

# **Civil & Environmental Engineering Curriculum Guide**

F '18

## Courses in **bold** require minimum grade of C-

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Fall Semester	16	Fall Semester	17	Fall Semester	17	Fall Semester	17
Freshman 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
Chemistry I (CHEM 06100)	4	Calculus III (MATH 01.230)	4	Structural Engineering (CEE08.382)	3	CE Design Project I (CEE08.491)	2
Calculus I (MATH 01.130)	4	Science Elective*	4	Fluid Mechanics I (ENGR 01.341)	2	Civil Engineering Practice (CEE08.490)	1
Intro to Sci. Progr. (CS01.104)	3	Statics (ENGR01.271)	2	Environ. Engineering I (CEE 08.311)	3	Civil Engineering Elective	3
Intro to Mapping & GIS (GEO 16.160)	3	Civil Engineering Systems (CEE08.305)	3	Intro to Microeconomics (ECON 04.102)	3	Civil Engineering Elective	3
		*Chem. II CHEM06.101; Intro. to E&M PHYS00.222; or Intro. Thermodyn., Fluids, Waves & Opt. PHYS00.221		Civil Engineering Materials (CEE 08.301)	2	Rowan Core - Global Literacy	3
				Materials Science (ENGR 01.281)	2	Free Elective	3
Spring Semester	15	Spring Semester	16	Spring Semester	17	Spring Semester	16
Freshman 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 Engrg Analysis (MATH 01.235)	4	Anal. & Design Steel Frames (CEE 08.383)	3	CE Design Project II (CEE08.492)	3
Introductory Mechanics (PHYS 00222)	4	Engineering Graphics (CEE 08.102)	2	Water Resources Engr. (CEE 08.342)	3	Technical Elective	2
Intro to Infrastructure (CEE08.101)	2	Field Surveying CEE (08.103)	2	Sustainable Civil/Env Engr. (CEE 08.312)	3	Civil Engineering Elective	3
College Comp I (COMP 01111)	3	Dynamics (ENGR 01.291)	2	Transportation Engr. (CEE 08.361)	3	Civil Engineering Elective	3
		Solid Mechanics (ENGR 01.272)	2	Geotechnical Engr. (CEE 08.351)	3	Rowan Experience - Broad-Based Literature	3

Total Credits 131

### **University Requirements**

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

Rowan Core-Literacies	Fulfilled by:
Artistic (ARTL)	Introduction to Mapping and GIS
Global (GLBL)	elective
Communicative (COML)	Comp I, SEC I and II
Humanistic (HUML)	Introduction to Economics-Microeconomics
Quantitative (QNTL)	Calculus I
Scientific (SCIL)	Chemistry I
Rowan Experience	Fulfilled by:

Rowan Seminar (RS) Freshman Engineering Clinic I
Writing Intenstive (WI) Senior Engineering Clinic
Broad-based lit. (LIT) elective

#### Notes

#### Additional Civil Engineering Electives (4 required):

Additional CEE electives must be selected from the available courses in civil engineering. Students should take at least 1 course each in 2 of the following three areas: transportation, geotechnical, and water resources.