

Mechanical Engineering Curriculum Guide

Effective Fall 2020 (IMPORTANT: Courses in BOLD require minimum grade of C-)

First Year		Sophomore Year		Junior Year		Senior Year	
Fall Semester	16	Fall Semester	16	Fall Semester	14	Fall Semester	12
First Year Clinic 1 (ENGR 01.101)	2	Sophomore Clinic 1 (ENGR 01.201)	4	Junior Clinic (ENGR 01.303)	2	Senior Clinic (ENGR 01.403)	2
Calculus I (MATH 01.130)	4	Calculus III (MATH 01.230)	4	Fluid Mechanics for ME (ME 10.330)	3	Dynamic Systems & Control (ME 10.345)	4
Chemistry I (CHEM 06.100)	4	Intro Elect. & Magnetism (PHYS 00.222)	4	Strength of Materials (ENGR 01.273)	3	Intro Quality Engineering (ME 10.342)	3
Intro Scientific Program: MATLAB/CAD (CS 01.104)	3	Manufacturing & Measurement Tech (ME 10.210)	2	Intro Numerical Analysis (MATH 01.332) OR Principles & Apps. of ECE (ECE 09.205)	3	Technical Elective I (<i>see notes below</i>)	3
<i>Rowan Core Elective</i>	3	Statics (ENGR 01.271)	2	<i>Rowan Core Elective</i>	3		
Spring Semester	16	Spring Semester	17	Spring Semester	15	Spring Semester	14
First Year Clinic 2 (ENGR 01.102)	2	Sophomore Clinic 2 (ENGR 01.202)	4	Junior Clinic (ENGR 01.303)	2	Senior Clinic (ENGR 01.403)	2
Calculus II (MATH 01.131)	4	Math for Engr. Analysis (MATH 01.235)	4	Heat Transfer for ME (ME 10.335)	3	Technical Elective II (<i>see notes below</i>)	3
College Comp I (COMP 01.111)	3	Materials Science & Mfg. (ENGR 01.283)	3	Finite Element Analysis (ENGR 01.410)	3	<i>Rowan Core Elective</i>	3
Introductory Mechanics I (PHYS 00.220)	4	Dynamics (ENGR 01.291)	2	Machine Design (ME 10.301)	4	Business Elective (<i>see notes below</i>)	3
Intro to Mech. Design (ME 10.101)	3	Intro Thermal-Fluid Sciences (ME 10.310)	4	Principles & Apps. of ECE (ECE 09.205) OR Intro Numerical Analysis (MATH 01.332)	3	Ethics Elective (<i>see notes below</i>)	3
Total Credits						120	

University Requirements

The *Rowan Core* is the University's general education model. It is based on six literacies and *Rowan Experience* (see below), which reflect contemporary priorities while maintaining a strong liberal arts foundation. Some literacies are incorporated in your major-specific courses. Others you will fulfill by taking elective courses in the required literacy.

Rowan Core-Literacies

Artistic (ARTL)
Global (GLBL)
Humanistic (HUML)
Communicative (COML)
Quantitative (QNTL)
Scientific (SCLL)

Fulfilled by:

elective
elective
elective
Comp I, SEC I and II
Calculus I
Chemistry I

Notes

Ethics elective examples:

PHIL 09150, 09151, 09218, 09222, 09341, 09346, 09392 or 09393

Business elective examples:

ECON 04101 or 04102; INTR 01138; BUS 01105; ENT 06240, 06346 or 06450

Rowan Experience

Rowan Seminar (RS)
Writing Intensive (WI)
Broad-based lit. (LIT)

Fulfilled by:

Freshman Engineering Clinic I
Senior Engineering Clinic
Literature-designated elective

Technical Elective Requirements

Approved ENGR, ME, ECE, CHE, CEE, BME 400-level or other approved 400-level courses

Technical elective examples:

ME 10401 - ME 10482 (see Undergraduate Catalog for list of courses)