



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation)

Shobhavana Campus, Mijar-574225, Moodbidri, D.K

Phone: 08258-262725, Fax: 08258-262726

Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

ATTENDANCE BOOK

Academic Year : 2023-24

Semester : 6th Section A

Period of the Semester : From 29-4-24 to 31-07-24

Subject with Code : Advanced Java Programming 21CS642

Name of the Faculty : SHRIKANTH N.G.

Department : AIML

VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

VISION OF THE DEPARTMENT

Foster Competent Professionals by Instilling Knowledge and Skills in the Artificial Intelligence & Machine Learning Realm to cater needs of Industry & Community.

MISSION OF THE DEPARTMENT

- To strengthen the assimilation process of concepts in AI & ML through experiential learning.
- To create a better Academia - Industry liaison by means of skill enhanced training.
- To develop a Support System for Research & Development for broader application in AIML domain.
- To promote Entrepreneurial Culture through Interaction with Collaborative Knowledge Partners.

COURSE OUTCOMES

CO1	Interpret the need for advanced java Concepts like enumerations, and annotations in developing modular & efficient programs.
CO2	Apply the Concepts of Generic Classes in Java Programs.
CO3	Illustrate the use of String handling functions.
CO4	Describe how Servlets fit into Java-based web application architecture.
CO5	Illustrate database access and details for managing information Using the JDBC API.
CO6	

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02	PS03	PS05
CO1	3	3	3	3								2	2		2	2
CO2	2	2	2	2								2	2		2	2
CO3	3	3	3	3								2	2		2	2
CO4	3	3	3	3								2	2		2	2
CO5	3	3	3	3								2	2		2	2
CO6	2-8	2-8	2-8	1-8								2	2		2	2

PROGRAM OUTCOMES (POs)

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 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 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 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.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	Understand, analyse, and demonstrate the knowledge of human cognition, Artificial Intelligence (AI), and Machine Learning (ML) in terms of real-world problems to meet the challenges of the future.
PSO2	Incorporate AI and ML techniques for industrial applications in the areas of Autonomous Systems, IoT, Cloud Computing, Robotics, Natural Language Processing, and emerging areas.
PSO3	Develop computational knowledge and project development skills using innovative tools and techniques to solve problems in the areas related to Deep Learning, Machine learning, Artificial Intelligence.
PSO4	Provide solutions to complex problems, using the latest hardware and software tools, along with analytical skills to arrive at cost-effective and appropriate solutions through AI & ML dimensions.
PSO5	Work as a part of the team through effective communication on multidisciplinary projects and successful careers in the computer and information technology industry that meets the needs of a society enriched with professional ethics.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1	PEO1	Expand knowledge in the field of AI & ML
	PEO2	Develop a continuous learning attitude, ethics, and values.
PEO2	PEO3	Inculcate abilities and talents, leading to creativity and productivity in the professional and industrial field beyond the curriculum and enhancing employability skill.
PEO3	PEO4	Self-educate and expand to the innovative entrepreneurship dimension.
PEO4	PEO5	Provide solutions for technical and social problems through research and innovation.



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation)

Shobhavana Campus, Mijar-574225, Moodbidri, D.K

Phone: 08258-262725, Fax: 08258-262726

Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

ATTENDANCE BOOK

Academic Year : 2023-24

Semester : 3 Section..A

Period of the Semester : From 15/11/2023 to

Subject with Code : Data Structures & Applications..(BCS 304)

Name of the Faculty : Deepika kumarath

Department : Computer Science & Engg.

VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

VISION OF THE DEPARTMENT

Engendering competent, excellent professionals by transforming the knowledge and computing skills to individuals through modern innovative tools and techniques

MISSION OF THE DEPARTMENT

- To produce skilled, creative software developers through rigorous training.
- To conduct specific technical courses to keep abreast to the latest technological developments and transformations in the domain.
- To establish Industry-Institute Interaction programs to enhance the skills of employability and entrepreneurship.
- To implement the ideas of research and innovations in interdisciplinary domains.

