

DURHAM TECHNICAL COMMUNITY COLLEGE PLAN OF STUDY

Revised Fall 2020
6 Semesters

ELECTRICAL SYSTEMS TECHNOLOGY
Associate Degree (A35130)

Catalog/Academic Year 2020-2021

Key to symbols after some courses:

* Developmental courses (ENG 002 and/or MAT 003) may be required based on college placement and course requisites.

**Requires prior approval by Work Based Learning Coordinator.

^{GE} Fulfills the general education requirements for this degree.

FALL SEMESTER 2020

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
ACA 122 College Transfer Success	0	2	0	1		
ELC 113 Residential Wiring	2	6	0	4		
ELC 131 Circuit Analysis I	3	3	0	4		
ELC 131A Circuit Analysis I Lab	0	3	0	1		
ENG 111 Writing and Inquiry* ^{GE}	3	0	0	3		
MAT 121 Algebra/Trigonometry I* ^{GE}	2	2	0	3		

SPRING SEMESTER 2021

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
COM 231 Public Speaking* ^{GE} OR ENG 112 Writing/Research in the Disciplines ^{GE}	3	0	0	3		
ELC 115 Industrial Wiring	2	6	0	4		
ELC 117 Motors and Controls	2	6	0	4		
ELC 118 National Electrical Code	1	2	0	2		

SUMMER TERM 2021

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
CIS 110 Introduction to Computers	2	2	0	3		
ELC 128 Intro to PLC	2	3	0	3		
Concentration Elective I (Mechatronics Track)	2	3	0	3		

FALL SEMESTER 2021

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
BPR 111 Print Reading	1	2	0	2		
ELC 228 PLC Applications	2	6	0	4		
MNT 110 Intro to Maintenance Procedures	1	3	0	2		
Concentration Elective I (Electrical Track)	3	3	0	4		

SPRING SEMESTER 2022

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
ELC 213 Instrumentation	3	2	0	4		
PHY 110 Conceptual Physics	3	0	0	3		
PHY 110A Conceptual Physics Lab	0	2	0	1		
WBL 110 World of Work** AND WBL 111 Work-Based Learning I** OR ISC 112 Industrial Safety	1-2	0	10	2		
Social/Behavioral Sciences Elective* ^{GE}				3	PSY 150 or SOC 210 recommended	

SUMMER TERM 2022

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
ELC 215 Electrical Maintenance	2	3	0	3		
Concentration Elective II (Mechatronics Track)	2	3	0	3		
Humanities/Fine Arts Elective* ^{GE}				3	HUM 115 or PHI 240 recommended	

MINIMUM SEMESTER HOURS REQUIRED FOR AAS DEGREE 66

Humanities/Fine Arts Elective – Choose one of the following:

ART 111, ART 114, ART 115, ART 117, ART 121, ART 131, ART 171, ART 240, ART 244, ART 281, DRA 122, ENG 231, ENG 232, ENG 241, ENG 242, ENG 273, HUM 110, **HUM 115**, HUM 120, HUM 150, HUM 160, MUS 110, MUS 112, PHI 215, **PHI 240**, REL 110, REL 211

Social Science/Behavioral Sciences Electives – Choose one of the following:

ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, HIS 111, HIS 112, HIS 131, HIS 132, POL 120, POL 220, **PSY 150**, **SOC 210**, SOC 225

Concentration Electives – Students will choose **one** concentration (Electrical or Mechatronics) and complete all electives listed in that track

Electrical Track

Concentration Elective I – ELN 133 Digital Electronics (3-3-4)
Concentration Elective II – None

Mechatronics Track

Concentration Elective I – HYD 110 Hydraulics/Pneumatics I (2-3-3)
Concentration Elective II – ATR 218 Work Cell Integration (2-3-3)

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

For additional information about requirements and graduation, please refer to the [Curriculum Program Completion and Graduation](#) policy. Program-specific criteria may be found on the respective [Programs](#) page. For questions about this program, consult the Program Director or an advisor for assistance.