

## Introduction to Computing

Course title	Course code
Introduction to Computing (Theory)	CSC101

Course Catalog Description
The fundamental aim of this course is to teach students the basics of computing in a relative term. Students, in this course, will learn the fundamentals of computing including computer basics and organization, common tools and applications, data representations, Operating systems and software usage. The focus of the course is to develop a good understanding of computing and a basic knowledge about how computers work.

Course detail	
Credit Hours	(1 theory + 1 lab)
Core	BE.EE
Elective	
Pre Requisite	None

Course offering Detail				
Lecture Hall	No of lecture per week	Duration of lecture	Lecture day	Semester
G107	1	1 Hours		

Instructor Detail	
Name	Engr. Muhammad Waqas
Office	
Email	<a href="mailto:m.waqas@inu.edu.pk">m.waqas@inu.edu.pk</a>
Counseling hours	
Course assistant	

Recommended Books			
Text Book			
Title	Edition	Web link	Others/tutorial
Brian Williams and Stacey Sawyer, "Using Information Technology". McGraw	11 <sup>th</sup> Edition, 2014		

-Hill ISBN:0072260718,			
Reference Books			
PattandPatel, "Introduction to Computing Systems from Bits and Gates to C and Beyond", McGraw Hill	2 <sup>nd</sup> Edition, 2003		

CLO	Statement	Weightage
1	<b>State</b> the knowledge on history, types & basics of computers systems and basics of computer programming in C++. <b>[PLO1, C3]</b>	<b>35%</b>
2	Define and explain the fundamentals of data organization, operating system, word processing, properly install and <b>use</b> various operating systems and software. <b>[PLO5, C3]</b>	<b>30%</b>
3	<b>Apply</b> the knowledge acquired to solve various numbering systems and conversions. <b>[PLO2, C2]</b>	<b>35%</b>

Course Plan					
Lect No:	Contents	Exam		Quiz	Assign.
		Mid	Final		
1	Introduction to Computers: Brief History of Computers [CLO 1]	✓			
2	Basic components of Computers, Classification of Computers, Common tools and applications [CLO 1]	✓		✓	✓
3	Types of memories, Storage media and devices [CLO 1]	✓			
4	Physical and logical storage [CLO 1]	✓			
5	Introduction to operating systems & Data organization [CLO 2]	✓	✓		
6	Introduce different techniques to install & maintain an operating system and different software [CLO 2]	✓		✓	✓
7	Numbering systems: Binary, decimal, Octal and hexadecimal conversions [CLO 3]	✓	✓		
8	Numbering systems: Conversion of Binary to decimal, Octal and hexadecimal conversions [CLO 3]	✓			

<b>Midterm Examination</b>					
9	Numbering systems: Conversion of Decimal, Octal and Hexadecimal to various conversions [CLO 3]		✓		
10	Signed and unsigned numbers, Number representation and ranges [CLO 3].		✓		
11	Numbering systems: Applying Arithmetic Operations [CLO 3]		✓	✓	✓
12	Introduction to word processing, creating document.[CLO 2]		✓		
13	Introduction to Power point [CLO 2]		✓		
14	Introduction to Excel [CLO 2]		✓	✓	✓
15-16	Introduction to programming languages (C++) and programming Environment [CLO 1]		✓		
<b>Final Examination</b>					

#### Mapping CLOs to Standard PLOs

CLOs \ PLOs	PLOs											
	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12
CLO1	✓											
CLO 2					✓							
CLO 3		✓										

<b>Prepared by Course Review Committee Communications (CRC-C-EE)</b>	
Dr. ShahryarShafique	
Engr. PirMehrAli Shah	
Engr. MujtabaIhsan	
Engr.MehreMuner	
Engr. PernyaAkram	

Engr. Sajid Nawaz	
Engr. SalehaDurrani	<b>Prepared by</b>

General Remarks:

Approved By

Chairman Electrical Engineering