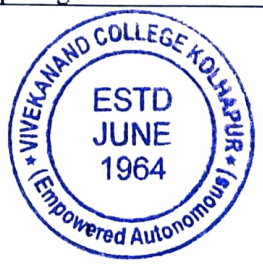
"Dissemination of Education for Knowledge, Science and Culture"
-Shikshanmaharshi Dr. Bapuji Salunkhe

Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)

Department of Computer Science

M.Sc.-II Computer Science (Implemented from June 2024)	
SEMESTER – III	
DSC-V (DSC19CSC31): Mobile Application Development with Flutter	
Course Outcomes:	Students will able to
CO1:	Understand the core concepts and architecture of Flutter and understanding Dart.
CO2:	Apply Flutter widgets and layout mechanisms to build interactive and responsive user interfaces.
CO3:	Analyze and integrate backend services and databases using Flutter, Firebase, and SQLite.
CO4:	Design, develop, test, and deploy complete Flutter applications.
DSC-VI (DSC19CSC32): Artificial Intelligence	
Course Outcomes:	Students will able to
CO1:	Become familiar with basic principles of AI toward problem solving, inference, perception, knowledge representation, and learning.
CO2:	Investigate applications of AI techniques in intelligent agents, expert systems, artificial neural networks and other machine learning models.
CO3:	Explore the current scope, potential, limitations, and implications of intelligent systems.
CO4:	Apply their knowledge to real-world problems using AI trends and will be able address challenges in applications and provide solutions.
DSE-III (DSE19CSC31): Cyber Security	
Course Outcomes:	Students will able to
CO1:	Analyze and evaluate the cyber security needs.
CO2:	Understand types of vulnerabilities.
CO3:	Implement cyber security solutions, information assurance, and cyber security tools software/tools.
CO4:	Comprehend and execute risk management processes, risk treatment methods in order to mitigate the security risk.
DSE-III (DSE19CSC32): Cloud Computing	
Course Outcomes:	Students will able to
CO1:	Identify and describe the key concepts, service models, and deployment models of cloud computing



CO2:	Explain the hands-on implementation of cloud services and applications, including security practices and resource management techniques
CO3:	Analyze various architectural patterns for cloud computing solutions and evaluate their effectiveness in addressing specific business needs
CO4:	Design and propose a comprehensive cloud computing solution for a given requirement, integrating concepts from all three modules and documenting the architecture, technologies, and implementation strategies.
DSE-III (DSE19CSC33): Human Computer Interaction	
Course Outcomes:	Students will able to
CO1:	List and describe the core concepts and theories of Human-Computer Interaction, including historical perspectives and human cognitive processes.
CO2:	Explain the principles of user-centered design and the significance of mental models in the design of interactive systems.
CO3:	Analyze various user research methods and evaluate their effectiveness in informing design decisions and improving usability.
CO4:	Explain the principles of user-centered design and the significance of mental models in the design of interactive systems.
SEMESTER – IV	
DSC-VII (DSC19CSC41): Software Project Management	
Course Outcomes:	Students will able to
CO1:	Understand the fundamentals of software project management.
CO2:	Study with the different methods and techniques used for project management.
CO3:	Understand different techniques of project monitoring, control and review.
CO4:	Apply project management practices, tools and risks estimation techniques.
DSC-VIII (DSC19CSC42): Natural Language Processing	
Course Outcomes:	Students will able to
CO1:	Understand the automated Natural Language Generation and Machine Translation.
CO2:	Explore the student with knowledge of various levels of analysis involved in NLP.
CO3:	Analyze the semantic analysis of natural language.
CO4:	Apply their knowledge for language generation and discourse analysis in the NLP application development.
DSC-IX (DSC19CSC43): Cryptography and Network Security	
Course Outcomes:	Students will able to
CO1:	Provide deep understanding of basics of Cryptography
CO2:	Learn and understand various approaches of Encryption and Decryption techniques, strengths of Integrity and Confidentiality
CO3:	Understand various protocols for network security to protect against the threats in the networks.
CO4:	Apply and design cryptography techniques to secure the communication and

	work over the network.
DSE-IV (DSE19CSC41): Remote Sensing and GIS	
Course Outcomes:	Students will able to
CO1:	To know about basic concepts of remote sensing, sensors & types, elements involved, terminology & units energy resources and basic concepts, principles of working, properties of remote sensing.
CO2:	Become familiar with the history, characteristics of satellite missions, and recent advancements in remote sensing technology.
CO3:	Understand the geographical information system and its fundamental
CO4:	Apply the knowledge of RS and GIS in data analysis
DSE-IV (DSE19CSC42): Decision Support Systems	
Course Outcomes:	Students will able to
CO1:	Identify and describe the key components and characteristics of Decision Support Systems (DSS), including the phases of the decision-making process and the subsystems of DSS.
CO2:	Explain the traditional system development life cycle and alternative development methodologies for Decision Support Systems, including the significance of prototyping and change management.
CO3:	Analyze various approaches to knowledge management and evaluate the effectiveness of different types of expert systems in addressing specific problem areas.
CO4:	Design and develop a prototype of a Decision Support System or an expert system for a specific application, incorporating relevant components and methodologies discussed in the course.
DSE-IV (DSE19CSC43): Python for Data Analytics	
Course Outcomes:	Students will able to
CO1:	Apply Descriptive Statistics for Data Summarization and Analysis.
CO2:	Analyze Correlation and Time Series Data.
CO3:	Evaluate Hypothesis Tests and Statistical Inferences.
CO4:	Create and Assess Regression Models for Predictive Analysis.

VIVEKANAND COLLEGE KOLHAPUR ESTD JUNE 1964 (Empowered Autonomous)

CO-ORDINATOR
M.Sc.(COMPUTER SCIENCE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)