ADAMAS UNIVERSITY

PURSUE EXCELLENCE

KOLKATA

SCHOOL OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

B.Tech. in Electrical and Electronics Technology

Course File (Theory)

Course Code: GEE11001

Course Coordinator: Mr. Nisarga Chand AND Mr. Titas Kumar Nag

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

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	05.04.2021	
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)	Y		
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)			
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			
11.	Lecture Notes – Unit IV & V			
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)			
13.	Course End Survey (Indirect Assessment) & Consolidation			
14.	**End Term Examination** A. Question Paper & Answer Key B. Sample Answer Scripts (Best, Average, Poor) if required C. Evaluation Sheet			

Year: I

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

Signature of HOD/ Dean **Signature of Faculty**

Date: **Date:**

Year: I

Semester: II

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Syllabus Copy

GEE11001	**Electrical and Electronics Technology**	L	T	P	C
Version 1.0	**Contact Hours - 45**	3	0	0	3
Pre-requisites/Exposure	Basic idea about basic mathematics				
Co-requisites	Basic idea of semiconductor devices and electromagnetism				

Course Objectives

1. To familiarize with passive components, active components and measuring instruments.
2. To familiarize the working of diodes, transistors, MOSFETS and integrated circuits.
3. To implement mini projects based on concept of electronics circuit.

Course Content

Unit IV: 6 lecture hours

Basics of Semi-Conductors and PN Junction: Introduction; Carrier Concentrations- the Fermi Level; Electron and Hole Concentration at Equilibrium; Temperature Dependence of Carrier Concentration; Drift and diffusion current; The Hall Effect; Optical Absorption, Luminescence; PN
Junction Diode in Equilibrium Conditions; PN Junction Diode in Forward Biased and Reverse Biased Condition; Breakdown in PN Junction Diodes.

Unit V: 6 lecture hours

Bipolar Junction Transistors: Introduction, Types: NPN and PNP; Current Components; Early Effect Ebber's Moll Model; Different Configurations of a Transistor and its Characteristics; Transistor as an Amplifier (CE, CB, CC); Transistor as a Switch

Unit VI: 6 lecture hours

Field Effect Transistors: Introduction, JFET and MOSFET, Realization of digital logic circuit using MOSFET (AND, OR, NOT etc.), Realization of switching circuit using MOSFET

Unit VII: 7 lecture hours

Electronics Instruments & Digital Electronics Fundamental:
Signal generator, Multimeter, operation of CRO and its application. Number systems, Conversions and codes, Logic gates and truth tables.

Text Books:

1. Electronic Devices & Circuit Theory: Boyelstad & Nashelsky
2. Electronics Fundamental and application: D.Chattopadhyay and P C Rakshit
3. Electronic Principle: Albert Paul Malvino
4. Digital circuits and design by S Salivahanan and S Arivazhagan

Year: I

Semester: II

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		C: 3

Reference Books:

1. Electronic Circuits, Discrete and Integrated- Charles Belove and Donald L. Schilling
2. Principles of Electrical Engineering and Electronics- V K Mehta, Rohit Mehta, S Chand and Company, New Delhi
3. Solid State Electronic Devices- Ben G. Streetman and Sanjay Kumar Banerjee, PHI.
4. Fundamental of Digital Circuits by Anand Kumar 2nd Edition, PHI Learning Pal, Rajendra and Korlahalli, J.S. (2011) Essentials of Business Communication. Sultan Chand & Sons. ISBN: 9788180547294.
5. J. Millman, C. Halkias and C. D. Parikh, *Millman's Integrated Electronics: Analog and Digital Circuits and Systems*, 2nd Ed., McGraw Hill Education, 2017.
6. D. P. Leach, A. P. Malvino and G. Saha, *Digital Principles and Applications*, 8th Ed., McGraw Hill Education, 2014.

