|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Skills | -Theoretical  -Applied | PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| Content | | | | figure | figure |
| To understand the basic concepts of air conditioning and refrigeration, to recognize the main and auxiliary elements used in these systems and to explain their functions. | | | | 1 | 1 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS FRAMEWORK (THQF) | | | BASIC FIELD AUTHORITIES (BFA) | | |
| 1. To have theoretical and practical knowledge at the basic level supported by textbooks, application tools and other resources that contain up-to-date information in the field based on the qualifications gained at secondary level. | | | 1. Has sufficient background in mathematics, science and related fields. | | |
| -Conceptual  -Cognitive | PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| To recognize the tools and devices used in air-conditioning and cooling applications and to gain the skills needed for the installation of these systems within the framework of the safety rules (welding, pipe cutting, bending, countersinking etc.). To have the first aid knowledge required for the first intervention in work accidents. | | | | 1,2 | 1,2,4 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS FRAMEWORK (THQF) | | BASIC FIELD AUTHORITIES  (BFA) | | | |
| 1. To gain the ability to use the theoretical and practical knowledge at the basic level at an advanced level or at the same level.  2. To be able to interpret and evaluate the data by using the basic knowledge and skills acquired in the field, to identify and analyze the problems, to develop solutions based on evidence. | | 1. Understands the problems and solutions in the application of advanced technologies.  2. Uses the latest techniques and tools in the field of technology with additional technical training.  3. Use the technical drawing skills effectively in practice.  4. Experiment, collects data, presents collected data | | | |
| Competencies | Competency to work independently and take responsibility | PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| To read projects related to air conditioning and refrigeration systems, to draw projects both manually and computer-aided. | | | | 1,2,3 | 1 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS  (THQF) | BASIC FIELD AUTHORITIES  (BFA) | | | | |
| 1. To be able to conduct a basic level study independently.  2. To be able to take responsibility as a team member to solve unforeseen complex problems encountered in the applications related to the field.  3. To be able to carry out activities for the development of the employees working under their responsibility within the framework of a project. | 1. Works individually or in teams. | | | | |
| PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| Learning Competence | Electrical control and automatic control elements used in air conditioning and cooling systems and circuits to recognize and make connections. To calculate the heat loads and device capacities based on the choice of air conditioning, cooling and heating system and to choose the device with the appropriate capacity. To dimension and install the duct system for air conditioning and ducted air conditioning systems. | | | | 1,2 | 2 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS  (THQF) | BASIC FIELD AUTHORITIES  (BFA) | | | | |
| 1. To be able to critically evaluate the basic knowledge and skills acquired in the field, to determine and meet learning needs.  2. To be able to direct his / her education to an advanced level of education in the same field or to a profession at the same level.  3. To gain awareness of lifelong learning. | 1. -Information about the necessity of life-long learning.  2. Uses the latest techniques and tools in technology | | | | |
|  | Communication and Social Competence | PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| To have the ability to prepare and present scientific research on the subjects related to the profession, to have the knowledge of basic business, quality and environment related to the profession, to comprehend the professional and ethical responsibility and to work in a team of various disciplines and / or to be able to To be able to use Turkish language effectively in oral communication, to have foreign language skills in order to follow and follow international developments related to the profession, to gain lifelong learning skills and to follow and learn contemporary and contemporary issues. | | | | 1,2,3,4 | 1,2 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS  (THQF) | BASIC FIELD AUTHORITIES  (BFA) | | | | |
| 1. To be able to convey his / her thoughts on the subjects related to the field at the level of basic knowledge and skills through written and oral communication.  2. To be able to share his / her thoughts and solutions to the problems related to his / her field with experts and non-experts.  3. To be able to follow information in the field and communicate with colleagues by using a foreign language at least at a level of European Language Portfolio A2 General Level.  4. To be able to use information and communication technologies together with computer software at the basic level of European Computer Driving License at the level required by the field. | 1. Uses information technologies, uses information and communication technologies together with computer software at the basic level of European Computer Driving License required by the field.  2. Establish effective oral and written communication; use at least one foreign language at the intermediate level of the European Language Portfolio A2 General Level.  3. Communicates using technical drawing. | | | | |
| Area Specific  perfection | PROGRAM LEARNING OUTCOMES | | | | (THQF) | (BFA) |
| Mounting and repairing of air conditioning and cooling systems (domestic and commercial coolers, cold storages, individual and central air-conditioning systems etc.), diagnosing and repairing malfunctions and performing preventive maintenance | | | | 1 | 1 |
| TURKEY HIGHER EDUCATION QUALIFICATIONS  (THQF) | BASIC FIELD AUTHORITIES  (BFA) | | | | |
| 1. To have social, scientific, cultural and ethical values in the stages of gathering, applying and announcing the data related to the field.  2. To have sufficient consciousness about the universality of social rights, social justice, quality and cultural values, environmental protection, occupational health and safety. | 1. Has an awareness of the legal consequences of technological practices and professional ethics. | | | | |