Bachelor of Science in Mechanical Engineering (Standard Option B675)
Summer 2019 through Spring 2020 – Total Credit Hours: 123

This flowchart is not an official check sheet of degree requirements. It is meant to be used as a supplemental visual guide to be used along with the official University of Oklahoma degree check sheet.

FRESHMAN

Fall
16 Hours

MATH 1914
Calculus I

MATH 2924
Calculus II

CHEM 1315
Chemistry I

PHYS 2514
Physics I

ENGR 2002
Prof. Development
Prereq: Soph standing & ENGL 1213
Co-req: ENGR 1411/3511

ENGL 1113
English Composition

ENGL 1213 or EXPO 1213
English Comp or Exploratory Writing

PSC 1113
American Federal Government

HIST 1483 or 1493
US History

Approved Elective
Social Science

Approved Elective
Technical Elective (3 hours)

Sooner ID:

In order to progress into 2nd year SOPHOMORE courses in AME, students must successfully complete (C minimum) MATH 1914, MATH 2924, PHYS 2514, & CHEM 1315 with a 3.0 Combined Ret GPA & possess a minimum 3.0 Combined Ret GPA in 24 or more credit hours.

SOPHOMORE

Fall
16 Hours

MATH 2934
Calculus III

AME 2002
Engineering Computing
Prereq: MATH 2924/2423

AME 2402
Engineering Computing
Prereq: MATH 2924/2423

AME 2213
Thermodynamics

AME 2303
Materials, Design & Manufacturing Processes

AME 2533
Statics

AME 2611
Thermodynamics

AME 2633
Design of Mechanical Components

AME 2833
Advanced Design of Thermo-Fluid Systems

AME 3113
Solid Mechanics Lab

AME 3143*
Solid Mechanics

AME 3303
Design of Mechanical Components

AME 3353
Design of Mechanical Components

AME 3433
Heat Transfer & Fluid Mechanics Lab

AME 3533
Design of Mechanical Components

AME 3833
Advanced Design of Thermo-Fluid Systems

AME 3933
Advanced Design of Thermo-Fluid Systems

ENGR 2002
Prof. Development
Prereq: Soph standing & ENGL 1213
Co-req: ENGR 1411/3511

ENGL 3153
Technical Writing
Prereq: MATH 2914

Approved Experimental Elective (2 hours)

Approved Experimental Elective (2 hours)

Approved Experimental Elective (2 hours)

Approved Elective
Western Civ & Culture

Approved Elective
Non-Western Culture

Approved Elective
Artistic Forms

JUNIOR

Fall
16 Hours

MATH 3113G
Intro. Diff. Equations
Prereq: MATH 2924/2423

ENGR 2431
Electrical Circuits
Prereq: MATH 2924/2423

ENGR 2511
Electrical Circuits I

ENGR 3431
Electromech Systems

ENGR 3511
Fluid Mechanics
Prereq: MATH 2924/2423

ENGR 3611
Solid Mechanics Lab

ENGR 3711
Heat Transfer & Fluid Mechanics Lab

ENGR 3811
Advanced Design of Thermo-Fluid Systems

ENGR 3911
Advanced Design of Thermo-Fluid Systems

ENGR 2531
Fluid Mechanics
Prereq: MATH 2924/2423

ENGR 2631
Design of Mechanical Components

ENGR 2731
Advanced Design of Thermo-Fluid Systems

ENGR 2831
Advanced Design of Thermo-Fluid Systems

ENGR 2931
Advanced Design of Thermo-Fluid Systems

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SENIOR

Fall
17 Hours

AME 3103
Interactive Engineering Design Simulation
Additional Prereq: AME 3143

AME 3173
Heat Transfer
Additional Prereq: AME 2213

AME 3363
Design of Thermal-Fluid Systems
Additional Prereqs AME 2402 or CS1313

AME 3553
Design of Mechanical Components

AME 3653
Advanced Design of Thermo-Fluid Systems

AME 3753
Advanced Design of Thermo-Fluid Systems

AME 4553
Design Practicum (Capstone)

Approved Elective
Technical Elective (3 hours)

Approved Elective
Engr Science Elective (3 hours)

Approved Elective
Western Civ & Culture

Approved Elective
Non-Western Culture

Approved Elective
Artistic Forms

ENGR 2531
Electrical Circuits II

ENGR 3431
Electromech Systems

ENGR 3511
Fluid Mechanics
Prereq: MATH 2924/2423

ENGR 3611
Solid Mechanics Lab

ENGR 3711
Heat Transfer & Fluid Mechanics Lab

ENGR 3811
Advanced Design of Thermo-Fluid Systems

ENGR 3911
Advanced Design of Thermo-Fluid Systems

ENGR 2531
Fluid Mechanics
Prereq: MATH 2924/2423

ENGR 2631
Design of Mechanical Components

ENGR 2731
Advanced Design of Thermo-Fluid Systems

ENGR 2831
Advanced Design of Thermo-Fluid Systems

ENGR 2931
Advanced Design of Thermo-Fluid Systems

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Prerequisite

Co-requisite.

Shaded courses offered once per year.

AME Electives and Flowcharts can be found here: www.ou.edu/content/coe/academics_flowcharts.html

Per AME: Courses taken during Winter and Spring Intersessions will not qualify for AME course credit.

* The following prereqs will be reflected on the AY 2019-2020 checksheet: For AME143-AME2533 & 2303; For AME3153-AME2533