

Energy Operations • Third Year Option in Robotics

Semester Course Outline • 2023 – 2024

9 Months (2 Semesters) • Revised: 1/20/23

Credits Required: 37



Graduates from the Energy Operations program can enroll in a third-year option to obtain an A.A.S. degree in Robotics. Admittance will be approved by the Robotics instructional staff.

Fall Semester

Course Number	Course Title	Clock Hours	Credits
EST 115	Electronic Systems	112	4
EST 219	3D Printer Build	84	3
EST 247	Microcontrollers	84	3
EST 267	Rework, Repair, and Surface Mount Soldering	56	2
RBTC 200	Mechanical Design and 3-D Modeling A	56	2
RBTC 203	Mechanical Design and 3-D Modeling B	28	1
RBTC 227	Robot Operation and Programming	84	3
Total		504	18

Spring Semester

Course Number	Course Title	Clock Hours	Credits
EST 246	Circuit Board Design	84	3
PM 228	Introduction to Precision Machining	112	4
RBTC 202	Robotic Engineering	168	6
RBTC 219	PLC Integration	84	3
RBTC 238	Advanced Robotic Operation	84	3
Total		532	19