

AIR CONDITIONING (AIR CON)

Air Conditioning (AIR CON) 101

Intro Air Conditioning I

Fundamentals of heat and measurement; intensity, quantity and modes of flow; factors of comfort studied and explored in relation to design of a system in connection with function of that system. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 102

Intro Air Conditioning II

Refrigeration, its theory, systems, components, and control as applied to air conditioning; study of refrigeration equipment, including function, selection, proper installation, maintenance, and service. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 103

Duct Design And Layout

Conventional low velocity duct design; high velocity air distribution design and systems using sophisticated design techniques; layout techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Grade of C or better in (AIR CON 101 and AIR CON 102) or Consent of Department Chairperson.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 104

Equipment and Systems Controls

Pneumatic, electric, and electronic controls and control systems; selection and design of control systems. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 105

Owner-Contractor Management

Fundamentals of management techniques for air conditioning dealers, contractors, and entrepreneurs. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 106

Sheet Metal I

Fabrication and installation of ducts used in air conditioning, ventilation and heating systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 2 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 107

Welding I

Techniques of welding and cutting different metals under a variety of conditions. Students will learn to weld, butt, edge, lap and fillet joints. Oxy-acetylene, oxy-propane and carbon arc methods are employed. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 2 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 120

Introductory Laboratory

Shop and laboratory safety, use of hand tools for air conditioning, refrigeration and heating, use of meters, instruments and gauges. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 121

Advanced Laboratory

Covers meters, instruments, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 150

Intro To Refrigeration

Servicing, installation, reinstallation, warranty, and troubleshooting of home and commercial refrigeration systems. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 151

Commercial Refrigeration

Selection, maintenance, installation of commercial refrigeration. Writing assignments, as appropriate to the discipline, are part of the course.

Grade of C or better in AIR CON 150.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 155

Refrigeration Laboratory

Gauges, meters, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 156

Domestic Refrigeration Laboratory

Domestic and hermetic servicing. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 157

Analysis Laboratory

Analysis of domestic and commercial hermetic systems, mechanical and electrical servicing. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 158

Commercial Refrigeration Laboratory

Installation of components and complete systems, service and maintenance of those components and systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 160

Intro to Principles of Heating

Warm air systems, hot water systems, steam systems, gas fuel, oil fuel, and coal fuel at both residential and commercial levels; control systems and their installation, maintenance, service and sub-electrical systems and their service. Writing assignments, as appropriate to the discipline, are part of the course.

3 Lecture hours. 3 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 165

Heating Laboratory

General study of domestic and commercial systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 Laboratory hours. 1 Lecture hours. 2 Credit Hours.

Offered At: KK

Air Conditioning (AIR CON) 204

Advanced Control Systems

Theory, maintenance and repair of advanced electrical, mechanical and electronic controls and control systems. Design techniques of control systems explored. Writing assignments, as appropriate to the discipline, are part of the course.

Grade of C or better in AIR CON 104.

2 Laboratory hours. 2 Lecture hours. 3 Credit Hours.

Offered At: KK