DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
BANGLADESH UNIVERSITY OF BUSINESS AND TECHNOLOGY

COURSE OUTLINE

1	**Faculty**	Faculty of Engineering& Applied Sciences (FEAS)
2	**Department**	Department of Computer Science and Engineering
3	**Program**	B.Sc. Engg. in Computer Science and Engineering (B. Sc. Engg. in CSE)
4	**Course Code**	CSE 341
5	**Course Title**	Advanced Programming
6	**Course Type**	Core Engineering Course
7	**Pre-requisites**	N/A
8	**Credit Hours/Value**	3.0
9	**Contact Hours**	17 weeks × 2 classes per week × 1.25 hours per class = 42.5 total hours
10	**Year- Semester**	3 - 1
11	**Academic Session**	Spring-2026

12	**Class Schedule**	Intake – Section (Shift)	Class Day	Class Hours	Venue
		53–1 (Day)	Monday	08:15 am – 09:45 am	B2/318
			Thursday	02:45 pm – 04:15 pm	B2/318
		BUBT Campus, Rupnagar, Mirpur 2, Dhaka - 1216			

13	**Course Website**	**Google Classroom Code:** 4mvcu6f2 **Meet Link:** https://meet.google.com/kjq-biju-ibw

14	**Course Teacher's Information**	**Name (Code):** Most. Jannatul Ferdous	**Specialization**: Machine learning, Deep learning
		Designation: Assistant Prof., Department of CSE	**Email:** jannatul_ferdous@bubt.edu.bd
			Cell: +8801723586258 **Room No.** 303(B1)

15	**Counselling Hour/Tutorial**	Day	Counseling Hours	Venue
		Sunday	01:30 pm – 02:45 pm	
		Monday	01:30 pm – 02:45 pm	B1/303
		Thursday	01:30 am – 02:45 pm	

16	**Accessories & Aids**	Students must carry learning materials like lecture notes, calculator, pen, pencil, eraser etc. in the classroom. Borrowing learning materials in the classroom or exam room from fellow students is prohibited. A student is also advised to keep separate class note (khata) of 50 pages for the course during class hours.

17	**Course Rationale**	This course has been designed to teach the students the fundamental concepts of the programming language Java. It focuses on how to write a program using the exclusive features such as OOP, interfaces, packages, multithreaded programming, exception handling, collection framework, etc. of Java programming language. It emphasizes that the students learn to determine suitable logic for solving the advanced object-oriented problem using the exclusive features of Java.

18	**Course Objective**	The purpose of this course is to impart a solid understanding of the fundamental principles behind the Java programming language to students. It places a strong emphasis on instructing them in crafting programs using the distinctive attributes of Java, including Object-Oriented Programming (OOP), interfaces, packages, multithreaded programming, exception handling, and the collection framework. The course highlights the importance of enabling students to adeptly formulate appropriate logic for solving complex object-oriented challenges by leveraging the unique capabilities inherent in Java's feature set.
19	**Course Learning Outcomes (CLOs)**	Upon completing this course student will be able to: **CLO1: Understand** the fundamentals of OOP features alongside basic programming concepts in java. **CLO2: Explain** exclusive features of java containing in OOP model, exceptions, multithreading, generic collections, files, etc. **CLO3: Design** solutions of different problems by applying OOP and java's features. **CLO4: Analyze** real life problem scenario and produce robust solution using java's advanced functionalities.

20	**Mapping of CO – PO Method of Delivery and Assessment Tool**				

CLOs	PLOs &CF	Bloom's Domain / Level	Delivery Methods / Activities	Assessment Tools
CLO1	PLO1 CF = 2	Cognitive/Understanding	⊙ Classroom Lecture (PPP &/or WBT*) ⊙ Classroom Discussion& Exercise practice ⊙ Analysis and design problem solving ⊙ Course Counseling	*Indirect*: In class response, course counseling, course end survey *Direct*: Class participation and activity, class test, assignment, midterm and final examinations
CLO2	PLO1 CF = 3	Cognitive/Understanding		
CLO3	PLO2 CF = 3	Cognitive/Analyzing		
CLO4	PLO3 CF = 3	Cognitive/Applying		

