

## Basic Information

Faculty	Satyaki Das, (Room PC-315)
Office Hours	<b>Sunday:</b> 1:30 pm - 5:30 pm (Permanent Campus: Room: PC-315) <b>Tuesday:</b> 1:30 pm - 5:30 pm (Permanent Campus: Room: PC-315) <b>Monday:</b> 11:30 am - 1:00 pm (Permanent Campus: Room: PC-315) & 2:00 pm - 2:30 pm (Campus-A Adjunct Faculty Room) <b>Wednesday:</b> 11:30 am - 1:00 pm (Permanent Campus: Room: PC-315) & 2:00 pm - 2:30 pm (Campus-A Adjunct Faculty Room) <b>Thursday:</b> 9:30 am - 12:30 pm (Permanent Campus: Room: PC-315) Note: Also available by Email Appointment at other times <b>satyaki.das@ulab.edu.bd</b>
Contact Details	<b>Room:</b> PC315 <b>satyaki.das@ulab.edu.bd</b>
Course Prerequisites	None
Department offering the course	Department of Computer Science and Engineering
Course Title	Introduction to Computer Studies
Course Code	CSE 101   Sec   11   Credit   3   Term   Spring 2020
Number of Lectures	24   Number of Tutorials   -   Number of Practical   -   Total   24

## Course Details

### 1. Course Description

This course will familiar the students with the Computing Systems, primitive programming and ubiquitous technology driven system. At the end of the class, we expect students be able to visualize computer science and engineering to some extent.

### 2. Course Objective

1. To **provide** a thorough introduction to computing system.
2. To **introduce** several important technological advancements that are interesting both from a theoretical and also practical point of view.
3. To **enable** students in designing programs using pseudocodes and flowcharts.
4. To **emphasize** on designing and solving practical problems through computer programs.
5. To **introduce** the students on fundamental programming features.

### 3. Intended learning outcomes of the course (ILOs)

1. <b>Describe</b> the concept and components of computing system along with its benefits.
2. <b>Explain</b> features and benefits of various technological advancements
3. <b>Define</b> a wide range of practical problems as a computational problem
4. <b>Understand</b> a real-life problem and <b>be able</b> to design and develop systems using pseudocodes and flowcharts.
5. <b>Introduce</b> the fundamental concepts of computer programming

#### 4. Mapping of Course LO and PLO:

Learning Outcome (LO) of the Course	Program Learning Outcome (PLO)											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>ILO 1</b>	MJ											
<b>ILO 2</b>	MJ											
<b>ILO 3</b>	MJ											
<b>ILO 4</b>	MJ											
<b>ILO 5</b>	MJ								MN	MN		

#### 5. Contents

ILO	Topic	Teaching Strategy	Assessment Strategy	Number of Sessions
1-2	Introduction to Computing System	Lecture Exercise	Q/A Test	4
1-2	Number Systems	Lecture Exercise	Q/A Test	4
1-2	Hardware and Software	Lecture Exercise	Q/A Test	2
1-3	Technological Advancements	Lecture Exercise	Q/A Test	2
1-5	Algorithms, pseudocode and flowcharts	Lecture Exercise	Q/A Test	4
1-5	Introduction to Programming	Lecture Exercise	Q/A Presentation Test	8
			<b>Total</b>	24

#### 6. A. Assessment Schedule

Assessment 1	Quiz	Session	TBA
Assessment 2	Mid Term	Session	As per ULAB Schedule
Assessment 3	Project Presentation	Session	TBA
Assessment 4	Final	Session	As per ULAB Schedule

## B. Weights of Assessments

Assessments	%
Mid-term Examination	20
Final Term Examination	40
Project Presentation (Project + Interview)	20
Class Participation	10
Quizzes	10
Total	100

## C. Grading Policy

Grade	Marks		Grade	Marks
A+	95-100		B-	65-69
A	85-94		C+	60-64
A-	80-84		C	55-59
B+	75-79		D	50-54
B	70-74			

## 7. List of References

Essential Books (Text Books)	<ul style="list-style-type: none"><li>Peter Norton, Introduction to Computers, 6<sup>th</sup> edition</li><li>Let us C - Y. Kanetkar</li></ul>
Online Resources	Related online resources will be provided in the class.

## Facilities Required for Teaching and Learning

Projector, Whiteboard, computer with internet connection.

## Course Policies and Procedures

- ULAB regulations will be followed in conducting exams and evaluating answer scripts and grading.
- Failing to attend 6 or more classes will result in an automatic fail.
- Mid-term and final examinations will be held according to ULAB schedules.
- Students are advised to be in the classroom on time.
- Cheating and plagiarism will result in an automatic mark of zero in the assessment item.
- Quizzes will be conducted as surprise quiz. Thus, students are advised to attend class regularly.
- There will be No Makeup Exam.
- Any cellular phone based activity is strictly prohibited in the class. Students are advised to keep their phones into silent mode while at the class.



Course Instructor

Date:

Head of the Department

Date:

#### Appendix-1: Program Learning Outcome (PLO)

No.	PLO
1.	Engineering Knowledge
2.	Problem Analysis
3.	Design/Development of Solutions
4.	Investigation
5.	Modern Tool Usage
6.	The Engineer and Society
7.	Environment and Sustainability
8.	Ethics
9.	Communication
10.	Individual and Team Work
11.	Life Long Learning
12.	Project Management and Finance

#### **Generic Skills (Detailed):**

1. **Engineering Knowledge (T)** -Apply knowledge of mathematics, sciences, engineering fundamentals and manufacturing engineering to the solution of complex engineering problems;
2. **Problem Analysis (T)** - Identify, formulate, research relevant literature and analyze complex engineering problems, and reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences;
3. **Design/Development of Solutions (A)** -Design solutions, exhibiting innovativeness, for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, economical, ethical, environmental and sustainability issues.
4. **Investigation (D)** Conduct investigation into complex problems, displaying creativeness, using research-based knowledge, and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions;
5. **Modern Tool Usage (A & D)** -Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations;
6. **The Engineer and Society (ESSE)** -Apply reasoning based on contextual knowledge to assess societal, health, safety, legal, cultural, contemporary issues, and the consequent responsibilities relevant to professional engineering practices.
7. **Environment and Sustainability (ESSE)** -Understand the impact of professional engineering solutions in societal, global, and environmental contexts and demonstrate knowledge of and need for sustainable development;
8. **Ethics (ESSE)** -Apply professional ethics with Islamic values and commit to responsibilities and norms of professional engineering code of practices.
9. **Communication (S)** -Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions;
10. **Individual and Team Work (S)** -Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.
11. **Life Long Learning (S)** -Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
12. **Project Management and Finance (S)** -Demonstrate knowledge and understanding of engineering management and financial principles and apply these to one's own work, as a member and/or leader in a team, to manage projects in multidisciplinary settings, and identify opportunities of entrepreneurship.