

AAS//Mechatronics Technology to BAS//Industrial Leadership



Bachelor of Applied Science – Industrial Leadership

Roane State Community College

Associate of Applied Science – Mechatronics Technology

Freshman Year – Fall Semester

Course Title	Cr	✓
COLS 1010- Study, Organize, Succeed	3	
MECH 1310- Electrical Components	3	
ENST 1320- Solidworks I OR Technical Elective	3	
MECH 1330- Pneumatic and Hydraulic Control Circuits	3	
ECON 2100 ¹ - Principles of Macroeconomics	3	
COMM 2025- Fundamentals of Communication	3	
Total	18	

Freshman Year – Spring Semester

Course Title	Cr	✓
MECH 1320- Mechanical Components and Electrical Motors	3	
ENGL 1010- Composition I	3	
MECH 1340- Digital Fundamentals and Programmable Logic Controllers	3	
MECH 1350- Industrial Robots OR Technical Elective	3	
PHIL 1030- Intro to Philosophy	3	
Total	15	

Sophomore Year – Fall Semester

Course Title	Cr	✓
MECH 2440- Process Control Technologies	4	
MECH 2441- Intro to Totally Automation	4	
MECH 2480- Automation Systems	4	
MATH 1530- Probability and Statistics	3	
Total	15	

Sophomore Year – Spring Semester

Course Title	Cr	✓
MECH 2320- Motor Controls	3	
MECH 2425- Mechanics and Machine Elements	4	
MECH 2490- Manufacturing Applications	4	
PHYS 1010- Intro to Physics	4	
Total	15	

¹Recommended for Transfer to ETSU

East Tennessee State University

Junior Year – Fall Semester

Course Title	Cr	✓
Growing as an Individual	3	
History	3	
CSCI 1100/1150- Using Information Technology	3	
Natural Science or Social/Behavioral Science	3	
ENGL 1020- Composition II	3	
Total	15	

Junior Year – Spring Semester

Course Title	Cr	✓
Electives ¹	9	
CDST 3000-Workforce Skills	3	
CDST 2300-The Interdisciplinary e-Portfolio and ITS Applications	1	
CDST 2200-Interdisciplinary and Multimedia Presentations	1	
Total	14	

Senior Year – Fall Semester

Course Title	Cr	✓
CDST 3100- Interdisciplinary Design Thinking	3	
CDST 4110-Research Invention	2	
ENTC 4017-Industrial Supervision	3	
ENTC 3030-Technical Communication	3	
MGMT 3000-Organizational Behavior and Management	3	
Total	14	

Senior Year – Spring Semester

Course Title	Cr	✓
CDST 4210- Senior Capstone	3	
Cultivate Artistic Awareness	3	
CDST 4950- Special Topics in Interdisciplinary Studies	3	
Critical Thinking Course	3	
History or Humanities	3	
Total	15	

¹Choose 9 credits from: Lead 4467, SCMT 3100, ENTC 4777, ENTC 2060, MGMT 3310, or PSYC 3340

Total Degree Credits: 63 (RSCC Total Credits) 58 (ETSU Total Credits) = 121

Program of Study

Courses at Roane State	Equate to courses at ETSU
COLS 1010	ETSU 1020
MECH 1310	Elective
ENST 1320	Elective
MECH 1330	Elective
ECON 2100	ECON 2210
COMM 2025	COMM 2025
MECH 1320	Elective
ENGL 1010	ENGL 1010
MECH 1340	Elective
MECH 1350	Elective
PHIL 1030	PHIL 1030
MECH 2440	Elective
MECH 2441	Elective
MECH 2480	Elective
MATH 1530	MATH 1530
MECH 2320	Elective
MECH 2425	Elective
MECH 2490	Elective
PHYS 1010	PHYS 1030