*PPP: Power Point Presentation & WBL: White Board Teaching

Correlation of COs to POs

Correlation Criteria	Correlation Level	Correlation Factor (CF)
Less than 25%	Almost no correlation	0
Equal to or greater than 25% and below50%	Poor (Low)	1
Equal to or greater than 50% and below 75%	Moderate (Medium)	2
Equal to or greater than 75%and up to 100%	Significant (High)	3

21	**Teaching-Learning Strategy**	The course's teaching-learning process is designed to achieve its intended learning outcomes. Various classroom tools, such as multimedia projectors with desktop computers, whiteboards, and overhead projectors, are used to make the process engaging, effective, and comprehensive. The primary method of teaching is through classroom lectures, wherein most of the course content is covered in the lecture notes. For the remaining topics, textbooks are utilized, with additional references provided for students to study on their own. Lecture materials are posted on Google Classroom web pages and also provided as hard copies in the classroom. To ensure that students achieve the expected performance and knowledge level, classroom discussions, PowerPoint presentations, problem-solving using whiteboard markers, and homework or home studies are used. Counseling is also offered to help students with weak areas. Formative assessments of individual students are done through inside and outside classroom discussions, in-class eye contact and clicker questions, homework, and students' responses. A course-end survey is also conducted. Summative assessments are done through class participation and performance observation, assignments, class tests, and semester midterm and final examinations.
		If a student is absent from a class for any reason, they are advised to do self-study and take tutorials from the class teacher to make up for the missed class. Supplementary examinations are available for students who missed the midterm or final examinations due to valid reasons. These supplementary exams are more challenging than the regular exams.

22	**Course Plan**

This course consists of 150.0 min./week of class contact hours and an additional 90 min./week of counseling hours to explain students' design problems, provide reading materials, and assist in understanding lecture materials for preparing examinations, class tests, and assignments.

Week	Selected Topics	Lecture Note, Text Book& Other Ref.	Teaching Learning Strategy	Assessment Strategy	Corresponding CLOs
1-2 (Week 1)	History and evolution of Java: The Java Technology Phenomenon, OOP Programming Concepts, benefits of OOP, applications of OOP.		Lecture, Video Presentation	Class Test, Assignment, Written Examination	CO1
3-4 (Week 2)	Getting started with java program: simple java applications, compiling a program, and executing applications, Variables, Primitive Data Types, Arrays, Operators: Assignment, Relational, Unary, Arithmetic, Conditional and others		Lecture discussion with White Board and Multimedia, Problem Solving		CO1

Week	Topic			CO
5-6 (Week 3)	Control statements: if-else, switch, for, while, do-while, for each loop, jump statements, Class fundamentals, declaring objects, introducing methods, Constructors, this keyword, garbage collection			CO2
7-8 (Week 4)	Method overloading, constructors overloading, using object as parameters, argument passing, returning objects, introducing access control, understanding static, introducing final			CO2
9-10 (Week 5)	Introducing nested and inner classes, String class, Using command line arguments, Inheritance basics and practical example, Using super			CO3
11-12 (Week 6)	Multilevel hierarchy, method overriding, Dynamic method dispatch, Abstract Class, using final with inheritance			CO3
13-14 (Week 7)	Interface Basics, implementing interface, nested interface, applying interface, variables in interface, extending interface, Packages and Interfaces: Packages, importing package, Defining and Implementing an Interface. Case Study & Review class for Mid Term Examination.	Lectures, Questions and answers	Problem Solving & Viva Voce	CO2
Midterm Examination (22 Feb – 07 Mar 2024)				
15-16 (Week 8)	Exception Handling: fundamentals, Exception types, Uncaught exceptions, using try and catch, multiple catch			CO2
	clause, nested try statements, finally block			
17-18 (Week 9)	Exception Handling: Throwing Exceptions, Java built in exceptions, custom exception, handing exception based on practical problem scenario	Lecture discussion with White Board and Multimedia, Problem Solving	Class Test, Assignment, Problem Solving Ability and Written Examination	CO3, CO4
19-20 (Week 10)	Multithreaded Programming: multitasking, Main thread, Creating a thread, life cycle of a thread			CO2
21-22 (Week 11)	Autoboxing, Annotations and Retention			CO3

