



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG105	NETWORK BASICS				
Semester	Code	Name	T+P	Credit	ECTS
1	BG105	NETWORK BASICS	3	3	4
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program		Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None		Instructor Berin BALCI	None
The aim of lesson :					
Knowing Computer Networks, Understanding Network Cables, Network Addressing, Sharing and Security, Knowing Network Peripherals					
Course Contents :					
Network History Data Networks, Network Topologies, Network Types, Networking Models, Security					



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG111	COMPUTER SECURITY AND CRYPTOGRAPHY				
Semester	Code	Name	T+P	Credit	ECTS
1	BG111	COMPUTER SECURITY AND CRYPTOGRAPHY	3	3	4
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None			Instructor Berin Balci berin.balci@gop.edu.tr	None

The aim of lesson :

The aim of this course is to teach students basic information and network security concepts and to equip them with skills in the fundamental principles of cryptography and data encryption.

Course Contents :

Definitions related to Information Security/Cybersecurity and security attacks; principles and objectives of information security; general concepts related to cryptography; basic security mechanisms and secure network designs; number theory and modular arithmetic; the history and types of cryptography; symmetric and asymmetric encryption methods; hash algorithms; public-key encryption algorithms; RSA and El-Gamal encryption methods; Elliptic Curve Cryptography; digital signatures; security certificates; security risk analysis and planning.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG113	INTRODUCTION TO CYBERSECURITY				
Semester	Code	Name	T+P	Credit	ECTS
1	BG113	INTRODUCTION TO CYBERSECURITY	4	4	5
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None			Instructor Arif Hakköz arif.hakkoz@gop.edu.tr	None

The aim of lesson :

The objective of the course is - to introduce current state of the art, historical background, basic terminology and essential technologies in cyber security domain - to elucidate legal, ethical, political and economical influences of cyber and information war

Course Contents :

Basic concepts in cyber space and security, cyber crime, IT law, computer law and cyber law, computer forensics, information security and assurance, computer and network security, cyber warfare, international standards on cyber security.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG116	INFORMATION LAW				
Semester	Code	Name	T+P	Credit	ECTS
2	BG116	INFORMATION LAW	2	2	2

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Berin BALCI	None

The aim of lesson :

To be knowledgeable about the main legal issues in the field of information technology, especially internet and intellectual property rights, unfair competition, internet and criminal law and the liability of service providers in these areas, the social effects of information technology, privacy, and professional conduct rules.

Course Contents :

At every point where information technology touches, we encounter issues related to information technology law that everyone should be aware of and that must be addressed. Information technology law issues consist of legal solutions related to these rapidly changing and evolving fields. Information technology law encompasses, on one hand, matters in the fields of commercial law and the law of obligations, while, on the other, it encompasses criminal law, intellectual property law, and many other branches of law.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG132	END USER SECURITY				
Semester	Code	Name	T+P	Credit	ECTS
2	BG132	END USER SECURITY	3	3	3

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Elective

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Yılmaz ÖZTÜRK	None

The aim of lesson :

The goal is to identify the security risks that end users may be exposed to and to teach them the necessary solutions to prevent these risks.

Course Contents :

Course Description, Aim, Scope End-User Security Personal Security Habits Importance of Information Protection of Personal Information Personal Information Methods of Storing Personal Information Basic Security Measures Protection of Personal Information and Privacy Settings Concepts of Hacker and Hacking Hacker Types of Hackers Hacking Techniques Security and Basic Security Threats Security Basic Security Threats Creating Strong Passwords Password Creation Strategies Password Management Tools Password Security Applications Malware and Protection Methods Malware Infection Methods Malware Protection Methods Antivirus Programs Email Security Email Attack Methods Secure Email Habits and Settings Browser Security and Security Extensions Phishing and Other Email Attacks Fraud Safe Internet Use Basic Rules for Safe Internet Use Operating System Security Operating Systems Operating System Security Methods Operating System Security Measures Mobile Device Security Security Threats to Mobile Devices Safe Mobile Application Use Mobile Device Security Settings and Applications Mobile Payment and Financial Transaction Security Wi-Fi Security and Protection from Open Networks Network Security Modern Interface Wireless Network Settings Security of Network Devices and Services VPN Usage and Settings VPN Usage and Benefits Security on Social Media Platforms Security Threats on Social Media Platforms Increasing Account Security Cloud Computing Security Cloud Computing Systems Future Cybersecurity Threats and Protection Strategies



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG109	MATHEMATICS				
Semester	Code	Name	T+P	Credit	ECTS
1	BG109	MATHEMATICS	2	2	3

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Çiğdem Özataş	None

The aim of lesson :

Give the key concept to student to solve basic math problems related to computer programs

Course Contents :

Arithmetic and algebraic operations, the first order one and two unknowns Equations, simple inequalities, Base and Root-making and problem-solving (Percent, age, speed problems, etc.)



