

20 Months Credits Required for Graduation: 77
 Process Plant Option or Power Plant Option
 Associate of Applied Science (A.A.S.) Degree

2009 – 2010 Revised: 10/09

Energy Operations is a new program beginning Fall of 2009. All course content is subject to change.

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
ET 100	Fundamentals of Energy Production and Distribution	56	2
ET 105	OSHA/Safety	14	.5
ET 110	Plant Blueprints and Drawings	42	1.5
EO 100	Introduction to Process Technology	84	3
EO 105	Fundamentals of Electricity I	84	3
EO 110	Thermodynamics	84	3
AED 100	Automated external Defibrillator	14	.5
CIS 102	Windows Applications for Technicians	84	3
HAZ 100	Hazardous Materials Safety	14	.5
MATH 118	Applied Trigonometry	28	1
Total		504	18

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
EO 115	Introduction to the Electric Industry	84	3
EO 120	Fundamentals of Electricity II	84	3
EO 125	Instrumentation and Controls	84	3
EO 130	Water Purification and Treatment	84	3
• Selected General Education Course		48	3
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Total		432	18

Additional Courses for the Process Plant Option

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
ET 165	Hydraulics Theory and Maintenance	28	1
ET 170	Fluid Power	56	2
EO 200	Process Boilers	84	3
EO 202	Hydrocarbon Chemistry	84	3
EO 204	Distillation and Refinery Operations	84	3
EO 206	Gas Processing	84	3
• Selected General Education Course		48	3
Total		468	18

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
EO 208	Ethanol and Biofuels Production	112	4
EO 210	Auxiliary Systems and Refrigeration	84	3
EO 212	Process Operations and Troubleshooting	84	3
EO 214	Instrumentation and Controls Simulations	56	2
WLD 230	Structural Material Welding	84	3
• Selected General Education Course		48	3
Total		468	18

Second Year – Summer Session

Course Number	Course Title	Clock Hours	Credits
ET 216	Internship	140	5
Total		140	5

Energy Operations

Additional Courses for the Power Plant Option

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
ET 165	Hydraulics Theory and Maintenance	28	1
ET 170	Fluid Power	56	2
ET 210	Powerplant, Wind, and Nuclear Energy Fundamentals	56	2
EO 201	Power Plant Equipment	84	3
EO 203	Boilers	84	3
EO 205	Gas Turbines and Combined Cycle Operations	112	4
• Selected General Education Course		48	3
Total		468	18

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
EO 207	Energy Sources and Conversion	56	2
EO 209	Steam Turbines and Auxiliaries	84	3
EO 211	Power Generation	56	2
EO 213	Electrical System Components and Protection	84	3
EO 214	Instrumentation and Controls Simulations	56	2
EO 215	Plant Operations and Troubleshooting	84	3
• Selected General Education Course		48	3
Total		468	18

Second Year – Summer Session

Course Number	Course Title	Clock Hours	Credits
ET 217	Internship	140	5
Total		140	5

- 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 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 *

Communications

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

Mathematics

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

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 *