

AKSARAY UNIVERSITY
AKSARAY TECHNICAL SCIENCES VOCATIONAL SCHOOL
DEPARTMENT OF COMPUTER TECHNOLOGY AND PROGRAMMING
COURSE CATALOG

FIRST SEMESTER

COURSE NAME: ATATURK 'S PRINCIPLES AND REVOLUTION HISTORY I L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: Main concepts, the innovations of Ottoman Empire in 19. Century, World War I. Ve Turkish Independence War.

COURSE NAME: TURKISH LANGUAGE I L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: Language and languages,connection of language and culture,the place of turkish language among world languages,languages in terms of source and structure,historical development of literary writing:old turkish,middle turkish,turkish of harezmi,ancient anatolian turkish;new term of turkish,modern term of turkish,turkish of west,turkish of southwest, turkish of turkey,turkish of east.phonetics,sound and formation of sound,vowel harmonies, vocal harmonies in turkish,characteristics of voices in turkish.the structure of syllables in turkish and stress,morphology,roots,bodies and grammar affixes(prefixes,suffixes),words in terms of expression and functions :nouns,adjectives,adverbs,verbs,conjugation of verbs, prepositions,conjunctions,semantics.

COURSE NAME: FOREIGN LANGUAGE I L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: Reading/listening/speaking/ writing about names and occupations, relationships, directions and transportation, people, events and times, clothes, home and work in English

COURSE NAME: MATHEMATICS-I L: 2 P: 0 CREDIT: 2 ECTS:2

CONTENTS: Number Sets,Complex Numbers, Trigonometri, Exponential Numbers, Inequalities and Equations with Second-Order, Logarithm and Properties, Functions, Absolute Value, Signum Function, Limit and Continuity, Derivative and its applications, Matrix Algebra. Determinants.

COURSE NAME :PROGRAMMING FUNDAMENTALS L: 4 P: 0 CREDIT:4 ECTS:5

CONTENTS: Algorithm, Flow Diagram, Programming Tools, Variable and Fixed, Input / Output Operations, operators, decision structures, loop Controls, Loop Controls, One-DimensionalArrays, MultidimensionalArrays, Subroutines not return value, the value rotating sub- Programs, Subroutines rotating value, SequentialFiles

COURSE NAME :GRAPHICS AND ANIMATION I L: 4 P: 0 CREDIT: 4 ECTS:4

CONTENTS: Vehicle Panel, Vector Tools, Text Editing Process, Color, StrokeandFill Applications Live Filters Live Filters, LayerProcessesand Active RegionsSlices, Buttonsand Pop-up Menus, Pages, Motion Pictures, Slideshow, ExportingandOptimization, Web Design Editor Workingwith

COURSE NAME :DATABASE I L: 4 P: 0 CREDIT: 4 ECTS:4

CONTENTS: Data base designing, creating, querying and other procedures related to database

COURSE NAME : WEB DESIGN BASICS L: 2 P: 2 CREDIT: 3 ECTS:4

CONTENTS: Internet,HTML,links,Table,Multimedia,Frames,Still,CSS,Menu,Browser Problems

COURSE NAME : BASIC ELECTRICS AND ELECTRONICS L: 3 P: 0 CREDIT: 3 ECTS:3

CONTENTS: The basic electrical concepts, electrical / electronic circuit elements (resistor, capacitor, coil, transistor, diode, zener diode, transformer, fuse, light emitting diode). Electrical / electronic circuit component tests. Electronic circuit diagram reading. Rectifying circuits, passive filters and regulator circuit applications.

COURSE NAME: BASIC COMPUTER SCIENCE L: 1 P: 1 CREDIT: 2 ECTS:2

CONTENTS: Basic computer knowledge, operating systems, office programs, internet

SECOND SEMESTER

COURSE NAME: ATATURK'S PRINCIPLES AND REVOLUTION HISTORY II L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: Turkish Revaluation: revaluations on fields of political, loyal, social, cultural, training.

COURSE NAME: TURKISH LANGUAGE II L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: The written expression forms such as; Phrases, true, side and metaphoric meanings of words, idioms, doublings, terms, language mistakes, sentence structure of Turkish, sentence elements, novels, articles, essays and poems, and types of expression such as; presentation, examples of reports and records, petitions, business letter and Curriculum Vitae (CV) writing, conversation and discussion.