Web Resources:

1. **https://nptel.ac.in/courses/117/103/117103063/**
2. **https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-002-circuits-and-electronics-spring-2007/index.htm**
3. **https://freevideolectures.com/course/3181/basic-electronics-i/1**
4. **https://www.allaboutcircuits.com/video-lectures/**

Journals:

1. International Journal of Electronics and Device Physics **ISSN: 2631-504, DOI: 10.35840/2631-5041**

2. Journal of Electrical and Electronics Engineering Research, Academic Journals, **ISSN: 2141-2367, DOI: 10.5897/JEEER**

Year: I

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Faculty Individual Time Table

ADAMAS UNIVERSITY, KOLKATA								
SCHOOL OF ENGINEERING & TECHNOLOGY								
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING								
Programme: B. TECH.								
Course Code & Course: GEE11001 & Electronics Technology Faculty Coordinator: Mr. Nisarga Chand								
DAY & TIME	**09:30-10:25**	**10:30-11:25**	**11:30-12:25**	**12:30-13:30**	**13:30-14:25**	**14:30-15:25**	**15:30-16:25**	**16:30-17:25**
Monday				**LUNCH**				
Tuesday						EET Theory (GEE11001)	-	
Wednesday	EET Theory (GEE11001)							
Thursday								
Friday								

Signature of HOD — **Signature of Class Coordinator**

Date: — **Date:**

Year: I

Semester: II

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17. Program : B. Tech. **T: 0**

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C: 3

Students Name List

Roll Number	Registration Number	Full Name
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
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

Year: I

Semester: II

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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
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:

Year: I

Semester: II

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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
4	**4**	**2**	**6**

Year: I

Semester: II

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Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: I

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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. C**ell 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 XXX@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, research literature, and analyze 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 the 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 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.
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 in 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	An ability to apply analytical knowledge, and modern hardware and software tools to design and implement complex systems in the areas related to Electronics and Communication systems
PSO2	An ability to develop their problem-solving skills and assess social, environmental issues with ethics and manage different projects in multidisciplinary areas.

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

CO4	**Apply** knowledge about different passive components used in electronic industry for common application.
CO5	**Illustrate** with the working of different active components to demonstrate basic electronic circuits.
CO6	**Describe** the basic construction of measuring instruments and digital logic circuits used for different electronics applications.

4. Co-Relationship Matrix

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

Program Outcomes / Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
CO4	3	-	3	-	-	3	-	-	-	-	-	-	3	-	-
CO5	3	-	3	-		3	-	-	-	-		3	2	-	-
CO6	3	-	-	-	-	-		-	-	-	-	3	2	3	
Average	**3**	**-**	**3**	**3**	**-**	**3**	**-**	**-**	**-**	**-**	**-**	**3**	**2.3**	**3**	**-**

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5. Course Outcomes Assessment Plan (COA):

Course Outcomes	Internal Assessment* (15 Marks)		Mid Term Exam (10 Marks)	End Term Exam (25 Marks)	Total (50 Marks)
	Before Mid Term	After Mid Term			
CO4	5	NA	6	8	19
CO5	2	2	4	8	16
CO6	NA	6	NA	9	15
Total	7	8	10	25	50

* 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.	Description	Planned			Actual			Remarks
		From	To	No. of Session	From	TO	No. of Session	
1.	Basics of Semi-Conductors and PN Junction	06.04.21	05.05.21	9				
2.	Bipolar Junction Transistors	05.05.21	08.06.21	9				
3.	Field Effect Transistors	08.06.21	29.06.21	6				
4.	Electronics Instruments & Digital Electronics Fundamental	29.06.21	14.07.21	4				

Total No. of Instructional periods available for the course: **28** Sessions

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: I

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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
1	06.04.21	Introduction to Electronics Components (Active & Passive), Comparison between Conductors, Semiconductors & Insulators.	CO4				
2	07.04.21	Introduction; and Carrier Concentrations-Introduction to the Fermi Level	CO4				
3	13.04.21	Semiconductors: Intrinsic & Extrinsic, Position of fermi level	CO4				
4	20.04.21	Electron and Hole Concentration at Equilibrium; Temperature Dependence of Carrier Concentration	CO4				
5	21.04.21	Majority & Minority Carrier inside a semiconductor, Mass action law	CO4				
6	27.04.21	PN Junction Diode in Forward Biased and Reverse Biased Condition; Breakdown in PN Junction Diodes.	CO4				
7	28.04.21	Drift and diffusion current, The Hall Effect, Barrier voltage	CO4				
8	04.05.21	P-Type & N-Type Semiconductor, V-I characteristics of P-N junction diode, Depletion region formation	CO4				
9	05.05.21	Junction Capacitance, Zener and Avalanche breakdown **(ASSIGNMENT 1)**	CO4				

Year: I

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Remarks:

Signature of Faculty

Date:

