

Computer Hardware: The computer hardware types, the hardware structures and properties, implementing and installing hardware into the computer.

Programming Basics: Introduction to basic algorithm design and computer programming concepts, data types, variables and input operations, user defined functions, usage of conditional statements, loops, arrays, multidimensional arrays, user defined data types, procedures, functions and files.

Software Installation Management: Software installation and security arrangements, installation of various operating systems on computers, configuration management of the software

Network Fundamentals: Basic networking concepts, network topologies, network types and OSI reference model, network hardware, cabling and basic wireless networking concepts.

Web Design Fundamentals: How web sites and web servers work, the concepts to design and implement a web project. HTML codes, DHTML (dynamic html). This course mainly focuses on to train students to write and run HTML codes without the help of an editor.

Database-I: Fundamental database concepts, designing a database, constructing a database, introduction to SQL and writing simple select command, using where and order by, using group functions, defining database objects.

Graphics and Animation: Designing images, banners, graphics and animations that can be utilized in Internet. Designing gif and flash animations. This course is given with Adobe Photoshop, Flash and Fireworks CS6 in the computer lab.

Visual Programming-I: Introduction to visual programming, the advantages of visual programming, installing a visual programming language on the computer, form design, using form elements and dialogs. This course is taught via .NET Framework C# programming language in the computer lab.

Web Editor: The concepts to design and implement a state of the art web site via web editors. The editors used throughout this course are Frontpage and Dreamviewer.

Internet Programming: How to use Internet technologies, installing a web server (apache and IIS) writing codes that can run on Internet, accessing a database through connections, add/delete/update/list database. PHP and apache server is taught in the computer lab.

Server Administration System: The basic principles of operating systems, the place of operating systems in information technologies, administration of server operating systems, hardware, software and user maintaining.

Object Oriented Programming: The basic concepts of object oriented programming, classes, objects, memory hierarchies, inheritance, encapsulation and polymorphism.

Visual Programming-II: Advanced concepts in visual programming, form design, using form elements, database connection, using Windows applications and registry. This course is taught via .NET Framework C# programming language in the computer lab.

Database-II: Installing client/server architecture based databases, programming in database, preparing an interface, administration of a database server, utilizing SQL commands and preparing reports.

Informatics Security: Informatics laws, data security, cyber security, software security, security standards, cyber threads.

Open Source Operating System: The basic concepts of open source operating systems, types, installation, administration of an open source OS such as Linux.