



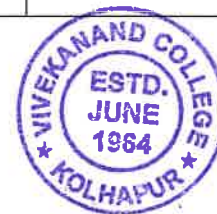
Shri Swami Vivekanand Shikshan Sanstha

## Vivekanand College, Kolhapur (Autonomous)

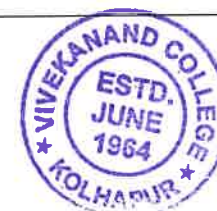
Department of Computer Science

### Curriculum relevance: Course outcomes with relevance to Local, Regional, National Global needs (UG) 2018-19 to 2023-24

Sr. No.	Course Code	Course / SECs Titles	Year of Introduction	COs and PSOs with relevance to local/ regional needs	COs & PSOs with relevance to national needs	COs & PSOs with relevance to global needs
1.	DSC-1006A	Problem Solving using Computers & Database Management System	2018-19	CO1: Learn and Understand Basics of Programming Languages and Database Management Systems.	CO2: Learn and understand basics of Python Programming and Concepts of Database Management System.	CO3: Design small problems using Python Programming Language and DBMS Environment. PSO2: Develop and build strong problem solving, analysing and decision-making skills and abilities to solve multidisciplinary problems of various domains associated with Computer Science.
2.	DSC-1006B	Problem Solving using Computers & Database Management System	2018-19	CO2: Design complex problems using Python Programming Language and DBMS Environment.	CO5: Explain and Justify problem solving techniques and concepts	CO6: Formulate, Construct and Demonstrate case studies. PSO4: Ability to understand the computing needs of multidisciplinary problems and to formulate and solve these by applying programming skills, development tools and environments.
3.	DSC-1006C	Operating System and Object-Oriented Programming	2019-20	CO1: Learn and understand the basics of operating system and Object-Oriented programming concepts. CO4: Illustrate and construct Linux commands and basics of OOPs	CO2: Learn and understand the basics of LINUX operating system and Object-Oriented programming concepts using Python. CO3: Define, Discuss and Explain the concepts of OS and features of OOPs	CO5: Solve and Analyse problems with object-oriented concepts CO6: Compile, Design and Construct case studies
4.	SEC-1006A	Introduction to HTML and CSS	2019-20	CO1: Learn the basic tags used in HTML.	CO2: Develop their own Cascading Sheets in order to design web pages.	



5.	DSC-1006D	Operating System and Data Structures	2019-20	CO1: Learn and understand the related and extended concepts of OS and basics of Data Structures. CO2: Learn and understand the concepts of LINUX scripting and data structures.	CO3: Illustrate and construct Linux shell scripts and different types of data structures in Python	CO4: Solve and Analyse problems using shell scripts and different types of data structures CO5: Explain and Determine scope of shell scripting and data structures in different applications
6.	SEC-1006B	Introduction to JavaScript	2019-20		CO1: Learn the basic concepts of JavaScript.	
7.	DSC-1006E1	Section-I Computer Network Section-II Software Engineering	2020-21	CO1: Learn and understand the basic Computer Network and Software engineering concepts. CO4: Apply Linux administration commands to configure Network Topologies and Design SRS	CO2: Learn and Understand Linux administration and Software Project Management. CO3: Illustrate and Demonstrate Linux administration commands and Software Required Specification with use cases	CO5: Analyze and Design SRS, test cases and local area Network for small laboratory. CO6: Design SRS and test designs with use cases and construct local area Network for small laboratory.
8.	DSC-1006E2	Section-I Internet Technologies-I Section-II Introduction to Java	2020-21	CO1: Learn and Understand basics of Java Programming Language, Flask Micro Framework. CO4: Solve and analyze complex problems with different problem-solving concepts	CO2: Apply Object Oriented Concepts with Java and understanding the basic of Web Development using Flask and Python. CO3: Recognize and identify the different concepts available in Java and Flask with Python	CO5: Design small applications using Java and Web Applications using Flask CO6: Construct standalone and web applications using Java and Flask PSO6: Develop skills and knowledge (communication, problem solving, interviewing, creativity, team work, group discussion, aptitude etc.) to make or to build competence among the stakeholders to achieve the career in different fields and at a different level (Industry personnel, academician, researcher, entrepreneur etc).
9.	SEC-1006C	PHP Programming	2020-21	CO2: Getting the primer knowledge of web application development frameworks.	CO3: Known about internet techniques.	