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

ENF100	INFORMATION TECHNOLOGIES AND OFFICE SOFTWARE				
Semester	Code	Name	T+P	Credit	ECTS
1	ENF100	INFORMATION TECHNOLOGIES AND OFFICE SOFTWARE	2	2	3

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None	Instructor Yılmaz ÖZTÜRK	None

The aim of lesson :

To broaden the use of Information Technologies, to increase computer literacy, and to gain experience in the use of Hardware, Operating Systems, Office Programs, and the Internet.

Course Contents :

Information Technology and Office Programs Course Content Computer Hardware Structure and Components Knows the meaning of computer hardware concepts. Can evaluate basic computer hardware components. Knows how to purchase a computer based on the hardware knowledge acquired. Shortcuts, General Windows Operations, Internet, and E-mail Operations Knows basic computer shortcuts. Can perform operations such as creating a folder, renaming, copying, pasting, deleting, adjusting screen resolution settings, and installing/uninstalling programs. Can perform effective searches on the Internet. Can send e-mails using Gop mail. Knows academic databases and can download and read scientific resources such as articles, papers, and theses. Word Processor - Home Tab Knows how to set the font, size, and color. Can perform text alignment and line spacing within the text. Knows how to do detailed bulleted/numbered lists within the text. Knows how to perform word search and replace operations within the text. Word Processor - Insert Tab (Table Work) Knows how to add a table to the work. Knows where and how to edit the added table. Can recognize how to perform different table applications. Word Processor - Insert Tab (Working with Drawings) Knows how to add drawing objects to the work. Knows where and how to edit the drawing objects in the work. Comprehends the purpose for which drawing tools can be used in different applications. Word Processor - Insert Tab (Mixed Applications) Knows why and how to insert a hyperlink into the work. Knows how to add a header, footer, and page number to the work. Knows how to insert an equation into the work. Can apply the features learned in the Insert tab on a mixed application. Word Processor - Layout Tab Can adjust margins, paper size, and change the page orientation (horizontal-vertical) in the page used in the work. Can divide the text in the work into columns in the desired format. Knows how to set a watermark, page color, and page border for the work. Word Processor - Layout Tab (Mixed Applications) Can perform applications related to the Layout tab. Word Processor - References Tab Knows why and where to insert a Table of Contents into the work. Knows how, where, and why to insert a footnote within the text. Word Processor - Review Tab Knows how to check spelling and grammar rules within the text. Knows why and where to add comment balloons into the text. Word Processor - Scientific Writing Rules Knows the format in which scientific papers should be written. Performs an application example of a paper (conference proceedings) in scientific studies. Word Processor - General Application A general review application for the Word Processor is performed, repeating all topics and ensuring a better grasp of the concepts. Introduction and Function of Presentation Software, Screen Elements, and Menus Comprehends the use of presentation software. Comprehends the menus of presentation software. Learns how to prepare an effective presentation. Application on Presentation Software Comprehends how to prepare a presentation according to the rules for effective presentation preparation. Spreadsheet - Home Tab (Table Work) Knows how to set the font, size, and color. Comprehends how to draw a table on spreadsheets. Knows how to prepare different types of tables. Comprehends how to perform operations such as financial and date calculations. Spreadsheet - Insert Tab (Chart Work) Knows how to insert a chart into the workspace. Comprehends which purpose to use different types of charts for. Spreadsheet - Home-Insert Tabs (Mixed Applications) Comprehends the purpose of using conditional formatting. Comprehends the purpose of using filtering. Can apply the features learned in the Home and Insert tabs on a mixed application. Spreadsheet - Learning to Write Basic Formulas Knows how to write a formula in spreadsheets. Comprehends how to write basic formulas and knows where they will be used. Spreadsheet - Writing Mathematical Formulas Comprehends the syntax for mathematical formulas. Knows where and how to use mathematical formulas. Knows how to write a formula by combining multiple formulas. Spreadsheet - Mathematical Formulas (Mixed Applications) Comprehends how to use the learned mathematical formulas nested within different works. Can perform mixed applications on mathematical formulas. Spreadsheet - Conditional Formulas: IF (Application) Comprehends the purpose for which the IF formula, one of the conditional formulas, can be used. Knows the use of the IF formula and comprehends how to use it in different works. Spreadsheet - Conditional Formulas: Nested IF (Application) Comprehends the syntax for the nested IF formula. Knows how to use the nested IF formula in different works. Can perform applications related to conditional formulas. Spreadsheet - Conditional Formulas Comprehends the use of the COUNTIF formula. Comprehends the use of the SUMIF formula. Comprehends the use of the AVERAGEIF formula. Comprehends the use of the VLOOKUP formula. Spreadsheet - General Application A general review application for Spreadsheets is performed, repeating all topics and ensuring a better grasp of the concepts.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG103	ALGORITHMS AND PROGRAMMING I				
Semester	Code	Name	T+P	Credit	ECTS
1	BG103	ALGORITHMS AND PROGRAMMING I	4	4	5

