Electronics Systems Technology • January Start

Semester Course Outline • 2026 – 2027

22 Months (5 Semesters) • Revised: 2/10/26

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 72

First Spring Semester (January – May)

Course Number	Course Title	Clock Hours	Credits
CSC 102	Windows Applications for Technicians	45	3
● Selected Behavioral Science Course (Choose one) PSYC 100 – Psychology of Human Relations PSYC 101 – General Psychology*		45	3
● Selected Communications Course (Choose one) CMST 101 – Foundations of Communication * (CSS 100 – Career Search Strategies .5 credit) COMM 101 – Communications and Career Strategies ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit)		45	3
● Selected Mathematics Course (Choose one) MATH 100 – Applied General Math MATH 101 – Intermediate Algebra MATH 114 – College Algebra *		45	3
● Selected Social Science Course (Choose one) ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics * ECON 202 – Principles of Macroeconomics * SOC 100 – Introduction to Sociology *		45	3
	Total	225	15

First Fall Semester (August – December)

Course Number	Course Title	Clock Hours	Credits
EST 116	DC/AC Electronics	112	4
EST 121	Digital Systems	112	4
EST 267	Rework, Repair, and Surface Mount Soldering	56	2
ET 150	Mechanical Systems	56	2
RBTC 200	Mechanical Design and 3-D Modeling	84	3
	Total	420	15

Second Spring Semester (January – May)

Course Number	Course Title	Clock Hours	Credits
EST 115	Electronic Systems	112	4
EST 219	3D Printer Build	84	3
ET 185	Fluid Power	56	2
RBTC 175	Basic Motor Controls	84	3
RBTC 205	Programmable Logic Controllers	84	3
	Total	420	15

Second Fall Semester (August – December)

Course Number	Course Title	Clock Hours	Credits
EST 246	Circuit Board Design	84	3
EST 247	Microcontrollers	84	3
RBTC 219	Programmable Logic Controllers (PLC) Integration	56	2
RBTC 227	Robot Operation and Programming	56	2
RBTC 229	Introductin to Vision Systems	56	2
	Total	336	12

Third Spring Semester (January – May)

Course Number	Course Title	Clock Hours	Credits
EST 253	Advanced Microcontrollers	84	3
EST 262	Advanced Digital Systems	84	3
EST 271	Advanced Electronic Systems	84	3
RBTC 202	Robotic Engineering	168	6
	Total	420	15

Elective Courses: Students can take any Robotics course as an elective that is not listed on the current semester outline. Anatomy 142 and Chemistry 106/106L can also be taken as elective courses.

- Students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk (*) can be transferred directly to the university system and may be substituted for recommended courses on the outline. Students should speak with an advisor before doing so.

  Students who select to take transferable communications course CMST 101 or ENGL 101, must also register for CSS 100 – Career Search Strategies for .5 credit. This curriculum is required for all Lake Area Tech graduates and is included in the COMM 101 course but is separate from the university system.