3373 (F,S,Su) Calculus III**
- **MFGE 4396 (S,Su) Manufacturing Systems Design**
- **IE 4310 (F,S) Statistical Design of Experiments**
- **IE 4370 (F,S) Probabilistic Operations Research**
- **IE 4392 (F,S) Industrial Design I**
- **IE 4393 (F,S) Industrial Design II**
- **IE 4395 (F,S) Supply Chain Engineering**
- **IE 4320 (F,S) Integrated Production Systems**

Choose 9 hours from:
- IE 4330
- IE 4340 (F)
- IE 4360 (F)
- IE 4399A – F
- MFGE 4367 (S)
- MFGE 4392 (F,S)
- ENGR 3190
- ENGR 4390
- ENGR 4395

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