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None	Instructor Yılmaz ÖZTÜRK	None

The aim of lesson :

This course aims to provide students with the necessary competencies in programming fundamentals and to enable them to find solutions to problems.

Course Contents :

Basic Concepts Defines the Central Processing Unit, memory, and input/output units. Explains the concepts of hardware and software. Explains different types of software. Recognizes Compiler and Interpreter units. Program Development Process and Algorithm Comprehends the program development process. Defines and exemplifies the concept of an algorithm. Explains different types of algorithms. Exemplifies simple, logical, and iterative (looping) algorithms. Flowchart Defines the concept of a flowchart and understands it through examples. Explains flowchart symbols. Writes a simple program algorithm. Creates the flowchart for the written program algorithm. Programming Tools, Variables, and Constants Defines programming tools. Learns variable data types. Defines variables of different types and performs type conversion. Performs constant definitions to be used. Input-Output Operations, Operators Comprehends basic Input-Output operations. Uses Input-Output operations in examples. Defines basic arithmetic operators. Prepares an algorithm and flowchart using arithmetic operators. Installation and Testing of Application Software Performs the installation of the C# programming language. Uses the basic components to be utilized within the software. Tests the program by explaining a simple example. Writes a program with a simple algorithm. Program Development Creates an algorithm for a program to be written. Creates a flowchart for the developed algorithm. Converts the algorithm into code using defined basic program codes. Tests the converted codes by running the software. Decision Structures Defines decision structures and comprehends the If - Else structure. Creates an algorithm and flowchart using If - Else. Comprehends the Switch - Case structure. Creates an algorithm and flowchart using Switch - Case. Loop Controls Recognizes the For loop and performs its control. Recognizes the While loop and performs its control. Recognizes the Do-While loop and performs its control. Exemplifies the differences between For, While, and Do-While loops. Program Development Creates an algorithm for the desired program using decision structures and loop controls. Creates a flowchart for the developed algorithm. Converts the algorithm into code using defined basic program codes. Tests the converted codes by running the software. One-Dimensional Arrays Knows the concept of an array. Defines a one-dimensional array. Runs a one-dimensional array example in the program. Creates an algorithm and flowchart using one-dimensional arrays. Multi-Dimensional Arrays Knows the concept of a multi-dimensional array. Defines a multi-dimensional array. Runs a multi-dimensional array example in the program. Creates an algorithm and flowchart using multi-dimensional arrays. Subprograms that Do Not Return Value and Return Value (Void and Non-Void Functions) Explains the concept of a function. Defines the concept of a parameter and a function. Comprehends the working logic of parameterless subprograms (functions). Comprehends the working logic of subprograms (functions) with parameters.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

KRY102	Career Planning				
Semester	Code	Name	T+P	Credit	ECTS
2	KRY102	Career Planning	1	1	2
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		None	Instructor Berin Balcı berin.balci@gop.edu.tr	None

The aim of lesson :

The Career Planning course aims to raise students' awareness about the importance of career planning in the process of preparing for the professional world by enabling them to recognize the business world, different sectors, and the requirements of these sectors. The course helps students discover their personal competencies and correctly understand the expectations of the business world, thereby supporting them in developing their knowledge and skills in alignment with the requirements of relevant sectors.

