

# AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

## DEGREES, CERTIFICATES AND AWARDS

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

## DESCRIPTION

Air Conditioning and Refrigeration Technology (ACR) is a constantly changing, self gratifying program designed to satisfy the mechanically oriented person. The Air Conditioning and Refrigeration major and certificate are designed to provide instruction in manipulative skills, technical knowledge, and related trade information which will prepare the student with entry level skills for employment in the rapidly growing service industry of Air Conditioning and Refrigeration.



## PROGRAM LEARNING OUTCOMES

1. Demonstrate knowledge of OSHA safety practices required for repair and installation of air conditioning and refrigerant equipment.
2. Demonstrate and understand practical and manipulative skills relates to HVAC/R industry.
3. Demonstrate competency and mastery of the body-of-knowledge in employee responsibilities within the HVAC/R industry.

## 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

Some of these careers may require education beyond the two year college level.

- ACR Contractor
- ACR Mechanic
- ACR Installer
- ACR and Heating Engineer
- Dispatcher
- Electrician
- Manufacturers Service Rep
- Sales Engineer
- Service Manager
- Service Technician
- Sheet Metal Technician

**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/)

# AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

## ASSOCIATE DEGREE PROGRAM

### AIR CONDITIONING AND REFRIGERATION TECHNOLOGY MAJOR – A.S. DEGREE

Thirty (30.0) units required for the major.

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

#### I. Thirty (30.0) units required for the major.

ACR	101	Air Conditioning and Refrigeration Systems	3.0
ACR	102	Residential Air Conditioning Systems	3.0
ACR	103	Air Conditioning Electrical Circuits and Controls	3.0
ACR	104	Air Conditioning Heating Systems	3.0
ACR	105	Heat Load Calculation and Measurements	2.0
ACR	106	Air Conditioning Ventilation Duct Systems	3.0
BLDC	130	Carpentry Layout and Framing	4.0
EWIR	110	Electrical Principles	4.0
WELD	100	Welding Technology	5.0

**Total Major Units**

**30.0**

## CERTIFICATE PROGRAM

### AIR CONDITIONING AND REFRIGERATION TECHNOLOGY CERTIFICATE

Seventeen (17.0) units required for the certificate.

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

#### I. Seventeen (17.0) units required for the certificate.

ACR	101	Air Conditioning & Refrigeration Systems	3.0
ACR	102	Residential Air Conditioning Systems	3.0
ACR	103	Air Conditioning Electrical Circuits and Controls	3.0
ACR	104	Air Condition Heating Systems	3.0
ACR	105	Heat Load Calculation and Measurements	2.0
ACR	106	Air Conditioning Ventilation Duct Systems	3.0

**Total Certificate Units**

**17.0**