

# Alamance Community College

## 2021 Calendar Year

### Mechatronics Engineering Technology • Semester by Semester

#### First Year

##### Fall 1st Semester

COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
ACA-111	College Student Success	1	1
CIS-110	Introduction to Computers	0	3
ELC-112	DC/AC Electricity	9	5
ELC-128	Introduction to Programmable Logic Controller	5	3
ENG-115	Oral Communication	3	3
	Semester Total	18	15

#### First Year

##### Spring 2nd Semester

COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
ELC-228	Programmable Logic Controllers Applications	8	4
	Humanities/Fine Arts Elective	3	3
HYD-110	Hydraulics/Pneumatics I	5	3
<i>Choose one from the following:</i>			
MEC-130	Mechanisms	4	3
	Semester Total	20	13

#### First Year

##### Summer 3rd Semester

COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
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COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
ELC-117	Motors and Controls	8	4
PHY-131	Physics-Mechanics	0	4
	Semester Total	8	8

## 2nd Year

### Fall 4th Semester

COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
ATR-112	Introduction to Automation	0	3
DFT-151	CAD I	5	3
ISC-112	Industrial Safety	2	2
MNT-250	PLC Interfacing	6	4
	Semester Total	13	12

## 2nd Year

### Spring 5th Semester

COURSE NUMBER	COURSE TITLE	CONTACT HOURS	CREDIT HOURS
ATR-215	Sensors and Transducers	0	3
ATR-212	Industrial Robots	5	3
ELC-213	Instrumentation	0	4
<i>Choose one of the following:</i>			
EGR-285	Design Project	4	2
WBL-111	Work-Based Learning I	10	1
WBL-115	Work-Based Learning Seminar I	1	1
	Social/Behavioral Science Elective	3	3
	Semester Total	8-18	13-15

	TOTAL CREDITS	61-63
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