



6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

THEORY COURSE FILE CONTENTS

Check list Course Outcomes Attainment

S. No.	Contents	Available (Y/N/NA)	Date of Submission	Signature of HOD
1.	Authenticated Syllabus Copy	Y	01.09.2020	
2.	Individual Time Table	Y		
3.	Students' Name List (Approved Copy)	Y		
4.	Course Plan, PO, PSO, COs, CO-PO Mapping, COA Plan, Session Plan and Periodic Monitoring	Y		
5.	Previous Year End Semester Question Papers	Y		
6.	Question Bank (All Units - Part A, Part B & C)	NA		
7.	Dissemination of Syllabus and Course Plan to Students	Y		
8.	Lecture Notes - Unit I, II & III	Y		
9.	Sample Documents and Evaluation Sheet for Internal Assessment - Tutorials / Assignments / Class Test / Open Book Test / Quiz / Project / Seminar / Role Play if any (Before Mid Term)	N		
10.	Mid Term Examination A. Question Paper / Any Other Assessment Tools Used B. Sample Answer Scripts (Best, Average, Poor) if required C. Evaluation Sheet D. Slow Learners List and Remedial Measures	Y	25.01.2021	
11.	Lecture Notes – Unit IV & V	Y		
12.	Sample Documents and Evaluation Sheet for Internal Assessment - Tutorials / Assignments / Class Test / Open Book Test / Quiz / Project / Seminar / Role Play if any (After Mid Term)	N		
13.	Course End Survey (Indirect Assessment) & Consolidation	Y	26.03.2021	
14.	End Term Examination A. Question Paper & Answer Key B. Sample Answer Scripts (Best, Average, Poor) if required C. Evaluation Sheet	Y		



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	D. Slow Learners List and Remedial Measures.			
15.	Content Beyond the Syllabus (Proof)	NA		
16.	Innovative Teaching Tools Used for TLP	N		
17.	Details of Visiting Faculty Session / Industry Expert / Guest Lecture / Seminar / Field Visit / Webinars / Flipped Class Room / Blended Learning / Online Resources etc.	NA		
18.	Consolidated Mark Statement	Y		
19.	CO Attainment (Mid Term + Internal Assessment + End Term)	Y		
20.	Gap Analysis & Remedial Measures	Y		
21.	CO - PO Attainment	Y		
22.	Class Record (Faculty Logbook)	Y	09.04.2021	

Signature of HOD/ Dean

Date:

Signature of Faculty

Date:



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Syllabus Copy

DGS11001	DESIGN THINKING	L	T	P	C
Version 1.0		2	0	0	2
Pre-requisites/Exposure	Knowledge of analyzing society problems and product usage problems and a zeal to improve the current situation, in addition to knowing to using laptop/computers, internet, social media interaction, file sharing and uploading, email and communication etiquettes.				
Co-requisites	--				

Course Objectives

1. To enable students to acquire knowledge, imagination and be more assertive on opinions on problems in society.
2. To enable students to learn basics of research, data collection, analysis, brainstorming to find solutions to issues.
3. To make them understand Design Thinking methodologies to problems in field of study and other areas as well.
4. To help students to understand future Engineering positions with scope of understanding dynamics of working between inter departments of a typical OEM.

Course Content

Unit I: 2 Lecture Hours

WHAT IS DESIGN THINKING: Designers seek to transform problems into opportunities. Through collaboration, teamwork, and creativity, they investigate user needs and desires on the way to developing human-centered products and/or services. This approach is at the very heart of design thinking.

Unit II: 2 Lecture Hours

THE DESIGN THINKING MODEL: A tool that helps guides you along a design thinking path. The model does this by providing a series of activities that will help you effectively design a product, service or solution to a user's need. The model presents the approach as a process, allowing us to look at each step – or phase – along the journey to the development of a final design.

Unit III: 4 Lecture Hours

PHASE 1: DISCOVER: Begin the design thinking process with the Discover phase, where you will identify the specific problem your design is intended to solve, as well as important usability aspects from those who will use your design. Discovery can be performed through a variety of different research methods which you will learn in this module.



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Unit IV: **4 Lecture Hours**

PHASE 2: DEFINE: In the Define phase, you come to understand the problem. We often refer to this as framing the problem. You can do this by using a variety of tools, including storytelling, storyboarding, customer journey maps, personas, scenarios, and more.

Unit V: **4 Lecture Hours**

PHASE 3: DEVELOP: Turn your attention to solving the problem. In this phase you brainstorm custom creative solutions to the problems previously identified and framed. To do this, you conceptualize in any way that helps, putting ideas on paper, on a computer, or anywhere whereby they can be considered and discussed.

Unit VI: **4 Lecture Hours**

PHASE 4: DELIVER: This phase is all about testing and building concepts. Here you take all of the ideas that have been discussed to this point and bring them a little closer to reality by building a concept; something that makes it easier for a user to experience a design. This concept is referred to as a prototype.

Unit VII: **4 Lecture Hours**

PHASE 5: ITERATE: You will test the prototype of your design solution, collecting and acting on feedback received. These actions may mean minor or major revisions to your design, and are repeated as often as necessary until a solution is reached. Tools such as focus groups and questionnaires are used to help you collect feedback that can help with your final design.

Unit VIII: **2 Lecture Hours**

BEYOND DESIGN THINKING: The Design Thinking Model is a tool that helps guide you along a design thinking path. The model does this by providing a series of activities that will help you effectively design a product, service or solution to a user's need. The model presents the approach as a process, allowing us to look at each step – or phase – along the journey to the development of a final design.

Text Books:

1. Brown, Tim. "What We Can Learn from Barn Raisers." Design Thinking: Thoughts by Tim Brown. Design Thinking, 16 January 2015. Web. 9 July 2015.
2. Knapp, Jake. "The 8 Steps to Creating a Great Storyboard." Co.Design. Fast Company & Inc., 21 Dec. 2013. Web. 9 July 2015.

Reference Books:

1. Van der Lelie, Corrie. "The Value of Storyboards in the Product Design Process." Journal of Personal and Ubiquitous Computing 10.203 (2006): 159–162. Web. 9 July 2015. [PDF].
2. Millenson, Alisson. "Design Research 101: Prototyping Your Service with a Storyboard." Peer Insight. Peer Insight, 31 May 2013. Web. 9 July 2015.

