



Program Funded by the  
National Science Foundation  
Award #2055717



Associate  
of Applied  
Science



Career  
Studies  
Certificate



# MAKE YOUR CAREER IN DATA CENTER OPERATIONS

## NOVA is the Place for DCO

There's never been a more exciting time to be a tech student at Northern Virginia Community College (NOVA).

NOVA offers another first in the Commonwealth, a specialization of the Engineering Technology A.A.S. degree in **Data Center Operations (DCO)**.

In addition, our DCO Career Studies Certificate (C.S.C.) can be completed in just 1 year and integrates completely with the DCO Specialization A.A.S. Degree.

## The DCO Program

Provides graduates of the **Engineering Technology A.A.S** degree with the skills and hands-on training necessary to earn an entry-level position working in a data center or as a technician in one of the many companies that support the technology and infrastructure of data centers.

The **C.S.C.** immerses you in course work to earn BICSI Installer 1 (Copper) and Installer 2 (Fiber Optic) industry credentials, as well as an OSHA 10 certification.

## Prepare for the Future

**Northern Virginia has the largest data center market in the country.**

There is massive demand for employees with skills that support the sophisticated infrastructure needs of data centers. Entry-level salaries for these positions are generally excellent. **Start your DCO career at NOVA!**

**NOVA IET**  
INFORMATION & ENGINEERING TECHNOLOGIES

For more info go to [www.nvcc.edu/iet](http://www.nvcc.edu/iet)

## A.A.S. Degree Courses (Associate of Applied Science)

<b>1st Semester</b>			<b>Credits 15</b>
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
MTH	111	Basic Technical Mathematics	3
SAF	130	Industrial Safety - OSHA 10	1
SDV	100	College Success Skills - <b>OR</b> -	
SDV	101	Orientation to (a Specific Discipline)	1
 <b>2nd Semester</b>			 <b>Credits 15</b>
CAD	175	Schematics and Mechanical Diagrams	2
ELE	146	Electric Motor Control	4
ELE	148	Power Distribution Systems <sup>1</sup>	3
ELE	233	Programmable Logic Controller Systems I	3
ENE	195	Introduction to Data Center Operations	3
 <b>3rd Semester</b>			 <b>Credits 15</b>
ELE	189	Data Cabling Communication	3
ENE	228	Building Automation & Energy Mgmt. Systems <sup>1</sup>	3
ETR	281	Digital Systems	3
CST	126	Interpersonal Communication	3
MEC	270	Computation for Engineering Technology	3
 <b>4th Semester</b>			 <b>Credits 15-16</b>
ELE	211	Electrical Machines I	3
ELE	250	Fiber Optic Technology <sup>2</sup> - <b>OR</b> -	
AIR	121	Air Conditioning/Refrigeration <sup>2</sup>	3/4
ENE	295	Topic in: Critical Site Operations	3
—	—	Humanities/Fine Arts Elective <sup>3</sup>	3
—	—	Social/Behavior Science Elective <sup>4</sup>	3

**Total Credits: 60-61**

- <sup>1</sup> ENE 195, ENE 228, ENE 295, ELE 148 are only offered on the Manassas and Loudoun campuses
- <sup>2</sup> AIR 121 is offered on the Loudoun and Woodbridge campuses. ELE 250 is offered on the Loudoun and Manassas campuses
- <sup>3</sup> See humanities/fine arts courses listed under General Education Electives
- <sup>4</sup> See social/behavioral science courses listed under General Education Electives

**DCO is a Specialization of the Engineering Technology (ET) A.A.S. Degree**

**75-80% of A.A.S. courses in ET and DCO are the same**

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

<b>1st Semester</b>			Credits <b>13</b>
CAD	175	Schematics & Mechanical Diagrams	2
ELE	150	A.C. and D.C. Circuit Fundamentals	3
IND	137	Team Concepts in Problem Solving	3
MTH	111	Basic Technical Mathematics (or higher)	3
SAF	130	Industrial Safety - OSHA 10	1
SDV	100	College Success Skills - <b>OR</b> -	
SDV	101	Orientation to (a Specific Discipline)	1

<b>2nd Semester</b>			Credits <b>13</b>
ELE	146	Electric Motor Control	4
ELE	148	Power Distribution Systems	3
ELE	250	Fiber Optic Technology	3
ENE	195	Topics in: Introduction to Data Center Operations	3

**Total Credits: 26**

The one-year C.S.C. curriculum is designed to prepare students for entry-level employment in data centers or companies that support data center function as a technician, operator, and/or technologist. Coursework will prepare students to earn the BICSI Installer 2 (Fiber Optic) and OSHA 10 industry credentials.

A total of 26 credits is required for the Data Center Operations (DCO) Career Studies Certificate (C.S.C).



**Accepted Credit for Prior Learning (CPL) for DCO A.A.S.**  
(CPL's for the C.S.C. may be equal to or less than the list below):  
OSHA - OSHA 10 Certification

**For More Info about NOVA's**  
Data Center Operations A.A.S. Degree Specialization or C.S.C. go to [www.nvcc.edu/iet](http://www.nvcc.edu/iet)



# DATA CENTER OPERATIONS



Associate  
of Applied  
Science



Career  
Studies  
Certificate

---

For More Info about NOVA's  
Data Center Operations A.A.S. Degree Specialization or C.S.C. go to [www.nvcc.edu/iet](http://www.nvcc.edu/iet)