COURSE OUTCOMES

CO1	Observe introduction to Data Structure, classification, different operations of arrays, structures, Unions, Strings. Demonstrate the pointers, Dynamic Memory Allocation of arrays, Multidimensional arrays, polynomial, sparse matrices. Develop the application programs on different operations of stack.														
CO2	Develop the application programs on different operations of arrays, stack and queues. Explain definitions, classifications, representation of different types of Linked List, chains, representation of chains in C and different operations on Singly linked list.														
CO3	Explain definitions, representation of Doubly Linked List and Employ different operations on Doubly Linked List. Construct the application, programs on different operations of binary trees														
CO4	Construct the application programs on different operations of Binary Search trees, Selection Trees, Forests and graphs. Explain Representation of Disjoint sets, Counting Binary Trees.														
CO5	Explain Graph Abstract Data Types, Elementary Graph operations, advance. Data structure concepts such as Hashing and Optimal Binary Search Trees, Single and double ended Priority Queues, Leftist Trees.														
CO6															

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	2	2				2	2	1	2	2	2	2
CO2	2	2	2	2	1				1	2	1	2	2	2	2
CO3	2	2	2	2	1				2	2	1	2	2	2	2
CO4	2	1	2	1	1				1	2	1	2	2	2	2
CO5	2	1	1	1	1				1	2	1	2	2	2	2
CO6									1	2	1	2	2	2	2

PROGRAM OUTCOMES (POs)

- 1 **Engineering knowledge:** Apply the knowledge of mathematics, science, Engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- 2 **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 3 **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.
- 4 **Conduct investigations of complex problems:** Use research-based knowledge and research information to provide valid conclusions.
- 5 **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.
- 6 **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.
- 7 **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.
- 8 **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9 **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10 **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.
- 11 **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.
- 12 **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.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- 01 **Professional Skills:** The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.
- 02 **Problem-Solving Skills:** The ability to solve real-world problems by the suitable mathematical model with strong technological concepts in the rapidly growing arena of computer technology.
- 03 **Successful Career and Entrepreneurship:** Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development.
- 04

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 01
- 02
- 03
- 04



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(A Unit of Alva's Education Foundation)
Shobhavana Campus, Mijar-574225, Moodbidri, D.K
Phone: 08258-262725, Fax: 08258-262726
Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

ATTENDANCE REGISTER FOR LABS

Academic Year : 2023 - 24

Semester : 4th Section : A, B, C.

Period of the Semester : From 29/04/24 to 07/08/24

Subject with Code : Technical Writing using LaTeX (BCSL456D)

Name of the Faculty : Dr. Madhusudhan, S.

Department : CSE

VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

VISION OF THE DEPARTMENT

"Engendering competent, excellent professionals by transforming the knowledge and computing skills to individuals through modern innovative tools and techniques"

MISSION OF THE DEPARTMENT

- M1. To produce skilled, creative software developers through rigorous training.
- M2. To conduct specific technical courses to keep abreast to the latest technological developments and transformations in the domain.
- M3. To implement the ideas of research and innovations in interdisciplinary domains.
- M4. To establish Industry-Institute Interaction programs to enhance the skills of employability and entrepreneurship.

COURSE OUTCOMES

CO1	Apply basic LaTeX Command to develop simple document
CO2	Develop LaTeX script to present the tables and figures in the doc
CO3	Illustrate LaTeX script to present theorems and mathematical eqns
CO4	Experiment programs to generate the complete report with citation
CO5	Practice the use of TikZ and alg libraries to design graphics.
CO6	

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02	PS03	PS04
CO1	2	2	2	1	1				1	1	2	2	2	2	2	
CO2	2	2	2	1	1				1	1	1	2	2	2	2	
CO3	2	2	2	1	1				1	1	1	2	2	2	2	
CO4	2	2	2	1	1				1	1	1	2	2	2	2	
CO5	2	2	2	1	1				1	1	1	2	2	2	2	
CO6									1	1	1	3	2	2	2	

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

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

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.