Web Resources:

1. <https://designtinking.ideo.com/>



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Faculty Individual Time Table

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
Programme: B.Tech

Course Code & Course: DGS11001 and Design Thinking
Faculty Coordinator: Dr. Rituparna Mitra

Day & Time	10.30 - 11.20	11.20 - 12.10	12.10 - 01.00	01.00 - 01.50	01.50 - 02.40	02.40 - 03.30	03.30 - 04.20	04.20 - 05.10
Monday				LU NC H		Design Thinking(DGS11001)		
Tuesday			-					
Wednesday								
Thursday								
Friday								

Signature of HOD

Date:

Signature of Class Coordinator

Date:



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Students Name List

Roll Number	Registration Number	Name of the Student
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul
UG/02/BTBIOME/2020/007	AU/2020/0005270	Hritika Adhikary
UG/02/BTBIOME/2020/001	AU/2020/0004488	Soumyadip Santra
UG/02/BTBIOME/2020/005	AU/2020/0005262	Moyuri Sen
UG/02/BTBIOME/2020/009	AU/2020/0005518	Anwesa Sarkar
UG/02/BTCSE/2020/014	AU/2020/0004474	Abhishek Thakur
UG/02/BTCSE/2020/015	AU/2020/0004475	Subhendu Roy
UG/02/BTCSE/2020/016	AU/2020/0004476	Rhythm Sen
UG/02/BTCSE/2020/017	AU/2020/0004477	Ashish Kumar Singh
UG/02/BTCSE/2020/019	AU/2020/0004480	Sagar Ghosh
UG/02/BTCSE/2020/021	AU/2020/0004491	Swapnodip Das
UG/02/BTCSE/2020/023	AU/2020/0004506	Subrata Hazra
UG/02/BTCSE/2020/043	AU/2020/0004584	Atanu Chowdhury
UG/02/BTCSE/2020/044	AU/2020/0004586	Subhadeep Kar
UG/02/BTCSE/2020/045	AU/2020/0004591	Priyesh Chanda
UG/02/BTCSE/2020/013	AU/2020/0004473	Vishesh Mohanty
UG/02/BTCSE/2020/024	AU/2020/0004512	Aditya Kumar
UG/02/BTCSE/2020/050	AU/2020/0005525	Jit Chatterjee
UG/02/BTCSE/2020/030	AU/2020/0004532	Prathama Sarkar
UG/02/BTCSE/2020/031	AU/2020/0004537	Brinta Deb



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UG/02/BTCSE/2020/025	AU/2020/0004516	Anushka Khatua
UG/02/BTCSE/2020/020	AU/2020/0004490	Deeptanu Saha
UG/02/BTCSE/2020/040	AU/2020/0004579	Soumik Das
UG/02/BTCSE/2020/037	AU/2020/0004571	Arpan Maity
UG/02/BTCSE/2020/038	AU/2020/0004576	Animesh Dutta
UG/02/BTCSE/2020/039	AU/2020/0004577	Aritra Biswas
UG/02/BTCSE/2020/029	AU/2020/0004531	Rohan Sutradhar
UG/02/BTCSE/2020/048	AU/2020/0005466	Pragati Kedia
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	Dron Guin
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	Debrup Dey
UG/02/BTCSEAIML/2020/014	AU/2020/0004581	Sayanik Sutradhar
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	Rishav Ghosh
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	Srijita Saha
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	Pritom Saha
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md Sahid Alam
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	Biswajit Chakraborty
UG/02/BTCSECSF/2020/007	AU/2020/0005551	Md Dawood Khan
UG/02/BTCSECSF/2020/005	AU/2020/0004558	Nilanjana Roy
UG/02/BTCSECSF/2020/004	AU/2020/0004554	Ayush Kumar Singh
UG/02/BTCSECSF/2020/002	AU/2020/0004527	Mayank Pareek
UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar Saw



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UG/02/BTECE/2020/003	AU/2020/0004487	Rishav Bardhan
UG/02/BTME/2020/003	AU/2020/0004489	Souhardya Saha

Signature of HOD/Dean

Date:

Signature of Class Coordinator

Date:



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COURSE PLAN

Target	60% (marks)
Level-1	50% (population)
Level-2	60% (population)
Level-3	70% (population)

1. Method of Evaluation

UG	PG
Internal Assessment (30%) (Quizzes/Tests, Assignments & Seminars etc.)	Internal Assessment (30%) (Quizzes/Tests, Assignments & Seminars etc.)
Mid Semester Examination (20%)	Mid Semester Examination (20%)
End Semester Examination (50%)	End Semester Examination (50%)

*Keep as per Program (UG/PG)

2. Passing Criteria

Scale	PG	UG
Out of 10 Point Scale	CGPA – “5.00” Min. Individual Course Grade – “C” Passing Minimum – 40	CGPA – “5.00” Min. Individual Course Grade – “C” Passing Minimum – 35

*Keep as per Program (UG/PG)

3. Pedagogy

- **Direct Instruction**
- Kinesthetic Learning
- **Flipped Classroom**
- Differentiated Instruction
- Expeditionary Learning
- Inquiry Based Learning
- Game Based Learning
- Personalized Learning

4. Topics introduced for the first time in the program through this course

- (New Topics Related to this Course – Syllabus Revision if any/Content Beyond Syllabus)

5. References:

Text Books	Web Resources	Journals	Reference Books
2	1	0	2

Signature of HOD/Dean

Signature of Faculty



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GUIDELINES TO STUDY THE SUBJECT

Instructions to Students:

1. Go through the 'Syllabus' in the LMS in order to find out the Reading List.
2. Get your schedule and try to pace your studies as close to the timeline as possible.
3. Get your on-line lecture notes (Content, videos) at Lecture Notes section. These are our lecture notes. Make sure you use them during this course.
4. check your LMS regularly
5. go through study material
6. check mails and announcements on blackboard
7. keep updated with the posts, assignments and examinations which shall be conducted on the blackboard
8. Be regular, so that you do not suffer in any way
9. **Cell Phones and other Electronic Communication Devices:** Cell phones and other electronic communication devices (such as Blackberries/Laptops) are not permitted in classes during Tests or the Mid/Final Examination. Such devices MUST be turned off in the class room.
10. **E-Mail and online learning tool:** Each student in the class should have an e-mail id and a pass word to access the LMS system regularly. Regularly, important information – Date of conducting class tests, guest lectures, via online learning tool. The best way to arrange meetings with us or ask specific questions is by email and prior appointment. All the assignments preferably should be uploaded on online learning tool. Various research papers/reference material will be mailed/uploaded on online learning platform time to time.
11. **Attendance:** Students are required to have minimum attendance of 75% in each subject. Students with less than said percentage shall NOT be allowed to appear in the end semester examination.

This much should be enough to get you organized and on your way to having a great semester! If you need us for anything, send your feedback through e-mail rituparna.mitra@adamasuniversity.ac.in. Please use an appropriate subject line to indicate your message details.

There will no doubt be many more activities in the coming weeks. So, to keep up to date with all the latest developments, please keep visiting this website regularly.



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RELATED OUTCOMES

1. The expected outcomes of the Program are:

PO1	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering Fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/ Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern Tool Usage: 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.
PO6	The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and Sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively in 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.
PO11	Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and multidisciplinary environments.
PO12	Life-Long Learning: 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.



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2. The expected outcomes of the Specific Program are: (up to 3)

PSO1	Engage in analysis and design of various power system components and their applications in the field of Electrical Engineering.
PSO2	Apply the domain knowledge of Electrical Engineering to solve problems for development of society, and/ or pursue higher education and research.
PSO3	Engage in lifelong learning and adapt to changing professional and societal needs.

