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

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Computer Science

	M.ScI Computer Science (Implemented from June 2023)	
SEMESTER – I		
	DSC-I (DSC19CSC11): Problem Solving using Python	
Course	Students will able to	
Outcomes:		
CO1:	Understand the basics of python programming.	
CO2:	Understand the concepts like files, exceptions and object orientation and solve	
2	real life problems for the same.	
CO3:	Design the Graphical and GUI applications.	
CO4:	Get acquainted with open-source libraries of python like NumPy, Pandas and	
	Matplotlib and their applicability.	
	DSC-II (DSC19CSC12): Advanced Database Techniques	
Course	Students will able to	
Outcomes:		
CO1:	Demonstrate proficiency in translating SQL queries into relational algebra and	
	other operators.	
CO2:	Acquire a comprehensive understanding of transaction management,	
	concurrency control and recovery techniques.	
CO3:	Understand the fundamentals of distributed databases and distributed database	
	management systems (DDBMS).	
CO4:	Gain insights into NoSQL databases, including their features, advantages and	
	disadvantages.	
	DSE-I (DSE19CSC11): Design and Analysis of Algorithms	
Course	Students will able to	
Outcomes:		
CO1:	Understand the concept of algorithms and its design.	
CO2:	Learn the usability, techniques of analysis and design strategies of algorithms.	
CO3:	Study the different algorithms and its applications	
CO4:	Design efficient algorithms for complex problems and improve its	
=	performance.	
	DSE-I (DSE19CSC12): Theory of Computer Science	
Course	Students will able to	
Outcomes:		
CO1:	Understand the basic mathematical concepts such as set theory, relations,	
	functions, mathematical induction, and recursive definitions.	
CO2:	Understand the concepts of alphabets, strings, and languages, and be able to	
	design regular grammars and finite automata.	



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Outcomes:	Course	Students will able to
	Outcomes:	
CO1: Understand the fundamentals of embedded systems.	CO1:	Understand the fundamentals of embedded systems.



CO2:	Design and develop IoT devices and applications.
CO3:	Explore advanced topics in embedded systems and IoT and wireless sensor networks.
CO4:	Apply their knowledge to real-world projects, demonstrating the ability to plan, develop, and present embedded systems and IoT solutions.



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