Student ID:	Catalog: 2015-2016 Catalog
Student Name:	Program: Industrial Electrical Maintenance Technical Certificate
Adviser Name:	Minimum Credits Required:

## Industrial Electrical Maintenance Technical Certificate

#### **Technical Certificate**

Contact Information: Program Office 615-353-3475, E-mail: industrial.maintenance@nscc.edu, Program Site

This comprehensive certificate program offers excellent preparation for a career in the maintenance of large electrical and manufacturing systems. It includes an appropriate amount of necessary theory explaining "why" while placing a strong emphasis on the actual equipment and operation of large and critical electrical power systems. The program covers electrical, as well as associated electronic, hydraulic, and pneumatic equipment and applications.

Graduates of this program should be able to:

- Operate and maintain equipment and systems supporting modern manufacturing;
- Effectively troubleshoot and repair industrial electrical equipment and facility systems;
- Effectively work in teams to solve complex electrical system problems; and
- Operate programmable logic controller (PLC) systems.

## **Career Opportunities**

- Plant maintenance technician
- Power plant operator/maintenance technician
- Plant electrician
- · On-call service technician

# Transfer/Advising

This certificate is designed so that a student can apply all of the required courses toward a Nashville State A.A.S. degree in Electrical Engineering Technology. A student who plans to apply the certificate toward an A.A.S. degree should consult his/her advisor about articulation options.

# **Course Requirements**

Course Name	Credits	Term Taken	Grade	Gen Ed
EETH 1100 - Electrical Maintenance Orient	4 Credits			
EETH 1110 - Electric Circuits	4 Credits			
EETH 1115 - Electric Circuits Lab	1 Credit			
EETH 1200 - Electronics for Ind Elec	1 Credit			
EETH 1220 - Transformers/Rotating Machines	2 Credits			
EETH 1225 - Transformers/Rotat. Mach. Lab	1 Credit			
EETH 1400 - Digital Electronics	2 Credits			
EETH 1405 - Digital Electronics Lab	1 Credit			
EETH 2010 - Industrial Electronic Controls	3 Credits			
EETH 2015 - Industrial Elec. Controls Lab	1 Credit			
EETH 2410 - Hydraulics and Pneumatics	4 Credits			
EETH 2600 - Automatic Control Systems	4 Credits			
EETH 2640 - Electrical Code	4 Credits			

### **Total Certificate Requirements: 32 Credits**

# Recommended Schedule

#### First Year

## **Fall Semester**

Course Name	Credits	Term Taken	Grade	Gen Ed
EETH 1100 - Electrical Maintenance Orient	4 Credits			
EETH 1110 - Electric Circuits	4 Credits			
EETH 1115 - Electric Circuits Lab	1 Credit			

### **Spring Semester**

Course Name	Credits	Term Taken	Grade	Gen Ed
	,			

1 of 2 5/15/15 3:25 PM

EETH 1200 - Electronics for Ind Elec	1 Credit		
EETH 1400 - Digital Electronics	2 Credits		
EETH 1405 - Digital Electronics Lab	1 Credit		
EETH 2410 - Hydraulics and Pneumatics	4 Credits		

## **Second Year**

### **Fall Semester**

Course Name	Credits	Term Taken	Grade	Gen Ed
EETH 1220 - Transformers/Rotating Machines	2 Credits			
EETH 1225 - Transformers/Rotat. Mach. Lab	1 Credit			
EETH 2010 - Industrial Electronic Controls	3 Credits			
EETH 2015 - Industrial Elec. Controls Lab	1 Credit			

## **Spring Semester**

Course Name	Credits	Term Taken	Grade	Gen Ed
EETH 2600 - Automatic Control Systems	4 Credits			
EETH 2640 - Electrical Code	4 Credits			

## Note:

**Additional course requirements:** The Tennessee Board of Regents requires that students either demonstrate the appropriate skill levels in math, reading, and/or writing before enrolling in college-level courses or enroll in appropriate co-requisite experiences with college-level courses to develop competency in those skills while performing college-level work. ACT/SAT scores, COMPASS test scores, or other relevant information determine whether a student needs to enroll in co-requisite courses in math, reading, and/or writing (English).

Notes:			

2 of 2 5/15/15 3:25 PM