3. The expected outcomes of the Course are: (minimum 4 and maximum 6)

CO1	Examine design thinking concepts and principles
CO2	Practice the methods, processes, and tools of design thinking
CO3	Apply the Design Thinking approach and model to real world scenarios
CO4	Analyze the role of primary and secondary research in the discovery stage of design thinking

4. Co-Relationship Matrix

Indicate the relationships by 1- Slight (Low) 2- Moderate (Medium) 3-Substantial (High)

Program Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
Course Outcomes															
CO1	3	-	-	-	-	-	-	-	-	-	2	-	-	-	-
CO2	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
CO3	2	2	-	3	-	-	-	-	-	-	-	-	-	-	-
CO4	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Average	2	3	-	3	2	-	-	-	-	-	2	-	-	-	-



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5. Course Outcomes Assessment Plan (COA):

Course Outcomes	Internal Assessment* (30 Marks)		Mid Term Exam (20 Marks)	End Term Exam (50 Marks)	Total (100 Marks)
	Before Mid Term	After Mid Term			
C01	6	NA	7	12	25
C02	8	NA	7	12	27
C03	NA	8	6	13	27
C04	NA	8	NA	13	23
Total	14	16	20	50	100

* Internal Assessment – Tools Used: Tutorial, Assignment, Seminar, Class Test etc.



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OVERVIEW OF COURSE PLAN OF COURSE COVERAGE

Course Activities:

S. No .	Descrip- tion	Planned			Actual			Remarks
		From	To	No. of Sessio- n	From	To	No. of Sessio- n	
1.	<i>WHAT IS DESIGN THINKING</i>	07/09/2020	21/09/2020	3	07/09/2020	21/09/2020	3	Completed As per Plan
2.	<i>THE DESIGN THINKING MODEL</i>	28/09/2020	12/10/2020	3	28/09/2020	12/10/2020	3	Completed As per Plan
3.	<i>PHASE 1: DISCOVER</i>	19/10/2020	09/11/2020	3	19/10/2020	09/11/2020	3	Completed As per Plan
4.	<i>PHASE 2: DEFINE</i>	16/11/2020	23/11/2020	2	16/11/2020	23/11/2020	2	Completed As per Plan
5.	<i>PHASE 3: DEVELOP</i>	07/12/2020	21/12/2020	3	07/12/2020	21/12/2020	3	Completed As per Plan
6.	<i>PHASE 4: DELIVER</i>	28/12/2020	04/01/2021	2	28/12/2020	04/01/2021	2	Completed As per Plan
7.	<i>PHASE 5: ITERATE</i>	25/01/2021	01/02/2021	2	25/01/2021	01/02/2021	2	Completed As per Plan
8.	<i>BEYOND DESIGN THINKING</i>	08/02/2021	08/02/2021	1	08/02/2021	08/02/2021	1	Completed As per Plan

Total No. of Instructional periods available for the course: 19 Sessions



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SESSION PLAN UNIT-I

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	07/09/2020	What Is Design Thinking	CO1	1	07/09/2020	What Is Design Thinking	CO1
2	14/09/2020	Correlation between collaboration, teamwork, and creativity	CO1	2	14/09/2020	Correlation between collaboration, teamwork, and creativity	CO1
3	21/09/2020	Idea of developing human-centered products and/or services	CO1	3	21/09/2020	Idea of developing human-centered products and/or services	CO1

Remarks:

Signature of Faculty

Date:



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SESSION PLAN UNIT-II

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
4	28/09/2020	What is Design Thinking Model	CO2	4	28/09/2020	What is Design Thinking Model	CO2
5	05/10/2020	How to effectively design a product, service or solution to a user's need	CO2	5	05/10/2020	How to effectively design a product, service or solution to a user's need	CO2
6	12/10/2020	Journey to the development of a final design	CO2	6	12/10/2020	Journey to the development of a final design	CO2

Remarks:

Signature of Faculty

Date:



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SESSION PLAN UNIT-III

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
7	18/10/2020	Begin the design thinking process with the Discover phase	CO3	7	18/10/2020	Begin the design thinking process with the Discover phase	CO3
8	02/11/2020	Identify the specific problem your design is intended to solve	CO3	8	02/11/2020	Identify the specific problem your design is intended to solve	CO3
9	09/11/2020	Variety of different research methods	CO3	9	09/11/2020	Variety of different research methods	CO3

Remarks:

Signature of Faculty

Date:



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SESSION PLAN UNIT-IV

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
10	16/11/2020	Understand the problem	CO4	10	16/11/2020	Understand the problem	CO4
11	23/11/2020	Understanding storytelling, storyboarding, customer journey maps, personas, scenarios, and more	CO4	11	23/11/2020	Understanding storytelling, storyboarding, customer journey maps, personas, scenarios, and more	CO4

Remarks:

Signature of Faculty

Date:



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SESSION PLAN UNIT-V

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
12	07/12/2020	Brainstorm custom creative solutions	CO1	12	07/12/2020	Brainstorm custom creative solutions	CO1
13	14/12/2020	Conceptualization of the Idea	CO2	13	14/12/2020	Conceptualization of the Idea	CO2
14	21/12/2020	How to put ideas on paper, on a computer	CO1	14	21/12/2020	How to put ideas on paper, on a computer	CO1

Remarks:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

SESSION PLAN

UNIT-VI

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
15	28/12/2020	Ways to build a concept	CO3	15	28/12/2020	Ways to build a concept	CO3
16	04/01/2021	Concept of prototyping	CO4	16	04/01/2021	Concept of prototyping	CO4

Remarks:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

SESSION PLAN UNIT-VII

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
17	25/01/2021	Test the prototype	CO2	17	25/01/2021	Test the prototype	CO2
18	01/02/2021	Questionnaire creation and ask for feedback to create final design	CO3	18	01/02/2021	Questionnaire creation and ask for feedback to create final design	CO3

Remarks:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

SESSION PLAN

UNIT-VIII

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
19 1	08/02/202 1	Effectiveness of Design Thinking	CO4	19 1	08/02/202 1	Effectiveness of Design Thinking	CO4

Remarks:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

PERIODIC MONITORING

Actual date of completion and remarks, if any

Components		From	To	From	To
Duration (Mention from and to Dates)		07.09.2020	23.11.2020	07.12.2020	08.02.2021
Percentage of Syllabus covered		55 %		45 %	
Lectures	Planned	1	11	12	19
	Taken	1	11	12	19
Tutorials	Planned	NA			
	Taken	NA			
Test/Quizzes/ Mid Semester/ End Semester	Planned	28.11.2020	28.11.2020	22.02.2021	22.02.2021
	Taken	28.11.2020	28.11.2020	22.02.2021	22.02.2021
	CO's Addressed	CO1, CO2	CO1, CO2	CO2, CO3, CO4	CO2, CO3, CO4
	CO's Achieved	CO1, CO2	CO1, CO2	CO2, CO3, CO4	CO2, CO3, CO4
Assignments	Planned	2	2	2	2
	Taken	2	2	2	2
	CO's Addressed	CO1, CO2	CO1, CO2	CO3, CO4	CO3, CO4
	CO's Achieved	CO1, CO2	CO1, CO2	CO3, CO4	CO3, CO4
Signature of Faculty					
Head of the Department					
OBE Coordinator					

