K.L.N. COLLEGE OF ENGINEERING POTTAPALAYAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Regulation 2013 Course Outcomes
Degree/Branch: M.E., COMPUTER SCIENCE AND ENGINEERING

## Year/Semester: I/I

### MA7155-Applied Probability and Statistics

| CO | Course Outcomes |
|---|---|
| C101.1 | Apply the concept of random variable to find moments& moment generating functions of distributions |
| C101.2 | Find marginal,conditional distribution, statistical average for the standard probability function. |
| C101.3 | Find the M.L.E and use the principle of least squares for curve fitting and regression lines. |
| C101.4 | Identify small,large samples and apply testing of hypothesis. |
| C101.5 | Analyze the multivariate methods for normal density and principal components from standardized variables |

### CP7101-Design and Management of Computer Networks

| CO | Course Outcomes |
|---|---|
| C102.1 | Understand the process of designing a computer network |
| C102.2 | Understand the addressing strategies for managing the networks. |
| C102.3 | Understand the functions of flow analysis . |
| C102.4 | Understand the routing strategies for managing the networks. |
| C102.5 | To learn the process of optimizing a network. |

### CP7102-Advanced Data Structures and Algorithm

| CO | Course Outcomes |
|---|---|
| C103.1 | Understand the principles of iterative and recursive algorithms. |
| C103.2 | Design and implement optimization algorithms in specific applications |
| C103.3 | Design implement dynamic programming algorithms. |
| C103.4 | Understand the concept of shared and concurrent objects |
| C103.5 | Implement and apply concurrent linked lists, stacks, and queues |

## CP7103-Multicore Architecture

| CO | Course Outcomes |
|---|---|
| C104.1 | Identify the limitations of ILP and the need for multicore architectures |
| C104.2 | Discuss the issues related to Vector Processing, GPU and software pipelining |
| C104.3 | Ability to discuss issues on multiprocessors, cache coherence and interconnection networks |
| C104.4 | Ability to discuss the architecture and workloads for warehouse scale computers. |
| C104.5 | Discuss the architecture of embedded processors and multiprocessors |

## CP7004-Image Processing and Analysis

| CO | Course Outcomes |
|---|---|
| C105.1 | Understand the basics of digital images and their spatial domain processing |
| C105.2 | Understand the various frequency domain transformations and filters |
| C105.3 | Apply different segmentation techniques to digital images |
| C105.4 | Understand the various Corner and interest point detection methods and morphological operators |
| C105.5 | Understand the components of color images and different image compression technique |

## NE7002-Mobile and Pervasive Computing

| CO | Course Outcomes |
|---|---|
| C106.1 | CO1: Interpret the fundamental of basics of Mobile Computing and Pervasive  Computing |
| C106.2 | CO2: Construct the role of Cellular Networks in Mobile and Pervasive Networks |
| C106.3 | CO3: Apply the knowledge in concept of sensor and mesh networks |
| C106.4 | CO4: Demonstrate the tools with context aware and wearable computing |
| C106.5 | CO5: Demonstrate the Application and Manage the Memory |

## CP7211-Advanced Data Structures and Lab

| CO | Course Outcomes |
|---|---|
| C107.1 | Design and apply iterative and recursive algorithms |
| C107.2 | Design and implement optimisation algorithms for specific applications. |
| C107.3 | Design and implement randomized algorithms. |
| C107.4 | Design appropriate shared objects and concurrent objects for applications. |
| C107.5 | Implement and apply concurrent linked lists, stacks, and queues |

## CP7112-Case Study – Network Design

| CO | Course Outcomes |
|---|---|
| C108.1 | Analyzed the performance of various configurations and protocols in LAN. |
| C108.2 | Understanding the concept of RIP and OSPF |
| C108.3 | Demonstrated the concept of Network Security and Networks Traffic Flow. |
| C108.4 | Understand the configuration of Firewall. |
| C108.5 | Understand the integration of EIGRP (Enhanced Interior Gateway Routing Protocol) into Existing Networks |

## Year/Semester: I/II

## CP7201-Theoretical Foundation of Computer Science

| CO | Course Outcomes |
|---|---|
| C109.1 | Interpret the fundamentals of set theory. |
| C109.2 | Solve the different logic programming for the given statements. |
| C109.3 | Compare the different reduction methods in lambda calculus. |
| C109.4 | Illustrate the methods of tree and graph structures for problem solving. |
| C109.5 | Construct a FA for the given language set. |

**CP7202-Advance Databases**

| CO | Course Outcomes |
|---|---|
| C110.1 | Outline database system architectures and explain parallel and distributed databases |
| C110.2 | Compare object and object relational databases and experiment with OQL |
| C110.3 | Explain active, temporal and spatial databases |
| C110.4 | Outline mobile, multimedia databases and explain mining techniques |
| C110.5 | Experiment with XML and summarize web database and cloud storage basics |

**CP7203-Priniciples of Programming Language**

| CO | Course Outcomes |
|---|---|
| C111.1 | Summarize syntax and semantics of a programming language |
| C111.2 | Outline design issues of data types, statements and expressions |
| C111.3 | Experiment with design issues for subprograms |
| C111.4 | Identify design issues for various object oriented concepts |
| C111.5 | Interpret different multi paradigm languages |

