

# Programmable Controller (PLC) Certificate

## Engineering Technology

### Programmable Controller (PLC) Certificate



A Programmable Logic Controller (PLC) Certificate prepares the individual to install, maintain and troubleshoot industrial grade Programmable Logic Controllers (PLC) systems. Typically these Technicians will work closely with Maintenance Supervisors and Electrical Engineers, sometimes receiving objectives and technical

advice from them. Technicians conduct extensive self study (reading, research and practice) to improve and maintain technical proficiency, due to new and improved electrical control devices.

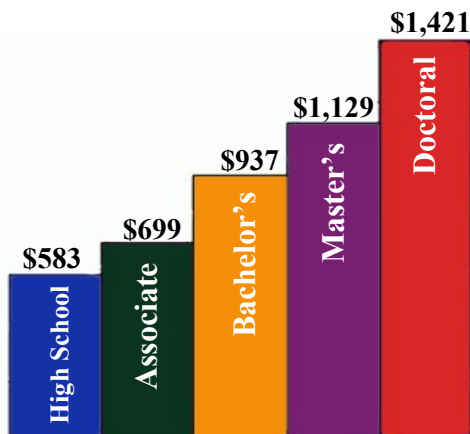
Typically technicians work on assignments and tasks with minimum supervision and guidance, often requiring the technician to interface and pass down information between cross function personnel of incoming and outgoing shifts. It is expected by employers that technicians demonstrate excellent verbal, written and interpersonal communication skills.

### Career Options

Graduates of this program may find employment as entry-level Control technicians, Electrical technicians or as Service technicians working under the direction of the Maintenance or Engineering department. Some of the typical duties of these Technicians will include: troubleshooting and programming of PLC Control Systems; variable frequency drives; 480 volt 3 phase motor wiring; reading blueprints and electrical schematics; installing conduit and wiring; testing wiring connections; working closely with electrical engineers and / or general contractors

### Education Pays

Average Weekly Earnings Based on Educational Attainment



Based on data from the Bureau of Labor Statistics



### Program Sequence

2011-2013

#### First Semester

+	IND120	Industrial Electricity I	3
	MTH080	Beginning Algebra	$\frac{3}{6}$

#### Second Semester

+	IND121	Industrial Electricity II	3
+	IND110	Industrial Computing I**	$\frac{3}{6}$

#### Third Semester

+	CAD111	CAD I	4
+	IND223	Motors & Motor Controls	$\frac{3}{7}$

#### Fourth Semester

+	PLC200	Programmable Controller I	3
		General Studies Elective	$\frac{3}{6}$

#### Fifth Semester

+	IND221	Instrumentation & Controls	3
+	PLC210	Programmable Controller II	$\frac{3}{6}$

#### Sixth Semester

+	EET240	Engineering Programming	3
+	PLC220	Programmable Controller III	$\frac{3}{6}$

\*\* Prior to taking IND110, students should have basic computer literacy in Windows and at least one Windows application

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate

\*\* Course curriculum is subject to change. Please consult with an Academic Advisor for up-to-date information

### Contact Information

**For Program Information, Contact:**

Dan Burklo, Dean  
Engineering Technologies  
(419) 267-1273  
dburklo@northweststate.edu

**For Admissions Information, Contact:**

Admissions Office  
(419) 267-1320

# Northwest State Community College

## Dave VonDeylen, Class of 1981

Future Northwest State Students:

I, like many others, attended Northwest State because tuition was affordable and the campus was close to home. While attending Northwest State, my instructors were extremely helpful. They guided me to enroll in courses that appealed to my interests and talents, and really went the extra mile to ensure my success in their programs.

My advisors also were able to help me gain employment through a Co-op program that gave me a chance to get hands-on training outside of the classroom and begin networking with other professionals in the area. Now, many years later, I know the experience I gained and the local contacts I made helped me build my own company, Alex Products, Inc.

Alex Products began in a small, one room shop and, in 22 years, has grown into a large plant with four locations in the five-county area. Not only are we well known for our quality of service, we are also recognized for offering the highest level of career preparation for our employees. As a matter of fact, out of our 1,000 employees, more than 20% have received some level of training from Northwest State Community College.

Whether you decide to major in Engineering, Business, Nursing or any other degree at Northwest State Community College, you are building a foundation to a successful future. Not only will the education you earn at Northwest State prepare you for the workforce, it will give you the confidence to fill a professional role right out of college. The confidence that employers, like me, look for in their employees.

Best of luck in your education as well as your career.

Dave VonDeylen

## Numbers to Call

**Admissions:** (419) 267-1320

**Financial Aid:** (419) 267-1333

**Main Campus:** (419) 267-5511

**Or Visit Our Web Site at**

[www.northweststate.edu](http://www.northweststate.edu)



The Plastic Engineering Technology program at Northwest State Community College is an incredible program to be involved in. There are great opportunities for jobs in the plastic engineering field after graduation. It is a key component in trying to get your foot in the door at a plastics company.

Another option that the Plastic Engineering Degree offers is transferring to a four year school. I had the opportunity to transfer to Ferris State University to earn a bachelor's degree in plastic engineering. The

knowledge I gained at Northwest State made it a very easy transition. If you are interested in a position in plastics, or want to continue your education, Northwest State is a great choice.

- Brian Brown, Class of 2006



I graduated from Northwest State with an engineering technology degree and the confidence that I was well-prepared to enter the job field. It was that confidence that helped me earn a position at Campbell Soup working as a technology trouble shooter.

Today, I am making more money than I ever could have without a college degree. Northwest State Community College transformed my life.

- Mike Kappen, Class of 2003



## Northwest State Service Area



It Makes  
You Think!