Signature of HOD/ Dean

Date

Signature of Faculty

Date



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

PERIODIC MONITORING

Attainment of the Course (Learning) Outcomes:

Components	Attainment level	Action Plan	Remarks
Assignment	CO1:	Submission Target 26.09.2020	Questions Covered innovation thinking in Design Thinking
	CO2:	Submission Target 27.10.2020	Questions Covered defining the problem statement
	CO3:	Submission Target 21.12.2020	Questions Covered how to develop a solution
	CO4:	Submission Target 25.02.2021	Questions Covered how to deliver and pitch in design thinking
Quiz/Test etc.	CO1:	Conducted on 23.09.2020	Basics of Design Thinking and developing of idea
	CO2:		
	CO3:	Conducted on 03.02.2021	Various steps of design thinking
	CO4:		
Mid Semester	CO1:	Scheduled on 18.01.2020	
	CO2:		
	CO3:	--	
	CO4:	--	
End Semester	CO1:	Scheduled on 23.03.2021	
	CO2:		
	CO3:		
	CO4:		
Any Other	CO1:	NA	
	CO2:		
	CO3:		
	CO4:		

Signature of HOD/ Dean

Date

Signature of Faculty

Date



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

Previous Year Question Papers - Set 1

ADAMAS UNIVERSITY END SEMESTER EXAMINATION (Academic Session: 2020 – 21)			
Name of the Program:	B. Tech	Semester:	I
Paper Title:	Design thinking	Paper Code:	EMC41101
Maximum Marks:	50	Time Duration:	3 Hrs
Total No. of Questions:	17	Total No of Pages:	2
<i>(Any other information for the student may be mentioned here)</i>	1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. 3. Assumptions made if any, should be stated clearly at the beginning of your answer.		

Group A (Multiple Choice Questions) Answer All the Questions (5 x 1 = 5)			
1	Design Thinking is: (a) Thinking about design (b) Designing ways in which people think (c) Asking users to solve problems (d) Defining, framing and solving problems from users' perspectives.	[U]	CO1
2	What are the steps of Design Thinking Process? (a) Understand > Draw > Ideate > Create > Test (b) Empathise > Define > Ideate > Prototype > Test (c) Empathise > Design > Implement > Produce > Test (d) Understand > Define > Ideate > Produce > Try	[R]	CO2
3	Design Thinking is a Linear Process. True or False?	[AP]	CO3
4	A college is redesigning its website. Current students are the main users of the website. Which one of the below elements should definitely be on the website? (a) College rules and regulations	[R]	CO4



6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

	(b) Information on faculty members (c) Information about courses (d) Alumni details		
5	Aravind Eye Care System (AECS), an Indian eye care provider for millions of low income people has been using design thinking in its approach since a long time. Which of the below statements are examples of design thinking at AECS? (a) AECS provides buses from remote locations to the AEC centre to provide transportation to its users, the poor people as they can't afford these (b) AECS has developed a manufacturing facility which enables providing lenses at a fraction of cost than the market price (c) AECS has been using telemedicine trucks to enable expert advice of doctors at hospital (d) All of the above	[AN]	CO1

Group B

Answer All the Questions (5 x 2 = 10)

6 a)	What are the 4 D's of design thinking? (OR)	[R]	CO1
6 b)	What are the 3 most important elements of design thinking?	[R]	CO1
7 a)	What are the 5 stages of design thinking? (OR)	[U]	CO2
7 b)	What is POV (Point of View) design thinking?	[AP]	CO2
8 a)	What means design thinking? (OR)	[U]	CO3
8 b)	Why is design thinking so important?	[AN]	CO3
9 a)	What is the biggest asset of design thinking? (OR)	[U]	CO4
9 b)	What kind of prototypes should be built in the design thinking process?	[AN]	CO4
10 a)	What is a design challenge? (OR)	[U]	CO2
10 b)	What is the thinking process model? Group C	[C]	CO2
Answer All the Questions (7 x 5 = 35)			
11 a)	In design thinking, who is the client and target audience? (OR)	[U]	CO1



6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

11 b)	What should prototypes not be?	[R]	CO1
12 a)	What are primary and secondary researches in design thinking?	[AP]	CO2
(OR)			
12 b)	What are the 3 phases of human centered design?	[AP]	CO2
13 a)	How ideation depends on research information?	[AN]	CO3
(OR)			
13 b)	How can anyone improve their design thinking skills?	[AN]	CO3
14 a)	Do all potential solutions require prototyping?	[U]	CO4
(OR)			
14 b)	What is 'How might we' session?	[R]	CO4
15 a)	Describe the steps of design thinking project with an elaborate example.	[AP]	CO4
(OR)			
15 b)	How do you create a problem statement in design thinking?	[AN]	CO4
16 a)	How innovation is correlated with design thinking?	[U]	CO3
(OR)			
16 b)	What is the difference between design thinking and human centered design?	[U]	CO3
17 a)	How to be successful in pitching for any idea? Explain with an example.	[R]	CO4
(OR)			
17 b)	What is design thinking Double Diamond?	[R]	CO4



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

Previous Year Question Papers - Set 2

ADAMAS UNIVERSITY END SEMESTER EXAMINATION (Academic Session: 2020 – 21)			
Name of the Program:	B. Tech	Semester:	I
Paper Title:	Design thinking	Paper Code:	EMC41101
Maximum Marks:	50	Time Duration:	3 Hrs
Total No. of Questions:	17	Total No of Pages:	2
<i>(Any other information for the student may be mentioned here)</i>	4. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. 5. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. 6. Assumptions made if any, should be stated clearly at the beginning of your answer.		

Group A (Multiple Choice Questions) Answer All the Questions (5 x 1 = 5)			
1	Which of the below firm is associated the most with Design Thinking? (a) Ikea (b) Ideo (c) Idea (d) Ikey	[U]	CO1
2	Design Thinking typically helps in _____ (a) Innovation (b) Data analytics (c) Financial planning (d) Operational efficiency	[R]	CO2
3	One needs to have professional training in design to become a design thinker. True or False?	[AP]	CO3
4	Which of the following well known consulting firms are offering Design Thinking as a solution? (a) McKinsey & Co	[R]	CO4



6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

	(b) BCG (c) Bain & Co (d) All of above		
5	Which of the below is incorrect? (a) PepsiCo has turned Design Thinking into its strategy (b) GE Healthcare has built a MR scanner for children using Design Thinking (c) AirBnB avoided bankruptcy and turned profitable using Design Thinking (d) Google has a 3 step process to bring about new innovations (e) All of the above are correct	[AN]	CO1
Group B Answer All the Questions (5 x 2 = 10)			
(OR)			
6 a)	What are the steps of design thinking process?	[R]	CO1
6 b)	What is the first stage of an interaction design process?	[R]	CO1
7 a)	Which is technique used to quickly align the team on a common goal in design thinking?	[U]	CO2
(OR)			
7 b)	What are design thinking tools?	[AP]	CO2
8 a)	What is the first step of design thinking?	[U]	CO3
(OR)			
8 b)	What are design thinking skills?	[AN]	CO3
9 a)	What is the most important skill of a design thinking leader?	[U]	CO4
(OR)			
9 b)	What is a whiteboard design challenge?	[AN]	CO4
10 a)	What is social design thinking?	[U]	CO2
(OR)			
10 b)	What is the most important aspect of design thinking?	[C]	CO2
Group C Answer All the Questions (7 x 5 = 35)			
(OR)			
11 a)	What is Design Thinking and why should we adopt it?	[U]	CO1
11 b)	What is design thinking and why is it so popular?	[R]	CO1
12 a)	What are the studies necessary for research in design thinking?	[AP]	CO2
(OR)			
12 b)	Is design thinking a mindset?	[AP]	CO2
13 a)	Which methods will be used for idea generation?	[AN]	CO3