23-24 (Week 12)	String Handling: Special string operations, character extraction, string comparison, modifying string, other string operations, practical problem solving based on string manipulations					CO2
25-26 (Week 13)	Generics and Wildcard					CO2, CO3
27-28 (Week 14)	Java Collections Framework: Basics, Collection interface, set interface, Array list class, linked list class, list interface, queue interface, Priority queue class, Map class, Map interface, practical problem design solutions			Discussion and Problem Solving	Problem Solving Ability and Written Examination	CO2, CO3
29-30 (Week 15)	The Character Streams: serialization, Buffered Reader, Buffered Writer					CO3
31-32 (Week 16)	**Brain Storming Week**					
33-34 (Week 17)	File Input/Output: practical problem solving, Case Study & Review class for Semester Final Examination.			Lectures, Questions and answers	Problem Solving & Viva Voce	CO4

Final Exam (26 May -07 June 2024)

23	i	Text Books	1. Java: The Complete Reference, 7th Edition, by Herbert Schildt
	ii	Reference Books	1. Java: How to Program, 9th Edition, by Harvey Deitel & Paul Deitel 2. Programming with Java: A Primer, 3rd Edition, E. Balagurusamy
24		Assessment and marks distribution criteria	Active engagement in class activities, participation in outside classroom discussions, and communication through the Internet and phone are integral parts of this course. Failure to participate in class regularly, take class tests, and/or complete assignments may result in failing the course. To achieve the course-specific expectations, students must actively participate in classroom discussions and complete all sets of work at a satisfactory level, as outlined in the course content. The course-specific expectations for students are achieved if

- 75% of students in a section attend more than 70% of classes (determined by summative assessment).
- Their active participation in the classroom discussion is targeted at up to 80% of the total attendees (determined by formative assessments such as eye contact, clicker questions, and group discussions).
- Equal or more than 40% of course outcomes must be achieved by the students (summative assessment).
- The level of engagement in the studies, such as regularly preparing class lectures, class tests, and assignments, must be more than 60% (formative assessment).
- Expected level of participation in the outside class discussion (once weak, more than 30% of students in a section) by course counseling and using social media like Google Classroom, email, phone call, etc. (formative assessment).
- Students are assessed according to their individual performance in the examinations, class tests, assignments, and class participation. The final mark calculation and course outcome assessment are done based on the following mark distribution criteria:

Assessment tool	Conducting Number	Mark distribution (%)
Class participation and activity	34	05
Class test	2	$7.5 \times 2 = 15$
Assignments/Report and Presentation	1	$5.0 + 5.0 = 10$
Midterm examination	1	30
Final examination	1	40
	Total Mark	100

Class participation & activity performance criteria

Performance level	Mark distribution (%)
91% - 100%	05
86% - 90%	04
81% - 86%	03
76% - 80%	02
70% - 75%	01
less than 70%	Not allowed to sit for the final examination.

25 Assessment Strategy

Assessment tool	Content, Length and Criteria	Weight (mark)	Due date
Class test 1	Composed of 3 to 5 short questions. Duration of the class test is 40 minutes, and the assigned full mark is 7.5.	7.5	On the 12th lecture
Class test 2	Composed of 3 to 5 short questions. Duration of the class test is 40 minutes, and the assigned full mark is 7.5.	7.5	On the 25th lecture
Assignment with a presentation/ Viva Voce	Assignment with a presentation/ Viva Voce will be delivered two weeks after assigning. 5 marks are assigned for the assignment and the other 5 marks are for a presentation/ Viva Voce.	10.0	Presentation will be conducted on the 28th lecture
Midterm Examination	Midterm Examination is held according to the Academic Calendar and examination schedule after 7 weeks of classes. All three sets of questions are to be answered by the students in one and halfhour exam period. Each question set contains multiple short type questions. The assigned full mark for the 3 sets of questions is 30.	30	After 14th lecture and following the examination schedule of BUBT.

	Final Examination	Final Examination is held after 8 weeks of classes after the midterm examination. All four sets of questions are to be answered by the students in a two-hour exam period. Each question set contains multiple short type questions. The assigned full mark for the 4 sets of question is 40.	40	After 9 weeks of classes afterward the midterm examination and following the examination schedule of BUBT.

