# Heating Ventilation and Air Conditioning (HVAC) Program Alignment CIP: 47.0201 - Kansas Board of Regents

2022 Implement by Fall 2024

# **HVAC - Level 1**

- All Common and Support Courses (13-16 hours)
- Certifications:
  - o OSHA 10 or 30
  - o EPA 608

# **Certificate A** 16-29 Credit Hours

# **HVAC - Level 2**

- Certificate A requirements +
- Entry Level Credential in one of the following (see page 2):
  - O ICE (Industry Competency Exam)
  - O NATE (North American Technician Excellence)
  - HVAC Excellence
  - O NCCER (National Center for Construction Education and Research)

**Certificate B**30-44 Credit Hours

OR

Certificate C 45-59 Credit Hours

# **HVAC Degree**

- Certificate B or C Requirements +
  - Minimum of 15 Credit Hours of General Education

**A.A.S.** 60-68 Credit Hours

# **Required Courses within Program**

Common Courses	8 credits:
HVAC Fundamentals	4 credits
Heating System Fundamentals	3 credits
EPA 608	1 credit
Support Courses*	5-8 credits:

3-4 credits

1-3 credits

1 credit

**Electrical Fundamentals** 

Workplace Skills

Safety Orientation/OSHA 10 or 30

#### **Notes**

Specifics pertaining to HVAC programs:

- 1. Title must include HVAC and may also include:
  - Refrigeration and/or
  - Climate and Energy Control
- 2. Course list sequence has no implication on course scheduling by colleges.
- 3. Institutions may add additional competencies based on local demand.
- 4. \*Institutions may use existing course titles for Support Courses that adhere to the agreed upon course length and competencies.

# Institutions may choose one of the following four credentialing options:

**ICE** - Completion of one of the following Credential options:

- Residential: CORE + At least one speciality (Air Conditioning, Air Distribution, Heat Pumps, Gas Furnaces, or Oil Furnaces).
- Light Commercial Air Conditioning and Heating: including Start-up Heating, Start-up Air Conditioning, Service Heating, Refrigerant Recovery, and Installation.
- Commercial Refrigeration: including System Design, Installation Start-up, Preventative Maintenance, and Service & Repair.

# OR

**NATE** - Credential Core Areas + Minimum of one specialty area in Installation or Service which may include:

- Air Conditioning
- Air Distribution
- Air-to-Air Heat Pumps
- Gas Heating (Air)
- Oil Heating (Air)
- Hydronics Gas
- Hydronics Oil
- Light Commercial Refrigeration
- Commercial Refrigeration

#### OR

**HVAC Excellence** - Credential Core Areas (Electrical & Refrigeration Theory)

- + Minimum of one of the following areas:
- Air Conditioning, Gas Heat, & Electrical
- Light Commercial Air Conditioning, Gas Heat, & Electrical
- Light Commercial Refrigeration & Electrical

### OR

**NCCER** - Credential Core Areas + Completion of Level 1 & 2 Competencies



Institutions may add an HVAC A.A.S. degree (maximum of 68 credits) that requires completion of the requirements for a Certificate B OR C AND requires a minimum of 15 Credit Hours of General Education.