**CP7204-Advanced Operating System**

| CO | Course Outcomes |
|---|---|
| C112.1 | C112.1 Discuss the various synchronization, scheduling and memory management issues |
| C112.2 | C112.2 Demonstrate the Mutual exclusion, Deadlock detection and agreement protocols of Distributed operating system |
| C112.3 | C112.3 Discuss the various resource management techniques for distributed systems |
| C112.4 | C112.4 Identify the different features of real time and mobile operating systems |
| C112.5 | C112.5 Install and use available open source kernel |
| C112.6 | Modify existing open source kernels in terms of functionality or features used |

## NE7202-Network and Information Security

| CO | Course Outcomes |
|---|---|
| C113.1 | Understand the fundamentals of Cryptography |
| C113.2 | Apply the knowledge of various algorithms to provide confidentiality, integrity and authenticity. |
| C113.3 | Implementation of various key distribution and management schemes. |
| C113.4 | Examine encryption techniques to secure data in transit across data networks |
| C113.5 | Design security applications in the field of Information technology |

## IF7202-Cloud Computing

| CO | Course Outcomes |
|---|---|
| C114.1 | To introduce the broad perceptive of cloud architecture and model |
| C114.2 | To understand the concept of Virtualization |
| C114.3 | To apply different cloud programming model as per need. |
| C114.4 | To understand the design of cloud Services. |
| C114.5 | To learn to design the trusted cloud Computing system |

## CP7211-Advance Database lab

| CO | Course Outcomes |
|---|---|
| C201.1 | Apply distributed database, Parallel database technique to solve a scenario |
| C201.2 | Apply OQL to retrieve results |
| C201.3 | Experiment with weka tool |
| C201.4 | Make use of active and deductive database to solve a scenario |
| C201.5 | Construct XML schema for given database |

CP7212-Case Study – Operating System Design

| CO | Course Outcomes |
|---|---|
| C202.1 | C116.1 Understand the issues in designing and implementing modern operating systems |
| C202.2 | C116.2 Understand team formation, team issues, and allocating roles and responsibilities |
| C202.3 | C116.3 Demonstrate individual competence in building medium size operating system   components |
| C202.4 | C116.4 Demonstrate ethical and professional attributes of a computer engineer. |
| C202.5 | C116.5 Prepare suitable plan with clear statements of deliverables, and track the same. |

## Year/Semester: II/III

## CP7301-Software Process and Project Management

| CO | Course Outcomes |
|---|---|
| C203.1 | Explain software development life cycle processes |
| C203.2 | Prepare requirements using the requirement management techniques |
| C203.3 | Generalize about planning and tracking activities |
| C203.4 | Operate with various test cases and testing types to ensure quality |
| C203.5 | Explain software process definition and management |

## NE0111-Mobile Application Development

| CO | Course Outcomes |
|---|---|
| C204.1 | Understand system requirements for mobile applications |
| C204.2 | Generate suitable design using specific mobile development frameworks |
| C204.3 | Generate mobile application design |
| C204.4 | Implement the design using specific mobile development frameworks |
| C204.5 | Deploy the mobile applications in marketplace for distribution |

**CP7022-Software Design**

| CO | Course Outcomes |
|---|---|
| C205.1 | Analyze specifications |
| C205.2 | Describe approaches to design |
| C205.3 | Develop design documentation |
| C205.4 | Evaluate the design |
| C205.5 | Analyze specifications |

**CP7026-Software Quality Assurances**

| CO | Course Outcomes |
|---|---|
| C206.1 | Understand the basics of Quality models and assurance process |
| C206.2 | Understand the various Verification techniques |
| C206.3 | Explain the different approaches for testing |
| C206.4 | Outline the various structural testing |
| C206.5 | Summarize the various functional testing with the testing attributes. |

**CP7028-Enterprise Application Integration**

| CO | Course Outcomes |
|---|---|
| C207.1 | Identify the requirements and approaches to enterprise application integration |
| C207.2 | Construct the integration pattern for application and middleware |
| C207.3 | Choose efficient model for implementation of Service Oriented Integration |
| C207.4 | Analyze infrastructure for implementation Messaging Based Integration |
| C207.5 | Examine the integration approaches suitable for a given problem |

**CP7311-Project Work (Phase- I)**

| CO | Course Outcomes |
|---|---|
| C208.1 | Identify the problem by applying acquired knowledge |
| C208.2 | Construct and organize executable project modules through proper designing |
| C208.3 | Choose efficient tools for implementation of the designed modules |
| C208.4 | Analyze and categorize the outcomes of the implementation and derive inferences. |
| C208.5 | Examine the completed task and compile the project report |

Year/Semester: II/IV

CP7411-Project Work (Phase- II)

| CO | Course Outcomes |
|---|---|
| C209.1 | Plan and construct improved methods for an identified problem by applying acquired knowledge |
| C209.2 | Experiment and Develop effective solutions through proper designing |
| C209.3 | Analyze and categorize the outcomes of the implementation and derive inferences. |
| C209.4 | Assess the acquired outcomes based on evaluation metrics |
| C209.5 | Examine the completed task and compile the project report |