26	CLO Assessment Criteria	Assessment of CLOs					
		Assessment Tool	CLO				Mark Allocation
			CLO1	CLO2	CLO3	CLO4	
		Class Participation	5/4	5/4	5/4	5/4	05
		Class Test	5.0	10.0	0	0	15
		Assignment& Presentation	0	5.0	5.0	0	10
		Midterm Exam	10	20	0	0	30
		Final Exam	05	10	15	10	40
		Total Mark	21.25	46.25	21.25	11.25	100

27	Rubrics (Attainment Criteria)	CLOs (Taxonomy domain)	Not attained /Failed (0-39%)	Poor (40%-49%)	Moderate (50%-64%)	Good (65%-79%)	Excellent (80%-100%)
		CLO1 (understand) CLO2 (understand and apply) CLO3 (apply) CLO4 (understand and apply)	The question was answered with serious deficiencies in understanding and explanation. Applicable method was not almost touched.	The question was answered inadequately by touching on the applicable method or without explanations. As a result, a few steps of problem-solving procedures or concepts are not developed properly or are missing.	The question was answered partially correctly by applying the method or concepts asked, but a few important details were missing.	The question was answered correctly but briefly, and missed some portions of the important explanation by applying the required method or concepts.	The question was answered correctly with detailed explanations using the asking method of solving the problem or concepts with adequate explanation.

28	Feedback	All kinds of feedback to the students will be produced within a week after the day of holding a class test and midterm examination. No answer script will be shown for the final examination if it is not challenged by a student. Online and email queries will also be responded to within three days by email.

29	Grading Policy	Letter grades and grade points are used to evaluate the performance of a student in the course:
		Marks Range	Letter Grade	Grade Point

80% and above	A+ : A Plus (Outstanding)	4.00
75% to less than 80%	A : A regular (Excellent)	3.75
70% to less than 75%	A- : A minus (Very good)	3.50
65% to less than 70%	B+ : B Plus (Good)	3.25
60% to less than 65%	B : B regular (Average)	3.00
55% to less than 60%	B- : B minus (Below average)	2.75
50% to less than 55%	C+ : C Plus (Poor)	2.50
45% to less than 50%	C : C regular (Very poor)	2.25
40% to less than 45%	D : Pass marginally	2.00
Less than 40%	F : Fail	0.00
	I : Incomplete	
	R : Retake	
	W : Withdraw	

30	Additional Course Policies	Assignment	Late assignment submissions will not be accepted. *Any kind of copied information without proper citation (i.e., plagiarism) in the assignments or any other work is prohibited and treated as serious academic misconduct, which is prosecuted through the Discipline Committee of BUBT.* All copied or plagiarized assignments/reports/test papers will be canceled, and the isolated student must prepare a new assignment/project again. **Zero tolerance will be shown in this regard.** Feedback after the submission of long assignments will be provided on hand or by email within two weeks.
		Class Test	Two class tests (CTs) will be conducted for the course. All class tests have equal weightage of 7.5. Both regular and surprise CTs can be conducted.
		Closed book assessments	CTs, midterm and final examinations are closed book assessments. Mobile phone is prohibited in the examination hall. Students are insisted on carrying simple scientific calculators to solve the complex calculations and a wrist-watch to follow time during the exam hours.
		Test Policy	If a student is absent from a class test anyway and does not report to the class teacher personally beforehand, his/her score for that test will be zero. No make-up for the class test will be allowed. No supplementary for midterm and final examinations will be entertained without physical presence and recommendation of the guardian, along with written permission of the department. Supplementary examination questions are much harder than the regular examination questions; therefore, students are discouraged from taking supplementary examinations.

