Learning outcomes

- According to the National Program Accreditation Guide

First: (Knowledge)

Graduates are expected to be able to:

1. Demonstrate a solid understanding of the fundamental mathematics and engineering principles related to refrigeration and air conditioning.
2. Understand the principles of thermodynamics, heat transfer, and fluid mechanics, and apply them to thermal systems.
3. Identify the components and types of refrigeration and air conditioning systems and understand how they operate.
4. Be familiar with the standard specifications and engineering criteria used in the design and operation of HVAC systems.
5. Understand the impact of environmental and economic factors on the performance and efficiency of thermal systems.

Second: (Values)

Graduates are expected to adhere to the following:

1. Engineering ethics and integrity in scientific and practical performance.
2. Professional responsibility in the design and operation of refrigeration and air conditioning systems.
3. Occupational safety and environmental protection during work.
4. Respect for relevant national and international laws and standards.
5. Teamwork and collaboration with other disciplines.

Third: (Competencies)

Graduates are expected to be able to:

1. Analyze engineering problems related to refrigeration and air conditioning systems and propose appropriate solutions.
2. Design refrigeration and air conditioning systems according to performance and efficiency requirements.
3. Conduct laboratory experiments, interpret results, and analyze data.
4. Use modern technologies and engineering software in analysis and design.
5. Perform operation and maintenance work and diagnose faults in thermal systems.
6. Prepare technical reports and communicate effectively in the workplace.
7. Manage time and resources efficiently within engineering projects.
8. Keep abreast of scientific and technological advancements through continuous learning.