Course Contents :

Introduction to the course and the concept of career; concepts of career, career development, career management and career planning; career path, career anchor, career plateau and career shock; national and international exchange programs (Mevlana, Erasmus+, Farabi) and their application requirements; basic communication skills, use of social media, effective communication techniques, language learning and networking; the role of non-governmental organizations and social responsibility projects in career development; soft skills including time management, stress management, problem solving, analytical thinking, critical thinking, teamwork and decision-making; career opportunities in public sector, private sector, academia and entrepreneurship; diction and body language; preparing a resume and cover letter; effective interview techniques; course evaluation and creating a personal career plan.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

İNG102	English II				
Semester	Code	Name	T+P	Credit	ECTS
2	İNG102	English II	2	2	2
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Elective	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		None	Instructor Hatice Tüzün Paçcı	None

The aim of lesson :

The objective of this course is to be able to bring the students to the A2 Level in terms of CEF.

Course Contents :

Compulsory Foreign Language Course (English)



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ALM101	GERMAN I				
Semester	Code	Name	T+P	Credit	ECTS
1	ALM101	GERMAN I	2	2	2
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	German	Associate	No	Elective	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		None	Instructor Erdal ÖRDEK İSPİRLİ	None

The aim of lesson :

To be able to use german language in beginner level with the aim of written and oral communication skills, and to construct a base for further learning of the language.

Course Contents :

General main course of german language.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

AIİT101	Ataturk's Principles and History of Turkish Revolution I				
Semester	Code	Name	T+P	Credit	ECTS
1	AIİT101	Ataturk's Principles and History of Turkish Revolution I	2	2	2
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None			Specialist Dr. UĞUR POLAT ugur.polat@gop.edu.tr	None

The aim of lesson :

To understand Ataturk s reforms and how basic principles of the republic came into existence in Republic of Turkey establishment period. To help Turkish youth in the way of being unified individuals as a nation and becoming effective in the contemporary world.

Course Contents :

The last periods of the War of Independence. Treaties that causes the establishment of Republic of Turkey. Ataturk s principles which determine the features of Republic of Turkey and the revolutions which strenghten these principles



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

TD101	Turkish Language I				
Semester	Code	Name	T+P	Credit	ECTS
1	TD101	Turkish Language I	2	2	2
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None			Instructor Dr. ERDAL BARAN	None

The aim of lesson :

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Course Contents :

Dersin amacı, kapsamı ve temel kavramlar hakkında bilgi verilmesi. Türk dilinin temel sorunları, kuralları. Dilin etkili ve güzel kullanımı.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG237	OPERATING SYSTEMS				
Semester	Code	Name	T+P	Credit	ECTS
3	BG237	OPERATING SYSTEMS	3	3	3
Education Type	Language	Course Level	Course Internship Status	Type of Course	
Formal Education	Turkish	Associate	No	Required	
Department/Program	Precondition		Course Coordinator	Instructor	Course Assistants
Information Security Technology	None			Instructor Berin Balci berin.balci@gop.edu.tr	None

The aim of lesson :

The aim is to present the theory of modern operating systems, including the concepts of processes and threads, memory management, file systems, and I/O principles.

Course Contents :

his course covers the fundamental concepts and operating principles of operating systems. The course includes the definition and general functions of operating systems, the structure of computer systems, task management and scheduling algorithms. It also examines memory management and its methods, file systems and file management, input-output operations, protection and security mechanisms in operating systems, and disk scheduling and management. In addition, the course introduces different types of operating systems, the general structure of Windows operating systems, and open-source operating systems.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

İNG101	English I				
Semester	Code	Name	T+P	Credit	ECTS
1	İNG101	English I	2	2	2

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Elective

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None	Instructor H.Tüzün PAÇCI	None

The aim of lesson :

As a result of this course, students will be able to use the basic structures to express themselves. This course aims at giving the students basics of English at beginner level.

Course Contents :

Compulsory Foreign Language Course (English)



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

ALM102	GERMAN II				
Semester	Code	Name	T+P	Credit	ECTS
2	ALM102	GERMAN II	2	2	2

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Elective

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None	None	None

The aim of lesson :

German language at a basic level and looking forward to be able to use written and oral communication purpose is to strengthen the infrastructure of language

Course Contents :

Current issues in the presence of basic German grammar



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

AIİT102	Ataturk's Principles and History of Turkish Revolution II				
Semester	Code	Name	T+P	Credit	ECTS
2	AIİT102	Ataturk's Principles and History of Turkish Revolution II	2	2	2

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology		None	Specialist Dr. İzzet Bahri ATEŞLİ Specialist Dr. Ayşe ERYAMAN Specialist Dr. Sadet ALTAY Specialist Dr. Sabri ZENGİN Specialist Dr. Adnan GELMEZ	None

The aim of lesson :

To understand Ataturk s reforms and how basic principles of the republic came into existence in Republic of Turkey establishment period. To help Turkish youth in the way of being unified individuals as a nation and becoming effective in the contemporary world.

