Industrial Maintenance HVAC I  
(INDMA) C504

**First Semester**
- INM 1220 Basic A/C & Refrigeration 4
- INM 1221 Intro to HVACR 2
- INM 1225 Basic Heating 3
- INM 2210 Occupational Safety (OSHA) 2

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**Second Semester**
- INM 2220 Advanced A/C 4
- Commercial Refrigeration
- INM 2225 Air Distribution/Load Calculation 4
- INM 2230 Recovery & EPA Tech Certification .5

8.5

Total Hours 19.5

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.iecc.edu/consumer/.

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**Financial Assistance**

OCC offers a comprehensive financial aid program which includes scholarships, grants, Perkins and Stafford loans and college work study. Generally those who obtain assistance receive a combination of aid from these various programs. In order to be considered for any of these available financial aid programs, all students must complete a federal and state application form for student aid.
The Industrial Maintenance HVAC I program will provide students with the skills required to enter the field of heating, ventilation, and air conditioning. Students will be qualified to find jobs as entry-level HVAC technicians.

Installation of new systems and repair to existing HVAC systems for residential and commercial (small business) purposes will be covered. This program also targets incumbent workers who desire to broaden their skills for a career change or for advancement consideration.

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**INM 1220 Basic A/C & Refrigeration**
The course covers maintenance and repair of window type and central air conditioning. Emphasis is on basic refrigeration theory, refrigeration components identification and operation, system charging and evacuation. Copper brazing and electrical troubleshooting of residential A/C systems will also be addressed.

**INM 1221 Intro to HVACR**
The class provides an introduction to heating, ventilation, air conditioning and refrigeration systems and the mechanics that make them work.

**INM 1225 Basic Heating**
The class provides an introduction to heating systems, gas forced air, medium and high efficiency, electric and hydronic system installation, control system operation, and troubleshooting. Emphasis is on system service and troubleshooting.

**INM 2210 Occupational Safety (OSHA)**
This course is based on the Occupational Safety & Health Training Course in General Industry Safety & Health and the Illinois Onsite Safety & Health Consultation Program. In this course, the student will learn what the OSH Act is and why it became necessary in protecting the workforce in the United States, what the Federal Code of Regulations are and how to identify workplace hazards, and also how to work with industrial managers in eliminating these workplace hazards. PREREQUISITE: CIS 1104 Intro to Online Learning.

**INM 2220 Advanced A/C Commercial Refrigeration**
Maintenance repair and troubleshooting of larger A/C 6 tons and up, walk-in coolers, freezers, ice machines, display cases, commercial refrigerators, and water coolers are covered. Emphasis is on refrigerant and refrigerant controls found mainly on commercial equipment.

**INM 2225 Air Distribution/Load Calculation**
This course addresses heating and cooling load calculations needed to determine equipment size, airflow requirements, duct sizing, construction and materials, and different duct system types.

**INM 2230 Recovery & EPA Technician Certification**
This course covers proper use and operation of refrigerant recovery equipment with an emphasis on taking the EPA technician certification exam.

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**Employment Opportunities**
According to the U.S. Department of Labor, employers nationwide are reporting a shortage of qualified HVAC technicians. The Bureau of Labor Statistics expects jobs for HVAC technicians to grow by 21 percent in the coming years. Those familiar with computers and electronics and individuals with good troubleshooting skills will have the best job opportunities.