

## Chem-Biology Concentration (ENBC)

### Associate in Science Degree in Engineering (AS\_ENGN)

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 MATH 2141) or the completion of CCRI Pre-calculus (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](#).

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](#).

**Note:** Many courses require prerequisites, corequisites and/or testing. [See course descriptions for details](#).

#### General Education Requirements

COURSE NO.	COURSE TITLE	COURSE NOTES	CREDITS
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
<a href="#">Humanities OR Social Science Electives</a>		See <a href="#">this page</a> for complete listing of courses that fulfill the HUMN or SSCI attribute.	3
Total General Education Requirements Credits			34

#### Core Requirements

COURSE NO.	COURSE TITLE	COURSE NOTES	CREDITS
ENGR 1020	Introduction to Engineering & Technology		3
ENGR 2160	Introduction to Engineering Analysis		2
Total Core Requirements Credits			5

**Chem-Biology (ENBC)**

<b>COURSE NO.</b>	<b>COURSE TITLE</b>	<b>COURSE NOTES</b>	<b>CREDITS</b>
BIOL 1002	Introductory Biology: Cellular		4
BIOL 2480	General Microbiology		4
CHEM 1100	General Chemistry II		5
CHEM 2250	Organic Chemistry I Lecture		3
ENGR 2150	Introduction to Electrical Engineering		3
ENGR 2151	Introduction to Electrical Engineering Lab		1
CHE 212	Chemical Process Calculations	(URI)	3
CHE 272	Introduction to Chemical Engineering Calculations	(URI)	3
CHE 213	Chemical Engineering Thermodynamics I	(URI)	3
CHE 232	Materials Science and Engineering	(URI)	3
<a href="#">General Education Elective</a>		See <a href="#">this page</a> for complete listing of courses that meet this requirement.	3
<b>Total Chem-Biology (ENBC) Credits</b>			<b>35</b>

Total Program Credits 74