Course Contents :

The last periods of the War of Independence. Treaties that causes the establishment of Republic of Turkey. Ataturk s principles which determine the features of Republic of Turkey and the revolutions which strengthen these principles



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

TD102	Turkish Language II				
Semester	Code	Name	T+P	Credit	ECTS
2	TD102	Turkish Language II	2	2	2

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Cafer Akin	None

The aim of lesson :

To make studens become familiar with the correct, beautiful and efficient use of the Tuekish language to maket hem base the writen and spoken intercourse of the language on strong principals to maket hem gain their skills in correspondence, presentatations and ezplanations succesfully in their business life to make them become intellectual individuals who read, think, inquire and bring solutions.

Course Contents :

According to their subjects, reading, listening, writing, presentation, discussion, sampling, question and answer techniques will be used.



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG108	DATABASE I				
Semester	Code	Name	T+P	Credit	ECTS
2	BG108	DATABASE I	4	4	5

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Yılmaz ÖZTÜRK	None

The aim of lesson :

This course aims to equip students with the skills to design, create, and query databases, and to use database management functions.

Course Contents :

Database Concept Basic Database Components Database Requirements Analysis Entity-Relationship Model Relational Database Design Normalization Rules SQL Data Types Data Integrity and Constraints Installing and Running the SQL Server Program SQL - Data Definition Language Commands SQL - Data Manipulation Language Commands SQL - Data Control Language Commands Queries Within a Single Table Sorting Query Results Conditional Querying Arithmetic Operators and Functions Querying by Grouping Functions Used in Grouping Grouping by Multiple Columns Conditional Statements in Grouping Operations Querying on Multiple Tables Joining Tables Joining Tables Without Common Columns Joining Tables with Clustering Expressions Subqueries and Their Properties Points to Consider in Subqueries Subquery Creating Using Subqueries in Column Names Using Subqueries in From Statements Views Benefits of Creating Views Creating Views Changing View Structures Ensuring Security with Views Using Indexes How Indexes Work? Index Types Creating Indexes



Tokat Gaziosmanpaşa University

Tokat Vocational School Information Security Technology

BG112	ALGORITHMS AND PROGRAMMING II				
Semester	Code	Name	T+P	Credit	ECTS
2	BG112	ALGORITHMS AND PROGRAMMING II	2	2	3

Education Type	Language	Course Level	Course Internship Status	Type of Course
Formal Education	Turkish	Associate	No	Required

Department/Program	Precondition	Course Coordinator	Instructor	Course Assistants
Information Security Technology	None		Instructor Yılmaz ÖZTÜRK	None

The aim of lesson :

This course aims to provide students with the necessary competencies in programming fundamentals and to enable them to find solutions to problems.

Course Contents :

Program Development Creates an algorithm for a program to be written. Creates a flowchart for the program whose algorithm has been created. Converts the algorithm into code using the defined basic program codes. Tests the converted code by running the software. Decision Structures Defines decision structures and understands the If-Else structure. Creates algorithms and flowcharts using If-Else. Understands the Switch-Case structure. Creates algorithms and flowcharts using Switch-Case. Loop Controls Recognizes and controls the For loop. Recognizes and controls the While loop. Recognizes and controls the Do-While loop. Explains the differences between For, While, and Do-While loops. Program Development Creates an algorithm for the desired program using decision structures and loop controls. Creates a flowchart for the program whose algorithm has been created. Converts the algorithm into code using the defined basic program codes. Tests the converted code by running the software. One-Dimensional Arrays Knows the concept of an array. Defines a one-dimensional array. Runs a one-dimensional array example in a program. Creates algorithms and flowcharts using one-dimensional arrays. Multi-Dimensional Arrays Knows the concept of a multi-dimensional array. Defines a multi-dimensional array. Runs a multi-dimensional array example in a program. Creates algorithms and flowcharts using multi-dimensional arrays. Non-Returning and Returning Subprograms Explains the concept of a function. Defines the concepts of parameters and functions. Understands the working logic of non-parameterized subprograms. Understands the working logic of parameterized subprograms. Date and String (Text) Operations Date Object Formatting Date Information String (Text) Operations Error Handling The Concept of Error and Types of Errors Error Handling Python Error Types File Operations Working Directory Settings and Folder Creation Creating and Writing Files Deleting and Backing Up Files