BS – Manufacturing Engineering: Mechanical

(SC-BS/MFGE/MSYS) 2021 Catalog year: College of Science and Engineering

Freshman
Fall semester

MATH 2471
(F,S,Su)
Calculus I
TCCNS: MATH 2413

CHEM 1341+1141
(F,S,Su)
General Chemistry I
TCCNS: CHEM 1311+1111 or 1311

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

OR

ENGR 1304
(F,S,Su)
Engineering Design
Graphics
(replaced ENGR 1313)

Freshman
Spring semester

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

PHYS 1430
(F)
Electronics & Magnetism
TCCNS: PHYS 2425/2325+2325

PHYS 2425
(F,S,Su)
Statics
(Replaced ENGR 1335)

PHYS 1342
(F,S)
Programming for Scientists & Engineers

Sophomore
Fall semester

ENGR 2300
(F,S,Su)
Materials Engineering

MATH 3323
(F,S,Su)
Differential Equations
TCCNS: MATH 2321

IE 3330
(E)
Quality Engineering

MFGE 2332
(F,S,Su)
Materials Selection

MFGE 2312
Manufacturing Lab I

Sophomore
Spring semester

MATH 3377
(F,S,Su)
Linear Algebra

ENGR 2301
(F,S,Su)
Statics
(Replaced ENGR 1335)

ENGR 3315
(F,S,Su)
Engineering Economic Analysis

ENGR 3311
(F,S)
Circuits & Devices
Also requires CS 1428 or 1342

Junior
Fall semester

MFGE 3316
(F,S)
Computer Aided Design & Mfg

MATH 2471 corequisite

MFGE 3317
(F,S)
Manufacturing Systems Design

MFGE 3315
(F,S)
Tool Design

MFGE 3376
(F,S)
Manufacturing Systems Design

Junior
Spring semester

MFGE 4395
(F,S)
Computer Integrated Manufacturing
Also requires CS 1342/1343

MFGE 4390
(F,S)
Facilities Planning
Also requires ENGR 3315

MFGE 4391
(F)
Control Systems & Instrumentation
Also requires PHYS 1430

Senior
Fall semester

Choose 6 hours of mechanical systems electives:
ENGR 3190
MFGE 4367
MFGE 4381
(replaced MFGE 4399A)
MFGE 4377 (replaced MFGE 4399B)
MFGE 4378 (replaced MFGE 4399C)
EE 4392 (replaced MFGE 4392)
EE 4394 (replaced MFGE 4394)

Senior
Spring semester

MFGE 4355 (S)
Design of Machine Elements

MFGE 4376
(F,S)
Design of Machine Elements

MFGE 4176
Manufacturing Lab III

MFGE 4396
(F,S)
Design of Machine Elements

MFGE 4397
(F,S)
Control Systems & Instrumentation
Also requires PHYS 1430

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

Core courses must be completed:

6 credits Core 010
6 credits Core 020
6 credits Core 030
6 credits Core 040
3 credits Core 050
3 credits Core 060
6 credits Core 070
6 credits Core 080
6 credits Core 090
6 credits Core 100
6 credits Core 110
6 credits Core 120
6 credits Core 130
6 credits Core 140
6 credits Core 150
6 credits Core 160
6 credits Core 170
6 credits Core 180
6 credits Core 190
6 credits Core 200
6 credits Core 210
6 credits Core 220
6 credits Core 230
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6 credits Core 620
6 credits Core 630
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6 credits Core 670
6 credits Core 680
6 credits Core 690
6 credits Core 700
6 credits Core 710
6 credits Core 720
6 credits Core 730
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6 credits Core 760
6 credits Core 770
6 credits Core 780
6 credits Core 790
6 credits Core 800
6 credits Core 810
6 credits Core 820
6 credits Core 830
6 credits Core 840
6 credits Core 850
6 credits Core 860
6 credits Core 870
6 credits Core 880
6 credits Core 890
6 credits Core 900
6 credits Core 910
6 credits Core 920
6 credits Core 930
6 credits Core 940
6 credits Core 950
6 credits Core 960
6 credits Core 970
6 credits Core 980
6 credits Core 990

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

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.