COURSE NAME: FOREIGN LANGUAGE-II L: 2 P: 0 CREDIT: 0 ECTS:2

CONTENTS: Reading/ writing /listening/speaking exercises about activities, weather and ongoing activities, food, past events, appearance and health, abilities and requests, past, present and future plans in English

COURSE NAME: VISUAL PROGRAMMIN-I L: 3 P: 1 CREDIT:4 ECTS:5

CONTENTS: Installation and setting up visual programming editor, Forms, and features the Standard Objects, Introduction and message windows, dialogue windows, advanced objects, operators, functions, decision structures and loops, arrays, graphics applications, reporting applications.

COURSE NAME: NETWORK FUNDAMENTALS L: 2 P:0 CREDIT:2 ECTS:2

CONTENTS: Computer Networks, Network Cables, Network Addressing, Sharing and Security, Network Peripherals.

COURSE NAME: GRAPHICS AND ANIMATION-II L: 3 P:1 CREDIT:4 ECTS:5

CONTENTS: Animation Basics Graphics, Graphics Text Processing, Symbols, Animation Techniques, Audio and Video Processing, Displays, Components, Dynamic Data, Software Optimization, Flash Files Publish Settings, in the Actions Panel, Basic Programming Structures, Objects, Functions, Audio and Video Processing, Server Side Operations.

COURSE NAME: WEB DESIGN EDITORS L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Web Editor Basic Tools, Text Processing, Table Operations, Multi-Media Operations, Links, Frame Procedures, Templates, Library Processing, Form Processing, Interactive Elements, Layer Operations, Accessibility and Site Management.

COURSE NAME: OFFICE SOFTWARE L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Document Processing, Forming Processes, Document Control, Printing, Table Processing, Object Transactions, Advanced Features, Macros, Customizing, Study Area, Data Entry, Formatting, Processes, Formulas, Functions, Charting, Data Analysis, Printing, Macros, Customizing, Work Field, Slide Processing, Design, Slide Objects, Display Settings, Print, Customization, Internet Concepts, E-Mail

COURSE NAME: COMPUTER HARDWARE L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Precautions against static electricity Static, Hardware, Materials Properties, Computer case Power Supply, Motherboard, Processor and memory units, Disk Drives, Hardware Cards, Peripherals, BIOS Error Messages.

COURSE NAME: SYSTEM IMPROVEMENTS L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Hardware and software upgrades, increase system performance

COURSE NAME: SENSORS L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Temperature Sensors, Humidity Sensors, Speed Sensors, Vibration Sensors, Acceleration Sensors, Position Sensors, Proximity Sensors, Pressure Sensors, Flow Sensors, Level Sensors, Force Sensors Pulse.

COURSE NAME: SCIENTIFIC PRINCIPLES OF TECHNOLOGY L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Physical Quantities, Geometry and Physics, Vectors, collection of vectors, scalar product, vector product, Newton's laws of motion, momentum conservation, Energy Concepts, Potential Energy, Conservative Forces,

COURSE NAME: DATA STRUCTURES AND PROGRAMMING L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Data structures, linear list, list types, Stack and stack operations, Infix, Suffix and Prefix statements Circular structured queue and circular structured queue operations, binary tree and operations, Sort methods, Search methods

COURSE NAME: ENVIRONMENTAL PROTECTION L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: Environmental Information Regulation, Risk Analysis, Waste Storage, Personal Protection Measures, the International Health and Safety Alerts, Health and Safety Regulations.

COURSE NAME: SOCIAL MEDIA L: 3 P:1 CREDIT:4 ECTS:4

CONTENTS: In the widest sense, Social psychology is the science of interaction among individuals. It is effective in the area between sociology and psychology. Psychological social psychology analyses events from individual to their environment, whereas sociological social psychology analyses events from environment to individual.

THIRD SEMESTER

COURSE NAME: ENTREPRENEURSHIP L: 3 P: 1 CREDIT:4 ECTS:4

CONTENTS: Definition of entrepreneurship, Entrepreneurship and Business, Small Business Administration Description of the Business Impact of Entrepreneurs, Who is the Entrepreneur, Entrepreneur Start-up to be, a company, Managing Growing Enterprises.

