



Energy Systems Technology*

Associate in Applied Science Degree
Certificate of Proficiency

Program **ENERGY.SYS.TECH.AAS**
Certificate **ENERGY.SYS.TECH.CERT**
CIP 150305

The Energy Systems Technology degree program provides students with the level of technical competency required of entry-level technicians or apprentices in various energy industries such as water, cable, electric, nuclear, gas, and solar.

Admission to the program requires a high school diploma or its equivalent.

PROGRAM OUTCOMES

- Analyze, troubleshoot, and repair electronic as well as electric circuits;
- Troubleshoot, repair, and assemble PC boards;
- Operate modern electronic test equipment;
- Construct metal chasses for electronic products;
- Learn new manual skills as needed in utility industry and small manufacturing positions.

The Energy Systems Technology certificate program provides students with the level of technical competency required of entry-level technicians or apprentices in various energy industries such as water, cable, electric, nuclear, and gas.

All courses in this program completed with a grade of C or better may be applied toward certain A.A.S. degree programs, including the Energy Systems Technology Associate in Applied Science.

Admission to the program requires a high school diploma or its equivalent.

PROGRAM OUTCOMES

- Analyze, troubleshoot, and repair electronic as well as electric circuits;
- Operate modern electronic test equipment;
- Construct metal chasses for electronic products;
- Learn new manual skills as needed in utility industry positions.

NOTE: All program listings are subject to periodic updates. Please consult your program advisor, academic division, or www.mccc.edu/programs_degree

A.A.S. Curriculum

Code	Course (lecture/lab hours)	Credits
FIRST SEMESTER		
EET 130	Fundamentals of Electronics (2/2)	3
EET 140	Electronic Construction (1/3)	2
ENG 101	English Composition I (3/0)	3
ERG 111	Alternative Energy Sources (3/0)	3
MAT —	Mathematics elective ¹	4
SECOND SEMESTER		
BCT 110	Building Construction Materials and Methods I (3/0)	3
EET 141	Electrical Wiring and Cabling (2/2)	3
EET 215	Fiber Optics (3/2)	4
ERG 112	Energy Audit and Weatherization (2/2)	3
ERG 113	Solar Installation Technology (2/2)	3
THIRD SEMESTER		
DRA 218	3-D Modeling / 3-D Printing (2/2)	3
ECO 103	Basic Economics (3/0) ²	3
ENG 102	English Composition II (3/0)	3
IST 101	Computer Concepts with Applications (2/2)	3
— —	Technical elective ³	3-4
FOURTH SEMESTER		
HPE 110	Concepts of Health and Fitness (1/2)†	2
— —	Technical electives ³	11-13
— —	General Education elective ⁴	3
		61-64

¹ Select in consultation with an academic advisor.

² ECO 111 or 112 are acceptable alternatives.

³ Select from BCT 112; EET 132, 143, 230, 251, 266; ENT 116; HRA 101, 102; MET 122, 123, 124.

⁴ Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective

† **CSW 100 is a preferred alternative**; HPE 111 is an acceptable alternative.

* State approval pending

Certificate Curriculum

Code	Course (lecture/lab hours)	Credits
BCT 110	Building Construction Materials and Methods I (3/0)	3
EET 130	Fundamentals of Electronics (2/2)	3
EET 140	Electronic Construction (1/3)	2
ENG 101	English Composition I (3/0)	3
ERG 111	Alternative Energy Sources (3/0)	3
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EET 141	Electrical Wiring and Cabling (2/2)	3
EET 215	Fiber Optics (3/2)	4
ERG 112	Energy Audit and Weatherization (2/2)	3
ERG 113	Solar Installation Technology (2/2)	3
MAT —	Mathematics elective ¹	3-4
		30-31

¹ Select in consultation with an academic advisor.