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

(OR)

13 b)	How do you create a POV?	[AN]	CO3
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14 a)	What functionality will the prototype have in design thinking?	[U]	CO4
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(OR)

14 b)	Who needs design thinking?	[R]	CO4
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15 a)	i) Define qualitative and quantitative survey. ii) What are the other types of surveys available for research?	[AP]	CO4
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(OR)

15 b)	What is the nature of each phase in design thinking process?	[AN]	CO4
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16 a)	How socio-economic demographics are relevant in ethnography?	[U]	CO3
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(OR)

16 b)	How do you test design thinking?	[U]	CO3
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17 a)	State importance of sampling and feedback in design thinking?	[R]	CO4
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(OR)

17 b)	What is Prototype thinking?	[R]	CO4
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Year: I
Semester: I

6. Name of the Faculty:	Dr. Rituparna Mitra	Course Code: DGS11001
7. Course	: SEC A	L: 2
8. Program	: B.Tech	T: 0
9. Target	: 60 %	P: 0 C: 2

Lecture Notes – Sample

https://g21.tcsion.com/LX/home/home_page?c_id=design-thinking-i-2020-sem-3-2019-group-1-441-2783



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

ADAMAS UNIVERSITY MID-SEMESTER EXAMINATION: JANUARY 2021 (Academic Session: 2020 – 21)			
Name of the Program:	B. Tech	Semester:	I
Paper Title:	Design thinking	Paper Code:	EMC41101
Maximum Marks:	20	Time duration:	2 Hrs
Total No of questions:	06	Total No of Pages:	01
<i>(Any other information for the student may be mentioned here)</i>	1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. 3. Assumptions made if any, should be stated clearly at the beginning of your answer.		

Answer all the Groups

Group A

Answer all the questions of the following

$5 \times 1 = 5$

1. a) Define Design Thinking? [U][CO1]
 b) What are the steps of Design Thinking Process? [U][CO2]
 c) Design Thinking is a Linear Process. True or False? Justify. [Ap][CO3]
 d) Which of the firm is associated the most with Design Thinking? [R][CO4]
 e) A college is redesigning its website. Current students are the main users of the website. Which elements should definitely be on the website? [Ap][CO2]

GROUP -B

Answer *any three* of the following

$3 \times 5 = 15$

2. Briefly explain the importance of ethnography in design thinking? [U][CO2]



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra **Course Code: DGS11001**
7. Course : SEC A **L: 2**
8. Program : B.Tech **T: 0**
9. Target : 60 % **P: 0**
 C: 2

3. Explain in detail about importance of prototyping in Design Thinking. [U][CO4]

4. Distinguish between design thinking and visualization of a problem. [An][CO1]

5. What is Napkin Pitch? Explain the points to make a pitch successful. [U][CO3]

6. People from immortal time are making design thinking for their existence in the world. Now the idea has become a concept. Define the progress of design thinking in this support. [Ap][CO1]



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra
7. Course : SEC A
8. Program : B.Tech
9. Target : 60 %

Course Code: DGS11001
L: 2
T: 0
P: 0
C: 2

Evaluation Sheet – Internal Assessment

Roll Number	Registration Number	Name of the Student	Internal Assessment (30)		
			Assignment (20)	Class Test (10)	Total
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul	19	7	26
UG/02/BTBIOME/2020/007	AU/2020/0005270	Hritika Adhikary	17	7	24
UG/02/BTBIOME/2020/001	AU/2020/0004488	Soumyadip Santra	19	9	28
UG/02/BTBIOME/2020/005	AU/2020/0005262	Moyuri Sen	19	6	25
UG/02/BTBIOME/2020/009	AU/2020/0005518	Anwesa Sarkar	18	8	26
UG/02/BTCSE/2020/014	AU/2020/0004474	Abhishek Thakur	18	8	26
UG/02/BTCSE/2020/015	AU/2020/0004475	Subhendu Roy	17	7	24
UG/02/BTCSE/2020/016	AU/2020/0004476	Rhythm Sen	16	7	23
UG/02/BTCSE/2020/017	AU/2020/0004477	Ashish Kumar Singh	16	8	22
UG/02/BTCSE/2020/019	AU/2020/0004480	Sagar Ghosh	18	8	26
UG/02/BTCSE/2020/021	AU/2020/0004491	Swapnodip Das	16	7	23
UG/02/BTCSE/2020/023	AU/2020/0004506	Subrata Hazra	16	8	24
UG/02/BTCSE/2020/043	AU/2020/0004584	Atanu Chowdhury	**	**	**
UG/02/BTCSE/2020/044	AU/2020/0004586	Subhadeep Kar	15	9	24
UG/02/BTCSE/2020/045	AU/2020/0004591	Priyesh Chanda	15	8	23



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

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C: 2

UG/02/BTCSE/2020/013	AU/2020/0004473	Vishesh Mohanty	17	7	24
UG/02/BTCSE/2020/024	AU/2020/0004512	Aditya Kumar	19	7	26
UG/02/BTCSE/2020/050	AU/2020/0005525	Jit Chatterjee	14	9	23
UG/02/BTCSE/2020/030	AU/2020/0004532	Prathama Sarkar	20	8	28
UG/02/BTCSE/2020/031	AU/2020/0004537	Brinta Deb	17	9	26
UG/02/BTCSE/2020/025	AU/2020/0004516	Anushka Khatua	18	9	27
UG/02/BTCSE/2020/020	AU/2020/0004490	Deeptanu Saha	17	8	25
UG/02/BTCSE/2020/040	AU/2020/0004579	Soumik Das	16	8	24
UG/02/BTCSE/2020/037	AU/2020/0004571	Arpan Maity	19	8	27
UG/02/BTCSE/2020/038	AU/2020/0004576	Animesh Dutta	17	9	26
UG/02/BTCSE/2020/039	AU/2020/0004577	Aritra Biswas	18	9	27
UG/02/BTCSE/2020/029	AU/2020/0004531	Rohan Sutradhar	16	9	25
UG/02/BTCSE/2020/048	AU/2020/0005466	Pragati Kedia	16	8	24
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	Dron Guin	15	8	23
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	Debrup Dey	16	7	23
UG/02/BTCSEAIML/2020/014	AU/2020/0004581	Sayanik Sutradhar	14	9	23
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty	15	8	23
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	Rishav Ghosh	14	8	22
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	Srijita Saha	15	8	23
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	Pritom Saha	13	8	21
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md Sahid Alam	15	8	23
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	Biswajit Chakraborty	16	7	23
UG/02/BTCSECSF/2020/007	AU/2020/0005551	Md Dawood Khan	**	**	**
UG/02/BTCSECSF/2020/005	AU/2020/0004558	Nilanjana Roy	15	9	24
UG/02/BTCSECSF/2020/004	AU/2020/0004554	Ayush Kumar Singh	15	10	25
UG/02/BTCSECSF/2020/002	AU/2020/0004527	Mayank Pareek	19	7	26



