



South Central College

AGME 2841 Air Conditioning

Common Course Outline

Course Information

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| Description | This course covers both the theory and repair of the air conditioning system. Students will reclaim, evacuate, charge, test and diagnosis the air conditioning system. Students will be able to repair and convert R-12 systems to alternative products and R-134a. |
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| Total Credits | 1 |
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| Total Hours | 32 |
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Types of Instruction

Instruction Type

On Campus Lab

Credits/Hours

Pre/Corequisites

None

Course Outcomes

1. Identify air conditioning operating principles and components

Learning Objectives

- Identify safety precautions
- Identify components
- Identify R-12 ac system
- Identify R-134a ac system
- Identify gauge operation

2. Identify refrigerant recovery and recycling

Learning Objectives

- Identify recovery station operation
- Operate recovery/recycle station

3. Identify air conditioning test equipment

Learning Objectives

- Identify gauge operation
- Install gauges
- Test AC system
- Perform volumetric efficiency test

Test control circuit

4. Diagnosis and repair cooling problems

Learning Objectives

- Perform service procedures
- Remove/replace receiver dryer
- Flush AC system
- Perform leakage test
- Perform electrical tests
- Locate external leaks
- Test warning circuit
- Test expansion valve

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

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