

Air Conditioning & Refrigeration Technology

Certificate Program

14 Courses - Total Units – 37.5

Day Program

Students Must Enter the Program in the Fall Semester – If the Following Courses are Taken in the Sequence Presented, the Program Can be Completed in One Academic School Year for a Certificate.

Fall Semester – 14.0 Units – Entry Level Courses

Airc 10 Technical Mathematics in Air Conditioning & Refrigeration 2.0 Units	Airc 11 Welding for Air Conditioning and Refrigeration 2.0 Units	Airc 12 Air Conditioning Codes and Standards 2.0 Units
Airc 20 Refrigeration Fundamentals 3.0 Units	Airc 25 Electrical Fundamentals for Air Conditioning and Refrigeration 4.0 Units	

Winter Intersession – 6.5 Units

Airc 26A Heat Pump Fundamentals (first 3 weeks) 1.5 Units	Airc 26B Gas Heating Fundamentals (second 3 weeks) 2.0 Units	Airc 30 Heat Load Calculations 3.0 Units
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Spring Semester – 17.0 Units

Airc 31 Commercial Electric for Air Conditioning and Refrigeration 4.0 Units	Airc 32A Air Properties and Distribution (first 8 weeks) 1.5 Units	Airc 32B Air Distribution Systems (second 8 weeks) 1.5 Units
Airc 34 Advanced Mechanical Refrigeration 4.0 Units	Airc 37 Pneumatic Controls 2.0 Units	Airc 39 Building Automation Systems 4.0 Units

Note: Questions regarding any of the courses or sequence of courses can be answered by contacting staff or faculty listed on the semester course offering sheets.

Evening Program

The Evening Program is Designed for Students That Work During the Day and Can Only Take Late Afternoon or Evening Classes. Depending on the Number of Courses a Student Can Take at One Time, the Program May Take 2 to 3 Years to Complete the 14 Courses in Air Conditioning & Refrigeration Program for a Certificate. The Following Offerings are a recommended sequence in taking the Classes in the Program. Advanced level courses may be taken in any sequence.

1st or 2nd or 3rd Semester – Fall Semester – Entry Level Courses

Airc 11 Welding for Air Conditioning & Refrigeration 2.0 Units	Airc 20 Refrigeration Fundamentals 3:35 – 6:45 PM 3.0 Units	OR, Airc 20 Refrigeration Fundamentals 7:00 – 10:10 PM 3.0 Units	OR, Airc 25 Electrical Fundamentals for Air Conditioning & Refrigeration 4.0 Units
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Winter Intersession – Entry Level Course

Airc 10 Technical Mathematics for Air Conditioning & Refrigeration 2.0 Units

1st or 2nd or 3rd Semester – Spring Semester – Entry Level Courses

Airc 12 Air Conditioning Codes & Standards 3.0 Units	Airc 20 Refrigeration Fundamentals 3.0 Units	Or, Airc 25 Electrical Fundamentals for A/C & Refrigeration 3:35 – 6:45 PM 4.0 Units	Or, Airc 25 Electrical Fundamentals for A/C & Refrigeration 7:00 – 10:10 PM 4.0 Units
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3rd or 4th or 5th or 6th Semester – Fall Semester – Advanced Level Courses

Airc 31 Commercial Electric for Air Conditioning & Refrigeration 4.0 Units	Airc 32A Air Properties & Measurement (1st 8 Weeks of Semester) 1.5 Units <hr style="border-top: 1px dashed black;"/> Airc 32B Air Distribution Systems (2nd 8 Weeks of Semester) 1.5 Units	Airc 34 Advanced Mechanical Refrigeration 4.0 Units	Airc 37 Pneumatic Controls 2.0 Units
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3rd or 4th or 5th or 6th Semester – Spring Semester – Advanced Level Courses

Airc 26A Heat Pump Fundamentals (1st 8 Weeks of Semester) 1.5 Units <hr style="border-top: 1px dashed black;"/> Airc 26B Gas Heating Fundamentals (2nd 8 Weeks of Semester) 2.0 Units	Airc 30 Heat Load Calculations 3.0 Units	Airc 39 Building Automation Systems 4.0 Units	
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Note: Questions regarding any of the courses or sequence of courses can be answered by contacting staff or faculty listed on the semester course offering sheets.