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

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P: 0

C: 2

UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar Saw	18	7	25
UG/02/BTECE/2020/003	AU/2020/0004487	Rishav Bardhan	18	8	26
UG/02/BTME/2020/003	AU/2020/0004489	Souhardya Saha	15	9	24

Signature of HOD/Dean

Signature of Faculty

Date:

Date:

Evaluation Sheet – Mid Semester

Roll Number	Registration Number	Name of the Student	Marks (20)
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul	15
UG/02/BTBIOME/2020/007	AU/2020/0005270	Hritika Adhikary	16
UG/02/BTBIOME/2020/001	AU/2020/0004488	Soumyadip Santra	16
UG/02/BTBIOME/2020/005	AU/2020/0005262	Moyuri Sen	14
UG/02/BTBIOME/2020/009	AU/2020/0005518	Anwesa Sarkar	16
UG/02/BTCSE/2020/014	AU/2020/0004474	Abhishek Thakur	16
UG/02/BTCSE/2020/015	AU/2020/0004475	Subhendu Roy	15
UG/02/BTCSE/2020/016	AU/2020/0004476	Rhythm Sen	17
UG/02/BTCSE/2020/017	AU/2020/0004477	Ashish Kumar Singh	16
UG/02/BTCSE/2020/019	AU/2020/0004480	Sagar Ghosh	15
UG/02/BTCSE/2020/021	AU/2020/0004491	Swapnodip Das	14
UG/02/BTCSE/2020/023	AU/2020/0004506	Subrata Hazra	16
UG/02/BTCSE/2020/043	AU/2020/0004584	Atanu Chowdhury	**
UG/02/BTCSE/2020/044	AU/2020/0004586	Subhadeep Kar	16
UG/02/BTCSE/2020/045	AU/2020/0004591	Priyesh Chanda	15
UG/02/BTCSE/2020/013	AU/2020/0004473	Vishesh Mohanty	15
UG/02/BTCSE/2020/024	AU/2020/0004512	Aditya Kumar	15
UG/02/BTCSE/2020/050	AU/2020/0005525	Jit Chatterjee	15
UG/02/BTCSE/2020/030	AU/2020/0004532	Prathama Sarkar	15
UG/02/BTCSE/2020/031	AU/2020/0004537	Brinta Deb	16



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

UG/02/BTCSE/2020/025	AU/2020/0004516	Anushka Khatua	14
UG/02/BTCSE/2020/020	AU/2020/0004490	Deeptanu Saha	16
UG/02/BTCSE/2020/040	AU/2020/0004579	Soumik Das	16
UG/02/BTCSE/2020/037	AU/2020/0004571	Arpan Maity	15
UG/02/BTCSE/2020/038	AU/2020/0004576	Animesh Dutta	16
UG/02/BTCSE/2020/039	AU/2020/0004577	Aritra Biswas	15
UG/02/BTCSE/2020/029	AU/2020/0004531	Rohan Sutradhar	16
UG/02/BTCSE/2020/048	AU/2020/0005466	Pragati Kedia	16
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	Dron Guin	16
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	Debrup Dey	15
UG/02/BTCSEAIML/2020/014	AU/2020/0004581	Sayanik Sutradhar	15
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty	16
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	Rishav Ghosh	16
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	Srijita Saha	15
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	Pritom Saha	16
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md Sahid Alam	16
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	Biswajit Chakraborty	15
UG/02/BTCSECSF/2020/007	AU/2020/0005551	Md Dawood Khan	**
UG/02/BTCSECSF/2020/005	AU/2020/0004558	Nilanjana Roy	15
UG/02/BTCSECSF/2020/004	AU/2020/0004554	Ayush Kumar Singh	15
UG/02/BTCSECSF/2020/002	AU/2020/0004527	Mayank Pareek	16
UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar Saw	14
UG/02/BTECE/2020/003	AU/2020/0004487	Rishav Bardhan	16
UG/02/BTME/2020/003	AU/2020/0004489	Souhardya Saha	15

Signature of HOD/Dean

Date:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra
7. Course : SEC A
8. Program : B.Tech
9. Target : 60 %

Course Code: DGS11001
L: 2
T: 0
P: 0
C: 2

COURSE END SURVEY

INDIRECT ASSESSMENT

Sample format for Indirect Assessment of Course outcomes:

NAME: *****
ROLL NO.: *****
REG. NO.: *****
COURSE: DESIGN THINKING
PROGRAM: B.Tech

Please rate the following aspects of course outcomes of

Use the scale 1-5 (Poor – Excellent)

Course Outcomes	Statement	1	2	3	4	5
CO1	Examine design thinking concepts and principles.					5
CO2	Practice the methods, processes, and tools of design thinking					5
CO3	Apply the Design Thinking approach and model to real world scenarios					5



Year: I
Semester: I

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CO4	Analyze the role of primary and secondary research in the discovery stage of design thinking						5
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INDIRECT ASSESSMENT CONSOLIDATION

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
CO Indirect Assessment

Programme: B.Tech	Academic Year: 2020-21	
Batch: 2020-22		
Course Code & Name: DGS11001 & DESIGN THINKING		
Course Outcome	Students Feed Back (5)	Attainment (100)
CO1	5	100
CO2	5	100
CO3	5	100
CO4	5	100
Signature of HOD/Dean Date:	Signature of Faculty Date:	



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra
7. Course : SEC A
8. Program : B.Tech
9. Target : 60 %

Course Code: DGS11001
L: 2
T: 0
P: 0
C: 2

Evaluation Sheet (End Semester)

