

Energy

Building Automation Systems Option

TERRY CAMPUS

Fall 2021

The Building Automation Systems (BAS) program leads to an Associate in Applied Science (A.A.S.) degree in Energy Management with a Building Automation Systems option. BAS technicians conduct the hands-on operation of a building's computer networking of electronic devices designed to monitor and control the mechanical, security, fire and flood safety, HVAC and humidity control, and ventilation systems. The program incorporates electronics, energy, and HVAC courses designed to train an entry level controls technician.

PROGRAM SPECIFIC ADVISEMENT STATEMENT

Courses - Semester 1	Credits	Lecture	Lab
SSC 100 - First Year Seminar	1	1	0
NRG 101 - Intro to Energy Management	3	2	2
PHY 120 - Energy Physics	3	3	1
(MAT 152 - Quantitative Reasoning	3	3	
OR MAT 183 - Reasoning with Functions I)	5	5	
NRG 108 - Safety Basics	1	1	1
NRG 140 - Commercial Building Systems	3	2	2
DAT 101 - Intro to Data Analytics/Visual	3	2	3

Courses - Semester 2	Credits	Lecture	Lab
NRG 126 - Fundamentals of HVAC systems	4	3	3
ENG 101 - Composition I	3	3	0
NRG 123 - Fundamentals of Control System	3	2	3
CEN 126 - Industrial Networks	3	2	2
NRG 223 - Energy Control Strategies	3	2	2

Courses - Semester 3	Credits	Lecture	Lab
NRG 226 - Bldg Mech/Elec Systms Analysis	4	3	2
NRG 233 - Lighting Applications	4	3	2
AET 164 - Architectural CAD Applications	3	2	2
NRG 245 - Building Systems Integration	3	2	2
ELM 130 - Industrial Electricity	3	2	3

Courses - Semester 4	Credits	Lecture	Lab
SOC 103 - Sustainability and Society	3	3	
ENG 102 - Composition II	3	3	0
NRG 253 - BAS Capstone	3	2	4
NRG 209 - BAS Co-operative Education	3	0	9

Approved Electives

Student must choose one of the following courses to be taken in the fourth semester.

Group	Courses	Credits	Lecture	Lab
A	COM 111 - Human Communications	3	3	0
A	PSY 100 - Human Relations	3	3	0
A	PSY 121 - General Psychology	3	3	0

A	ECO 111 - Macroeconomics	3	3	0
A	ECO 122 - Microeconomics	3	3	0
A	GIS 101 - Introduction to GIS	3	2	2
A	SOC 104 - Human Geography	3	3	0
A	CLT 110 - Cross-Cultural Immersion	3	3	0

*To complete program requirements, you must pass the above courses and earn at least **66 credits**. The number of courses and credits required for graduation may be more depending on your need for developmental education courses and the elective choices you make (if electives are a part of the program). Some programs also have college-level courses that you must take if you do not score at a certain level on the College Placement Test. If this applies to your program, the courses are listed at the top of the sequence sheet before the first semester of the course list.*