

Electronic Engineering Technology

Instrumentation Option

STANTON CAMPUS

Spring 2020

The Instrumentation Engineering Technology Option prepares graduates for careers as process control instrumentation engineering technicians. Workplace duties can include design, specification, management and troubleshooting of instrumentation and control systems in the areas of chemical processing, food processing, petrochemical production, manufacturing, energy production, and other highly technical fields. Graduates offer their employers immediate contributions as team members equipped with a combination of technical knowledge, problem solving experience, and communication skills. Courses include a strong component of practical applications, hands-on laboratory experience, and basic theoretical concepts. Computer simulation and applications are an integral part of the curriculum. Studies focus on electrical and electronic circuits, digital circuits, microprocessors, computers, programmable logic controls, liquid and gas flow measurement, control systems, instrumentation, and calibration. The Instrumentation Engineering Technology Option is a path through the Electronics Engineering Technology program.

PROGRAM SPECIFIC ADVISEMENT STATEMENT

Courses - Semester 1	Credits	Lecture	Lab
SSC 100 - First Year Seminar	1	1	0
ELC 125 - Electrical Circuits I	4	3	3
CEN 150 - Computer Assembly/Maint	4	3	2
MAT 180 - College Algebra	4	4	1
CEN 100 - Intro Elec & Computer Eng Tech	3	2	2

Courses - Semester 2	Credits	Lecture	Lab
ENG 101 - Crit Thinking & Acad Writing	3	3	0
ELC 126 - Analog Electronics I	3	2	2
ELC 127 - Digital Electronics	4	3	3
CEN 180 - C/C++ Language Intro	4	3	2
MAT 190 - Precalculus	4	4	1

Courses - Semester 3	Credits	Lecture	Lab
ELC 225 - Electrical Circuits II	4	3	3
ELC 227 - Microcontroller Fundamentals	3	2	3
ENG 102 - Composition and Research	3	3	0
PHY 205 - General Physics I	4	3	3
ELC 101 - Intro to Instrumentation	3	2	2

Courses - Semester 4	Credits	Lecture	Lab
ELC 228 - Microcontroller Applications	4	3	4
ELC 243 - Programmable Logic Controllers	4	3	3
ELC 270 - Process Instrumentation I	4	3	2

Approved Electives

Group	Courses	Credits	Lecture	Lab
	ECO 111 - Macroeconomics	3	3	0
	ECO 122 - Microeconomics	3	3	0
	POL 111 - Political Science	3	3	0
	PSY 100 - Human Relations	3	3	0

PSY 121 - General Psychology	3	3	0
SOC 111 - Sociology	3	3	0
COM 111 - Human Communications	3	3	0

*To complete program requirements, you must pass the above courses and earn at least **69 credits**. The number of courses and credits required for graduation may be more depending on your need for developmental education courses and the elective choices you make (if electives are a part of the program). Some programs also have college-level courses that you must take if you do not score at a certain level on the College Placement Test. If this applies to your program, the courses are listed at the top of the sequence sheet before the first semester of the course list.*