Year: I

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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
1	11.05.21	Introduction, Types: NPN and PNP and Applications	CO5				
2	12.05.21	Current Components of a transistor (PNP or NPN)	CO5				
3	18.05.21	Biasing of BJT, operating mechanism of NPN & PNP BJT	CO5				
4	19.05.21	Different Configurations of a Transistor and its Characteristics (CE & CB Mode)	CO5				
5	25.05.21	Different Configurations of a Transistor and its Characteristics (CC Mode), Relation between alpha, beta & gamma.	CO5				
6	26.05.21	Transistor as an Amplifier (CE, CB, CC)	CO5				
7	01.06.21	Transistor as a Switch, output characteristics of BJT	CO5				
8	02.06.21	Early Effect and Eber's Moll Model	CO5				
9	08.06.21	Q point, stability factor	CO5				

Remarks: **Signature of Faculty**

Year: I

Semester: II

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Date:

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C: 3

SESSION PLAN
UNIT-VI

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	09.06.21	Introduction; JFET and MOSFET	CO5				
2	15.06.21	Drain and Transfer characteristics of JFET	CO5				
3	16.06.21	N-channel & P-channel JFET	CO5				
4	22.06.21	Pinch- off voltage of JFET, Characteristics parameters of JFET- Trans conductance(g_m), Drain resistance(r_d), Amplification factor(μ) and their Relationship	CO5				
5	23.06.21	Realization of digital logic circuit using MOSFET (AND, OR, NOT etc.)	CO5				
6	29.06.21	Realization of switching circuits using MOSFET **(ASSIGNMENT 2)**	CO5				

Remarks:

Signature of Faculty

Date:

Year: I

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C: 3

SESSION PLAN
UNIT-VII

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	30.06.21	Signal generator, Multi meter, operation of CRO and its application	CO6				
2	06.07.21	Number systems, Conversions and codes	CO6				
3	07.07.21	Logic gates, universal gates & their truth tables.	CO6				
4	13.07.21	Various logic gates design using Universal gates	CO6				

Remarks:

Signature of Faculty

Date:

Year: I

Semester: II

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17. Program : B. Tech. — T: 0

18. Target : 60% — P: 0

C: 3

PERIODIC MONITORING

Actual date of completion and remarks, if any

Components		From	To	From	To
Duration (Mention from and to Dates)		06.04.21	26.05.21	01.06.21	20.07.21
Percentage of Syllabus covered		50%		50%	
Lectures	Planned	1	15	16	30
	Taken				
Tutorials	Planned	NA			
	Taken				
Test/Quizzes/ Mid Semester/ End Semester	Planned	1	1 (MID)	1	1 (END)
	Taken				
	CO's Addressed	CO4	CO4	CO5, CO6	CO4, CO5, CO6
	CO's Achieved				
Assignments	Planned	1		1	
	Taken				
	CO's Addressed	CO4		CO5, CO6	
	CO's Achieved				
Signature of Faculty					
Head of the Department					
OBE Coordinator					

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001

16. Course : Electrical and Electronics Technology — L: 3

17. Program : B. Tech. — T: 0

18. Target : 60% — P: 0

C: 3

PERIODIC MONITORING

Attainment of the Course (Learning) Outcomes:

Components	Attainment level	Action Plan	Remarks
Assignment	CO4:	Submission Target 14.05.21	
	CO5:	Submission Target 10.07.21	
	CO6:		
Quiz/Test etc.	CO4:	Scheduled on 14.05.21	
	CO5:	Scheduled on 14.07.21	
	CO6:		
Mid Semester	CO4:	Scheduled on 17.05.21	
	CO5:		
	CO6:		
End Semester	CO4:	Scheduled on 09.08.21	
	CO5:		
	CO6:		
Any Other	CO4:	NA	
	CO5:		
	CO6:		

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

Evaluation Sheet – Internal Assessment

Roll Number	Registration Number	Name of the Student	Internal Assessment (15)				
			Assignment	Class Test	Case Study	etc.	Total
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					
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					

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

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

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

Evaluation Sheet – Mid Semester

Roll Number	Registration Number	Name of the Student	Marks (10)
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	
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	

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

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

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001

16. Course : Electrical and Electronics Technology — L: 3

17. Program : B. Tech. — T: 0

18. Target : 60% — P: 0

C: 3

Planning for Remedial Classes – Mid Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	Mid Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	End Sem Marks	Improvement (Y/N)
					Date									
					Venue									
					Time									
1.														
2.														

