

BE IN DEMAND IN ENGINEERING TECHNOLOGY

NOVA is the Place for ET!

Our **Engineering Technology A.A.S.** degree or **C.S.C.** prepares you for a career as a technician, operator, and/or technologist in many fields including engineering technology, industrial technology, operational technology, sensor technology, automation technology, robotics, mechatronics, and more!

The ET Program

Offers a solid foundation into engineering technology, while providing valuable insight to determining your area of focus. With courses like Electric Motor Control, Programmable Logic Controller Systems and Application of Fluid Mechanics, you'll gain the knowledge and exposure to place you into high demand fields.

Prepare for the Future

There is high demand for skilled talent in ET fields. Our degree course work provides an industry certification for OSHA 10. Through our industry partnerships, students have landed relevant internships and are able to work and continue programs of study simultaneously. **Get started, get ahead, and be in-demand!**

A quick guide for students trying to distinguish **Engineering Technology** from Engineering:

Engineering is primarily inventive and focused on the process of *designing* the human-made world through research and math. **Engineering Technology** is more *hands-on* and maintains engineering ideas through process, systems, tools, and techniques.

A.A.S. Degree Courses

(Associate of Applied Science)

Semester 1			Credits: 15
ELE	150	A.C. and D.C. Circuit Fundamentals	3
ENG	115	Technical Writing	3
IND	123	Intro to Learn Manufacturing and Six Sigma	1
IND	137	Team Concepts in Problem Solving	3
MEC	140	Introduction to Mechatronics ①	3
SAF	130	Industrial Safety - OSHA 10	1
SDV	100	College Success Skills - OR -	
SDV	101	Orientation to (a Specific Discipline)	1
Semester 2			Credits: 15
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
Semester 3			Credits: 16
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 ① ②	3
Semester 4			Credits: 15
ELE	211	Electrical Machines I	3
MEC	266	Application of Fluid Mechanics	3
—	—	Humanities/Fine Arts Elective ③	3
—	—	Social/Behavioral Science Elective ④	3
—	—	Technical Elective ① ②	3
Total Credits: 61			

① MEC 140, MEC 230, MEC 266, INS 233 are only offered on the Manassas Campus.

② Approved Technical Electives: INS 230, BUS 204, ELE 189, ELE 250, or ITP 170.

③ See humanities/fine arts courses listed under General Education Electives.

④ See social/behavioral science courses listed under General Education Electives.

NOVA also offers a
Specialization of the Engineering Technology A.A.S. in Data Center Operations

C.S.C. Courses (Career Studies Certificate)

Semester 1

Credits: 13

CAD	175	Schematics and Mechanical Diagrams	2
ITE	152	Intro to Digital and Info. Literacy and Computer App.	3
ELE	150	A.C. and D.C. Circuit Fundamentals	3
MTH	111	Basic Technical Mathematics (or higher)	3
SAF	130	Industrial Safety - OSHA 10	1
SDV	100	College Success Skills - OR -	
SDV	101	Orientation to (a Specific Discipline)	1

Semester 2

Credits: 14

ELE	146	Electric Motor Control	4
ELE	250	Fiber Optic Technology	3
IND	123	Intro to Lean Manufacturing and Six Sigma	1
IND	137	Team Concepts in Problem Solving	3
MEC	140	Introduction to Mechatronics	3

Total Credits: 27

The one-year C.S.C. curriculum is designed to prepare students for entry-level employment in technology companies and related industries that require technicians/technologists trained in engineering technology, mechatronics, automation, electronics, and robotics. Coursework will prepare students to earn the BICSI Installer 2 (Fiber Optic) and OSHA 10 industry credentials.

There are no required prerequisites for this certificate. It is recommended that the student possess a proficiency in high school English, high school algebra and geometry, and be proficient in utilizing hand tools and instrumentation.

CPL Credit for Prior Learning (CPL) available for these degree's courses:



ELE 189 - ETA Data Cabling Installer
ELE 250 - ETA Fiber Optics Installer
SAF 130 - OSHA 10

For More Info about NOVA's
Engineering Technology A.A.S. Degree or C.S.C. go to www.nvcc.edu/iet

NOVA | Northern Virginia
Community College



ENGINEERING TECHNOLOGY



Associate
of Applied
Science



Career
Studies
Certificate

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