

First Year – Fall Semester 2010

Course Number	Course Title	Clock Hours	Credits
EST 103	Principles of DC Circuits Theory	84	3
EST 106	Principles of DC Circuits Lab	84	3
EST 109	Principles of AC Circuits Theory	84	3
EST 112	Principles of AC Circuits Lab	84	3
• Selected Mathematics Course		48	3
• Selected General Education Course		48	3
Total		432	18

First Year – Spring Semester 2011

Course Number	Course Title	Clock Hours	Credits
EST 115	Electronic Devices I Theory	84	3
EST 118	Electronic Devices I Lab	84	3
EST 121	Digital I Theory	84	3
EST 124	Digital I Lab	84	3
EST 267	Rework, Repair, and Surface Mount Soldering	42	1.5
RBTC 210	Mechanical Systems	42	1.5
CIS 102	Windows Applications for Technicians	48	3
Total		468	18

Second Year – Fall Semester 2011

Course Number	Course Title	Clock Hours	Credits
EST 214	Digital II Theory	84	3
EST 216	Digital II Lab	84	3
RBTC 200	Blueprint Reading/Solid Modeling	84	3
RBTC 205	Programmable Logic Controllers	84	3
RBTC 207	Fluid Power	84	3
• Selected General Education Course		48	3
Total		468	18

Second Year – Spring Semester 2012

Course Number	Course Title	Clock Hours	Credits
RBTC 202	Robotic Engineering	84	3
RBTC 219	Programmable Logic Controllers' Applications	84	3
RBTC 227	Flexible Manufacturing Systems	56	2
MTT 228	Introduction to Machine Tool	112	4
WLD 232	Welding Process	56	2
AED 100	Automated External Defibrillator	14	.5
HAZ 100	Hazardous Materials Safety	14	.5
• Selected General Education Course		48	3
Total		468	18

- Students will select a course in each of the four areas to meet general education requirements. Courses marked with an asterisk can be transferred directly to the university system under the terms of articulation agreements. Students should speak with an advisor before selecting transferable courses.

Behavioral Science

[PSYC 100](#) – Psychology of Human Relations
[PSYC 101](#) – General Psychology *

Mathematics

[MATH 100](#) – Applied General Math
[MATH 101](#) – Intermediate Algebra
[MATH 102](#) – College Algebra *

Communications

[COMM 101](#) – Contemporary Communication
[ENGL 101](#) – Composition *
[SPCM 101](#) – Fundamentals of Speech *

Social Science

[ECON 105](#) – Leadership in the Global Workplace
[ECON 201](#) – Principles of Economics I (Micro) *
[ECON 202](#) – Principles of Economics II (Macro) *
[SOC 100](#) – Introduction to Sociology *

Robotics 3rd Year Option



Semester Outline

9 Months Credits Required for Graduation: 36
Associate of Applied Science (A.A.S.) Degree

2010 – 2011 Revised: 6/10

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

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
EST 103	Principles of DC Circuits Theory	84	3
EST 103	Principles of DC Circuits Lab	84	3
EST 103	Principles of AC Circuits Theory	84	3
EST 103	Principles of AC Circuits Lab	84	3
• EST 121	Digital I Theory	84	3
• EST 124	Digital I Lab	84	3
Total		432	18

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
RBTC 202	Robotic Engineering	84	3
• RBTC 205	Programmable Logic Controllers	84	3
RBTC 219	Programmable Logic Controllers' Applications	84	3
RBTC 227	Flexible Manufacturing Systems	56	2
EST 225	Advanced Electronics Theory	70	2.5
EST 228	Advanced Electronics Lab	84	3
EST 267	Rework, Repair, and Surface Mount Soldering	42	1.5
Total		504	18

- Self-study or online courses.