Rowan University

ELECTRICAL & COMPUTER ENGINEERING

ROWAN ECE CURRICULUM - ADVISING & PROGRESS SHEET W/ROWAN CORE

EFFECTIVE FALL 2021

FALL	CR	Semester Completed	Grade	SPRING	CR	Semester Completed	Grade
FIRST YEAR							
First-Year Engineering Clinic I (ENGR 01.101)(RS)	2			First-Year Engineering Clinic II (ENGR 01.102)	2		
ECE: Solving Tomorrow's Problems (ECE 09.101)	2			College Composition I (COMP 01.111)[2] - **COMM**	3		
Calculus I (MATH 01.130)[1,2] **QUANTITATIVE**	4			**Calculus II (MATH 01.131)[1]**	4		
Intro. Mechanics I (PHYS 00.220)[2] **SCIENTIFIC**	4			**Intro Elec. & Mag. (PHYS 00.222)[1]**	4		
Computer Sci. & Prog (CS 04.103)	4			Intro. to Digital Systems (ECE 09.241)	2		
Total Units	16			Total Units	15		
SECOND YEAR							
Sophomore Engineering Clinic I (ENGR 01.201)[2] (with College Composition II) **COMM**	4			Sophomore Engineering Clinic II (ENGR 01.202)[2] (with Public Speaking) **COMM**	4		
Calculus III (MATH 01.230)[1]	4			Math for Eng. Analysis I (MATH 01.235)	4		
Computer Architecture (ECE 09.243)[1]	3			Principles of Data Structures (CS04.225)	3		
Electrical Circuit Analysis (ECE 09.203)[1]	4			Embedded Systems (ECE 09.342)	3		
				Electronics I (ECE 09.311)	3		
Total Units	15			Total Units	17		
THIRD YEAR							
Junior Engineering Clinic (ENGR 01.303)	2			Junior Engineering Clinic (ENGR 01.303)	2		
Signals & Systems (ECE 09.341)[1]	2			Systems & Control I (ECE 09.321)	3		
Science Elective[3]	4			Digital Signal Processing (ECE 09.351)	3		
Engineering Electromagnetics (ECE 09.303)	3			Modules in ECE (ECE 09.363)	1		
Mech. Engineering for ECEs (ME 10.320)	3			ECE Technical Elective	3		
Business Elective[4] **(Non program requirement)**	3			Prob & Stat for ECE (STAT 02.286) **(Non program)**	3		
Total Units	17			Total Units	15		
FOURTH YEAR							
Senior Engineering Clinic (ENGR 01.403)(WI)	2			Senior Engineering Clinic (ENGR 01.403)(WI)	2		
VLSI Design (ECE 09.414)	3			Engineering Clinic Consultant (ECE 09.461)	1		
Electrical Communication Systems (ECE 09.433)	3			Seminar: Frontiers (ECE 09.498)	1		
ECE Technical Elective	3			ECE Technical Elective	3		
ECE Technical Elective	3			ECE Technical Elective	3		
Rowan Core[2]	*3*			Rowan Core[2]	3		
				Rowan Core[2]	3		
Total Units	17			Total Units	16		

Rowan Core Requirements (Fill in the course information below)							
HUMANISTIC:	3			**ARTISTIC:**	3		
GLOBAL:	3			**Non Program:**	3		
LITERATURE:				**Multidisciplinary / Out of Discipline[5]**			
				Multidisciplinary / Out of Discipline experience satisfied by:			

Total Program Credits: 128

Notes:

1. Courses listed in **bold face** need to be completed with a minimum grade higher than D- to satisfy the prerequisites of one or more subsequent courses. A minimum grade of "C-" is needed in Calculus I, II and III to continue to the next class. A minimum grade of "C" is required in Principles of Electric Circuit Analysis, Introduction to Electricity & Magnetism, Computer Architecture and Signals & Systems.

2. Rowan Core requires six literacies: Communication, Quantitative, Scientific, Artistic, Global, Humanistic. The first three are satisfied by major courses (indicated in green above). The remaining three must be taken from appropriate bank of courses, one of which must carry "Literature" attribute. Some business electives may satisfy Humanistic Literacy requirement.

3. Choose from: CHEM 06.100 College Chemistry I, BIOL 01.112 General Biology, Environmental Focus, BIOL 01.113 General Biology, Human Focus; BIOL 01.115 General Biology – Plants and People; BIOL 10.210 Human Anatomy and Physiology; PHYS 00300 Modern Physics; PHYS 00221 Introductory Thermo, Fluid, Wave and Optics.

4. Business elective satisfies a non-program elective for Rowan Core, and must be one of the following: ECON 04.101 Introduction to Macroeconomics, ECON 04.102 Introduction to Microeconomics, ENT 06.240 Entrepreneurship and Innovation, or ENT 06.326 Small Business Management.

5. OOD / Multidisciplinary experience requirement can be satisfied by either
   a. Participating in one out-of-discipline clinic project
   b. Providing consulting services to a non-ECE clinic or other research project through Clinic Consultant;
   c. Taking a non-ECE class (must be 400-level) as an elective, or an elective offered by the ECE Department but one that is clearly outside of the traditional boundaries of ECE providing non-ECE content (such as bioinformatics, biomedical systems and devices)
   d. Completing a Minor in any field or a CUGS offered by a program outside of ECE (no double dipping with ECE courses allowed)

ECE electives are 400-level ECE courses that are not otherwise required as part of the ECE core curriculum. One non-ECE course may be taken towards ECE electives requirements if it is a relevant 400-level course. Most 400-level engineering courses qualify, but please check with ECE Dept. Head before registering if you want to take a non-ECE class towards ECE elective requirements.

RS: ENGR 01.101 First-Year Engineering Clinic satisfies Rowan Seminar, and WI: ENGR 01.403 Senior Engineering Clinic satisfies the Writing Intensive requirement of Rowan Experience. Literature requirement must be satisfied by a Rowan Core / general education elective.

Your notes from meetings with your Advisor (Make sure that your advisor enters these to your record on GRAD)

Revised June 2021 - For students entering as first year in Fall 2021 or later