ENGINEERING, INDUSTRIAL - ASSOCIATE IN SCIENCE IN ENGINEERING

ENIN

Knight Campus, Warwick only

Successful completion of this program enables qualified students to transfer to an accredited engineering curriculum and apply most credits to a Bachelor of Science degree in engineering. This program provides a firm background in basic engineering principles. The curriculum includes a strong foundation in mathematics, the basic sciences and engineering fundamentals, as well as liberal arts courses that are applicable to most Bachelor of Science degree programs.

Entrance to the program requires a mathematics placement examination at a calculus level (student is ready to take Calculus I (MATH 2141)) or the completion of Pre-Calculus Mathematics (MATH 2111). It is recommended that all applicants take a mathematics placement examination prior to the summer session.

For courses to transfer to accredited engineering programs, it is important that students adhere to the required prerequisites and corequisites. When in doubt, refer to the course descriptions (https://catalog.ccri.edu/course-descriptions/).

Although most courses apply to the curriculum of many B.S. in engineering programs, the course sequences and schedules listed on the following pages will allow students to apply their studies toward one of nine University of Rhode Island engineering programs. These course sequences are for full-time, day students who enter in the fall semester, allowing them to complete the Associate in Science degree requirements at CCRI in four semesters and transfer to the University of Rhode Island as a junior. For the first semester, all engineering students take all the same courses. In all other semesters, the required courses will depend upon the desired engineering program. For most engineering programs, students are required to take courses only offered by URI. For CCRI students taking 12 or more credits, up to seven of these credits can be taken per semester at URI under the inter-institutional agreement at no additional cost. See description of the agreement on this page (https://catalog.ccri.edu/academic-information/).

Note: Many courses require prerequisites, corequisites and/or testing. See course descriptions for details (https://catalog.ccri.edu/course-descriptions/).

Requirements

Code	Title	Hours
General Education Requirements		
CHEM 1030	General Chemistry I	5
ECON 2030	Principles of Microeconomics	3
ENGL 1010	Composition I	3
MATH 2141	Calculus I	4
MATH 2142	Calculus II	4
MATH 2243	Calculus III	4
MATH 2362	Advanced Engineering Mathematics	4
PHYS 1150	University Physics I	3
PHYS 1151	University Physics I Laboratory	1
Humanities OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3
Subtotal		34
Core Requirements		
ENGR 1020	Introduction to Engineering & Technology	3
ENGR 2160	Introduction to Engineering Analysis	2
Subtotal		5
Industrial (ENIN)		
ENGR 1030	Engineering Graphics	3
ENGR 2050	Engineering Mechanics Statics	3
ENGR 2150	Introduction to Electrical Engineering	3
ENGR 2151	Introduction to Electrical Engineering Lab	1
Select two of the following:		6
ENGR 2060	Engineering Mechanics Dynamics	
ENGR 2540	Mechanics of Materials for Engineering	
ENGR 2620	Linear Electrical Systems and Circuit Theory for Engineers	
Select one the following:		4-5
BIOL 1005	Biology in the Modern World	
CHEM 1100	General Chemistry II	
PHYS 2110 & PHYS 2111	Topics in Acoustics, Optics and Thermodynamics and Introduction to Acoustics and Optics Laboratory	
EGR 316G	Engineering Ethics (URI-Spring only)	3
ISE 240	Manufacturing Processes and Systems (URI)	3
ISE 241	Manufacturing Processes and Systems Lab (URI)	1
ISE 261G	Sustainable Lean Production (URI-Fall only)	3
Subtotal		30-31
Total Hours		69-70

Recommended Course Sequence

Course	Title	Hours
Prerequisites		
MATH 2111	Pre-Calculus Mathematics	4
	Hours	4
	Total Hours	4

Course	Title	Hours
Year 1		
Semester 1		
Fall:		
CHEM 1030	General Chemistry I	5
ECON 2030	Principles of Microeconomics	3
ENGL 1010	Composition I	3
ENGR 1020	Introduction to Engineering & Technology	3
MATH 2141	Calculus I	4
	Hours	18
Semester 2		
Spring:		

ENGR 1030	Engineering Graphics	3
ENGR 2050	Engineering Mechanics Statics	3
ENGR 2160	Introduction to Engineering Analysis	2
MATH 2142	Calculus II	4
PHYS 1150	University Physics I	3
PHYS 1151	University Physics I Laboratory	1
	Hours	16
Year 2		
Semester 1		
Fall:		
ENGR 2150	Introduction to Electrical Engineering	3
ENGR 2151	Introduction to Electrical Engineering Lab	1
MATH 2243	Calculus III	4
Humanities OR Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3
ISE 240	Manufacturing Processes and Systems (URI)	3
ISE 241	Manufacturing Processes and Systems Lab (URI)	1
ISE 261G	Sustainable Lean Production (URI-Fall only)	3
	Hours	18
Semester 2		
Spring:		
Select two of the following:		6
ENGR 2060	Engineering Mechanics Dynamics	
ENGR 2540	Mechanics of Materials for Engineering	
ENGR 2620	Linear Electrical Systems and Circuit Theory for Engineers	
Select one of the following:		4-5
BIOL 1005	Biology in the Modern World	
CHEM 1100	General Chemistry II	
PHYS 2110 & PHYS 2111	Topics in Acoustics, Optics and Thermodynamics and Introduction to Acoustics and Optics Laboratory	
MATH 2362	Advanced Engineering Mathematics	4
EGR 316G	Engineering Ethics (URI-Spring only)	3
	Hours	17-18
	Total Hours	69-70

Transfer

If you are interested in earning a bachelor's degree, please meet with an Academic Advisor (https://www.ccri.edu/advising/transfer_information/) who can help you select the courses that best prepare you for transfer to a four-year college or university. For more information, you can also visit ritransfers.org (http://www.ritransfers.org/) with resources on course and program transfer to Rhode Island College and the University of Rhode Island, or visit CCRI's Transfer Articulation (https://www.ccri.edu/oes/records/transfers/traagree.html) page for information on articulation agreements with colleges and universities throughout New England.