

# ENERGY EFFICIENCY TECHNOLOGY

## DEGREES, CERTIFICATES AND AWARDS

Associate in Science Degree (A.S.)  
Certificate of Achievement

### DESCRIPTION

The Energy Efficiency Technology Associate in Science Degree and Certificate are designed to provide instruction in manipulative skills, technical knowledge, and technical information from the Building Performance Institute, which will prepare the student for employment in energy efficiency, home performance and energy auditing with emphasis in green building retrofits. The course work for the associate degree also emphasizes subject areas that are significant to the construction worker such as building sciences, environmental sciences, and the development of analytical and communication skills through the general education requirements.

### PROGRAM LEARNING OUTCOMES

1. Calculate the quantities of air leakage in cubic feet per minute using the following formula.
2. Create a reliable cost estimate for insulating an attic with loose fill insulation based on square footage.
3. Students will perform a duct blaster test to determine leakage of a system.

### ASSOCIATE DEGREE AND CERTIFICATE OF ACHIEVEMENT PROGRAMS

**The Associate in Arts (AA) or the Associate in Science (AS) Degree** involves satisfactory completion of a minimum of 60 semester units with a C average or higher, including grades of C in all courses required for the major, and fulfillment of all IVC district requirements for the associate's degree along with all general education requirements. The degree provides a sound basis for transfer to upper division institutions for additional degrees or for higher vocational preparation. To be eligible to receive an Associate Degree the student must complete the requirements for the major, the District requirements for an Associate Degree, and the General Education requirements. In addition students must maintain a minimum grade point average and meet the minimum grade requirements of their program. Detailed information is available in the college catalog.

**The Certificate of Achievement** program is designed for students with personal or occupational goals who wish early employment. To qualify for the Certificate, a student must satisfy the following requirements: (1) complete all courses listed for a particular certificate.; (2) achieve a "C" average (2.0 GPA) for all courses used to complete the certificate; and, (3) file a Certificate Application form with Admissions and Records by the appropriate deadline(s) identified on the application.

### CAREER OPPORTUNITIES

Of the career opportunities identified some will usually require the completion of degree requirements at 4-year colleges and universities. Green Careers also exist in fields such as Hydrology (Water), Solar, Geo-Science, Ecology, Wind Energy, Infrastructure/Green Building, Atmospheric Science and Geothermal.

- Green Architect
- Business Development
- Construction
- Technician
- Engineering
- Energy Optimization Specialist
- Energy and Utilities Consultant
- Energy Auditor/Designer
- Installer
- Solar Energy Engineer
- Manager
- Marketing
- Energy & Environmental Specialist
- Sales
- Field Services Technician
- Finance

**Gainful Employment:** Federal regulations require institutions to provide students with Gainful Employment information for specific certificate programs offered at IVC. Please click on our Programs of Study link to view the information for each certificate program: <http://www.imperial.edu/courses-and-programs/programs-of-study/>



### TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree at Imperial Valley College may not be the same as those required for completing the major at a transfer institution offering a bachelor's degree. Students who plan to transfer to a four-year college or university should schedule an appointment with an IVC Counselor to develop a student education plan (SEP) before beginning their program.

#### Transfer Resources:

[www.ASSIST.org](http://www.ASSIST.org) – CSU and UC Articulation Agreements and Majors Search Engine

[www.CSUMentor.edu](http://www.CSUMentor.edu) – CSU System Information

[www.universityofcalifornia.edu/admissions/index.html](http://www.universityofcalifornia.edu/admissions/index.html) – UC System Information

[www.aiccu.edu](http://www.aiccu.edu) – California Independent Colleges and Universities, Association of

<http://wiche.edu/wue> – Western Undergraduate Exchange Programs

### FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that IVC offers a full array of financial aid programs – grants, work study, scholarships, and fee waivers (we do not participate in the federal loan programs). These programs are available to both full and part time students who are seeking a degree or certificate. For those who qualify, financial aid is available to help with tuition, fees, books and supplies, food, housing, transportation, and childcare. Please log onto our website for additional information: [www.imperial.edu/students/financial-aid-and-scholarships/](http://www.imperial.edu/students/financial-aid-and-scholarships/)

# ENERGY EFFICIENCY TECHNOLOGY

## ASSOCIATE DEGREE PROGRAM

### ENERGY EFFICIENCY TECHNOLOGY MAJOR – A.S. DEGREE

Twenty-four (24.0) units are required for this major.

ALL COURSES FOR THIS MAJOR MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

#### I. Required courses for the major (24.0 units)

BLDC	101	Safety Standards (Cal/OSHA) 30-Hour Cards	3.0
BLDC	110	Construction Blueprints, Specifications, Measurements and Codes	3.0
BLDC	115	Energy Fundamentals	3.0
BLDC	155	Solar Thermal and Water Efficiency	3.0
BLDC	170	Essentials of Efficient Green Construction	3.0
BLDC	175	Home Performance Retrofits	3.0
ENVS/AG	110	Environmental Science	3.0
RNEW	150	Solar Energy Systems PV1	3.0

**Total Major Units**

**24.0**

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## CERTIFICATE PROGRAM

### ENERGY EFFICIENCY TECHNOLOGY CERTIFICATE

Twenty-four (24.0) units are required for this certificate.

ALL COURSES FOR THIS CERTIFICATE MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

#### I. Required courses for the certificate (24.0 units)

BLDC	101	Safety Standards (Cal/OSHA) 30-Hour Cards	3.0
BLDC	110	Construction Blueprints, Specifications, Measurements and Codes	3.0
BLDC	115	Energy Fundamentals	3.0
BLDC	155	Solar Thermal and Water Efficiency	3.0
BLDC	170	Essentials of Efficient Green Construction	3.0
BLDC	175	Home Performance Retrofits	3.0
ENVS/AG	110	Environmental Science	3.0
RNEW	150	Solar Energy Systems PV1	3.0

**Total Certificate Units**

**24.0**