

Kannada Sangha Pune's  
**Kaveri College of Arts, Science and Commerce, Pune**

M.Sc(CS) – I Sem - I  
(2019 CBCS Syllabus)

Subject: Paradigm of Programming Language (CORE)

### **Course Outcome**

CO1: To understand syntax and semantics.

CO2: To understand programming language designs.

CO3: To learn new languages more quickly.

CO4: To understand use standard vocabulary when discussing languages.

CO5: To understand basic language implementation techniques.

M.Sc(CS) – I Sem - I  
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Subject: Design and Analysis of Algorithm (CORE)

### **Course Outcome**

CO1: To design the algorithms.

CO2: To learn basic Algorithm Analysis techniques and understand the use of asymptotic notation.

CO3: To select the appropriate algorithm by doing necessary analysis of algorithm.

CO4: To understand different design strategies.

CO5: To understand the use of data structure in improving algorithm performance.

CO6: To understand classical problems and solutions.

CO7: To learn a variety of useful algorithms.

CO8: To understand classification problem.

CO9: To provide foundation in algorithm design and analysis.

CO10: To develop the ability to understand and design algorithms in context of space and time complexity.

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**M.Sc(CS) – I Sem - I**  
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**Subject: Database Technologies (CORE)**

### **Course Outcome**

CO1: To provide an overview of the concept of NoSQL technology.

CO2: To provide an insight to the different types of NoSQL database .

CO3: To make the student capable of making a choice of what database technologies to use, based on their application need.

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**Subject: PPL and Database Technologies Practical**

### **Course Outcome**

CO1: Apply the knowledge of Scala to develop web-based applications

CO2: Provides knowledge of code optimization

CO3: To understand the concept of interoperability.

CO4: Students are able to build and maintain the databases and handle real life applications and daily needs.

CO5: Able to perform hands-on NoSql database lab assignments that will allow students to use the four NoSQL database types via products such as MongoDB,Neo4J

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**Subject: Cloud Computing (ELECTIVE)**

### **Course Outcome**

CO1: To understand the principal paradigm of cloud computing.

CO2: To appreciate the role of Virtualization Technologies.

CO3: To have ability to design and deploy Cloud Infrastructure.

CO4: To Understand cloud security issue and solutions.

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**Subject: Artificial Intelligence (ELECTIVE)**

### **Course Outcome**

CO1: To learn various types of algorithms useful in Artificial Intelligence.

CO2: To convey the ideas in AI research and programming.

CO3: To understand the numerous applications and huge possibilities in the field of AI that goes beyond the normal human imagination.

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**Subject: Web Services (ELECTIVE)**

### **Course Outcome**

CO1: To understand the details of web services like WSDL, UDDI, SOAP.

CO2: To learn and understand how to implement and deploy web service client and server.

CO3: To explore interoperability between different frameworks.

CO4: To understand the concept of RESTful system.

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**M.Sc(CS) – I Sem - II**  
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**Subject: Advanced Operating System (CORE)**

### **Course Outcome**

CO1: To provides understanding of the functions of Operating System.

CO2: To provides an insight into the functional module of Operating System.

CO3: To understand the concept of underlying design and implementation of Operating System.



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**M.Sc(CS) – I Sem - II**  
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**Subject: Mobile Technologies (CORE)**

### **Course Outcome**

CO1: To impart basic understanding of the wireless communication system.

CO2: To expose students to various aspects of mobile and ad-hoc networks.

CO3: To understand the issue relating to Wireless applications.

CO4: To understand Mobile security.

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**M.Sc(CS) – I Sem - II**  
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**Subject: Software Project Management (CORE)**

### **Course Outcome**

CO1: To covers skills that are required to ensure successful medium and large scale software projects.

CO2: To examines Requirements Elicitation, Project Management, Verification and Validation and Management of Large Software Engineering Projects.

CO3: To select and apply project management techniques for process modeling, planning, estimation, process metrics and risk management; perform software verification and validation using inspections, design and execution of system test cases.

**M.Sc(CS) – I Sem - II**  
**(2019 CBCS Syllabus)**

**Subject: Practical on Advanced OS & Mobile Technologies**

### **Course Outcomes**

**CO1:** Student can understand internal structure and operations of OS along with various processes including threading, inter process communication and synchronization with I/O operations.

**CO2:** Awareness of computational issues, resources in distributed environments.

**CO3:** To develop mobile computing applications by analyzing their characteristics and requirements, selecting the appropriate computing models and software architectures, and applying standard programming languages and tools.

**CO4:** To understand how the underlying wireless and mobile communication networks work, their technical features, and what kinds of applications they can support

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**Subject: Human Computer Interaction (ELECTIVE)**

### **Course Outcome**

CO1: To design effective dialogue for HCI.

CO2: To design effective HCI for individuals and persons with disabilities.

CO3: To assess the importance of user feedback.

CO4: To explain the HCI implication for designing multimedia / e-commerce / e-learning Web sites.

CO5: To develop meaningful user interface.

M.Sc(CS) – I Sem - II  
(2019 CBCS Syllabus)

Subject: Soft Computing (ELECTIVE)

### **Course Outcome**

CO1: To introduce the ideas of soft computational techniques based on human experience.

CO2: To generate an ability to design, analyze and perform experiments on real life problems using various Neural Learning Algorithms.

CO3: To conceptualize fuzzy logic and its implementation for various real world applications.

CO4: To apply the process of approximate reasoning using Neuro-Fuzzy Modeling.

CO5: To provide the mathematical background to carry out optimization using genetic algorithms.

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**Subject: Project (Elective)**

### **Course Outcome**

CO1: Describe the phases of Software development project life cycle.

CO2: Apply the various project management tools and techniques.

CO3: Implement software systems that meet specified design & performance requirements.

CO4: Use Team Management to effectively design & implement the project.

CO5: Demonstrate effective project execution & Control techniques that results in successful project.