

Academic Year: 2025-26(Odd)					
SI No	Course Name with Code	Name of the Faculty	Activity	Description	Impact Analysis
1	Software Project Management and Finance 23AML151	Mrs. Kavya M S Mrs. Divya M S	Interactive Case Study Discussions	The real-world case studies are given to identified key issues, and proposed practical solutions through collaborative group discussions. This activity enhanced their critical thinking, problem-solving, and decision-making skills while connecting theoretical concepts to industry scenarios.	Students developed critical thinking, analytical, teamwork, and decision-making skills by evaluating real-world project scenarios. The activity improved their ability to apply project management and financial concepts to practical industry situations.
2	Automata Theory and Combinatory 23AML152	Mrs. Poornima N Ms. Abhilasha P Kumar	JFLAP Simulator to check correctness of the designed automata	The JFLAP simulator is used to construct and test finite automata, validating their designs against various input strings and acceptance conditions. This hands-on activity strengthened their understanding of automata theory concepts and improved their ability to identify and correct design errors..	Students gained a deeper understanding of automata concepts through hands-on simulation. The activity enhanced logical reasoning, problem-solving abilities, and confidence in designing and validating finite automata accurately.
3	Computer Networks and Security 23AML153	Dr. Halaravi Keerthi Dr. Sunitha R	Traffic Flow analysis using Wireshark	Captured and analyzed network traffic using Wireshark to identify packet flow patterns, protocols, and communication behaviors across the network. This activity provided practical exposure to network monitoring, packet inspection, and troubleshooting techniques used in real-world networking environments.	Students acquired practical skills in packet analysis, network monitoring, and protocol identification. The activity improved their troubleshooting capabilities and strengthened their understanding of network communication and security mechanisms.
4	Advanced Machine Learning 23AML154	Dr. Tejaswini R M Mrs. Pavithra H C	Mini project to solve real world problems	Mini projects using advance machine learning techniques to address real-world challenges such as image classification, sentiment analysis, or predictive analytics. This activity enhanced their practical understanding of neural networks, model development, and the application of AI solutions to solve complex problems.	Students enhanced their problem-solving, programming, and model development skills by implementing machine learning solutions for real-world applications. The activity fostered innovation, teamwork, and the ability to apply advanced AI techniques effectively.

5	Generative AI	Dr. Kakoli Bora Dr. Nagarathna C R	Hackathon/ Mini Project	This activity enables students to solve problems using Generative AI algorithms and tools, while providing them with the opportunity to work in a team and contribute towards society. Students will select a problem on any of the themes like: • Climate Change Analysis and Mitigation • Mental Health Technology support • Educational Technology and Personalized Learning • Sustainable Smart Cities and few more	Students enhanced their creativity, teamwork, and innovation by developing Generative AI solutions for societal challenges. The activity improved their problem-solving skills and ability to design AI-driven applications for real-world domains such as healthcare, education, and sustainability.
6	Reinforcement Learning	Pradip Kumar Das	Mini Project	With the primarily goal of students to build analytical and solution development skill on the target course, students were provided with activities in the form of appropriate reinforcement learning problems that they need to solve in a small team using learned skills applying relevant algorithm(s) and using frameworks and standard environment providers	Students strengthened their analytical and decision-making skills by implementing reinforcement learning algorithms to solve practical problems. The activity improved their ability to model environments, optimize policies, and evaluate intelligent agents.
7	Blockchain Technology	Dr. Sunitha R	Application Development	Two members in a team selected problems on blockchain applications development. At the end they will give a presentation on the solutions and submit a report.	Students gained practical experience in developing blockchain-based applications and presenting their solutions. The activity enhanced their understanding of decentralized systems, smart contracts, teamwork, and technical communication skills.
8	Predictive Analytics & Business Intelligence	Mrs. Pankaja R	Mini Project	Students will undertake a mini project focused on creating interactive dashboards using Power BI and Tableau. This project will help them apply core concepts of data visualization and business analytics to real-time scenarios. Through this activity, they will analyze various business solutions, interpret insights, and explore predictive aspects for informed decision-making	Students developed practical skills in data visualization, business analytics, and predictive modeling using Power BI and Tableau. The activity enhanced their ability to interpret business insights and support data-driven decision-making.

