

DURHAM TECHNICAL COMMUNITY COLLEGE PLAN OF STUDY

Revised Fall 2026

INDUSTRIAL SYSTEMS TECHNOLOGY

Catalog/Academic Year 2026-2027

Day and Evening Program

Advanced Manufacturing

6 Semesters

Associate Degree (A50240A)

Key to symbols after some courses:

* Developmental courses may be required based on college placement and course requisites.

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

FIRST FALL SEMESTER

Term A	Term B	16 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
X			ACA 122 Transfer and Career Success	0	2	0	1	
		X	ELC 112 DC/AC Electricity	3	6	0	5	
X	X		ENG 111 Writing and Inquiry* ^{GE}	3	0	0	3	
		X	MAT 121 Algebra/Trigonometry I* ^{GE}	2	2	0	3	
	X		MNT 110 Intro to Maintenance Procedures	1	3	0	2	

FIRST SPRING SEMESTER

Term A	Term B	16 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
X			CIS 110 Introduction to Computers	2	2	0	3	
		X	ELC 117 Motors and Controls	2	6	0	4	
X			ISC 112 Industrial Safety	2	0	0	2	
		X	PHY 110 Conceptual Physics*	3	0	0	3	
		X	PHY 110A Conceptual Physics Lab*	0	2	0	1	

FIRST SUMMER TERM

8 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
X	ELC 128 Intro to PLC	2	3	0	3	
X	HUM 115 Critical Thinking* ^{GE}	3	0	0	3	
X	HYD 110 Hydraulics/Pneumatics I	2	3	0	3	
X	WLD 112 Basic Welding Processes	1	3	0	2	

SECOND FALL SEMESTER

Term A	Term B	16 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
X			BPR 111 Print Reading	1	2	0	2	
		X	ELC 228 PLC Applications	2	6	0	4	
X			MAC 121 Introduction to CNC	2	0	0	2	
		X	MEC 111 Machine Processes I	1	4	0	3	

SECOND SPRING SEMESTER

Term A	Term B	16 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
		X	ELC 213 Instrumentation	3	2	0	4	
X			MNT 230 Pumps & Piping Systems	1	3	0	2	
	X		MNT 240 Industrial Equip Troubleshooting	1	3	0	2	
		X	WLD 121 GMAW (MIG) FCAW/Plate	2	6	0	4	

SECOND SUMMER TERM

8 Weeks	Course	Hours Class	Hours Lab	Hours Work	Hours Credit	Program Remarks
X	COM 231 Public Speaking*GE	3	0	0	3	
X	ELC 215 Electrical Maintenance	2	3	0	3	
X	SOC 210 Introduction to Sociology*GE	3	0	0	3	

MINIMUM SEMESTER HOURS REQUIRED FOR AAS DEGREE**70**

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.