

Computers & Computation

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Course Details

Subject	Computers and Computation
Subject code	Ch.E - 104
Contact hours	3 + 2
Credit hours	3 + 1

Evaluation procedure

Sessional	30 % (Quizzes + Attendance + Class participation + Assignment)
Mid term	30%
Final term	40%

Course Outline (1)

- **Introduction to Computers:**

- Logging in proper usage
- Access and Security
- Use of keyboard and mouse
- General features and operations of graphic user interfaces
- Menus and windows operations
- Use of online help and tutorials

- **General Operations:**

Files and Directories naming

Handling and good practice

Copying, Cutting and Pasting

Operating systems in practices

Course Outline (2)

- **Word processors:**
 - Document creation and editing
 - Formatting
 - Layout
 - Use of fonts
 - Spell checking
 - Spreadsheets
 - Data
 - Formulae
 - Label input and management
 - Layout and good practices
- **Graphics:**
 - Basic use of graph making and drawing packages
 - Creation and presentation of different types

Course Outline (3)

- **Integration:**
 - Cutting and pasting via clipboard
 - By direct import from compatible software to create composite documents
- **Network operations**
- **Use of printer servers and drivers**
- **Electronic mail for receiving and submitting assignments**

What ???

Why ???

How ???

When ???

Who ???

Computer

- **A computer is a machine that reads, stores, manipulates and displays data.**
- **A computer is a machine that manipulates data according to a set of instructions called a computer program.**
- **The program has an executable form that the computer can use directly to execute the instructions.**

Computation

- "In a general way, we can define computing to mean any goal-oriented activity requiring, benefiting from, or creating computers.
- Thus, computing includes designing and building hardware and software systems for a wide range of purposes; processing, structuring, and managing various kinds of information; doing scientific studies using computers; making computer systems behave intelligently; creating and using communications and entertainment media; finding and gathering information relevant to any particular purpose, and so on.

Computation

- The term "computing" is also synonymous with counting and calculating.
- The discipline of computing is the systematic study of algorithmic processes that describe and transform information: their theory, analysis, design, efficiency, implementation, and application.
- The fundamental question underlying all computing is "What can be (efficiently) automated?"