

J.J. College of Arts and Science (Autonomous), Pudukkottai

Department of Computer Applications

Course Outcomes

M.C.A – PSCA

Course Name - Digital Computer Fundamentals		Course Code - P1R1CACC1
Upon Completion of the course students would be able to		
CO 1	understand about digital computer fundamentals	
CO 2	gain the knowledge about Boolean algebra and logical gates	
CO 3	develop the knowledge about flip flops	
CO 4	improve the knowledge about logical circuit and sequential logic	
CO 5	provide a concept to represent the register and counter	
Course Name - Data Structures and Algorithms		Course Code - P1R1CACC2
Upon Completion of the course students would be able to		
CO 1	develop the knowledge of basic data structure and C++	
CO 2	understand the concept of trees and graphs	
CO 3	provide a knowledge about sorting techniques	
CO 4	Learn to analyze and compare algorithm for efficiency in searching	
CO 5	learn the different algorithm for design techniques	
Course Name – Database Management System		Course Code – P1R1CACC3
Upon Completion of the course students would be able to		
CO 1	Understand the basics of database management system	
CO 2	Understand the meaning and purpose of Entity Relationship model	
CO 3	Improve the knowledge about relationship model concepts	
CO 4	Understand the basic concept of Structured Query Language using various commands	
CO 5	Use PL/SQL Commands with ease	
Course Name - Shell Programming Using Unix		Course Code – P1R1CACC4
Upon Completion of the course students would be able to		

CO 1	Understand the basic concepts of UNIX
CO 2	Identify and analyze the knowledge of using SHELL
CO 3	Create Shell programming using UNIX
CO 4	Identify the features in UNIX using file system
CO 5	Conceptualize the program development and documentation
Course Name - Ooad And Uml	
Course Code – P1R1CACC5	
Upon Completion of the course students would be able to	
CO 1	Analyze the basic concepts of OOAD and UML
CO 2	Improve the knowledge about various object oriented methodologies
CO 3	Understand the concepts of UML models using diagrams and their real world applications
CO 4	Identify and analyze the use cases, relationship, attributes and methods
CO 5	Develop the knowledge about object oriented design using different layers
Course Name - Shell Programming Using Unix – Practical	
Course Code – P1R1CACC6P	
Upon Completion of the course students would be able to	
CO 1	Run various UNIX commands
CO 2	Access files, directories using commands
CO 3	Do shell programming on UNIX OS
CO 4	Understand and handle UNIX System calls
CO 5	Know the commands of grep and conditional statements
Course Name - RDBMS Practical	
Course Code – P1R1CACC7P	
Upon Completion of the course students would be able to	
CO 1	Gain a knowledge about the back end application programs
CO 2	Gain knowledge to write SQL commands to create, insert, delete, update data in tables
CO 3	Understand to specify primary and foreign key constraints in CREATE TABLE statements

CO 4	Write SQL aggregation queries involving GROUP BY and HAVING clauses
CO 5	Understand to write triggers, indexes and how to use them in programs
Course Name – Distributed Operating System	
Course Code – P2R1CACC8	
Upon Completion of the course students would be able to	
CO 1	Understand the concepts of DOS, characteristics and design issues
CO 2	Acquire knowledge on communication mechanism in distributed environment
CO 3	Know Synchronization in distributed system
CO 4	Understand the concept of thread
CO 5	Understand Distributed file system and memory concepts

Course Name - Programming in Java		Course Code – P2R1CACC9
Upon Completion of the course students would be able to		
CO 1	Learn the basics of JAVA	
CO 2	Get the knowledge about classes and objects	
CO 3	Understand the concept of inheritance and package	
CO 4	Get the knowledge about multithreading	
CO 5	Gain the knowledge about applet ,event and AWT components	
Course Name - Object Oriented Programming With C++		Course Code – P2R1CACC10
Upon Completion of the course students would be able to		
CO 1	Understand the concept of OOPS	
CO 2	Understand Classes and Objects	
CO 3	Understand Function Overloading	
CO 4	Understand the Inheritance concepts	

