### Manufacturing Engineering: Mechanical

#### BS (SC-BM/FGE/MSYS)

#### 2023 Catalog year: College of Science and Engineering

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<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
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<tr>
<td>Fall</td>
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- **MATH 2471** (F,S,Su) Calculus I
  - TCCNS: MATH 2413

- **CHEM 1341+1141** (F,S,Su) General Chemistry I
  - TCCNS: CHEM 1311+1311 or 1311

OR

- **CHEM 1335+1135** (F,S,Su) Engineering Chemistry
  - TCCNS: CHEM 1309+1109

- **MATH 2472** (F,S,Su) Calculus II
  - TCCNS: MATH 2414

- **PHYS 1430** (F,S) Mechanics
  - TCCNS: PHYS 2425/2125+2125

- **PHYS 2425** (F,S) Electricity & Magnetism
  - TCCNS: PHYS 2426/2326+2326

- **ENGR 2300** (F,S,Su) Materials Engineering

- **MATH 3323** (F,S) Linear Algebra
  - Differential Equations
  - TCCNS: MATH 3220

- **IE 3320** (F,S,Su) Engineering Statistics

- **ENGR 2332** (F,S) Materials Selection

- **MFGE 2312** (F,S) Manufacturing Lab I

- **ENGR 3316** (F,S) Computer Aided Design & MFGE
  - MATH 2471 corequisite

- **MFGE 3316** (F,S) Manufacturing Systems Design

- **MFGE 4365** (F) Tool Design

- **MFGE 4396** (F,S) Manufacturing Systems Design

- **MFGE 4357** (F,S) Dynamics of Machines
  - Also requires ENGR 2301

- **MFGE 4391** (F,S) Manufacturing Engineering Senior Design I

- **MFGE 4390** (F,S) Manufacturing Engineering Senior Design II

- **MFGE 4355** (S) Design of Machine Elements

- **MFGE 4176** (F,S) Design of Machine

- **MFGE 4315** (F,S) Manufacturing Systems Design

- **MFGE 4376** (F,S) Control Systems & Instrumentation
  - Also requires PHYS 1430 & ENGR 2300

- **MFGE 4395** (F,S) Computer Integrated Facilities Planning
  - Also requires ENGR 3373

- **MFGE 4395** (F,S) Computer Integrated Manufacturing
  - Also requires ENGR 3342/1342

#### Notes:

- 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.
- Courses taught in specific semesters are indicated with the following codes:
  - F = Fall
  - S = Spring
  - Su = Summer Session I or II

- Required WI courses: MFGE 4390, 4391, 4395, 4396

- Core courses must be completed:
  - 6 credits Core 010
  - 3 credits Core 020
  - 6 credits Core 030
  - MFGE required course: MATH 2471
  - 3 credits Core 040
  - MFGE required courses: PHYS 1430 + CHEM 1355/1135 (or CHEM 1341/1141)
  - 3 credits Core 050
  - TXST options: ART 2313, DAN 2313, MUS 2313, TH 2313
  - 6 credits Core 060
  - TXST options: [HIST 1310/3107/3108] and [HIST 1320/3236/3282]
  - 6 credits Core 070
  - TXST options: [HIST 2310 & POSI 2320]
  - 3 credits Core 080
  - MFGE required course: ECO 2301
  - 6 credits Core 090
  - MFGE required courses: MATH 2472 + PHYS 2425
  - 091, 092, 093, and 094

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

- Check prerequisites:
  - Max of 3 hours can be taken from ENGR 3190/3290 and ENGR 4395

- Requirements for graduation.

- Core and minor requirements (if applicable) and any other requirements for graduation.

- Undergraduate Advising Center for advising.