



Certificate of Achievement

The Certificates of Achievement give students the knowledge and skills needed for employment in their respective fields. They will provide students with a concentration of courses that can be taken in conjunction with those required for the A.S. Engineering Science degree program. If the student decides to continue with the remaining course requirements leading to an associate degree in Engineering Science, the certificate will allow them to take the additional courses needed for transfer and can be used as Program electives.

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

Engineering Science, COAs

Biomedical Engineering

[ENGRBEOA; CIP Code 15.1001]

☐ BIOL 101 General Biology I	4
☐ CHEM 102 General Chemistry II	4
☐ MATH 212 Linear Algebra	3
☐ PHYS 202 Physics with Calculus II	4
☐ SPEH 101 Effective Speech	3
	18

TOTAL MINIMUM CREDITS: 18

Civil Engineering

[ENGRCECOA; CIP Code 14.0101]

☐ SPEH 101 Effective Speech	3
☐ MATH 212 Linear Algebra	3
☐ ENGR 207 Engineering Materials	3
☐ ENGR 211 Engineering Statics	3
☐ ENGR 212 Mechanics of Materials	3
☐ ENGR 213 Engineering Dynamics	3
☐ GEGR 115 Introduction Geographic Information Systems	3
☐ CETE 108 Introduction to Surveying	3
☐ ETEC 103 CADD I (AutoCAD)	3
	27

TOTAL MINIMUM CREDITS: 27

Chemical Engineering

[ENGRCECOA; CIP Code 14.0101]

☐ SPEH 101 Effective Speech	3
☐ MATH 212 Linear Algebra	3
☐ CHEM 201 Organic Chemistry I	4
☐ CHEM 202 Organic Chemistry II	4
☐ BIOL 101 General Biology I	4
☐ ENGR 102 First Year Engineering Clinic I	2
	20

TOTAL MINIMUM CREDITS: 20

Electrical Engineering

[ENGRELECOA; CIP Code 14.0101]

☐ SPEH 101 Effective Speech	3
☐ MATH 212 Linear Algebra	3
☐ ENGR 108 Digital Electronics for Engineers	3
☐ ENGR 218 Principles of Electrical Circuit Analysis	4
☐ CSCI 220 Data Structures and Algorithms	4
	17

TOTAL MINIMUM CREDITS: 17

Mechanical Engineering

[COACAMC; CIP Code 14.0101]

☐ SPEH 101 Effective Speech	3
☐ MATH 212 Linear Algebra	3
☐ ENGR 207 Engineering Materials	3
☐ ENGR 211 Engineering Statics	3
☐ ENGR 212 Mechanics of Materials	3
☐ ENGR 213 Engineering Dynamics	3
	18

TOTAL MINIMUM CREDITS: 18