

Rowan College of South Jersey
Electrical Engineering Technology
Associate in Applied Science (A.A.S.) – Transfer
Program Requirements

This program prepares students for entry-level employment in the field of electrical engineering technology as well as transfer into baccalaureate programs leading to careers in manufacturing, product development, robotics, automotive, and various other industrial fields. The flexibility offered by this program allows for entrance directly into the workforce or transfer into a BS in Engineering Technology program.

Students who have completed the program will be able to:

- Conduct tests, measurements and experiments to analyze and interpret results
- Apply algebra to analyze simple electrical circuits
- Employ standardized industrial equipment such as Programmable Logic Controllers and apply the principles of quality control
- Understand industrial and commercial robotics technology
- Design solutions for technical problems and assist with the engineering design of systems, components or processes related to electrical engineering

Required Core and Elective Courses

<u>Communications</u>		<u>Credits</u>
EN 101	English Composition I	3
EN 102	English Composition II	3
SP 203	Effective Speech	3
<u>Humanities or Social Science</u>		
EC 201	Principles of Macroeconomics OR	3
EC 202	Principles of Microeconomics	3
<u>Mathematics</u>		
MA 121	Precalculus Mathematics	4
MA 130	Calculus I	4
<u>Science</u>		
PI 123	Fundamentals of Physics I	4
PI 124	Fundamentals of Physics II	4
<u>Technology</u>		
CS 212	C++ Programming	4
<u>Engineering</u>		
EG 101	Introduction to Engineering I	2
EG 103	Introduction to Engineering I Lab	2
EG 211	Introduction to Engineering II	1
EG 212	Introduction to Engineering II Lab	1
IT 107	Circuits I	3
IT 227	Circuits II	3
IT 205	Digital Electronics	3
IT 111	Electronics	4
IT 241	Robotics and Motion Control	3
IT 218	Programmable Logic Controllers	3
IT 244	Instrumentation and Measurement	3

TOTAL MINIMUM CREDITS: 60

Electrical Engineering Technology Associate in Applied Science (A.A.S.) Program Requirements

Four Semester Sequence of Courses

FIRST YEAR - Fall Semester

			<u>Credits</u>
_____	EN 101	English Composition I	3
_____	EG 101	Introduction to Engineering I	2
_____	IT 107	Circuits I	3
_____	MA 121	Precalculus Mathematics	4
_____	PI 123	Fundamentals of Physics I	4
			16

Spring Semester

_____	EN 102	English Composition II	3
_____	MA 130	Calculus I	4
_____	EG 103	Introduction to Engineering Lab I	2
_____	PI 124	Fundamentals of Physics II	4
_____	CS 212	C++ Programming	4
			17

SECOND YEAR - Fall Semester

_____	EG 211	Introduction to Engineering II	1
_____	IT 205	Digital Electronics	3
_____	EC 201	Principles of Macroeconomics OR	3
	EC 202	Principles of Microeconomics	
_____	IT 227	Circuits II	3
	IT 111	Electronics	4
			14

Spring Semester

_____	EG 212	Introduction to Engineering II Lab	1
_____	IT 241	Robotics and Motion Control	3
_____	IT 218	Programmable Logic Controllers	3
_____	SP 203	Effective Speech	3
_____	IT 244	Instrumentation & Measurement	3
			13

TOTAL MINIMUM CREDITS: 60