10.	DSC-1006F1	Section-I Advanced Computer Network Section-II Object Oriented Software Engineering	2020-21	CO1: Learn and Understand various OOSE concepts and advanced network concepts. CO2: Illustrate and demonstrate advanced network concepts and UML diagrams	CO3: Design and Apply Network Concepts and UML Diagrams.	CO4: Analyze applied Network Concepts and designed UML Diagrams. CO5: Design case studies for small network and software system applications
11.	DSC-1006F2	Section-I Internet Technologies-II Section-II Data Science using Python	2020-21	CO1: Learn and understand advanced concepts of Web Development using Flask and Python and basics of data science. CO2: Learn and Understand basics of application deployment and Machine Learning concepts.	CO3: Apply web development and Data science concepts and methods to solve small problems in real-world contexts	CO4: Analyze web development and data science concepts with small problems CO5: Design and Analyze case studies.
12.	SEC-1006D	Advanced PHP Programming	2020-21		CO1: Learn the advanced concepts of PHP.	
13.	DSC-1006A	Problem Solving using Computers & Database Management System	2021-22	CO1: Learn and Understand Basics of Programming Languages and Database Management Systems.	CO2: Learn and understand basics of Python Programming and Concepts of Database Management System.	CO3: Design small problems using Python Programming Language and DBMS Environment.
14.	DSC-1006B	Problem Solving using Computers & Database Management System	2021-22	CO2: Design complex problems using Python Programming Language and DBMS Environment.	CO5: Explain and Justify problem solving techniques and concepts	CO6: Formulate, Construct and Demonstrate case studies.
15.	DSC-1006C	Operating System and Object-Oriented Programming	2022-23	CO1: Learn and understand the basics of operating system and Object-Oriented programming concepts. CO4: Illustrate and construct Linux commands and basics of OOPs	CO2: Learn and understand the basics of LINUX operating system and Object-Oriented programming concepts using Python. CO3: Define, Discuss and Explain the concepts of OS and features of OOPs	CO5: Solve and Analyse problems with object-oriented concepts CO6: Compile, Design and Construct case studies
16.	SEC-1006A	Introduction to HTML and CSS	2022-23	CO1: Learn the basic tags used in HTML.	CO2: Develop their own Cascading Sheets in order to design web pages.	



17.	DSC-1006D	Operating System and Data Structures	2022-23	CO1: Learn and understand the related and extended concepts of OS and basics of Data Structures. CO2: Learn and understand the concepts of LINUX scripting and data structures.	CO3: Illustrate and construct Linux shell scripts and different types of data structures in Python	CO4: Solve and Analyse problems using shell scripts and different types of data structures CO5: Explain and Determine scope of shell scripting and data structures in different applications
18.	SEC-1006B	Introduction to JavaScript	2022-23		CO1: Learn the basic concepts of JavaScript.	
19.	DSC-1006E1	Computer Network	2023-24	CO1: Learn and understand the basic Computer Network and Software engineering concepts.	CO2: Learn and Understand Linux administration and Software Project Management.	CO5: Analyze and Design SRS, test cases and local area Network for small laboratory.
20.	DSC-1006E2	Software Engineering	2023-24	CO4: Apply Linux administration commands to configure Network Topologies and Design SRS	CO3: Illustrate and Demonstrate Linux administration commands and Software Required Specification with use cases	CO6: Design SRS and test designs with use cases and construct local area Network for small laboratory
21.	DSC-1006E3	Internet Technologies-I	2023-24	CO1: Learn and Understand basics of Java Programming Language, Flask Micro Framework.	CO3: Recognize and identify the different concepts available in Java and Flask with Python	CO6: Construct standalone and web applications using Java and Flask
22.	DSC-1006E4	Introduction to Java	2023-24	CO4: Solve and analyze complex problems with different problem-solving concepts	CO2: Apply Object Oriented Concepts with Java and understanding the basic of Web Development using Flask and Python.	CO5: Design small applications using Java and Web Applications using Flask
23.	SEC-1006C	PHP Programming	2023-24	CO2: Getting the primer knowledge of web application development frameworks.	CO3: Known about internet techniques.	
24.	DSC-1006F1	Advanced Computer Network	2023-24	CO1: Learn and Understand various OOSE concepts and advanced network concepts.		CO5: Design case studies for small network and software system applications



