ENGINEERING TECHNOLOGY, A.A.S.

Location(s): LO, MA
NOVA Code: 9680

Purpose

This program is designed to prepare students for employment as a technician, operator, and/or technologist in the fields of engineering technology, electrical technology, industrial technology, operational technology, sensor technology, automation technology, robotics and mechatronics.

Transfer Information

Transfer is not the primary purpose of an A.A.S. program, but NOVA has articulation agreements that facilitate the transfer of this and other career-oriented programs to selected senior institutions. Students interested in transfer should contact a counselor or their academic advisor early in their program.

Two Years

Course	Title	Credits
1st Semester		
ELE 150	A.C. and D.C. Circuit Fundamentals	3
ENG 115	Technical Writing	3
IND 123	Introduction to Lean Manufacturing and Six Sigma	1
IND 137	Team Concepts & Problem Solving	3
MEC 140	Introduction to Mechatronics [1]	3
SAF 130	Industrial Safety OSHA 10	1
SDV 100 or SDV 101	College Success Skills or Orientation to:	1
	Credits	**15**
2nd Semester		
CAD 175	Schematics and Mechanical Diagrams	2
ELE 146	Electric Motor Control	4
ELE 233	Programmable Logic Controller Systems I	3
MTH 111	Basic Technical Mathematics (or Higher)	3
MEC 230	Mechatronics Process Control [1]	3
	Credits	**15**
3rd Semester		
CST 126	Interpersonal Communication	3
ETR 281	Digital Systems	3
INS 233	Process Control Integration	4
MEC 270	Computation for Engineering Technology	3
Technical Elective (p. 1) [1]		3
	Credits	**16**
4th Semester		
ELE 211	Electrical Machines I	3
MEC 266	Application of Fluid Mechanics	3
Humanities/Fine Arts Elective (https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elect)		3
Social/Behavioral Sciences Elective (https://catalog.nvcc.edu/general-education-electives/#ge_soc_beh_sci_elec)		3
Technical Elective (p. 1) [1]		3
	Credits	**15**
	Total Credits	**61**

Electives should be chosen with the advice of an academic advisor to meet the requirements of the intended transfer institution.

[1] MEC 140 Introduction to Mechatronics, MEC 230 Mechatronics Process Control, MEC 266 Application of Fluid Mechanics, INS 233 Process Control Integration are only offered on the Manassas Campus, and ETR 281 Digital Systems is offered on the Loudon and Manassas Campus.

Approved Technical Electives

Code	Title	Credits
INS 230	Instrumentation I	3
BUS 204	Project Management	3
ELE 189	Data Cabling Communication	3
ELE 250	Fiber Optic Technology	3
ITP 170	Project Management	3