Signature of HOD/ Dean

Date:

Signature of Faculty

Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course : Electrical and Electronics Technology **L: 3**

17. Program : B. Tech. **T: 0**

18. Target : 60% **P: 0**

C: 3

COURSE END SURVEY

INDIRECT ASSESSMENT

Sample format for Indirect Assessment of Course outcomes:

NAME:
ROLL NO.:
REG. NO..:
COURSE:
PROGRAM:

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						
CO2						
CO3						
CO4						
CO5						

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001
16. Course : Electrical and Electronics Technology — L: 3
17. Program : B. Tech. — T: 0
18. Target : 60% — P: 0
C: 3

INDIRECT ASSESSMENT CONSOLIDATION

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO Indirect Assessment

Programme: **Academic Year:2020-21**
Batch: 2020-22

Course Code & Name:

Course Outcome	Students Feed Back (5)	Attainment (100)
CO1		
CO2		
CO3		
CO4		
CO5		
etc.		

Signature of HOD/Dean
Date:

Signature of Faculty
Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001

16. Course : Electrical and Electronics Technology — L: 3

17. Program : B. Tech. — T: 0

18. Target : 60% — P: 0

C: 3

Evaluation Sheet (End Semester)

Roll Number	Registration Number	Name of the Student	Marks (50)

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001
16. Course : Electrical and Electronics Technology — L: 3
17. Program : B. Tech. — T: 0
18. Target : 60% — P: 0
C: 3

Planning for Remedial Classes – End Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	End Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	Supple Exam Marks	Improvement (Y/N)
					Date									
					Venue									
					Time									
1.														
2.														

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001

16. Course : Electrical and Electronics Technology — L: 3

17. Program : B. Tech. — T: 0

18. Target : 60% — P: 0

C: 3

Consolidated Mark Statement

Roll Number	Registration Number	Name of the Student	Total Marks			
			Mid Semester (20)	Internal Assessment (30)	End Semester (50)	Total (100)

Signature of Dean/HOD

Date:

Signature of Faculty

Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course **: Electrical and Electronics Technology** **L: 3**

17. Program **: B. Tech.** **T: 0**

18. Target **: 60%** **P: 0**

C: 3

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001
16. Course : Electrical and Electronics Technology — L: 3
17. Program : B. Tech. — T: 0
18. Target : 60% — P: 0
C: 3

CO ATTAINMENT – GAP ANALYSIS & REMEDIAL MEASURES

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO ATTAINMENT - GAP ANALYSIS & REMEDIAL MEASURES

Batch :	2020-22		Academic Year: 2020-21
Course Code & Name		Name of the Coordinator	Year & Semester
			I & I

CO	Direct Assessment	Indirect Assessment	CO Attainment	Target	CO Attainment Gaps	Action for Bridge the Gap	Target Modification
CO1							
CO2							
CO3							
CO4							
CO5							

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand — Course Code: GEE11001
16. Course : Electrical and Electronics Technology — L: 3
17. Program : B. Tech. — T: 0
18. Target : 60% — P: 0
C: 3

CO-PO ATTAINMENT

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO-PO ATTAINMENT

Programme :	Year & Sem: I & I	Academic Year: 2020-21	Batch:2020-22

Course Code	Course Name	CO-PO	PO 1	PO 2	PO 3	PO4	PO5	PO6	PO 7	PO8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
		Relationship															
		Mapping Value															
		Attainment															

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: I

Semester: II

15. Name of the Faculty: Nisarga Chand **Course Code: GEE11001**

16. Course **: Electrical and Electronics Technology** **L: 3**

17. Program **: B. Tech.** **T: 0**

18. Target **: 60%** **P: 0**

C: 3

PO ATTAINMENT OF THE COURSE

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course	**: Electrical and Electronics Technology**	**L: 3**
13. Program	**: B. Tech.**	**T: 0**
14. Target	**: 60%**	**P: 0**
		C: 3

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**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

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		
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)	Y		
7.	Dissemination of Syllabus and Course Plan to Students	Y		
8.	Lecture Notes - Unit I, II & III			
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)			
10.	**Mid Term Examination** E. Question Paper / Any Other Assessment Tools Used F. Sample Answer Scripts (Best, Average, Poor) if required G. Evaluation Sheet H. Slow Learners List and Remedial Measures			
11.	Lecture Notes – Unit IV & V			
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)			
13.	Course End Survey (Indirect Assessment) & Consolidation			
14.	**End Term Examination** E. Question Paper & Answer Key F. Sample Answer Scripts (Best, Average, Poor) if required G. Evaluation Sheet			