COURSE NAME: INTERNET PROGRAMMING -I L: 1 P: 2 CREDIT:2 ECTS:3

CONTENTS: Variables and Constants, Operators, Decision Control Structures, Loop Control Structures, User Defined Functions, Stock Functions, Arrays and Objects, Filing Procedures, Web Forms, Data Transfer Methods Between Pages, Database Operations 1, Database Transactions 2, XML and Web services 1, 2 XML and Web services

COURSE NAME: OBJECT ORIENTED PROGRAMMING-I L: 1 P: 2 CREDIT:2 ECTS:4

CONTENTS: Establishment of the necessary software for programming, Basic One Console Application and Operating System, Fixed and Variable Object Use, the operators use, Decision Control Statements, Loop Control Statements, User Defined Functions, Ready Functions, File Operations, Class, Field and Method Usage, Local and Global References, Arrays, Multidimensional Arrays, Standard Components, Advanced Components, Database Connection, Database Queries.

COURSE NAME: EVALUATION OF INTERNSHIP L: 0 P: 2 CREDIT:0 ECTS:3

CONTENTS: industrial application , present as a report.

COURSE NAME: SECTORAL APPLICATION I L: 2 P: 4 CREDIT:4 ECTS:6

CONTENTS: Student makes practice

COURSE NAME: VOCATIONAL FOREIGN LANGUAGE-I L: 2 P: 0 CREDIT:2 ECTS:2

CONTENTS: Technical terms used in the foreign language Review of basics in English language
Understanding of the following concepts: 1-Operating system setup documents 2-Operating system error messages
3-Operating system help documents 4-Programming language documents

COURSE NAME: VISUAL PROGRAMMING - II L: 1 P: 2 CREDIT:2 ECTS:2

CONTENTS: Contact the local data base and data list, the local database, data processing, the records required to reach a local database, connect to a remote database and the data list, the remote database, manipulate data, do simple queries , statistical queries, to get graphics from a database, a database to get the

COURSE NAME: DATABASE-II L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Database management systems, Database server setup, Database control panel, Database setup

COURSE NAME: INTERNET SECURITY L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Basic information about the Internet and Network Security, Browse for security solutions in general, Types of possible attacks on the Internet, Malicious Software And Other Software Risks, Risks Associated with Hardware and Peripherals

COURSE NAME: WEB PROJECT MANAGEMENT L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Web site needs, web site design, web site preparation procedures for publication, web site publishing processes, web site security settings, web site backups, web site maintenance.

COURSE NAME: SOFTWARE SETUP AND MANAGEMENT L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Operating Systems, Operating System Installation, System Properties, Control Panel, Group Policies, Operating System, duplicate, Security, Software, Office Software, Other Application Software.

COURSE NAME: OPEN SOURCE OPERATING SYSTEM L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Open Source Operating System Structure, Basic Concepts and Procedures Desktop, File System and the Logic of the study, the Open Source Operating System Basic Tools and Applications, Basic Networking Programs and Network Settings, Internet Access, Basic User and Group Operations, Open Source Operating System Editor, Set up and update the program, Shell Processes, File and Directory Sharing.

COURSE NAME: CONTENT MANAGEMENT SYSTEM L: 4 P: 0 CREDIT:4 ECTS:4

CONTENTS: Content Management Systems, Site Management, Content Management, Component Management, Extension Management, Vehicle Management..

COURSE NAME: PERIPHERAL DEVICES L: 2 P: 0 CREDIT:2 ECTS:2

CONTENTS: Printers, Digital Imaging Devices and other peripheral devices

COURSE NAME: COMMUNICATION L: 2 P: 0 CREDIT:2 ECTS:2

CONTENTS: Oral Communications to set up, establish written communication, to communicate non-verbal, to communicate with Formal Formal, Informal Communication to Non-Formal, non-communicating with the organization.

COURSE NAME: INFORMATION MANAGEMENT L: 2 P: 0 CREDIT:2 ECTS:2

CONTENTS: Information, Information Systems, Information Management

FOURTH SEMESTER

COURSE NAME: VOCATIONAL FOREIGN LANGUAGE-II L: 2 P: 0 CREDIT:2 ECTS:2

CONTENTS: Communicate (writing and spoken) using the technical language, Compiler error Error messages in programming code and system messages

COURSE NAME : SYSTEM ANALYSIS AND DESIGN L: 0 P: 2 CREDIT:1 ECTS:5

CONTENTS: Against a field to select the project topic Obtained present information, threads and Working Environment in the project with analysis Identify the Project in which the data to be saved and Determining Types, Information Obtained Presentation, Project Algorithm and Flow Chart to Identify, Establish the Project Of Working Platform, the Preparation Presentation, Project Main Topics Writing and Testing Code, presentation of the project, Detailed Proposals for the project to import, Code Writing and Testing the Project Presentation of the Project Installation Package Prepare, Prepare project All Stages booklet containing the report