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.

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.

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.

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.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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.

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.

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.

PROGRAM SPECIFIC OUTCOMES (PSOs)

A graduate of the Computer Science and Engineering Program will exhibit:

PSO1: Professional Skills: The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.

PSO2: Problem-Solving Skills: The ability to solve real-world problems by suitable mathematical model with strong technological concepts in rapidly growing arena of computer technology.

PSO3: Successful Career and Entrepreneurship: Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The graduates of Computer Science & Engineering will be able to

- PEO1: Exhibit the knowledge and skill sets to adapt to the dynamic technological transformations and developments in the field of computer Science and Engineering.



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation)

Shobhavana Campus, Mijar-574225, Moodbidri, D.K

Phone: 08258-262725, Fax: 08258-262726

Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

ATTENDANCE BOOK

Academic Year : ...2023-2024.....

Semester :4..... Section.....ECE 'A'.....

Period of the Semester : From...29/04/24...to...27/07/24.....

Subject with Code : B.E.C4.02, Principles of Communication Systems.

Name of the Faculty : ...Dr. NAPOLEAN A.....

Department : Electronics and Communications Engg

VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater

VISION OF THE DEPARTMENT

Centre of Excellence to empower the young minds in the field of Electronics and Communication Engg with research focus and skill development through transformative education catering to the needs of the society.

MISSION OF THE DEPARTMENT

M1: To create learning environment to enable the students for excellence in the field of Electronics and Communication Engg.

M2: To Empower the Students with necessary skills for solving the complex technological problems.

M3 : To inculcate research culture among teaching learning group by guiding them towards research activities & bridge the gap between industry and Academic.

M4: By imbuing the students with human values and Ethics through transformative education and make them socially responsible professionals.

COURSE OUTCOMES

COURSE OBJECTIVES	
CO1	Understand the Principles of analog Communication systems and noise modelling.
CO2	Identify the schemes for analog modulation and demodulation and Compare their Performance.
CO3	Design of PCM systems through the processes Sampling, Quantization and encoding.
CO4	Describe the ideal condition, Practical Considerations of the signal representation for baseband transmission of digital signals.
CO5	Identify and associate the random Variables and random process in Communication system design.
CO6	

[illegible]

AIET		Lesson Plan & Execution		Format No.	ACD 08	
				Issue No.	01	
				Rev. No.	00	
Name of the faculty		DR. NAPOLEAN. A				
Semester and Section		IV & ECE 'A'				
Date of Commencement		29.04.24				
Last Working Day of the Semester		08.08.24				
Source Materials List		<ol style="list-style-type: none"> 1. Louis E Frenzel, Principles of Electronic Communication Systems, 3rd Edition, Mc Graw Hill Education (India) Private Limited, 2016. 2. Simon Haykin & Michael Muthur, Communication Systems, 5th Edition, John Wiley, India Pvt Ltd, 2010 ISBN: 978-81-265-2151-7 3. B.P. Lathi, Zhi Ding, Modern Digital and Analog Communication Systems, Oxford University Press, 4th Edition, 2010. ISBN 9780198738002 4. Herbert Taub, Donald L Schilling, Gautam Saha, "Principles of Communication Systems" 4th Edition, Mc Graw Hill Education, 2016 5. Principle of Communication system: https://nptel.ac.in/courses/108104091 Communication Engineering: https://nptel.ac.in/courses/117102059 				
Subject Name : BEC403 & Principles of Communication Systems.						
Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	29/4/24	<u>Module: 1</u> Introduction, Probability, Conditional probability	2	Introduction Probability, Conditional Probability	29/4/24	2.5
2	13/5/24	Random Variables	2	Random Variables	13/5/24	2.5
3	14/5/24	Function of Random Variables	2	Function of Random Variables	14/5/24	2.5
4	15/5/24	Moments, Random process	2	Moments, Random Process	15/5/24	2.5