25.	DSC-1006F2	Object Oriented Software Engineering	2023-24	CO2: Illustrate and demonstrate advanced network concepts and UML diagrams	CO3: Design and Apply Network Concepts and UML Diagrams.	CO4: Analyze applied Network Concepts and designed UML Diagrams.
26.	DSC-1006F3	Internet Technologies-II	2023-24	CO1: Learn and understand advanced concepts of Web Development using Flask and Python and basics of data science.		CO4: Analyze web development and data science concepts with small problems
27.	DSC-1006F4	Data Science using Python	2023-24	CO4: Analyse web development and data science concepts with small problems.	CO3: Apply web development and Data science concepts and methods to solve small problems in real-world contexts CO5: Design and Analyze case studies.	CO6: Implement Machine Learning Algorithms and web applications
28.	SEC-1006D	Advanced PHP Programming	2023-24		CO1: Learn the advanced concepts of PHP.	
29.	DSC03CSC11	Problem Solving using Computers-I	2023-24	CO1: Learn and Understand Basics of Programming Languages and Database Management Systems.	CO2: Learn and understand basics of Python Programming and Concepts of Database Management System.	CO3: Design small problems using Python Programming Language and DBMS Environment. PSO2: Develop and build strong problem solving, analysing and decision-making skills and abilities to solve multidisciplinary problems of various domains associated with Computer Science.
30.	DSC03CSC12	Introduction to DBMS-I	2023-24	CO2: Design complex problems using Python Programming Language and DBMS Environment.	CO5: Explain and Justify problem solving techniques and concepts	
31.	MIN03CSC11	Problem Solving using Computers-I	2023-24	CO2: Learn and understand basics of Python Programming and Concepts of Database Management System.		CO6: Formulate, Construct and Demonstrate case studies. PSO4: Ability to understand the computing needs of multidisciplinary problems and to formulate and solve these by applying programming skills,





						development tools and environments.
32.	MIN03CSC12	Introduction to DBMS-I	2023-24	CO2: Create simple programs and build simple database queries	CO5: Explain and Justify problem solving techniques and concepts	PSO2: Develop and build strong problem solving, analysing and decision-making skills and abilities to solve multidisciplinary problems of various domains associated with Computer Science.
33.	OEC03CSC11	Fundamentals of Computer-I	2023-24	CO1: Understand the basic functioning and components of computers, including hardware and software.	CO2: Demonstrate knowledge of different data representation techniques and computer networking fundamentals.	
34.	OEC03CSC12	Introduction to Web-I	2023-24	CO2: Students will be proficient in creating structured and semantically correct HTML documents.		CO3: Students will develop the skills necessary to create responsive web designs.
35.	IKS03GEC11	Indian Knowledge System	2023-24	CO2: Understand the nature of contribution made by Indian Mathematician		
36.	DSC03CSC21	Problem Solving using Computers-II	2023-24	CO2: Design complex problems using Python Programming Language and DBMS Environment.	CO5: Explain and Justify problem solving techniques and concepts	CO6: Formulate, Construct and Demonstrate case studies. PSO4: Ability to understand the computing needs of multidisciplinary problems and to formulate and solve these by applying programming skills, development tools and environments.
37.	DSC03CSC22	Introduction to DBMS-II	2023-24	CO2: Design complex problems using Python Programming Language and DBMS Environment.		CO5: Explain and Justify problem solving techniques and concepts



38.	MIN03CSC21	Problem Solving using Computers-II	2023-24	CO2: Design complex problems using Python Programming Language and DBMS Environment.	CO5: Explain and Justify problem solving techniques and concepts	CO6: Formulate, Construct and Demonstrate case studies. PSO4: Ability to understand the computing needs of multidisciplinary problems and to formulate and solve these by applying programming skills, development tools and environments.
39.	MIN03CSC22	Introduction to DBMS-II	2023-24	CO2: Design complex problems using Python Programming Language and DBMS Environment.		CO5: Explain and Justify problem solving techniques and concepts
40.	OEL03CSC21	Fundamentals of Computer-II	2023-24	CO1: Understand different data structures, their applications, and perform basic operations on them.	CO4: Gain insights into operating system functions, memory management, and file systems.	CO2: Analyze and design algorithms to solve computational problems with an understanding of time and space complexity.
41.	OEL03CSC22	Introduction to Web-II	2023-24	CO4: Students will develop awareness and knowledge of web security principles.		CO3: students will be familiar with essential web development tools, including version control using Git, package management with npm or yarn, and build tools like webpack.
42.	VSC03CSC21	HTML and CSS	2023-24	CO1: Upon completion of this course, students will have deep knowledge and skills in HTML CO2: Upon completion of the course, students will have a deep understanding of CSS	CO3: Students will develop the skills necessary to create responsive web designs.	CO4: students will be aware of web accessibility principles and best practices. PSO7: Understand professional and ethical responsibilities in order to work at different positions in organizations and at a societal context.



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