

# ENGINEERING

San José City College offers an Associate in Arts (AA) degree in Engineering. The Associate in Arts, Engineering Major meets the lower division course requirements necessary for a student to transfer to a four-year university as a junior to complete their baccalaureate degree in engineering. This program also opens the door for entry-level internships in engineering. Career options include many disciplines of engineering: mechanical, civil, electrical, computer, industrial, aeronautical/astronautical, chemical, materials, environmental, biomedical, and others. A grade of "C" or better is required for all coursework in the major.

- Apply knowledge of math, science, and engineering to identify, formulate, and solve basic engineering problems.
- Analyze and interpret data resulting from conducted experiments.
- Demonstrate basic design decisions regarding appropriate level engineering problems by applying techniques, skills, and modern engineering tools.
- Demonstrate effective communication in working well in situations that require teamwork.

## Major Requirements

Course	Title	Credits
ENGR 003	Introduction to Engineering	3
MATH 071	Calculus I With Analytic Geometry	5
	or MATH 071H Honors Calculus I With Analytic Geometry	
MATH 072	Calculus II with Analytic Geometry	5
MATH 073	Multivariable Calculus	5
PHYS 004A	General Physics	5
PHYS 004B	General Physics	5

Area of Specialization - complete one of the following courses:

ENGR 006	Engineering Graphics	3
ENGR 008	Programming and Problem-Solving in MATLAB	3
ENGR 032	Statics	3
ENGR 033	Circuit Analysis	4
ENGR 038	Materials Science and Engineering	3
CIS 084	Java Programming	3

## A.A. Degree Requirements

Course	Title	Credits
Major Requirements		31-32
General Education		39
Physical Activity		1
<b>Total Units</b>		<b>64-65</b>