31	Additional Information	Academic Calendar Spring 2024: https://www.bubt.edu.bd/Home/page_details/Academic_Calender Academic Rules: https://www.bubt.edu.bd/Home/page_details/Rules_and_Regulations Grading & Evaluation: https://www.bubt.edu.bd/Home/page_details/Evaluation_Grading_System Rules& Regulations: https://www.bubt.edu.bd/Home/page_details/Office_of_the_Registrar

32	**Bloom's Taxonomy for Teaching-Learning**

Bloom's Taxonomy is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specific quality. The three taxonomy domains for achieving learning objectives are cognitive, affective, and psychomotor. Cognitive domain is in the primary focus of educating and frequently used to structure curriculum learning objectives and achieve the level of learning. The three domains and their respective levels are illustrated below:

Cognitive [C] (Knowledge-based)	Affective [A] (Emotion-based)	Psychomotor [P] (Action-based)
Remember	Receive	Imitate
Understand	Respond	Manipulate
Apply	Value	Precision
Analyze	Organize	Articulation
Evaluate	Characterize	Naturalization
Create	--- --- ---	--- --- ---

33 **Descriptions of Cognitive Domain (Anderson and Krathwohl' supdated Taxonomy in 2001):**
The **cognitive domain** involves the development of our mental skills and the acquisition of knowledge.

Category (Level)	Meaning	Keywords
Remember (C1)	Recognizing or recalling knowledge from memory. Remembering is when memory is used to produce or retrieve definitions, facts, or lists, or to recite previously learned information.	Define, describe, draw, find, identify, label, list, match, name, quote, recall, recite, tell, and write
Understand (C2)	Constructing meaning from different types of functions be they written or graphic messages or activities like interpreting, exemplifying, classifying, summarizing, inferring, comparing, or explaining.	Classify, compare, exemplify, conclude, demonstrate, discuss, explain, identify, illustrate, interpret, paraphrase, predict, and report
Apply (C3)	Carrying out or using a procedure through executing or implementing. Applying relates to or refers to situations where learned material is used through products like models, presentations, interviews, or simulations.	Apply, change, choose, compute, dramatize, implement, interview, prepare, produce, role play, select, show, transfer, and use
Analyze (C4)	Breaking materials or concepts into parts, determining how the parts relate to one another or how they interrelate, or how the parts relate to an overall structure or purpose. Mental actions included in this function are differentiating, organizing, and attributing, as well as being able to distinguish between the components or parts. When one is analyzing, he/she can illustrate this mental function by creating spreadsheets, surveys, charts, or diagrams, or graphic representations.	Analyze, characterize, classify, compare, contrast, debate, deconstruct, deduce, differentiate, discriminate, distinguish, examine, organize, outline, relate, research, separate, and structure
Evaluate (C5)	Making judgments based on criteria and standards through checking and critiquing. Critiques, recommendations, and reports are some of the products that can be created to demonstrate the processes of evaluation.	Appraise, argue, assess, choose, conclude, decide, evaluate, judge, justify, predict, prioritize, prove, rank, rate, select, Monitor.
Create (C6)	Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing. Creating requires users to put parts together in a new way, or synthesize parts into something new and different creating a new form or product. This process is the most difficult mental function in the new taxonomy.	Create, invent, compose, predict, plan, construct, design, propose, devise, and formulate

34 **Graduate Attributes (Program Learning Outcomes) of B.Sc. in CSE Program based on Washington Accord**

Program Learning Outcomes (PLOs) are brief statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and attitudes that students acquire throughout the entire course of a program. The students of the B.Sc. in CSE program are expected to achieve the following graduate attributes or program outcomes at the time of graduation:

PLO1. Apply knowledge of mathematics, natural science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PLO2. Identify, formulate, and analyze complex engineering problems reaching substantiated conclusions using the first principles of mathematics and natural and engineering sciences.

PLO3. Design solutions for complex engineering problems and design systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.

PLO4. Conduct investigations of complex problems using research-based knowledge and research methods that include the design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

PLO5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering problems, with an understanding of the limitations.

PLO6. Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.

PLO7. Understand and evaluate the sustainability and impact of professional engineering work to solve complex engineering problems in societal and environmental contexts.

PLO8. Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

PLO9. Function effectively as individuals and members or leaders of diverse teams and in multidisciplinary settings.

PLO10. Communicate effectively on complex engineering activities with the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and convey and receive clear instructions.

PLO11. Demonstrate knowledge and understanding of engineering and management principles and apply them to their work as team members or leaders or entrepreneurs to manage projects in multidisciplinary environments.

PLO12. Recognize self-awareness to engage in a lifelong learning process to reflect in the broadest context of technological change.

35	**Knowledge Profile (K)**

K1: A systematic, theory-based understanding of the natural sciences applicable to the discipline.

