

## A.A.S. - Applied Technology: Sustainable Construction/ Renewable Energy option

This program emphasizes the tools and materials used in the construction industry. Topics include safety, hand tools, hand held power tools, building codes, construction measurements, and construction materials. This course also integrates renewable energy topics such as solar / thermal principals, sustainable building materials, and photovoltaic principals and design. Upon completion, students should be able to work safely within the industry and operate various hand tools and power equipment. Students will also understand how sustainable construction affects the environment and future economy.

|  | <b>credit hours</b> |
|--|---------------------|
| <b>Area I: Written Composition.....</b>                                | <b>3</b>            |
| ENG 101 English Composition .....                                      | 3                   |
| <b>Area II: Humanities and Fine Arts .....</b>                         | <b>6</b>            |
| SPH 106 Fundamentals of Oral Communications .....                      | 3                   |
| or SPH 107 Fundamentals of Public Speaking .....                       | 3                   |
| *Humanities/Fine Arts Elective .....                                   | 3                   |
| <b>Area III: Natural Science and Mathematics .....</b>                 | <b>10</b>           |
| MTH 100 Intermediate College Algebra (or higher level math).....       | 3                   |
| CIS 146 Microcomputer Applications.....                                | 3                   |
| PHS 112 Physical Science II .....                                      | 4                   |
| <b>Area IV: History, Social, and Behavioral Sciences .....</b>         | <b>3</b>            |
| PSY 200 General Psychology .....                                       | 3                   |
| <b>Area V: Preprofessional, Major, and Elective Courses .....</b>      | <b>43</b>           |
| ADM 100 Industrial Safety .....  | 3                   |
| ADM101 Precision Measurement .....                                     | 3                   |
| ADM 102 Computer Aided Design.....                                     | 3                   |
| ADM 103 Intro to Computer Integrated Manufacturing/Material Processes. | 3                   |
| ADM 104 Introduction to Thermal/Electrical Principles.....             | 3                   |
| ADM 105 Fluid Systems .....  | 3                   |
| ADM 106 Quality Control Concepts .....                                 | 3                   |
| REN 105 Renewable Technology Awareness .....                           | 1                   |
| REN 115 Photovoltaic Principles and Design .....                       | 3                   |
| REN 205 Solar Thermal Principles .....                                 | 3                   |
| REN 215 Photovoltaic Systems and Servicing Procedures .....            | 3                   |
| BUC 112 Construction Measurements and Calculations .....               | 3                   |
| BUC 133 Standard Building Codes .....                                  | 3                   |
| BUC 210 Current Topics in Building Construction.....                   | 3                   |
| BUC 111 Basic Construction Layout.....                                 | 3                   |
| <b>Additional degree requirements .....</b>                            | <b>3</b>            |
| **ORI 101 Orientation to College .....                                 | 1                   |
| WKO 101 Workplace Skills Development .....                             | 2                   |
| <b>Total .....</b>   | <b>68</b>           |

\* Students must choose from among the courses listed on page 78.

\*\* Students may use ORI 105, Orientation and Student Success, to satisfy this requirement. Enrollment in this three credit-hour class will add two semester hours to the student's program total.