

# Bachelor of Science in Mechanical Engineering

FALL	CR	SPRING	CR
<b>FIRST YEAR</b>			
First Year Clinic I (ENGR 01.101)	2	First Year Clinic 2 (ENGR 01.102)	2
<b>Calculus I (MATH 01.130)</b>	4	<b>Calculus II (MATH 01.131)</b>	4
Chemistry (CHEM 06.100)	4	Introductory Mechanics I (PHYS 00.220)	4
Computer Sci. & Prog (CS 04.103)	4	Intro to Mechanical Design (ME10.101) or Materials Science & Mfg. (ENGR 01.283)	3
General Education	3	College Composition I (COMP 01.111)	3
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>16</b>
<b>SECOND YEAR</b>			
Sophomore Clinic 1 (ENGR 01.201)	4	Sophomore Clinic 2 (ENGR 01.202)	4
<b>Calculus III (MATH 01.230)</b>	4	<b>Math for Engr Analysis (MATH 01.235)</b>	4
Intro Elect. & Magnetism (PHYS 00.222)	4	Strength of Materials (ENGR 01.273)	3
Statics (ENGR 01.271)	2	ME Lab (ME 10.211)	2
Dynamics (ENGR 01.291)	2	Materials Science & Mfg. (ENGR 01.283) or Intro to Mechanical Design (ME10.101)	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>16</b>
<b>THIRD YEAR</b>			
Junior Clinic (ENGR 01.301)	2	Junior Clinic (ENGR 01.302)	2
Thermal-Fluid Sciences I (ME 10.321)	6	Thermal-Fluid Sciences II (ME 10.322)	6
Machine Design (ME 10.301)	4	Quality & Reliability (ME 10.342)	3
General Education	3	Entrepreneurship & Innovation (ENT 06.240) or other business elective	3
		Principles & Apps. of ECE (ECE 09.205)	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>17</b>
<b>FOURTH YEAR</b>			
Senior Clinic (ENGR 01.401)	2	Senior Clinic (WI) (ENGR 01.402)	2
Systems Dynamics & Control I (ME 10.343)	3	Systems Dynamics & Control II (ME 10.344)	3
Finite Element Analysis (ENGR 01.410)	3	Major Elective III (ME 10.4xx)	3
Major Elective I (ME 10.4xx)	3	Major Elective IV (ME 10.4xx)	3
Major Elective II (ME 10.4xx)	3	General Education	3
General Education	3		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>14</b>
		<b>Total Credits</b>	<b>128</b>

## **General Education and Rowan Experience**

All Mechanical Engineering majors are required to fulfill the General Education / Rowan Experience requirements of a Specialized Degree Model. In this model, your Math, Science and Communications requirements are met from the required courses in the Mechanical Engineering program. Other Rowan Experience courses are met throughout your required program of study. For example, Senior Engineering Clinic II is the Writing Intensive (WI) course and First Year Clinic I is the Rowan Seminar (RS) course. You need to choose 15 credits of General Education courses (typically five courses that are 3 credits each) that meet the following criteria:

- Two (6 credits) History Humanities Language (HHL) courses
- Two (6 credits) Social and Behavioral Sciences (SBS) courses
- One (3 credits) Artistic and Creative Expression (ACE) course
- One of the above General Education courses must be a Multicultural/Global (listed as M/G or MCUL) course
- One of the above General Education courses must be a Literature-based (LIT) course.
- A course can be designated as both LIT and MCUL (e.g. ENGL02.112, Readings in Asian Lit) which will meet both criteria, but you still have to take 5 (five) courses.

Double counting of HHL, SBS, and ACE courses is not permitted. If a course meets the requirements of two categories (e.g., HHL and ACE), you must use it in one or the other. Therefore, you will still need to take 5 courses (15 credits).

### **General Education Checklist**

- ACE
- SBS
- HHL-1
- HHL-2
- LIT
- M/G