K2: Conceptually-based mathematics, numerical analysis, statistics and formal aspects of computer and information science to support analysis and modeling applicable to the discipline.

K3: A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline.

K4: Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline much is at the forefront of the discipline.

K5: Knowledge that supports engineering design in a practice area.

K6: Knowledge of engineering practice (technology) in the practice areas in the engineering discipline.

K7: Comprehension of the role of engineering in society and identified issues in engineering practice in the discipline:

ethics and the professional responsibility of an engineer to public safety; the impacts of engineering activity: economic, social, cultural, environmental and sustainability.

K8: Engagement with selected knowledge in the research literature of the discipline.

36	**Range of Complex Engineering Problem Solving (P)**

Complex Engineering Problems have characteristic **P1** and several or all of **P2** to **P7**:

P1. Depth of knowledge required: Cannot be resolved without in-depth engineering knowledge at the level of one or more of K3, K4, K5, K6 or K8, which allows a fundamentals-based, first principles analytical approach

P2. Range of conflicting requirements: Involve wide-ranging or conflicting technical, engineering and other issues

P3. Depth of analysis required: Have no obvious solution and require abstract thinking, originality in analysis to formulate suitable models

P4. Familiarity of issues: Involve infrequently encountered issues

P5. Extent of applicable codes: Are outside problems encompassed by standards and codes of practice for professional engineering

P6. Extent of stakeholder involvement and conflicting requirements: Involve diverse groups of stakeholders with widely varying needs

P7. Interdependence: Are high-level problems including many component parts or sub-problems

37	**Range of Complex Engineering Activities (A)**

Attribute Complex activities means (engineering) activities or projects that have several or all of the following characteristics:

A1. Range of resources: Involve the use of diverse resources (and for this purpose resources include people, money, equipment, materials, information and technologies).

A2. Level of interaction: Require resolution of significant problems arising from interactions between wide-ranging or conflicting technical, engineering, or other issues.

A3. Innovation: Involve creative use of engineering principles and research-based knowledge in novel ways.

A4. Consequences for society and the environment: Have significant consequences in a range of contexts, characterized by difficulty of prediction and mitigation.

A5. Familiarity: Can extend beyond previous experiences by applying principles-based approaches.

38	**Code of Conduct**

It is strongly suggested that students keep discipline in the classroom by attending class on time, listening to lectures attentively, and participating in discussions on the subject. To get class participation grades, students MUST attend the classes of the courses s/he registered for. Turn off his or her cell phone before entering a class or participating in class tests and exams. There are activities that are considered academic misconduct. One of them is plagiarism, which signifies the deliberate formal presentation or submission of works, phrases, texts, ideas, illustrations, or diagrams of others as one's own without proper citation. Another one is the use of unauthorized aids (including electronic devices), asking for assistance, or using illegal materials when preparing assignments or in examinations. In addition, copying from others' work, showing your work to others, and asking for answers are also considered academic misconduct. Penalties for involving academic misconduct include one or more of the following: a zero grade on the work produced, a failing grade in the course, suspension for one semester or more, and even expulsion from the university. On the university premises or at a university-sponsored program, students must abide by the Student Code of Conduct and other Rules and Regulations of BUBT, which are available on the BUBT website at https://www.bubt.edu.bd/Home/page_details/Office_of_the_Proctor.

39	**Social & Moral Values**

Our promises are based on the three cardinal

principles: i. What we do believe. ii. What we do

practice. iii. What we will promote.

However, students are advised to undertake the following commitments for social and moral developments.

• To be punctual and attentive in classes; • To prioritize honesty & faith; • To ensure mutual respect; • To be always proactive; • To avoid conspiracy; • To be cooperative in learning; • To be sincere in class preparation;	• To avoid unfair means and plagiarism in exams, report writings and assignments; • To carry out assignments or keep other commitments timely; • To be motivated for asking question and encourage feedback; • Not to forget to switch-off the cellphone in a class;	• To follow the dress code and wearing ID card on campus; • To bedecenton all aspects; • To be loyal and trust-worthy to the teachers and others; • Help keepingan eco-friendly environment in the campus.

Prepared by: **Checked by:**   **Approved by:**

Most. Jannatul Ferdous, Asst. Prof., CSE, BUBT