

# INSTRUMENTATION AND CONTROL TECHNOLOGY

## Associate in Applied Science

Prescribed Technical Program	58
General Education	16
Digital Literacy	
<b>Total Degree Credits</b>	<b>74</b>

### 1st Year

#### Prescribed Technical Program Requirements

ELEC 100	Direct Current Analysis	4
ELEC 100L	Direct Current Analysis Lab	1
ELEC 118	Solid State Devices I	4
ELEC 118L	Solid State Devices I Lab	1
ELEC 114	Digital Electronics I	3
ELEC 114L	Digital Electronics I Lab	1
ELEC 130	Active Devices	4
ELEC 130L	Active Devices Lab	1
ELEC 120	AC Analysis	4
ELEC 120L	AC Analysis Lab	1
ELEC 115	Digital Electronics II	3
ELEC 115L	Digital Electronics II Lab	1
	<b>Total Credits</b>	<b>28</b>

### OR

<b>Prescribed Credits</b>	<b>28</b>
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Journeyman Electrician License <sup>1</sup>

Transfer in Electrician coursework completed through a regionally accredited institution

### 2nd Year

#### Prescribed Technical Program Requirements

ICTL 205	Mechanical Practices	4
ICTL 205L	Mechanical Practices Lab	1
ICTL 215	Instrumentation Drawings and Documents	4
ICTL 215L	Instrument Drawings and Documents Lab	1
ICTL 225	Input and Output Devices	4
ICTL 225L	Input and Output Devices Lab	1
ICTL 235	Motors and Controllers	4
ICTL 235L	Motors and Controllers Lab	1
ICTL 245	Controls	4
ICTL 245L	Controls Lab	1
ICTL 255	Automation Overview	4
ICTL 255L	Automation Overview Lab	1
	<b>Total Credits</b>	<b>30</b>

### General Education Requirements

*Arts & Humanities/Social & Behavioral Sciences*

Select one of the following recommended courses: 3

HIST 103	United States to 1877
ECON 201	Principles of Microeconomics
PSYC 111	Introduction to Psychology
SOC 110	Introduction to Sociology

<i>Written or Oral Communications</i>		
ENGL 110	College Composition I	3
Select one of the following:		3
COMM 110	Fundamentals of Public Speaking	
ENGL 120	College Composition II	
ENGL 125	Introduction to Professional Writing	
<i>Business, Math, Science, &amp; Technology (Two Areas of Study)</i>		
CIS 164	Networking Fundamentals I (Required)	4
Select one of the following recommended courses:		3
MATH 137	Applied Algebra	
MATH 210	Elementary Statistics	
Total Credits		16

### Digital Literacy Requirements

Select one of the following:		
CSCI 101	Introduction to Computers <sup>2</sup>	
CIS 147	Principles of Information Security <sup>2</sup>	
BSC Approved Training Course		
NDUS Institution Approved Training Course		
NDUS Institution Designated Digital Literacy Course		

1

Program must be approved through the Prior Learning Process.

2

CSCI 101, CIS 147 or courses transferred in from another NDUS Institution that are listed as both general education and digital literacy may satisfy both requirements upon successful completion.

College Degree & Digital Literacy Requirements

General Education & Diversity Course Matrix Requirements