



ASSOCIATE IN SCIENCE  
**Engineering Science**

curriculum code: 0530 | HEGIS code: 5609  
 minimum credit hours required: 66

This degree program is designed to prepare students to transfer to a four-year college or university to earn a bachelor’s degree in engineering. This degree program provides appropriate preparation for continued study toward careers in mechanical, chemical, civil, industrial, ceramic, aerospace, nuclear, environmental, or metallurgical engineering. **Program completion will require students to attend some classes on the Jamestown Campus.**

REQUIRED COURSES	CR	JCC	SUNY	LAS
ENR 1560: Introduction to Engineering & Engineering Design	4	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1710: Calculus and Analytic Geometry I	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1550: General Chemistry I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
ENR/PHY 2510: Thermodynamics	4	Applied Learning	NSCI	N
CSC 1610: Computer Programming for Scientists & Engineers	3			N
ENR 2550: Mechanics - Statics	3			N
ENR 2560: Mechanics - Dynamics	3			N
ENR 2740: Analysis of Linear Electrical Circuits	3			N
MAT 1720: Calculus and Analytic Geometry II	4		MATH	N
MAT 2650: Calculus and Analytic Geometry III	4		MATH	N
MAT 2680: Ordinary Differential Equations	3		MATH	N
PHY 1710: Analytical Physics I	4		NSCI	N
PHY 2710: Analytical Physics II	4		NSCI	N
Program Core Electives choose 2 from the following: MAT 2670, ENR 2580, CHE 1560, CHE 2530	7			N
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	Global Perspectives, Cultural Understanding, & Diversity	DIVE	X
<b>TOTAL CREDITS: 66</b>			43	66

**IMPORTANT POINTS:**

- Students in this program are required to fill only 5 of the 10 SUNY Gen Ed categories with a total of 30 credits. The 5 categories must include Communication (Written & Oral), DEISJ, Mathematics, and Natural Sciences. All other programs require 7 of 10 categories and 30 credits.
- Choosing electives carefully, with the help of an advisor, students can complete a focus in aerospace/mechanical, biomedical/chemical, civil, environmental, or industrial engineering.