

Refrigeration Service

9-credit Technical Certificate

About the Certificate

Learn about refrigeration basics such as the refrigeration cycle and refrigerants and electricity basics as applied to HVAC/ refrigeration. Through a blend of classroom lecture and hands-on lab work, students will cover topics such as refrigeration components and controls in addition to developing diagnostic/troubleshooting skills. System pump down, recover refrigerant, soldering, brazing, piping techniques, leak checking and recharging units are just a few of the other areas covered.

What is a Technical Certificate?

A WCTC technical certificate provides an excellent means for those already employed in business to cross train or to expand their knowledge through short-term training opportunities.

For more information, call 262.691.5200.

Required Courses

Credits

First Semester

401-309	Commercial Refrigeration I	2
413-310	Electricity for HVAC/Basic	1
Total semester credits		3

Second Semester

401-311	Commercial Refrigeration II	2
Total semester credits		2

Third Semester

401-312	Commercial Refrigeration III	2
Total semester credits		2

Fourth Semester

401-313	Commercial Refrigeration IV	2
Total semester credits		2

Curriculum is current as of catalog printing.

The ability to complete a full certificate may be affected by low enrollment.

Refrigeration Service Required Courses

401-309 Commercial Refrigeration I 2

Study refrigeration principles, the refrigeration cycle, and refrigerants in this course, the first of four in the commercial refrigeration service progression.

401-311 Commercial Refrigeration II 2

Examine topics such as automatic controls, diagram reading, troubleshooting, and electric motors. Come to understand the sequence of operation on all-weather systems packaged units and split systems and discuss indoor air quality, air distribution, and balancing during this 64-hour, 16-week course.
Prerequisites: 401-309 Commercial Refrigeration I and 413-310 Electricity for HVAC/Basic

401-312 Commercial Refrigeration III 2

Explore the following topics: water-cooled condensing, commercial ice-making machines, electric and hot gas defrosts, heat pumps, and electrical control systems.
Prerequisites: 401-311 Commercial Refrigeration II

401-313 Commercial Refrigeration IV 2

Study topics such as troubleshooting, commercial freezers and coolers, piping techniques, and parallel rack systems.
Prerequisites: 401-312 Commercial Refrigeration III

413-310 Electricity for HVAC/Basic 1

Geared for HVAC/refrigeration students who desire a basic understanding of electricity as applied to their fields of study, this course provides basic electrical theory, along with application and use of measuring devices.