9	MLOps	Mrs. Pavithra H C	Mini Project	Students will work on a mini ML project covering the core MLOps pipeline, from model development to deployment and monitoring. They will apply MLOps tools like Git, Docker, MLflow, or cloud platforms.	Students acquired hands-on experience in implementing the end-to-end machine learning lifecycle using MLOps tools and practices. The activity improved their skills in model versioning, deployment, monitoring, collaboration, and automation of ML workflows.
10	Ethical Hacking	Mrs. Kavya M S	Case Study	students will enhance their understanding of key concepts such as Kali Linux setup, footprinting, scanning, and penetration testing. They will also strengthen their practical knowledge of system exploitation using Metasploit, Python scripting, creating backdoors and keyloggers, and explore ethical considerations in cybersecurity.	Students strengthened their practical cybersecurity skills through case studies involving penetration testing, vulnerability assessment, and ethical hacking tools. The activity enhanced their understanding of secure system design and responsible cybersecurity practices.
11	R Programming	Mr. Mohanesh BM	Mini project	Data science project was aimed to find the different types of cancer present at present. How many cancers are spreading with a swift phase. Finding the possible to these problem and developing a report and investigating using AI learnt and concluding the result.	Students improved their data analysis and programming skills by applying R to investigate real-world healthcare datasets. The activity enhanced their ability to perform statistical analysis, visualize data, generate meaningful insights, and prepare analytical reports.
12	RM & IPR	Dr. Kakoli Bora Ms. Abhilasha P Kumar	Flip Class	This activity enables students to effectively extract and interpret information from technical research papers. Each student will choose a research paper published in a reputable journal or conference. Students must analyze and understand the research publication's contents before presenting in the class. This activity involves understanding complex concepts, identifying key data and findings, and synthesizing information to gain insights from the research	Students enhanced their research aptitude by critically analyzing and presenting research papers from reputed journals and conferences. The activity improved their literature review, presentation, critical thinking, technical writing, and understanding of research ethics and intellectual property rights.

Academic Year: 2025-26(Even)					
Sl No	Course Name with Code	Name of the Faculty	Activity	Description	Impact Analysis
1	Deep Learning 23AML161	Prof. Pavithra H C Pradip Kumar Das	Mini project to solve real world problems	Mini projects using deep learning techniques to address real-world challenges such as image classification, sentiment analysis, or predictive analytics. This activity enhanced their practical understanding of neural networks, model development, and the application of AI solutions to solve complex problems.	Students strengthened their understanding of deep learning concepts by developing AI-based solutions for real-world problems. The activity enhanced their skills in neural network design, model optimization, teamwork, and practical problem-solving.
2	Natural Language Processing 23AML162	Prof. Mohanesh B M Ms. Abhilasha P Kumar	Mini project to solve real world problems.	NLP-based mini projects to address real-world applications such as text classification, sentiment analysis, chatbot development, and language translation. This activity enhanced their understanding of language processing techniques, machine learning models, and the practical implementation of AI-driven solutions.	Students gained practical experience in applying NLP techniques to real-world applications. The activity improved their skills in text processing, language modeling, machine learning implementation, and the development of intelligent language-based systems.
3	Generative AI 23AML163	Dr. Kakoli Bora Dr. Nagarathna C R	Hackathon is planned to conduct to solve real world problems	A hackathon is planned to encourage students to develop innovative Generative AI-based solutions for addressing real-world challenges across domains such as education, healthcare, business, and sustainability. This activity will foster creativity, teamwork, problem-solving, and hands-on experience in designing and implementing AI-driven applications.	Students enhanced their creativity, innovation, and collaborative problem-solving skills by developing Generative AI solutions. The hackathon improved their ability to design, implement, and present AI-driven applications for real-world challenges.
4	Cryptography 23AML16541	Dr, Vani K A	Real time implementation of Activity trees for various applications	The real-time implementation of activity trees to model and analyze security-related scenarios across various applications, highlighting their role in identifying potential threats and system behaviors. This activity enhanced students' understanding of cryptographic systems, security analysis techniques, and structured approaches to solving complex cybersecurity problems.	Students developed a better understanding of cryptographic principles and security analysis through practical implementation of activity trees. The activity strengthened their analytical thinking, threat modeling, and cybersecurity problem-solving skills.