CO 5	Understand the Virtual Functions and Exception Handling
Course Name – Data Communication Networks	
Course Code – P2R1CACC11	
Upon Completion of the course students would be able to	
CO 1	Learn the basis of data and communication network
CO 2	Understand the concept of OSI model
CO 3	Get the knowledge about transmission media
CO 4	Get the knowledge about the switching techniques
CO 5	Learn the routing algorithms
Course Name – Programming in Java - Practical	
Course Code – P2R1CACC12P	
Upon Completion of the course students would be able to	
CO 1	Write a Java programs with conditional statements
CO 2	Handle multidimensional array program for matrix operation
CO 3	Understanding a concept of object thinking within the framework of functional model.
CO 4	Gain the knowledge of how to develop web programs using Java
CO 5	Know about Multithreading execution from programs.
Course Name – Object Oriented Programming with C++ Practical	
Course Code – P2R1CACC13P	
Upon Completion of the course students would be able to	
CO 1	Understanding a concept of object thinking within the framework of functional model.
CO 2	Know the program for Operator Overloading concepts
CO 3	Have basic knowledge of mathematical and algorithmic logics in a program
CO 4	Define and manage data structures based on problem subject domain
CO 5	Handle possible errors during program execution
Course Name - Compiler Design	
Course Code – P3R1CACC14	
Upon Completion of the course students would be able to	

CO 1	Understand the various phases of a compiler
CO 2	Know the role of parser
CO 3	Get Knowledge on intermediate code generation
CO 4	Gain knowledge on actual code generation
CO 5	Understand various code optimization issues

Course Name - J2ee Technologies

Course Code – P3R1CACCC15

Upon Completion of the course students would be able to

CO 1	Understand the basics of J2EE
CO 2	Understand the concept of presentation tier
CO 3	Understand the concept of enterprise information system tier
CO 4	Understand the knowledge about service tier
CO 5	Understand the knowledge about data tier

Course Name - Management Information Systems

Course Code – P3R1CACCC16

Upon Completion of the course students would be able to

CO 1	Evaluate the role of information systems in today's competitive business environment.
CO 2	Identify and describe important features of organizations in order to build and use information systems successfully.
CO 3	Demonstrate systems analysis, design and decision making in a business setting.
CO 4	Define and describe the fundamentals of hardware, software, database management, data communications and systems related to the management activities of an organization.
CO 6	Identify the principal management challenges posed by the ethical and social impact of information systems and management solutions
CO 5	Assess how information systems support the activities of managers and end-users in organizations.

Course Name - Discrete Mathematics		Course Code - P3R1CACC17
Upon Completion of the course students would be able to		
CO 1	Understand the basic concepts of sets, Relations and functions	
CO 2	Understand the logical arguments and logical constructs	
CO 3	Understand groups, semigroups and monoids	
CO 4	Appreciate the basic principles of Boolean algebra and lattices	
CO 5	Understand recurrence relations and to find solution	
Course Name – J2EE Technologies Practical		Course Code – P3R1CACC18P
Upon Completion of the course students would be able to		
CO 1	Understand the advance concepts of Java programs	
CO 2	Write programs with concepts o JDBC	
CO 3	Know about java servlets programming	
CO 4	Develop distributed web applications using RMI and JSP	
CO 5	Apply the concept of JavaBeans and JAR files to develop server side applications	
Course Name - Photoshop and flash Practical		Course Code – P3R1CACC19P
Upon Completion of the course students would be able to		
CO 1	Identify the basics tools and components of a multimedia project	
CO 2	Apply basic elements and principles of photo editing software	
CO 3	Get great photo effect by color, shadow, cropping and collage making	
CO 4	Create simple shapes using animation editing software	
CO 5	Know the tool of alteration in backgrounds, shape tweens and motion tweens	
Course Name - Mobile Communication		Course Code - P4R1CACC20
Upon Completion of the course students would be able to		

CO 1	Have knowledge on simplified reference model
CO 2	Have knowledge on satellite system and security
CO 3	Have knowledge on various standards in mobile communications
CO 4	Have knowledge on ip packet delivery & routing
CO 5	Have knowledge on supporting technologies wad, http, xml script

