



[ENGRGAS; CIP Code 14.0101]

Associate in Science (A.S.) – Transfer

The goal of this program is to provide the first two years of an Engineering Science baccalaureate degree program for students who wish to transfer to a four-year institution as an Engineering Science major.

Program Learning Outcomes

Students who have completed the program should be able to:

- Analyze and understand engineering designs
- Deliver an effective and informative professional engineering presentation
- Demonstrate an understanding of engineering materials used in different fields

✦ Are you ready to get started at RCSJ? Visit [RCSJ.edu/Enroll](https://www.rcsj.edu/Enroll) and complete the interest form. ✦

Engineering Science, A.S.

FIRST YEAR – Fall Semester

☐ CHEM 101 General Chemistry I	4
☐ CSCI 205 Programming in C++	4
☐ ENGL 101 English Composition I or ENGL 101E Enhanced English Composition I	3–4
☐ MATH 130 Calculus I	4
☐ ENGR 102 First Year Engineering Clinic I	2
	17–18

Spring Semester

☐ CHEM 102 General Chemistry II or _____ Program Elective ¹	3–4
☐ PHYS 201 Physics with Calculus I	4
☐ ENGR 103 First Year Engineering Clinic II	2
☐ ENGR 207 Engineering Materials or _____ Program Elective ¹	3–4
☐ MATH 140 Calculus II	4
	16–18

SECOND YEAR – Fall Semester

☐ ENGL 102 English Composition II	3
☐ ENGR 201 Second Year Engineering Clinic I	1
☐ MATH 225 Calculus III	4
☐ _____ Health and Physical Education or Free Elective ¹ or _____ Program Elective ¹	1–4
☐ PHYS 202 Physics with Calculus II or _____ Program Elective ¹	3–4
☐ _____ General Education Humanities or Social Science Elective	3
	15–18

Spring Semester

☐ MATH 230 Differential Equations	4
☐ ENGR 202 Second Year Engineering Clinic II	1
☐ _____ Health and Physical Education or Free Elective ¹ or _____ Program Elective ¹	1–4
☐ _____ General Education Humanities Elective	3
☐ PHIL 102 Ethics	3
	12–15

TOTAL MINIMUM CREDITS: 60

Program Electives¹

Mechanical¹

PHYS 202, ENGR 207, MATH 212, SPEH 101, ENGR 211, ENGR 212, ENGR 213

Electrical/Computer¹

PHYS 202, MATH 212, SPEH 101, CSCI 220, ENGR 108, ENGR 218

Civil¹

MATH 212, SPEH 101, GEGR 115, ENGR 207, ENGR 211, ENGR 212, ENGR 213, CETE 108, ETEC 103

Chemical¹

CHEM 102, MATH 212, SPEH 101, CHEM 201, CHEM 202

Biomedical¹

CHEM 102, PHYS 202, MATH 212, SPEH 101, BIOL 101