Roll Number	Registration Number	Name of the Student	Marks (50)
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul	45
UG/02/BTBIOME/2020/007	AU/2020/0005270	Hritika Adhikary	44
UG/02/BTBIOME/2020/001	AU/2020/0004488	Soumyadip Santra	44
UG/02/BTBIOME/2020/005	AU/2020/0005262	Moyuri Sen	43
UG/02/BTBIOME/2020/009	AU/2020/0005518	Anwesa Sarkar	44
UG/02/BTCSE/2020/014	AU/2020/0004474	Abhishek Thakur	44
UG/02/BTCSE/2020/015	AU/2020/0004475	Subhendu Roy	43
UG/02/BTCSE/2020/016	AU/2020/0004476	Rhythm Sen	43
UG/02/BTCSE/2020/017	AU/2020/0004477	Ashish Kumar Singh	45
UG/02/BTCSE/2020/019	AU/2020/0004480	Sagar Ghosh	43
UG/02/BTCSE/2020/021	AU/2020/0004491	Swapnodip Das	44
UG/02/BTCSE/2020/023	AU/2020/0004506	Subrata Hazra	45
UG/02/BTCSE/2020/043	AU/2020/0004584	Atanu Chowdhury	**
UG/02/BTCSE/2020/044	AU/2020/0004586	Subhadeep Kar	45
UG/02/BTCSE/2020/045	AU/2020/0004591	Priyesh Chanda	43
UG/02/BTCSE/2020/013	AU/2020/0004473	Vishesh Mohanty	45
UG/02/BTCSE/2020/024	AU/2020/0004512	Aditya Kumar	43
UG/02/BTCSE/2020/050	AU/2020/0005525	Jit Chatterjee	44
UG/02/BTCSE/2020/030	AU/2020/0004532	Prathama Sarkar	44
UG/02/BTCSE/2020/031	AU/2020/0004537	Brinta Deb	45



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

UG/02/BTCSE/2020/025	AU/2020/0004516	Anushka Khatua	44
UG/02/BTCSE/2020/020	AU/2020/0004490	Deeptanu Saha	42
UG/02/BTCSE/2020/040	AU/2020/0004579	Soumik Das	43
UG/02/BTCSE/2020/037	AU/2020/0004571	Arpan Maity	44
UG/02/BTCSE/2020/038	AU/2020/0004576	Animesh Dutta	43
UG/02/BTCSE/2020/039	AU/2020/0004577	Aritra Biswas	44
UG/02/BTCSE/2020/029	AU/2020/0004531	Rohan Sutradhar	42
UG/02/BTCSE/2020/048	AU/2020/0005466	Pragati Kedia	43
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	Dron Guin	45
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	Debrup Dey	43
UG/02/BTCSEAIML/2020/014	AU/2020/0004581	Sayanik Sutradhar	43
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty	45
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	Rishav Ghosh	44
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	Srijita Saha	44
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	Pritom Saha	45
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md Sahid Alam	42
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	Biswajit Chakraborty	43
UG/02/BTCSECSF/2020/007	AU/2020/0005551	Md Dawood Khan	**
UG/02/BTCSECSF/2020/005	AU/2020/0004558	Nilanjana Roy	43
UG/02/BTCSECSF/2020/004	AU/2020/0004554	Ayush Kumar Singh	45
UG/02/BTCSECSF/2020/002	AU/2020/0004527	Mayank Pareek	45
UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar Saw	42
UG/02/BTECE/2020/003	AU/2020/0004487	Rishav Bardhan	43
UG/02/BTME/2020/003	AU/2020/0004489	Souhardya Saha	42

Signature of HOD/Dean

Date:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

Consolidated Mark Statement

Roll Number	Registration Number	Name of the Student	Total Marks			
			Internal Assessment (30)	Mid Semester (20)	End Semester (50)	Total (100)
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul	26	15	45	86
UG/02/BTBIOME/2020/007	AU/2020/0005270	Hritika Adhikary	24	16	44	84
UG/02/BTBIOME/2020/001	AU/2020/0004488	Soumyadip Santra	28	16	44	88
UG/02/BTBIOME/2020/005	AU/2020/0005262	Moyuri Sen	25	14	43	82
UG/02/BTBIOME/2020/009	AU/2020/0005518	Anwesa Sarkar	26	16	44	86
UG/02/BTCSE/2020/014	AU/2020/0004474	Abhishek Thakur	26	16	44	86
UG/02/BTCSE/2020/015	AU/2020/0004475	Subhendu Roy	24	15	43	82



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A L: 2
8. Program : B.Tech T: 0
9. Target : 60 % P: 0
C: 2

UG/02/BTCSE/2020/0 16	AU/2020/000447 6	Rhythm Sen	23	17	43	83
UG/02/BTCSE/2020/0 17	AU/2020/000447 7	Ashish Kumar Singh	22	16	45	83
UG/02/BTCSE/2020/0 19	AU/2020/000448 0	Sagar Ghosh	26	15	43	84
UG/02/BTCSE/2020/0 21	AU/2020/000449 1	Swapnodip Das	23	14	44	81
UG/02/BTCSE/2020/0 23	AU/2020/000450 6	Subrata Hazra	24	16	45	85
UG/02/BTCSE/2020/0 43	AU/2020/000458 4	Atanu Chowdhury	**	**	**	**
UG/02/BTCSE/2020/0 44	AU/2020/000458 6	Subhadeep Kar	24	16	45	85
UG/02/BTCSE/2020/0 45	AU/2020/000459 1	Priyesh Chanda	23	15	43	81
UG/02/BTCSE/2020/0 13	AU/2020/000447 3	Vishesh Mohanty	24	15	45	84
UG/02/BTCSE/2020/0 24	AU/2020/000451 2	Aditya Kumar	26	15	43	84
UG/02/BTCSE/2020/0 50	AU/2020/000552 5	Jit Chatterjee	23	15	44	82
UG/02/BTCSE/2020/0 30	AU/2020/000453 2	Prathama Sarkar	28	15	44	87
UG/02/BTCSE/2020/0 31	AU/2020/000453 7	Brinta Deb	26	16	45	87
UG/02/BTCSE/2020/0 25	AU/2020/000451 6	Anushka Khatua	27	14	44	85
UG/02/BTCSE/2020/0 20	AU/2020/000449 0	Deeptanu Saha	25	16	42	83
UG/02/BTCSE/2020/0 40	AU/2020/000457 9	Soumik Das	24	16	43	83
UG/02/BTCSE/2020/0 37	AU/2020/000457 1	Arpan Maity	27	15	44	86
UG/02/BTCSE/2020/0 38	AU/2020/000457 6	Animesh Dutta	26	16	43	85



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A L: 2
8. Program : B.Tech T: 0
9. Target : 60 % P: 0
C: 2

UG/02/BTCSE/2020/039	AU/2020/0004577	Aritra Biswas	27	15	44	86
UG/02/BTCSE/2020/029	AU/2020/0004531	Rohan Sutradhar	25	16	42	83
UG/02/BTCSE/2020/048	AU/2020/0005466	Pragati Kedia	24	16	43	83
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	Dron Guin	23	16	45	84
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	Debrup Dey	23	15	43	81
UG/02/BTCSEAIML/2020/014	AU/2020/0004581	Sayanik Sutradhar	23	15	43	81
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty	23	16	45	84
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	Rishav Ghosh	22	16	44	82
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	Srijita Saha	23	15	44	82
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	Pritom Saha	21	16	45	82
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md Sahid Alam	23	16	42	81
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	Biswajit Chakraborty	23	15	43	81
UG/02/BTCSECSF/2020/007	AU/2020/0005551	Md Dawood Khan	**	**	**	**
UG/02/BTCSECSF/2020/005	AU/2020/0004558	Nilanjana Roy	24	15	43	82
UG/02/BTCSECSF/2020/004	AU/2020/0004554	Ayush Kumar Singh	25	15	45	85
UG/02/BTCSECSF/2020/002	AU/2020/0004527	Mayank Pareek	26	16	45	87
UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar Saw	25	14	42	81
UG/02/BTECE/2020/003	AU/2020/0004487	Rishav Bardhan	26	16	43	85



