

INFORMATION TECHNOLOGIES FIELD AND PROFESSIONAL DEFINITIONS OF BRANCHES

DEFINITION OF THE FIELD :

It is the field where education and training are provided to provide the competencies of the branches under the Information Technologies field.

PURPOSE OF THE FIELD :

In the branches under the Information Technologies field, it is aimed to train qualified professional staff who provide the necessary professional competencies in line with the needs of the sector and scientific and technological developments.

CURRENT STATUS AND FUTURE OF THE FIELD

Computer use has increased rapidly, especially in the last decade of the twentieth century. This increase has both spread all over the world and diversified its area of use.

Information Technologies; It is a field that emerged as a result of the developments in the computer sector and includes computer hardware and software technologies used to store, transmit and process data.

However, Information Technologies (IT) is not a field limited to the establishment of computer systems and the configuration of software today. From a current perspective, IT has many components such as computer hardware, software, computer networks, communication technologies, manpower trained in this field, procedures, Internet, intranet and communication tools.

As businesses in our country rapidly progress towards institutionalization, the need for the Information Technologies field has started to increase even more. For this reason, there is a great need for people with competence in the Information Technologies field. People from other branches and professions continue to focus on the need in this field. However, the right thing to do is to train people with these competences from the very beginning in this field.

Information Technologies will continue to be the most important element of working life in the future. Training people with competence in this field is very important for the development and progress of this sector in our country.

BRANCH PROGRAMS, DEFINITIONS, PURPOSES AND DUTIES

The following branches are included in the Information Technologies Field Framework Curriculum.

1. Software Development

2. Network Operation

In this direction, a formal education program has been prepared in accordance with national and international standards in the field of Information Technologies and the professions under the field. It is aimed to provide the student who completes this program with the following common knowledge, skills and competencies.

Acquiring skills that will provide professional development in the fields of “professional ethics and Ahi-Order, occupational health and safety, technological developments and industrial transformation, environmental protection, entrepreneurial ideas, establishing and running a business, intellectual and industrial property rights” in line with new age skills and design-oriented thinking approach

Performing basic algorithm, visual block programming and programming operations

Using computer ethics, information security, intellectual property, industrial revolutions, digital transformation and industry 4.0 technologies, computer assembly and network basics by taking occupational health and safety measures

Making drawings in accordance with technical drawing rules, printing the prepared designs by making three-dimensional designs on the computer

Software Development Branch:

Making projects, developing with object-oriented programming techniques, applying database usage methods

Creating a functional device using input and output devices, sensors, indicators, screens and engines by taking occupational health and safety measures

Website design, dynamic programming, database operations and publishing the website

Making mobile applications

Applying image processing and visual effect techniques

Network Operation Branch:

Taking occupational health and safety measures Configuring the switch device and performing switching operations on the network

Creating a functional device using input and output devices, sensors, indicators, screens and motors by taking occupational health and safety measures

Configuring the routing device and routing on the network by taking occupational health and safety measures

Application of information gathering techniques, ensuring network security and security methods

Installing and managing the server operating system by taking occupational health and safety measures

PROGRAM DURATION

The total education period of the field program is planned as 4 academic years.

EDUCATION AND CAREER OPPORTUNITIES:

Those who are successful in the "Higher Education Institutions Exam" (YKS) after vocational high school can continue their undergraduate programs or the relevant departments of vocational schools. There are also associate degree programs that graduates can enroll in with their additional scores.

Network operators, computer sales and technical support companies, banks, insurance companies, commercial organizations, internet service providers, internet broadcasting companies, radio and television companies, research companies, stock exchanges, transportation, logistics companies and public institutions in the service sector have wide job opportunities.

Web programmer works in an office environment and usually deals with design and visual elements. While working, he interacts with other colleagues and business owners. The work is done sitting down, the environment is usually quiet.

Occupational disease risks; the main problems of computer workers regarding vision are watery eyes, irritation and stinging in the eyes, eye fatigue, blue and double vision. The main complaints of computer workers are fatigue-related discomfort in the neck, shoulder, hand, arm, foot and back regions. Such discomforts are joint and muscle diseases.