# 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