## (H80) Certificate

This program prepares students to enter the work force as solar energy installers and technicians. They will have knowledge in electrical, electronics, and fluid power components and acquire troubleshooting skills on those components. Students completing this program may pursue certification in their field.

## Work and Employment

Students completing this program are prepared to work as field service technicians, installers, or manufacturing technicians.

## **Special Considerations**

Workers usually have the following skills and aptitudes; the ability to do precise and detailed work, use good eyehand 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; Christopher Carlson, Assistant Professor of HVAC, 815/835-6221; Steven McPherson, Associate Professor of Electronics/Technology, 815/835-6347.

Major Field Requirements

- Mathematics (MAT 106 or higher): 3 Semester hour(s)
- EET 110 Introduction to Digital Electronics 4 Semester hour(s)
- EET 245 Programmable Controllers 3 Semester hour(s)
- ELT 160 Fundamentals of Electricity 3 Semester hour(s)
- ELT 261 National Electric Code 3 Semester hour(s)
- ENE 130 Photovoltaics 3 Semester hour(s)
- ENE 135 Renewable Energy 3 Semester hour(s)
- ENE 140 Solar Thermal Energy 3 Semester hour(s)
- IND 105 Industrial Computers Applications 2 Semester hour(s) \*
- IND 116 Industrial Print Reading 3 Semester hour(s)

Total Hours Required for Certificate: 30

Note:

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

Suggested Program

First Semester - Sem/Hrs: 16

Mathematics (MAT 106 or higher): 3 Semester hour(s)

- EET 110 Introduction to Digital Electronics 4 Semester hour(s)
- ELT 160 Fundamentals of Electricity 3 Semester hour(s)
- ENE 135 Renewable Energy 3 Semester hour(s)
- IND 116 Industrial Print Reading 3 Semester hour(s)

Second Semester - Sem/Hrs: 14

- EET 245 Programmable Controllers 3 Semester hour(s)
- ELT 261 National Electric Code 3 Semester hour(s)
- ENE 130 Photovoltaics 3 Semester hour(s)
- ENE 140 Solar Thermal Energy 3 Semester hour(s)
- IND 105 Industrial Computers Applications 2 Semester hour(s)
- or
- CIS 109 Introduction to Microcomputers Windows 3 Semester hour(s)

<\div>