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

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

Signature of HOD/ Dean **Signature of Faculty**

Date: **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

Syllabus Copy

Course Code	Electrical and Electronics Technology	L	T	P	C
Version 1.0		3	0	0	3
Pre-requisites/Exposure	12th level Physics and Mathematics				
Co-requisites					

Course Objectives

1. Explain DC network theorems and apply these theorems to calculate the voltage, current and power for a given circuit.
2. Describe the concept of active power, reactive power, power factor, quality factor, steady state sinusoids.
3. Illustrate three-phase power measurement.

Course Content

Unit I: 7 lecture hours:
D.C. Circuit Analysis and Network Theorems: Concept of network, Active and passive elements, voltage and current sources, concept of linearity and linear network, unilateral and bilateral elements, R, Land C as linear elements, source transformation, Kirchoff's Law, mesh analysis and nodal analysis, star-delta transformation, network theorems: Thevenin's theorem, Norton's theorem, maximum power transfer theorem, network analysis with dependent sources.

Unit II: 7 lecture hours
Steady State Analysis of Single Phase A.C. Circuits: Sinusoidal, square and triangular waveforms-average and effective value, form the peak factors, concept of phasor, phasor representation of sinusoidal voltage and current, analysis of series-parallel RLC circuits. Apparent, active and reactive powers, power factor, causes and problems of low power factor, power factor improvement, resonance in series and parallel circuits, bandwidth and quality factors.

Unit III: 6 lecture hours
Three Phase A. C. Circuits: Its necessity and advantages, meaning of phase sequence, star and delta connections, balanced supply and balanced load, line and phase voltage/current relation, three phase power measurements, two wattmeter method.

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course	**: Electrical and Electronics Technology**	**L: 3**
13. Program	**: B. Tech.**	**T: 0**
14. Target	**: 60%**	**P: 0**
		C: 3

Text Books:

1. V. N. Mittal and A. Mittal, Basic Electrical Engineering, Tata McGraw-Hill Publishing Company Ltd, 2006.
2. T. K. Nagsarkar and M. S. Sukhija, Basic Electrical Engineering, 2nd Ed., Oxford, 2011.

Reference Books:

1. C. L. Wadhwa, Basic Electrical Engineering, 4th Ed., New Age International Publishers, 2007.
2. Vincent Del Toro, Electrical Engineering Fundamentals, 2nd Ed., Pearson, 2015.

Web Resources:

1. NPTEL :: Electrical Engineering - Basic Electrical Technology
2. NPTEL :: Electrical Engineering - NOC:Fundamentals of Electrical Engineering

Journals:

1. Cecilia Chan and Wilton Fok, Evaluating learning experiences in virtual laboratory training through student perceptions: a case study in Electrical and Electronic Engineering at the University of Hong Kong, IETE Journal of Education, vol. 4 (2), 2009.

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Faculty Individual Time Table

ADAMAS UNIVERSITY, KOLKATA

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL ENGINEERING

Programme: B. Tech.

Course Code & Course: GEE11001 **(Electrical and Electronics Technology)**
Faculty Coordinator: Mr. Titas Kumar Nag

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	-			LUNCH			EET	
Tuesday	-		-					
Wednesday	-							
Thursday	-				-		EET	-
Friday	-		-		-			

Signature of HOD

Date:

Signature of Class Coordinator

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Students Name List

Roll Number	Registration Number	Full Name
UG/02/BTBIOME/2020/006	AU/2020/0005268	Riya Paul
UG/02/BTBIOME/2020/007	AU/2020/0005270	HritikaAdhikary
UG/02/BTBIOME/2020/001	AU/2020/0004488	SoumyadipSantra
UG/02/BTBIOME/2020/005	AU/2020/0005262	MoyuriSen
UG/02/BTBIOME/2020/009	AU/2020/0005518	AnwesaSarkar
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	Sagarghosh
UG/02/BTCSE/2020/021	AU/2020/0004491	Swapnodip Das
UG/02/BTCSE/2020/023	AU/2020/0004506	SubrataHazra
UG/02/BTCSE/2020/043	AU/2020/0004584	AtanuChowdhury
UG/02/BTCSE/2020/044	AU/2020/0004586	SubhadeepKar
UG/02/BTCSE/2020/045	AU/2020/0004591	PriyeshChanda
UG/02/BTCSE/2020/013	AU/2020/0004473	VisheshMohanty
UG/02/BTCSE/2020/024	AU/2020/0004512	Aditya Kumar
UG/02/BTCSE/2020/050	AU/2020/0005525	JitChatterjee
UG/02/BTCSE/2020/030	AU/2020/0004532	PrathamaSarkar
UG/02/BTCSE/2020/031	AU/2020/0004537	Brinta Deb
UG/02/BTCSE/2020/025	AU/2020/0004516	AnushkaKhatua
UG/02/BTCSE/2020/020	AU/2020/0004490	DeeptanuSaha
UG/02/BTCSE/2020/040	AU/2020/0004579	Soumik Das
UG/02/BTCSE/2020/037	AU/2020/0004571	ArpanMaity
UG/02/BTCSE/2020/038	AU/2020/0004576	AnimeshDutta
UG/02/BTCSE/2020/039	AU/2020/0004577	AritraBiswas
UG/02/BTCSE/2020/029	AU/2020/0004531	RohanSutradhar
UG/02/BTCSE/2020/048	AU/2020/0005466	PragatiKedia
UG/02/BTCSEAIML/2020/005	AU/2020/0004544	DronGuin
UG/02/BTCSEAIML/2020/007	AU/2020/0004559	DebrupDey

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

UG/02/BTCSEAIML/2020/014	AU/2020/0004581	SayanikSutradhar
UG/02/BTCSEAIML/2020/001	AU/2020/0004518	Surya Chakraborty
UG/02/BTCSEAIML/2020/002	AU/2020/0004519	RishavGhosh
UG/02/BTCSEAIML/2020/010	AU/2020/0004567	SrijitaSaha
UG/02/BTCSEAIML/2020/004	AU/2020/0004538	PritomSaha
UG/02/BTCSEAIML/2020/012	AU/2020/0004574	Md. SahidAlam
UG/02/BTCSEAIML/2020/003	AU/2020/0004528	BiswajitChakraborty
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	MayankPareek
UG/02/BTCSECSF/2020/001	AU/2020/0004508	Shibsankar saw
UG/02/BTECE/2020/003	AU/2020/0004487	RishavBardhan
UG/02/BTME/2020/003	AU/2020/0004489	SouhardyaSaha

Signature of HOD/Dean **Signature of Class Coordinator**

Date: **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

COURSE PLAN

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

6. 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)

7. 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)

8. Pedagogy

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

9. 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)

10. References:

Text Books	Web Resources	Journals	Reference Books
2	2	1	2

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course	**: Electrical and Electronics Technology**	**L: 3**
13. Program	**: B. Tech.**	**T: 0**
14. Target	**: 60%**	**P: 0**
		C: 3

GUIDELINES TO STUDY THE SUBJECT

Instructions to Students:

12. Go through the 'Syllabus' in the LMS in order to find out the Reading List.
13. Get your schedule and try to pace your studies as close to the timeline as possible.
14. 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.
15. check your LMS regularly
16. go through study material
17. check mails and announcements on blackboard
18. keep updated with the posts, assignments and examinations which shall be conducted on the blackboard
19. Be regular, so that you do not suffer in any way
20. C**ell 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.
21. **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.
22. **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 XXX@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.

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

RELATED OUTCOMES

6. 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 modeling 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.

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
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14. Target : 60% **P: 0**
C: 3

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.

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

PSO1	To educate students in Electrical Engineering domain and guide their instincts to solve problems related to electrical engineering.
PSO2	To make our students fit for pursuing higher studies and R&D activities.
PSO3	To educate our students to become ethical and responsible engineering professionals.

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

CO1	Explain DC network theorems and apply these theorems to calculate the voltage, current and power for a given circuit.
CO2	Describe the concept of active power, reactive power, power factor, quality factor, steady state sinusoids.
CO3	Illustrate three-phase power measurement.