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

UG/02/BTME/2020/00 3	AU/2020/000448 9	Souhardya Saha	24	15	42	81
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Signature of Dean/HOD

Date:

Signature of Faculty

Date:



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

CO ATTAINMENT - GAP ANALYSIS & REMEDIAL MEASURES

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING

CO ATTAINMENT - GAP ANALYSIS & REMEDIAL MEASURES

Batch : 2020-22						Academic Year: 2020-21	
Course Code & Name	Name of the Coordinator					Year & Semester	
DGS11001 & DESIGN THINKING	Dr. Rituparna Mitra					I & I	
CO	Direct Assessment	Indirect Assessment	CO Attainment	Target	CO Attainment Gaps	Action for Bridge the Gap	Target Modification
CO1	75	100	80	70	-10		75
CO2	75	100	80	70	-10		75
CO3	75	100	80	70	-10		75
CO4	75	100	80	70	-10		75

Signature of HOD/Dean

Date:

Signature of Faculty

Date:



Year: I

Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra
7. Course : SEC A
8. Program : B.Tech
9. Target : 60 %

Course Code: DGS11001
L: 2
T: 0
P: 0
C: 2

CO-PO ATTAINMENT

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
CO-PO ATTAINMENT

ADAMAS UNIVERSITY, KOLKATA																		
SCHOOL OF ENGINEERING AND TECHNOLOGY																		
DEPARTMENT OF ELECTRICAL ENGINEERING																		
CO-PO ATTAINMENT																		
Programme : B.Tech	Year & Sem: I & I	Academic Year: 2020-21	Batch:2020-22															
Course Code	Course Name	CO-PO	PO1	PO2	PO ₃	PO4	PO5	PO6	PO ₇	PO8	PO ₉	PO ₁₀	PO ₁₁	PO ₁₂	PO ₁	PO ₂	PO ₃	
DGS11001	DESIGN THINKING	Relationship	CO1 , CO2 , CO3 , CO4	CO2 , CO3	NA	CO3	CO4	NA	NA	NA	NA	NA	CO ₁	NA	NA	NA	NA	NA
		Mapping Value	3	3	NA	3	2	NA	NA	NA	NA	NA	2	NA	NA	NA	NA	NA
		Attainment	2.4	2.4	NA	2.4	1.6	NA	NA	NA	NA	NA	N A	1.6	N A	NA	NA	NA



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

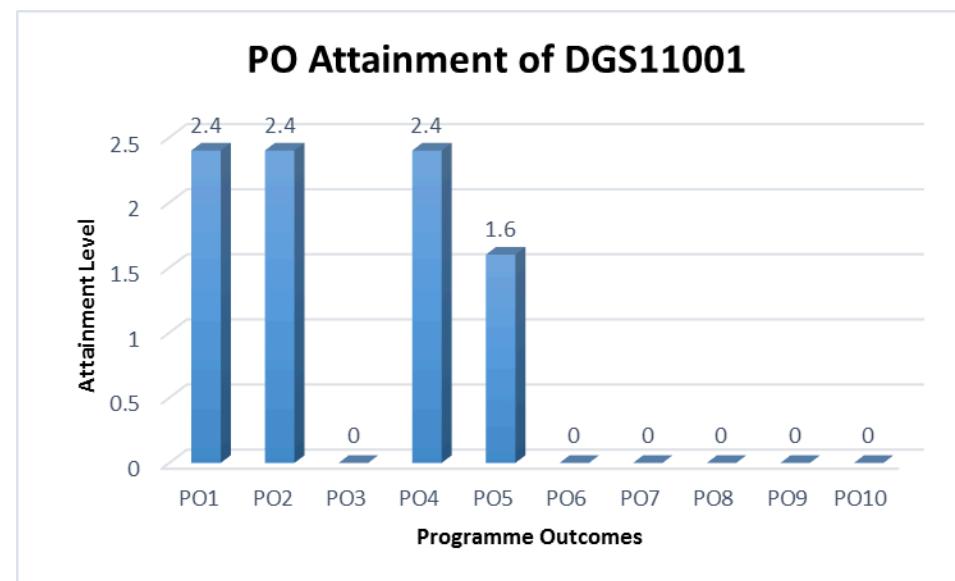
Signature of HOD/Dean

Signature of Faculty

Date:

Date:

PO ATTAINMENT OF THE COURSE



Signature of HOD/Dean

Signature of Faculty



Year: I
Semester: I

6. Name of the Faculty: Dr. Rituparna Mitra

Course Code: DGS11001

7. Course : SEC A

L: 2

8. Program : B.Tech

T: 0

9. Target : 60 %

P: 0

C: 2

Date:

Date:



6. Name of the Faculty: Dr. Rituparna Mitra	Course Code: DGS11001
7. Course : SEC A	L: 2
8. Program : B.Tech	T: 0
9. Target : 60 %	P: 0 C: 2

INSTRUCTIONS FOR FACULTY

Instructions for Faculty

- Faculty should keep track of the students with low attendance and counsel them regularly.
- Course coordinator will arrange to communicate the short attendance (as per University policy) cases to the students and their parents monthly.
- Topics covered in each class should be recorded in the table of RECORD OF CLASS TEACHING (Suggested Format).
- Internal assessment marks should be communicated to the students twice in a semester.
- The file will be audited by respective Academic Monitoring and Review Committee (AMRC) members for theory as well as for lab as per AMRC schedule.
- The faculty is required to maintain these files for a period of at least three years.
- This register should be handed over to the head of department, whenever the faculty member goes on long leave or leaves the Colleges/University.
- For labs, continuous evaluation format (break-up given in the guidelines for result preparation in the same file) should be followed.
- Department should monitor the actual execution of the components of continuous lab evaluation regularly.
- Instructor should maintain record of experiments conducted by the students in the lab weekly.
- Instructor should promote students for self-study and to make concept diary, due weightage in the internal should be given under faculty assessment for the same.
- Course outcome assessment: To assess the fulfilment of course outcomes two different approaches have been decided. Degree of fulfillment of course outcomes will be assessed in different ways through direct assessment and indirect assessment. In Direct Assessment, it is measured through quizzes, tests, assignment, Mid-term and/or End-term examinations. It is suggested that each examination is designed in such a way that it can address one or two outcomes (depending upon the course completion). Indirect assessment is done through the student survey which needs to be designed by the faculty (sample format is given below) and it shall be conducted towards the end of course completion. The evaluation of the achievement of the Course Outcomes shall be done by analyzing the inputs received through Direct and Indirect Assessments and then corrective actions suggested for further improvement.
- Submission Targets of Course Contents:
 - S. No. 1 to 8 : Before Starting the Course
 - S. No. 9 & 10 : After Mid Semester Examination
 - S. No. 11 to 18 : Immediately After End Semester Examination
 - S. No. 19 to 22 : After Declaration of Result of the Course