

DURHAM TECHNICAL COMMUNITY COLLEGE PLAN OF STUDY

Revised Fall 2022
6 Semesters

ELECTRICAL SYSTEMS TECHNOLOGY
Associate Degree (A35130)

Catalog/Academic Year 2023-2024

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 2023

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
ACA 122 College Transfer Success	0	2	0	1		
ELC 112 DC/AC Electricity	3	6	0	5		
ELC 113 Residential Wiring	2	6	0	4		
ENG 111 Writing and Inquiry* ^{GE}	3	0	0	3		
MAT 121 Algebra/Trigonometry I* ^{GE}	2	2	0	3		

SPRING SEMESTER 2024

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
COM 231 Public Speaking* ^{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 2024

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 2024

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 2025

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		
SOC 210 Introduction to Sociology* ^{GE}	3	0	0	3		
WBL 110 World of Work** AND WBL 111 Work-Based Learning I** OR ISC 112 Industrial Safety	1-2	0	0-10	2	Online (WBL 110)	

SUMMER TERM 2025

Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks	Notes
ELC 215 Electrical Maintenance	2	3	0	3		
HUM 115 Critical Thinking* ^{GE}	3	0	0	3		
Concentration Elective II (Mechatronics Track)	2	3	0	3		

MINIMUM SEMESTER HOURS REQUIRED FOR AAS DEGREE 66

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)

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.