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referer
5	16/5/24	Mean & Correlation Covariance	2	Mean & Correlation Covariance	16/5/24	2,5
6	17/5/24	Properties of auto Correlation function	2	Properties of auto Correlation function	17/5/24	2,5
7	17/5/24	Cross Correlation function	2	Cross Correlation function	17/5/24	2,5
8	20/5/24	Gaussian process	2	Cross Correlation function	20/5/24	2,5
9	21/5/24	(Basic signal) * Representation in MATLAB	2,5	Basic signal Representation in MATLAB *	21/5/24	2,5
10	22/5/24	Signal Representation in time frequency domain *	2,5	Signal representation in time frequency domain	22/5/24	2,5
11	23/5/24	Gaussian distribution function	2	Gaussian distribution function	23/5/24	2
12	24/5/24	Revision on Module -1	2,5	Revision on module -1	24/5/24	2,5
		<u>Module: 2</u>				
13	27/5/24	AM Concepts	1	AM Concepts	27/5/24	1
14	27/5/24	Modulation Index and % of modulation	1	Modulation Index and % of modulation	27/5/24	1
15	27/5/24	Sidebands and the frequency domain	1	Side bands and the frequency domain	27/5/24	1
16	31/5/24	AM power	1	AM power	31/5/24	1

* → IPCC


Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
17	06/06/24	Single sideband Modulation	1	Single sideband modulation	06/06/24	1
18	07/06/24	Diode Modulator	1	Diode modulator	07/06/24	1
19	10/06/24	Transistor and Collector modulator	1	Transistor and Collector modulator	10/06/24	1
20	10/06/24	Diode detector	1	Diode detector	10/06/24	1
21	12/06/24	Balanced Modulator Lattice Modulator	1	Balanced modulator, Lattice Modulator	12/06/24	1
22	13/06/24	Frequency Division Multiplexing	1	Frequency Division Multiplexing	13/06/24	1
23	14/06/24	Amplitude Modulation* and Demodulation	1, 5	Amplitude Modulation and Demodulation	14/06/24	1
24	18/06/24	Frequency Modulation* and Demodulation	1, 5	Frequency Modulation and Demodulation	18/06/24	1, 5
25	19/06/24	<u>Module: 3</u> Basic Principles of Frequency Modulation	1	Basic Principles of Frequency Modulation	19/06/24	1
	24/06/24	Principles of Phase Modulation	1	Principles of Phase Modulation	24/06/24	1
27	24/06/24	Modulation Index and Side bands	1	Modulation index & side bands	24/06/24	1
28	25/06/24	Noise Suppression effects of FM	1	Noise suppression effects of FM	25/06/24	1
29	26/06/24	FM vs AM, VCO	1	FM vs AM VCO	26/06/24	1

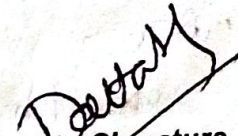
Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material needed
30	28/6/24	Slope detector	1	Slope detector	28/6/24	1
31	28/6/24	Phase Locked Loops	1	phase locked Loops	28/6/24	1
32	02/7/24	super heterodyne Receiver	1	super heterodyne Receivers	02/7/24	1
33	02/7/24	Frequency Conversion mixing Principles	1	frequency conversion & mixing Principles	02/7/24	1
34	03/7/24	JFET - Mixer	1	JFET mixer	3/7/24	1
35	04/7/24	Sampling & Reconstruction - chm of LPS *	1, 3	Sampling and Reconstruction of LPS *	4/7/24	1, 3
36	05/7/24	TDM & Demulti-plexing *	1, 3	TDM & De-multiplexing *	5/7/24	1, 3
Module 4						
37	12/7/24	Introduction	2	Introduction	12/7/24	2
38	12/7/24	Why digitise Analog Sources	2	Why digitise Analog sources	12/7/24	2
39	15/7/24	Sampling Process	2	Sampling Process	15/7/24	2
40	16/7/24	Pulse Amplitude Modulation	2	Pulse Amplitude Modulation	16/7/24	2
41	16/7/24	TDM	2	TDM	16/7/24	2
42	19/7/24	Generation and Detection of ppm	2	Generation and Detection of ppm	19/7/24	2

