

# ARC

# Electronic Systems Technology A.S. Degree

This program roadmap represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2024-25

GE Pattern: local AA/AS

Total Units: 60

# First Year

# Semester 1 9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	ET 302	Principles of Electricity and Electronics	4	
Req	ET 312	Mathematics for Circuit Analysis	3	
Req	ET 308	Technical Soldering Practices and Techniques	2	

#### Semester 2 8 Units

(	CAT.	COURSE	TITLE	UNIT	GE AREA
F	Req	ET 115	Fiber Optics and Telecommunication Cabling	4	
F	Req	ET 322	Semiconductors and Nanotechnology	4	

# Second Year

# Semester 3 7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	ET 380	Introduction to Electronic Communications	4	
Req	ET 381	Electronic Communication Regulations	3	

#### Semester 4 8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	ET 253	Industrial Communication Systems Support	4	
Req	ET 335	Integrated Circuits with Computer Applications	4	

# Third Year

#### Semester 5 7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	ET 420	Microcontrollers and Digital Signal Processors	4	
GE	HCD 310	College Success	3	IIIb

#### Semester 6 6 Units

(	CAT.	COURSE	TITLE	UNIT	GE AREA
	GE	ENGWR 300 / 480 H	College Composition	3	Ila WC
(	GE	TAFILM 307	Diversity in American Film	3	I

#### **CAREER PATH**

#### **Career Options:**

This degree provides students with the knowledge to successfully enter a variety of electronics and telecommunication careers. Working closely with our industry partners and contacts ensures our curriculum is relevant and meets the current and future needs of the Electronics and Telecommunications Industry.

#### **Advising Notes:**

• Students can substitute ESLW 340 for ENGWR 300/480.

#### Scheduling Notes:

- ET 302 and ET 312 are offered every semester day and night.
- ET 115, 253, 322, 335, 380, 381, and 420 are offered every semester alternating day and night schedules.
- ET 308 is offered on Fridays both day and night.

#### Other Notes:

- At the end of semester 1, students qualify for the Basic Electronics and Telecommunications certificate.
- At the end of semester 2, students qualify for the Advanced Electronics and Telecommunications certificate.
- At the end of semester 5, students qualify for the Electronic Systems Technology certificate.

# Fourth Year

#### Semester 7 7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE	MATH 300	Introduction to Mathematical Ideas	3	IIb MC
GE	NUTRI 310 / 481 <sup>H</sup>	Cultural Foods of the World	3	Vb, VI
GE		any PE activity course	1	IIIa

### Semester 8 8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE	PHYS 310	Conceptual Physics	3	IV
GE	POLS 301 / 481 <sup>H</sup>	Introduction to Government: United States	3	Va
Elec		any elective course numbered 100-499	2	

<sup>&</sup>lt;sup>H</sup> honors courses

		EXPLANATION OF CATEGORIES
Req	Required Core	A course that is required for this program
GE	General Education	A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement
Elec	Degree Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree

# **Graduation Requirement**

A course that fulfills a specific graduation requirement which can be replaced by another course that meets the same graduation requirement.

MC = Math Competency

wc = Writing Competency

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