## (H69) Certificate

This program prepares the individual to enter the job market as an electronics technician. Individuals will have an in-depth understanding of digital and microprocessor technology and AM and FM radio communications. As students progress through the program, they will become familiar with the design and maintenance of microprocessor systems and radio communications. Students completing this program will qualify for National Association of Radio and Telecommunications Engineers certification as an electronics technician.

## Work and Employment

Electronics technicians work in all phases of business, industry, manufacturing and government- from research and design to manufacturing, sales and customer service. They often apply the scientific, engineering and mathematical principles developed by engineers and scientists to practical situations.

## **Special Considerations**

Workers usually have the following skills and aptitudes: do precise and detailed work, use good eye-hand coordination, notice and compare differences in objects, have mathematical and mechanical aptitudes, are analytic, curious and creative.

## **Program Contacts at Sauk Valley Community College**

Academic Advising, 815/835-6354;

Steven McPherson, Associate Professor of Electronics/Technology, 815/835-6347.

Major Field Requirements

MAT Course (MAT 106 or higher) 3 Semester hour(s)

- EET 107 Introduction to DC and AC Circuits 4 Semester hour(s)
- EET 110 Introduction to Digital Electronics 4 Semester hour(s)
- EET 207 Advanced Circuits 3 Semester hour(s)
- EET 218 Microprocessor Architecture and Applications 4 Semester hour(s)
- EET 245 Programmable Controllers 3 Semester hour(s)
- EET 252 Industrial Electronics 3 Semester hour(s)
- EET 256 Technical Problems 3 Semester hour(s)
- EET 261 Advanced Programmable Controllers 3 Semester hour(s)
- ELT 265 Power Distribution 3 Semester hour(s)
- ENE 130 Photovoltaics 3 Semester hour(s)
- IND 108 Introduction to CAD 2 Semester hour(s)
- IND 131 OSHA Standards 1 Semester hour(s)
- IND 239 Industrial Communications 3 Semester hour(s)

Total Hours Required for Certificate: 42

N	$\sim$	t	Δ	•
ľ	U	ι	C	•

\* Students may choose CIS 109 in lieu of IND 105.

First Semester - Sem/Hrs: 13

- EET 107 Introduction to DC and AC Circuits 4 Semester hour(s)
- EET 110 Introduction to Digital Electronics 4 Semester hour(s)
- IND 108 Introduction to CAD 2 Semester hour(s)

• MAT 106 - Applied Mathematics 3 Semester hour(s)

Second Semester - Sem/Hrs: 7

- EET 207 Advanced Circuits 3 Semester hour(s)
- EET 245 Programmable Controllers 3 Semester hour(s)
- IND 131 OSHA Standards 1 Semester hour(s)

Third Semester - Sem/Hrs: 13

- EET 218 Microprocessor Architecture and Applications 4 Semester hour(s)
- EET 252 Industrial Electronics 3 Semester hour(s)
- EET 261 Advanced Programmable Controllers 3 Semester hour(s)
- ELT 265 Power Distribution 3 Semester hour(s)

Fourth Semester - Sem/Hrs: 9

- EET 256 Technical Problems 3 Semester hour(s)
- ENE 130 Photovoltaics 3 Semester hour(s)
- IND 239 Industrial Communications 3 Semester hour(s)

<\div>