Course Name - .Net Technologies

Course Code - P4R1CACC21

Upon Completion of the course students would be able to

CO 1	Learn C# language basics, and its framework
CO 2	Learn the concept of objects and namespace
CO 3	Design and Develop simple web page using web form
CO 4	Understand the error handling mechanism
CO 5	Project the outcomes of the web applications using various views

Course Name - Accounting For Managers

Course Code - P4R1CACC22

Upon Completion of the course students would be able to

CO 1	Understand about the concept of management accounting, and different methods of analysis of financial statements.
CO 2	Elicit knowledge on various types of ratio analysis techniques and analyzing the cost volume and break even analysis in Marginal costing.
CO 3	Proficiency in preparation of different types of budgets like sales budget, Cash budget and flexible budget etc.
CO 4	
CO 5	

Course Name - Probability and Statistics

Course Code - P4R1CACC23

Upon Completion of the course students would be able to

CO 1	Prove some basic theorems on probability theory
CO 2	Understand the concept that poisson distribution is limiting case of binomial distribution
CO 3	Know the most widely used probability distribution and recognize them in applications

CO 4	Develop skills to apply chi-square distribution
CO 5	Demonstrate a solid understanding of interval estimation and hypothesis testing
Course Name - Mobile computing - Practical	
Course Code - P4R1CACC24P	
Upon Completion of the course students would be able to	
CO 1	Apply the fundamental design paradigms and technologies to mobile computing applications
CO 2	Develop consumer and enterprise mobile applications
CO 3	Write to develop a simple calculator for mobile applications
CO 4	Animate a image applications
CO 5	Design a simple game and run various mobile devices
Course Name - .NET Technologies – Practical	
Course Code - P4R1CACC25P	
Upon Completion of the course students would be able to	
CO 1	Work with .net framework and its ASP.NET Controls
CO 2	Know about page layout, master pages, Tree view and Ad rotator controls
CO 3	Gain knowledge to develop dynamic web based applications
CO 4	Know about validation controls and its execution
CO 5	Handle to know database connectivity using Data Controls
Course Name - Soft Skill Development Course	
Course Code - P4R1CAPS2	
Upon Completion of the course students would be able to	
CO 1	Know how to read comprehensions
CO 2	Know how to correct errors
CO 3	Become proficiency in English
CO 4	Know how to participate in group discussion
CO 5	Understand Arithmetic Progression

Course Name - Datamining and Warehousing		Course Code - P5R1CACCC26
Upon Completion of the course students would be able to		
CO 1	Understand the concept of Data mining and the association rule mining	
CO 2	Understand Various algorithm of classification and clustering methods	
CO 3	Excel in web data mining	
CO 4	Knowledge on data ware housing	
CO 5	Acquire basic principles of information privacy	
Course Name - Network Security		Course Code - P5R1CACCC27
Upon Completion of the course students would be able to		
CO 1	Gain the knowledge about the basic components and principles of cryptography	
CO 2	Gain the knowledge to design their own cryptographic algorithm	
CO 3	Learn the knowledge of network security in different and dynamic environment	
CO 4	Obtain the knowledge to classify the threats and can design their own database of threats to avoid the VIRUS	
CO 5	Get the job as network security professionals	
Course Name - PhpAndMysql		Course Code - P5R1CACCC28
Upon Completion of the course students would be able to		
CO 1	Understand the basics of PHP and MYSQL	
CO 2	Understand the concepts of Arrays and objects	
CO 3	Gain the knowledge about coding	
CO 4	Understand the concept of MYSQL	
CO 5	Acquire the knowledge about MYSQL functions	
Course Name - Marketing Management		Course Code - P5R1CACCC29