COURSE NAME : INTERNET PROGRAMMING-II L: 2 P: 2 CREDIT:3 ECTS:5

CONTENTS: Introduction to PHP, Arrays, Constants, Operators, Control Structures, Functions of the String, Time, Math. Functions and variable., Other Stock Functions, File and Folder Operations, With PHP Session Management, Introduction to MySQL, PHP, MySQL Functions, Using MySQL with PHP, Sample Applications

COURSE NAME : VISUAL PROGRAMMING-III L: 2 P: 2 CREDIT:3 ECTS:5

CONTENTS: Active Form, DLL, Ole Objects, File Transfer Applications, Multi Layer Applications.

COURSE NAME : OBJECT ORIENTED PROGRAMMING-II L: 2 P: 2 CREDIT:3 ECTS:5

CONTENTS: Configuring the software set up for the Object -Oriented Programming, Programming Language Basic Deyimleriyle Console Applications Prepare, Prepare to Practice-Based Operating System Programming Language Basic Deyimleriyle, Decision Control Statements, Loop Control Statements, Control Objects and Arrays, Operators and Object Use, Standard Functions, User Defined Functions, Component Library, Data Structures, Operating System Objects, Menu Design, and Forms, Database Operations, Interactive Data Objects.

COURSE NAME : MICRO CONTROLLERS L:4 P:0 CREDIT:4 ECTS:4

CONTENTS: Microcontroller architecture, input-output connections and settings, programming methods and programming pim microcontrollers with Pic Assembly

COURSE NAME : SERVER OPERATING SYSTEMS L:4 P:0 CREDIT:4 ECTS:4

CONTENTS: Server Operating System, Server Operating System Management, File System, Disk Clustering, Systems (RAID), Disk Clustering Systems (RAID), File and Folder Management, Data Sharing and Security, Backup and Restore, the Active Directory Structure and User Groups Account Creation and Management, Advanced Account Management, TCP / IP Networks, Network Printing Services, Dhcp Service, WINS service, Dns Service

COURSE NAME : DATABASE ADMINISTRATION L:4 P:0 CREDIT:4 ECTS:4

CONTENTS: Database Needs Analysis, Normalization, Database Tools Setup to do, to create the tables and Features Identify, create, and Varieties Using the query, the query with related Statements Preparing, Using DML queries, Database Management

COURSE NAME : SOFTWARE ARCHITECTS L:4 P:0 CREDIT:4 ECTS:4

CONTENTS: To identify and analyze requirements, select the software development model and software architecture, design tools to use , the requirements for software design, software code, use the File version control tools, testing tools to use to test the software, using project management tools, maintenance and repair process transactions do.

COURSE NAME : COMPUTERIZED CONTROL L:4 P:0 CREDIT:4 ECTS:4

CONTENTS: RS 232 422 485 communication standards, the Ethernet protocol, LPT, USB ports structure, the computer connects to the ISA or PCI USB LPT, RS232 and so on. controls a variety of devices, programming languages, the AD and DA converter cards, relay output cards, servo and stepper motor control cards and control structures.

COURSE NAME : RESEARCH METHODS AND TECHNIQUES L:2 P:0 CREDIT:2 ECTS:2

CONTENTS: Selected Research Topics, Making Resource Research, Research Results Evaluation and Research Results Report Conversion into, Making the presentation, preparation, presentation Assault.

COURSE NAME : QUALITY ASSURANCE AND STANDARDS L:2 P:0 CREDIT:2 ECTS:2

CONTENTS: The Concept of Quality, Standards and Standardization, the standard importance of manufacturing and service sector quality management and standards, environmental standards, the quality management system models, models of quality management system, strategic management, strategic management, to participate in the management, Process management system, resource management system, resource management system The EFQM excellence model , production quality control, inspection and sampling, inspection and sampling, total quality control, Total Quality Control , Control Charts, Statistical Distributions

COURSE NAME : PROFESSIONAL ETHICS L:2 P:0 CREDIT:2 ECTS:2

CONTENTS: Ethics, main ethics principles, varieties of ethics, quality principles, ethic problems in business, reclamations, evaluating faulty services in industry.

COURSE NAME : SECTORAL APPLICATION II L:2 P:4 CREDIT:4 ECTS:6

CONTENTS: Student makes practice

COURSE NAME : SIGN LANGUAGE L:2 P:0 CREDIT:2 ECTS:2

CONTENTS: Recommended for all students who wish to develop non-verbal communication skills.