

# AIR CONDITIONING - HEATING, BASIC CERTIFICATE



College(s): KK

Program Code: 0178

The Basic Certificate in Heating studies the design, selection, maintenance, testing and installation of residential, commercial Heating systems, and business skills.

## Program Requirements

Code	Title	Hours
<b>Required Program Core</b>		
AIR CON 101	Intro Air Conditioning I	3
AIR CON 103	Duct Design And Layout	3
AIR CON 105	Owner-Contractor Management	3
AIR CON 160	Intro to Principles of Heating	3
AIR CON 165	Heating Laboratory	2
MATH 107	Math For Technicians I	4
Total Hours		18

## Pathway

This is an **example course sequence** for students interested in pursuing Air Conditioning and Refrigeration. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Heating.

### Semester-by-Semester Program Plan for Full-Time Student

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1		Hours
AIR CON 101	Intro Air Conditioning I	3
MATH 107	Math For Technicians I	4
Hours		7
Semester 2		
AIR CON 105	Owner-Contractor Management	3
AIR CON 160	Intro to Principles of Heating	3
Hours		6
Semester 3		
AIR CON 103	Duct Design And Layout	3
AIR CON 165	Heating Laboratory	2
Hours		5
Total Hours		18

Choose your courses with your College Advisor.

## Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

## Heating, Air Conditioning, and Refrigeration Mechanics and Installers Job Description

Install or repair heating, central air conditioning, HVAC, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.

## Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

### Annual Wages

Entry-Level 10 <sup>th</sup> Percentile	\$34,057
Median 50 <sup>th</sup> Percentile	\$58,448
Senior-Level 90 <sup>th</sup> Percentile	\$110,055

### Hourly Wages

Entry-Level 10 <sup>th</sup> Percentile	\$16
Median 50 <sup>th</sup> Percentile	\$28
Senior-Level 90 <sup>th</sup> Percentile	\$53

## Annual Job Openings

385 annual openings in Cook County

## National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	23.49%
A certificate	68.08%
Some college	6.93%
An Associate degree	1.50%
A Bachelor's degree	0.00%
A Master's or Professional degree	0.00%
A Doctoral degree or more	0.00%

0.00% continue their education beyond an associate degree