Rowan University
Henry M. Rowan College of Engineering

Mechanical Engineering Curriculum Guide

In effect Fall 2022 and beyond

IMPORTANT: All MATH courses and courses SHADED & in BOLD listed below require minimum grade of C-

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Fall Semester	**16**	**Fall Semester**	**16**	**Fall Semester**	**14**	**Fall Semester**	**12**
First Year Clinic I (ENGR 01101)	2	Sophomore Clinic I (ENGR 01201)	4	Junior Clinic (ENGR 01303)	2	Senior Clinic (ENGR 01403)	2
Calculus I (MATH 01130)	4	**Calculus III (MATH 01230)**	4	Fluid Mechanics for ME (ME 10330)	3	Dynamic Systems & Control (ME 10345)	4
Chemistry Lecture/Lab (CHEM06100/CHEM L6100)	4	Intro Elect. & Magnetism Lect/Lab (PHYS 00222/L0222)	4	Intro Numerical Analysis (MATH 01332) ***or*** Principles & Apps of ECE (ECE 09205)	3	Quality & Reliability (ME 10342)	3
Intro Sci.Progr.: Matlab/CAD (CS 01104)	3	**Statics (ENGR 01271)**	2	Strength of Materials (ENGR 01273)	3	Technical Elective I (*see notes below*)	3
Rowan Core elective	3	Manufg. & Measurement Tech (ME 10210)	2	*Rowan Core elective*	3		
Spring Semester	**16**	**Spring Semester**	**17**	**Spring Semester**	**15**	**Spring Semester**	**14**
First Year Clinic II (ENGR 01102)	2	Sophomore Clinic II (ENGR 01202)	4	Junior Clinic (ENGR 01303)	2	Senior Clinic (ENGR 01403)	2
Calculus II (MATH 01131)	4	**Math for Engr Analysis (MATH 01235)**	4	Heat Transfer for ME (ME 10335)	3	Technical Elective II (*see notes below*)	3
College Comp I (COMP 01111)	3	Material Science & Mfg. (ENGR 01283)	3	Finite Element Analysis (ENGR 01410)	3	Business Elective (*see notes below*)	3
Introductory Mechanics I Lect/Lab (PHYS 00220/PHYS L0220)	4	Dynamics (ENGR 01291)	2	Intro Numerical Analysis (MATH 01332) ***or*** Principles & Apps of ECE (ECE 09205)	3	Ethics Elective (*see notes below*)	3
Intro to Mech. Design (ME10101)	3	**Intro Thermal Fluid Sciences (ME 10310)**	4	Machine Design (ME 10301)	4	*Rowan Core Elective*	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	**Fulfilled by:**
Artistic (ARTL)	*elective*
Global (GLBL)	*elective*
Humanistic (HUML)	*elective*
Communicative (COML)	Comp I, SEC I and II
Quantitative (QNTL)	Calculus I
Scientific (SCIL)	Chemistry I

Rowan Experience	**Fulfilled by:**
Rowan Seminar (RS)	First Year Clinic I
Writing Intenstive (WI)	Senior Engineering Clinic
Broad-based lit. (LIT)	*Literature-designated elective*

Notes

Ethics options:

PHIL 09150, 09151, 09218, 09222, 09341, 09346, 09392 or 09393 (*note that some courses have literature designation*)

Business elective options:

ECON 04101 or 04102; INTR 01138; BUS 01105; ENT 06240, 06346 or 06450; MIS 02526

Technical Elective *examples: ENGR 01411, 01413; ME 10442, 10450, 10443, 10405, 10422, 10440*

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

Technical Elective Requirements

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

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