Upon Completion of the course students would be able to	
CO 1	Understand of nuances of marketing as a subject and its various elements of marketing mix that influence the organization.
CO 2	Comprehend the knowledge about product life cycle and new product planning process.
CO 3	Enhance assessment of price and how that influences the cost of the product describe about various promotion techniques that help increase the sales of the product.
CO 4	
CO 5	
Course Name - Optimization Techniques	
Course Code - P5R1CACC30	
Upon Completion of the course students would be able to	
CO 1	Apply knowledge of optimization to formulate and solve engineering problems
CO 2	Understand the different methods of optimization and be able to technique for a specific problem
CO 3	Learn the cost function of Inventory system
CO 4	Acquire the knowledge of Poisson Queuing System
CO 5	Understand the concept of Simulation of Networks
CO 6	
Course Name - Network Security - Practical	
Course Code - P5R1CACC31P	
Upon Completion of the course students would be able to	
CO 1	Develop an application for cyber security needs of an organization
CO 2	Identify the security issues in the network and resolve it
CO 3	Handle the errors in a program execution
CO 4	Develop and implement a java interface for encryption and decryption algorithms
CO 5	Implement address resolution protocol for socket programming
Course Name - PHP and MYSQL Practical	
Course Code - P5R1CACC32P	
Upon Completion of the course students would be able to	

CO 1	Write PHP scripts to handle HTML forms
CO 2	Get knowledge to create programs with various PHP library functions
CO 3	Handle and manipulate files and directories
CO 4	Analyze and solve various database tasks using the PHP programs
CO 5	Implement dynamic web pages that interact with MySQL Database
Course Name - Artificial Intelligence and Expert System	
Course Code - P2R1CAEC1:1	
Upon Completion of the course students would be able to	
CO 1	Students gained knowledge on working principles of Artificial Intelligence and Neural Networks
CO 2	Students can able to apply the AI Concepts in real world applications which involve perception, reason and learning
CO 3	Students might gain the real world knowledge representation
CO 4	Students can design the difference machine learning techniques
CO 5	Students understood the various searching techniques constraint satisfaction problem
Course Name - Digital Image Processing	
Course Code - P2R1CAEC1:2	
Upon Completion of the course students would be able to	
CO 1	Analyze general terminology of digital image processing
CO 2	Learn different techniques employed for the enhancement of images.
CO 3	Understand the need for image compression
CO 4	Learn the spatial and frequency domain techniques of image compression
CO 5	Understand the segmentation techniques.
Course Name - Machine Learning	
Course Code - P2R1CAEC1:3	
Upon Completion of the course students would be able to	
CO 1	Distinguish between, supervised, unsupervised and semi-supervised learning
CO 2	Apply the apt machine learning strategy for any given problem

CO 3	Suggest supervised, unsupervised or semi-supervised learning algorithms for any given problem
CO 4	Design a system that uses the appropriate graph models of machine learning
CO 5	Modify existing machine learning algorithms to improve classification efficiency
Upon Completion of the course students would be able to	
CO 1	Know the different process model
CO 2	Understand software requirements of the client to design the software
CO 3	Assess the software design quality
CO 4	Gain the knowledge of software testing and design process
CO 5	Acquire a job as a software programmer or tester
Upon Completion of the course students would be able to	
CO 1	Learn the basics of computer graphics
CO 2	Learn the attributes of output primitives
CO 3	Get the knowledge about GUI based methods
CO 4	Learn the geometric and modeling transformation
CO 5	Understand the concept of color models
Upon Completion of the course students would be able to	
CO 1	Learn the basics of HCI
CO 2	Understand the interaction design basics
CO 3	Gain the knowledge about HCI in the software process
CO 4	Get the knowledge about Cognitive models

CO 1	Understand about Big Data and Big Data Analytics
CO 2	Gain the insights of NoSQL and Hadoop
CO 3	Having the expertise in MongoDB & Cassandra
CO 4	Gain the knowledge in Mapreduce and Hive
CO 5	Get the knowledge in Pig and Machine Learning.
Course Name - Soft Computing	
Course Code - P5R1CAEC4:2	
Upon Completion of the course students would be able to	
CO 1	Yield the knowledge about various soft computing frameworks
CO 2	Attain the insight about types of Neural Networks
CO 3	Capture the proficiency of Neuro-fuzzy models
CO 4	Gain the cognizance about the applications of genetic algorithms
CO 5	Obtain the insight of hybrid soft computing techniques
Course Name - Software Quality Assurance and Testing	
Course Code - P5R1CAEC4:3	
Upon Completion of the course students would be able to	
CO 1	Analyze the various software development model
CO 2	Practicing white box testing method
CO 3	List out the scenarios in Usability and Accessibility testing
CO 4	Develop a test plan
CO 5	Practicing the acquired test metrics