

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: AET 108 Wind Energy Installation

Credits: 3

INSTRUCTOR:

SEMESTER/YEAR:

Course Description:

This class will provide students with the skills needed enter the field of wind turbine installation. Students will learn the principles behind turbine design and operation. Students will learn how evaluate a site and specify the components of wind energy system. Students will be able to install, startup, and test a typical wind energy system. Students will be able to trouble-shoot and maintain a typical wind energy system. Hands-on labs are included. Prerequisites: AET 101, AET 102, INT 109. Three credits.

Required Texts:

Wind Turbine Maintenance Level 1 Volume 2 Trainee Guide NCCER Level 1 Volume 2
Pearson Publishing 13: 9780132718967

STUDENT LEARNING OUTCOMES

On successful completion of this course, students should be able, at entry level, to:

- Specify and install a typical wind energy system.
- Collect and evaluate data from a wind energy system.
- Start up a wind energy system.
- Maintain and trouble-shoot a wind energy system.
- Work safely and efficiently.
- Calculate basic electrical load.

Credit Hours Explained

Total Hours of Coursework:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

| Assignment/Assessment | Clock Hours |
|--|------------------------------|
| In-class Instruction | 45 |
| Textbook Chapter Readings | 15 hours |
| Study of Manuals for Hands-on Activities | 15 hours |
| Chapter Review Questions and Answers | 15 hours |
| Research Assignments | 15 hours |
| Exam Preparation | 20 hours |
| | Total hours=125 hours |