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
43	20/7/24	Quantization process	2	Quantization process	20/7/24	2
44	22/7/24	Pulse code Modulation	2	Pulse code Modulation	22/7/24	2
45	23/7/24	Sampling & Quantization	2	Sampling & Quantization	23/7/24	2
46	23/7/24	Encoding, Decoding, Filtering, Multiplexing	2	Encoding, decoding, Filtering, Multiplexing	23/7/24	2
47	24/7/24	PCM, Sampling, Quantization, Encoding	1, 3	PCM, Sampling, Quantization, Encoding	24/7/24	1, 3
48	25/7/24	NRZ, RZ, Generate plot eye diagram	3, 5	NRZ, RZ, plot the eye diagram	25/7/24	3, 5
<u>Module - 5</u>						
49	31/7/24	Introduction	2	Introduction	31/7/24	2
50	1/8/24	Intersymbol interference	2	Intersymbol Interference	1/8/24	2
51	2/8/24	Eye pattern	2	Eye Pattern	2/8/24	2
52	2/8/24	Nyquist Criterion for distortionless Transmission	2	Nyquist Criterion for distortionless Transmission	2/8/24	2
53	5/8/24	Baseband M-ary PAM Transmission	2	Baseband M-ary PAM Transmission	5/8/24	2
54	6/8/24	Signal to Noise ratio	2	Signal to Noise ratio	6/8/24	2

[illegible]

Others	Planned	Actual	Remarks :
Special Classes	-	-	-
Tutorials	-	-	-
Assignments	3	3	-
Seminars	1	1	-
IA Tests	3	3	-
Portions Covered in the entire Semester	100%. (All Five Module + IPCC topics)		
Course Effectiveness			
Students Feedback			
Students Response			
Result	No. of Students AP	No. of Students Passed	% of Result


Faculty in Charge


HOD's Signature

Signature of Principal (& Remarks if any)

PRINCIPAL
Alva's Institute of Engg. & Technology,
Majur. MOODSIDRI - 574 225, D.K

[illegible]

VIET	INTERNAL EXAM RESULT ANALYSIS						Format No.	ACD 12
							Issue No.	01
							Rev. No.	00
Department	Electronics and Communications Engg						Semester	4
							Subject Code	BEC402
Total No. of students	68						Academic Year	2023-24
Test	Date	Number of Students				Signature		Remarks
		Attended	0-11	12-25	26-30	Faculty	HOD	
T ₁	04.6.24	64	05	44	15	MP	OR	-
T ₂	09.7.24	66	01	30	35	MP	OR	-
T ₃	29.7.24	62	12	39	11	MP	OR	-
T ₄								
T ₅								

Signature of Staff in - charge

HOD's Signature

PROGRAM OUTCOMES (POs)

- Engineering knowledge:** Apply the knowledge of mathematics, science, Engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 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.
- 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.
- 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.
- 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.
- 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.
- Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 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.
- 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.
- 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.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- 1 Understand and apply the Principles of Electronic and Communication Engg in various domain of Analog & digital systems.
- 2 Design and implement Systems using the Concepts of Electronic Signal Processing, Embedded systems & Semiconductor technology.
- 3 Apply modern hardware and software tools to analyse and solve engineering problems.
- 4

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 1 Apply mathematical, Scientific and Engineering skills for solving problems in the area of Electronic and Communication Engg.
- 2 Explore to emerging technologies and Excel in industrial Higher Studies, Research.
- 3 Apply analytical skills in the area of Electronic and Communication Engg. to become competent and employable.
- 4 Instill professional skills, ethics, human values, team work for solving Engg problems & contribute to social needs.

