

Certificate in Climate Control Technology – Air Conditioning, Heating, and Refrigeration
CIP 15.0501 – Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician

Macomb Program Information**Classification of Industry Program**

- 15.0501 – Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician

Program Level

- Undergraduate Certificate

Program Length*

- 20 months

Cost of Program**

- Total tuition and fees for entire program: \$5,156
- Estimated cost of books and supplies for entire program: \$1,981

<http://www.macomb.edu/TuitionFees>

Debt at Program Completion

- Number of students who completed program in 2009-10: 12
- Number of completers with any student loan debt: 1
- Median federal debt: \$0
- Median private debt: \$0

Program Completion in Normal Time

- Normal time to complete program: 20 months
- Percent of students completing program in normal time: 66.7%

Job Placement

- Job placement data is not required for this program.

**Program length and normal time to completion are calculated by the student attending fall and winter semesters and completing 24 credits during each 12 month period.*

***Tuition and fees are based on the 2011 in-district rate for on-campus classes. Estimated cost of books and supplies is \$47.17 per credit based on the college's published average of \$1,132 per year for full-time (24 credits). Students must purchase program-specific supplies for this program. The cost will vary from student to student.*

CIP Information**CIP Description**

A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing and using air conditioning, refrigeration, ventilation, and heating systems. Includes instruction in principles of heating and cooling technology, design and operational testing, inspection and maintenance procedures, installation and operation procedures, and report preparation.

Jobs Related to this CIP

(Job information from Federal O*NET Website)

Engineering Technicians, Except Drafters, All Other
<http://www.onetonline.org/link/summary/17-3029.00>

Heating, Air Conditioning, and Refrigeration Mechanics and Installers
<http://www.onetonline.org/link/summary/49-9021.00>