5	IPCV 23AML164	Dr. Mahantesha U Prof. Kavya M S	Mini project to solve real world problem.	IPCV-based mini projects to address real-world challenges such as object detection, image classification, facial recognition, and scene analysis. This activity enhanced their skills in image processing techniques, computer vision algorithms, and the development of intelligent visual systems for practical applications.	Students acquired hands-on experience in image processing and computer vision by developing solutions for practical applications. The activity enhanced their skills in visual data analysis, algorithm implementation, and the development of intelligent vision-based systems.
6	Cognitive Science	Dr.Kakoli Bora	Mini Project	This activity enables students to solve problems related to human cognition using AI algorithms and tools, while providing them with the opportunity to work in a team and contribute towards society.	Students developed a deeper understanding of human cognition and intelligent systems by applying AI techniques to cognitive science problems.
7	Reverse Engineering & Malware Analysis	Dr. Sunitha R	Seed Lab experiments	Seed lab experiments were undertaken to solve problems on malware analysis experiments. The students will present the solutions and submit a report.	Students gained practical experience in reverse engineering and malware analysis through hands-on SEED Lab experiments.
8	Graph Neural Network	Mrs. Pavithra H C	Mini Project	Students will build projects covering the core Graph Neural Network concepts, from model development to deployment.	Students acquired hands-on experience in designing and implementing Graph Neural Network models for graph-structured data. The activity enhanced their understanding of graph-based learning, model development, and the application of GNNs to solve real-world problems.
9	Operating System (24AML142)	Dr. SS Dr. MU Prof. KMS	Mini project	The objective of a mini project on operating systems is to provide hands-on experience with key concepts and functionalities of operating systems. It aims to bridge the gap between theoretical knowledge and practical implementation. The projects typically involve developing small components or tools that simulate or extend OS functionalities, helping students understand the inner workings of operating systems.	Students gained practical exposure to operating system concepts by developing small OS-related applications. The activity enhanced problem-solving, programming, debugging, and teamwork skills while strengthening their understanding of process management, memory management, file systems, and scheduling algorithms.
10	Database Management System (24AML143)	Dr. SR & Prof.SG	Build a NoSQL - based web application using MongoDB	The student has to demonstrate an outline of a present Database Management System using the MongoDB. MongoDB is a popular, open-source NoSQL document-oriented database designed for high performance,	Students acquired hands-on experience in designing and implementing NoSQL databases using MongoDB. The project improved their understanding of

				flexibility, and easy scalability. For this mini project a group of four students shall be made and the project output has to be shown on the system.	document-oriented databases, CRUD operations, database integration with web applications, and collaborative software development practices
11	Design and Analysis of Algorithm (24AML144)	Prof.PN & Dr. HK	Case Study Presentation	The purpose of this case study to explore the concepts of the Greedy algorithm techniques and its applications in real world scenarios.	Students developed analytical and critical thinking skills by exploring real-world applications of greedy algorithms. The activity improved their ability to identify suitable algorithmic approaches, evaluate solutions, and effectively present technical concepts.
12	Machine Learning (24AML145) Prof.PR & Prof.KP	Prof.PR & Prof.KP	Hands-on Implementation of Machine Learning Algorithms using Rapid Miner Tool	Students will have to begins with data preprocessing tasks such as data cleaning, handling missing values, normalization, and feature selection using the visual workflow environment of RapidMiner. Students then apply different machine learning algorithms including such as Decision Trees, k-Nearest Neighbors (KNN), and ensemble methods	Students gained practical experience in data preprocessing, feature selection, and implementing machine learning algorithms using RapidMiner. The activity strengthened their understanding of the complete machine learning workflow, model evaluation, and data-driven decision-making skills without extensive coding.
13	Cloud Computing and Applications (24AML146)	Dr. TRM & Prof. KJ	Role Play	To enhance students' conceptual understanding of virtualization in cloud computing through an interactive role-play activity, enabling them to visualize how multiple virtual machines operate on a single physical server.	The role-play activity improved students' conceptual understanding of virtualization and cloud computing by simulating the interaction between physical servers, hypervisors, and virtual machines. It enhanced collaborative learning, communication skills, and the ability to relate theoretical concepts to real-world cloud infrastructure.