# Solar Energy Technology
## Certificate

**Program Coordinator:** Donnie Melvin • dmelvin@vhcc.edu • 276-739-2453

**Length:**  Two semesters (one year)

**Purpose:** The Certificate in Energy Technology is designed to prepare students for employment upon graduation as technicians to install solar power generation systems.

**Admission Requirements:** A student eligible for admission to the College can normally be considered for admission to the Solar Energy Technology curriculum. Proficiency in high school English is required.

Direct enrollment guidelines using either multiple measures or informed placement will determine a student's placement into college-level English and mathematics courses.

**Program Requirements:** The program contains twenty-five credits in electrical technology and energy technology courses. The remaining credits are in mathematics, English, and orientation.

| Course Number | Course Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| **First Semester (Fall)** | | | | |
| ELE 157 | Electricity Fundamentals | 3 | 6 | 6 |
| ELE 176 | Introduction to Alternative Energy Including Hybrid Systems | 2 | 3 | 3 |
| SAF 130 | Industrial Safety – OSHA 10 | 1 | 0 | 1 |
| SDV 101 | Orientation to College Success | 1 | 0 | 1 |
| ENG 111 or 115 | College Composition I or Technical Writing | 3 | 0 | 3 |
| ELE 245 | Industrial Wiring | 2 | 2 | 3 |
| ELE 131 | National Electric Code I | 3 | 0 | 3 |
| | **Total** | **12** | **11** | **20** |
| **Second Semester (Spring)** | | | | |
| ELE 177 | Photovoltaic Energy Systems | 3 | 3 | 4 |
| ELE 141 | DC/AC Machines | 3 | 3 | 4 |
| MTH 111 | Basic Technical Mathematics | 3 | 0 | 3 |
| ELE 132 | National Electric Code II | 3 | 0 | 3 |
| | **Total** | **12** | **6** | **14** |
| **Total Credits for Career Studies Certificate** | | | | **34** |