

CC 111 – INTRODUCTION TO COMPUTERS

CREDIT HOURS

2 Hours

CONTACT HOURS (Hours/week)

Lecture: 1; Lab: 2

TEXT BOOK

Charles S. Parker, Deborah Morley, “Understanding Computers Today and Tomorrow”, Course Technology 2009, latest edition.

COURSE DESCRIPTION

This course provides an introduction to computers and computing. Topics of interest include the impact of computers on society, ethical issues, and hardware /software applications, including internet applications, system unit, storage and input/output devices, numbering systems, system and application software, presentation skills, program development, programming languages, and flow charts, Visual Basic, web page design using HTML, and communications and networks.

PREREQUISITE:

None

RELATION OF COURSE TO PROGRAM

Required

COURSE INSTRUCTION OUTCOMES

The student will be able to:

- Identify computer hardware components and their specifications and types.
- Use Windows, MS PowerPoint, HTML, and Visual Basic.
- Understand and use numbering systems.

TOPICS COVERED

- Introduction to the World of Computers Input and Output.
- The System Unit: Processing and Memory.
- Storage and Input/Output Devices
- System Software and Application Software
- Quiz 1+ Program Development, Programming Languages, and Flow charts
- Visual Basic 1
- Visual Basic 2
- Visual Basic 3
- Quiz 2 + Web page design using HTML 1
- Web page design using HTML 2
- Communications and Networks 1

- Communications and Networks 2
- Ethics, Computer Crime, Privacy, and other Social Issues

CONTRIBUTION OF COURSE TO MEET THE REQUIREMENTS OF CRITERION 5:

| Professional component Content | | | |
|---------------------------------------|---------------------------|--------------------------|--------------|
| Math and Basic Sciences | Engineering Topics | General Education | Other |
| | ✓ | | |

RELATIONSHIP OF COURSE TO STUDENT OUTCOMES:

| Student Outcomes | | Course aspects |
|-------------------------|---|---|
| A | An ability to apply knowledge of mathematics, science, and engineering | a ₁ a ₂ |
| B | An ability to design and conduct experiments, analyze and interpret data. | |
| C | An ability to design a system, component, or process to meet desired needs within realistic constraints such as economics, environmental, social, political, ethical, health, and safety, manufacturability, and sustainability | |
| D | An ability to function on multi-disciplinary teams. | |
| E | An ability to identify, formulate, and solve engineering problems | e ₁ e ₂ e ₃ |
| F | An understanding of professional and ethical responsibility | f ₁ f ₂ |
| G | An ability to communicate effectively | |
| H | The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and social content | h ₁ h ₂ h ₃ h ₄ |
| I | A recognition of the need for, and an ability to engage in life-long learning. | |
| J | A knowledge of contemporary issues within and outside the electrical engineering profession. | |
| k | An ability to use the techniques, skills, and modern engineering tools necessary for electrical engineering practice. | k |