

# Department of Computer Science

## Program objectives

- Students study the design, development and analysis of software and hardware used to solve problems in a variety of business, scientific and contexts.
- Demonstrate proficiency in atleast two high level programming languages and two operating systems.
- Demonstrate a breadth and depth of knowledge in the discipline of computer science.
- Demonstrate proficiency in the analysis of complex problems and the synthesis of solutions to these problems.
- Student should know about basic computational concepts and elementary data structures.
- Testing Strategies.
- Software development & their interactions, and some of the major problems of software development.

## Course Objectives

### Subject: WEB TECHNOLOGIES

- To introduce the fundamentals of internet, and the principles of web design.
- Construct basic websites using HTML and cascading style sheets.
- To build dynamic web pages with validation using javascript objects and by applying different event handling mechanisms.
- To develop modern interactive web application using PHP, XML and MySQL.
- Analyze and design real time Web applications.
- Develop basic programming skills using javascript and Query.
- Understand best technologies for solving web client/server problems.
- Become familiar with graphic design principles that relate to web design and learn how to implement theories into practice.
- Analyze to use appropriate client side or server side applications.

Zitran  
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Lecturer To Computer Science

Zitran  
PRINCIPAL  
COMPUTER SCIENCE

# Subject: Database Management System

- The primary goal of a DBMS is to provide an environment that is both convenient and efficient to use in retrieving and storing database information.
- A mechanism for organizing, structuring and storing data.
- Facilitate the creation of data structures and relieve the programmer of the problems of setting up complicated files
- Eliminate redundant data.
- Allow for multiple users to be active at one time.
- Provide for mass storage of relevant data.
- Protect the data from physical harm and un-authorized systems.
- Allow for growth in the data base system.
- Make access to the data easy for the user.
- Usage of Query languages...

# Subject: Programming Languages

- A prominent purpose of programming languages is to provide instructions to a computer.
- High level programming languages allow the programmer to focus on what needs to be done, rather than on how the computer actually works.
- C is a powerful general-purpose programming language. It can be used to develop software like operating systems, kernels, compilers, and so on...
- C++ is an object-oriented programming language which means that the main focus is on objects and manipulations around these objects which makes it much easier to manipulate code.
- Java is a widely used object-oriented programming language and software platform that runs on any platform and used in the real world, starting from a commercial e-commerce website to android apps, from scientific application to financial applications and so on...
- Python is an interpreted, object-oriented, high-level programming language with dynamic semantics and used to build websites and software, automate tasks, and conduct data analysis.