



Shri Swami Vivekanand Shikshan Sanstha
Vivekanand College, Kolhapur (Autonomous)
Department of Computer Science


Curriculum relevance: Course contents with focus on Employability / Entraprenaurship /Skill development (PG) 2022-23 to 2023-24

| Sr. No. | Course Code | Course / SECs Titles | Year of Introduction | Employability | Entrepreneurship | Skill Development |
|---------|-------------|-----------------------------------|----------------------|---|---|--|
| 1. | CC-2500 A | Design and Analysis of Algorithms | 2022-23 | Algorithm Analysis, Hashing, Data Structures Stacks, Queues, Linked list, Trees, Binary tree, Binary search tree | | Problem solving using Greedy Algorithm, Dynamic programming |
| 2. | CC-2501 A | Python Programming | 2022-23 | Installing Python, Simple program using Python | Creating Graphical User interface: Building a Basic GUI, Models, Views, and Controllers | Storing Collections of Data Using Lists, Writing Files, Writing Algorithms |
| 3. | CC-2502 A | Database Management System | 2022-23 | Data models: Conventional data models, NDM & HDM, Physical Data Organization-Hashed files, Indexed files, B-trees DBMS & RDBMS | | E-R diagrams, E-R design Issues in Relational database design, Functional dependencies. PL/SQL blocks. Cursor management, Trigger |
| 4. | CC-2503 A | Cyber Security | 2022-23 | Cyber Security Vulnerabilities, Cryptography, Deception, System administration, Complex Network Architectures, Securing Web Application, Services and Servers Cyber Forensics | Cryptography and Network Security Cyberspace and the Law | Applications of Cryptography. Firewalls- Types of Firewalls, VPN Security Protocols: - security at the Application Layer- PGP and S/MIME, Security at Transport Layer- SSL and TLS |
| 5. | CC-2506 | Web Technology | 2022-23 | NET framework and its architecture | ASP.NET, Web Services | ADO.NET, AJAX, C# Programming |
| 6. | CC-2507 | Advanced Java | 2022-23 | Java Database Connectivity, Java Beans, Spring and Hibernate | | Java programming |



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| 7. | CC-2508 | Android Development with Kotlin | 2022-23 | Use Kotlin REPL to practice basic expressions, object-oriented programming in Kotlin. Connect to the Internet and App Design | Building an Android app that contains images and a click handler, Modifying views within the layout of an app, Adding libraries to module gradle file, App Navigation | Installing Android Studio, Creating an Android app project, Deploying the app to an emulator or a device |
| 8. | CC-2509 | Software Project Management | 2023-24 | Project Organization, Planning a software project, Project Evaluation | Software Project Management Tools and Techniques- PERT & Gantt Charts | Software Quality Management and Testing |
| 9. | CC-2512 | Artificial Intelligence | 2023-24 | Artificial Intelligence, AI Problems, AI Techniques, Knowledge Representation | | Syntactic Processing, Semantic Analysis, Discourse and Pragmatic Processing. |
| 10. | CC-2513 | Advanced Web Technology | 2023-24 | ASP.NET MVC | Authentication and Authorization, Cloud Computing | ASP.NET Web API with MVC, Responsive webpage, Bootstrap Grid |
| 11. | CC-2514 | PHP | 2023-24 | Introduction of PHP, Functions in PHP, File Handling in PHP, Web Development and Session Management in PHP | | PHP Programming |
| 12. | CC-2515 | Network Security Analyst | 2023-24 | Secret Key Cryptography | Cryptographic Authentication, Kerberos, Firewalls, Intrusion Detection | Network Security: IANA, Allotment of IP Address, IPv4 and IPv6, IP |




Dr. V. B. Waghmare
HEAD
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