9. Co-Relationship Matrix
Indicate the relationships by 1- Slight (Low) 2- Moderate (Medium) 3-Substantial (High)

Program Outcomes / Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
CO1	2	2	-	-	-	-	-	-	-	-	-	-	3	-	-
CO2	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
CO3	2	-	3	-	-	-	-	-	-	-	-	-	-	2	-
Average	**2**	**2**	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3**	**2**	**-**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

10. Course Outcomes Assessment Plan (COA):

Course Outcomes	Internal Assessment* (30 Marks)		Mid Term Exam (10 Marks)	End Term Exam (25 Marks)	Total (50 Marks)
	Before Mid Term	After Mid Term			
CO1	10	NA	5	5	20
CO2	5	5	5	10	20
CO3	NA	10	-	10	10
Total	15	15	10	25	50

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

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

OVERVIEW OF COURSE PLAN OF COURSE COVERAGE

Course Activities:

S. No.	Description	Planned			Actual			Remarks
		From	To	No. of Session	From	TO	No. of Session	
1.	D.C. Circuit Analysis and Network Theorems	05.04.2021	20.05.2021	14				
2.	Steady State Analysis of Single Phase A.C. Circuits:	24.05.2021	28.06.2021	10				
3.	Three Phase A. C. Circuits	01.07.2021	15.07.2021	6				

Total No. of Instructional periods available for the course: 30 Sessions

Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

SESSION PLAN
UNIT-I

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	05.04.21	Concept of network	CO1				
2	08.04.21	Active and passive elements	CO1				
3	12.04.21	voltage and current sources, concept of linearity and linear network, unilateral and bilateral elements,	CO1				
4	19.04.21	concept of linearity and linear network, unilateral and bilateral elements,	CO1				
5	22.04.21	R, Land C as linear elements,	CO1				
6	22.04.21	source transformation	CO1				
7	26.04.21	Kirchoff's Law	CO1				

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

8	29.04.21	Mesh analysis and nodal analysis	CO1				
9	03.05.21	star-delta transformation	CO1				
10	06.04.21	Network theorems	CO1				
11	10.04.21	Thevenin's theorem	CO1				
12	13.05.21	Norton's theorem	CO1				
13	17.05.21	Maximum power transfer theorem	CO1				
14	20.05.21	Network analysis with dependent sources.	CO1				

Remarks:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

SESSION PLAN
UNIT-II

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	24.05.21	Sinusoidal, square and triangular waveforms-average and effective value	CO2				
2	27.05.21	Form the peak factors	CO2				
3	31.05.21	Concept of phasor,	CO2				
4	03.06.21	Phasor representation of sinusoidal voltage and current,	CO2				
5	07.06.21	Analysis of series-parallel RLC circuits	CO2				
6	10.06.21	Apparent, active and reactive powers	CO2				
7	14.06.21	Power factor	CO2				
8	17.06.21	Causes and problems of low power factor	CO2				
9	21.06.21	Power factor improvement	CO2				

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

10	24.06.21	Resonance in series and parallel circuits	CO2				
11	28.06.21	Bandwidth and quality factors.	CO2				

Remarks:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

SESSION PLAN
UNIT-III

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	01.07.21	Its necessity and advantages, meaning of phase sequence,	CO3				
2	05.07.21	Star and delta connections, balanced supply and balanced load,	CO3				
3	08.07.21	Line and phase voltage/current relation,	CO3				
4	12.07.21	Three phase power measurements, two wattmeter method.	CO3				
5	15.07.21	Revision class	CO3				

Remarks:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag — Course Code: GEE11001
12. Course : Electrical and Electronics Technology — L: 3
13. Program : B. Tech. — T: 0
14. Target : 60% — P: 0
C: 3

PERIODIC MONITORING

Actual date of completion and remarks, if any

Components		From	To	From	To
Duration (Mention from and to Dates)		06.04.21	26.05.21	01.06.21	20.07.21
Percentage of Syllabus covered		50%		50%	
Lectures	Planned	1	15	16	30
	Taken				
Tutorials	Planned	NA			
	Taken				
Test/Quizzes/ Mid Semester/ End Semester	Planned	1	1 (MID)	1	1 (END)
	Taken				
	CO's Addressed	CO4	CO4	CO5, CO6	CO4, CO5, CO6
	CO's Achieved				
Assignments	Planned	1		1	
	Taken				
	CO's Addressed	CO4		CO5, CO6	
	CO's Achieved				
Signature of Faculty					
Head of the Department					
OBE Coordinator					

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

PERIODIC MONITORING

Attainment of the Course (Learning) Outcomes:

Components	Attainment level	Action Plan	Remarks
Assignment	CO4:	Submission Target 15.05.21	
	CO5:	Submission Target 10.07.21	
	CO6:		
Quiz/Test etc.	CO4:	Scheduled on 14.05.21	
	CO5:	Scheduled on 14.07.21	
	CO6:		
Mid Semester	CO4:	Scheduled on 17.05.21	
	CO5:		
	CO6:		
End Semester	CO4:	Scheduled on 09.08.21	
	CO5:		
	CO6:		
Any Other	CO4:	NA	
	CO5:		
	CO6:		

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Evaluation Sheet – Internal Assessment

Roll Number	Registration Number	Name of the Student	Internal Assessment (30)				
			Assignment	Class Test	Case Study	etc.	Total

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag — Course Code: GEE11001
12. Course : Electrical and Electronics Technology — L: 3
13. Program : B. Tech. — T: 0
14. Target : 60% — P: 0
C: 3

Evaluation Sheet – Mid Semester

Roll Number	Registration Number	Name of the Student	Marks (20)

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Planning for Remedial Classes – Mid Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	Mid Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	End Sem Marks	Improvement (Y/N)
					Date									
					Venue									
					Time									
1.														
2.														

Signature of HOD/ Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**
12. Course : Electrical and Electronics Technology **L: 3**
13. Program : B. Tech. **T: 0**
14. Target : 60% **P: 0**
C: 3

COURSE END SURVEY

INDIRECT ASSESSMENT

Sample format for Indirect Assessment of Course outcomes:

NAME:
ROLL NO.:
REG. NO..:
COURSE:
PROGRAM:

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						
CO2						
CO3						
CO4						
CO5						

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag — Course Code: GEE11001
12. Course : Electrical and Electronics Technology — L: 3
13. Program : B. Tech. — T: 0
14. Target : 60% — P: 0
C: 3

INDIRECT ASSESSMENT CONSOLIDATION

ADAMAS UNIVERSITY, KOLKATA SCHOOL OF DEPARTMENT OF CO Indirect Assessment		
Programme: **Academic Year:2020-21** **Batch: 2020-22**		
Course Code & Name:		
Course Outcome	**Students Feed Back (5)**	**Attainment (100)**
CO1		
CO2		
CO3		
CO4		
CO5		
etc.		
Signature of HOD/Dean **Date:**		**Signature of Faculty** **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Evaluation Sheet (End Semester)

Roll Number	Registration Number	Name of the Student	Marks (50)

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Planning for Remedial Classes – End Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	End Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	Supple Exam Marks	Improvement (Y/N)
					Date									
					Venue									
					Time									
1.														
2.														

Signature of HOD/ Dean

Date

Signature of Faculty

Date

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

Consolidated Mark Statement

Roll Number	Registration Number	Name of the Student	Total Marks			
			Mid Semester (20)	Internal Assessment (30)	End Semester (50)	Total (100)

Signature of Dean/HOD

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag — Course Code: GEE11001
12. Course : Electrical and Electronics Technology — L: 3
13. Program : B. Tech. — T: 0
14. Target : 60% — P: 0
C: 3

CO ATTAINMENT – GAP ANALYSIS & REMEDIAL MEASURES

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO ATTAINMENT - GAP ANALYSIS & REMEDIAL MEASURES

Batch :	2020-22		Academic Year: 2020-21
Course Code & Name		Name of the Coordinator	Year & Semester
			I & I

CO	Direct Assessment	Indirect Assessment	CO Attainment	Target	CO Attainment Gaps	Action for Bridge the Gap	Target Modification
CO1							
CO2							
CO3							
CO4							
CO5							

Signature of HOD/Dean — **Signature of Faculty**

Date: — **Date:**

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag
12. Course : Electrical and Electronics Technology
13. Program : B. Tech.
14. Target : 60%

Course Code: GEE11001
L: 3
T: 0
P: 0
C: 3

CO-PO ATTAINMENT

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO-PO ATTAINMENT

Programme :	Year & Sem: I & I	Academic Year: 2020-21	Batch:2020-22

Course Code	Course Name	CO-PO	PO 1	PO 2	PO 3	PO4	PO5	PO6	PO 7	PO8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
		Relationship															
		Mapping Value															
		Attainment															

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

PO ATTAINMENT OF THE COURSE

Signature of HOD/Dean

Date:

Signature of Faculty

Date:

Year: 1st
Semester: 2nd

11. Name of the Faculty: Mr. Titas Kumar Nag **Course Code: GEE11001**

12. Course : Electrical and Electronics Technology **L: 3**

13. Program : B. Tech. **T: 0**

14. Target : 60% **P: 0**

C: 3

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**