

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

PG & Research Department of Computer Science

Course Outcomes

M.Sc. Computer Science – PSCS

Course Name – Design and Analysis of Algorithms		Course Code - P1R3CSCC1
Upon Completion of the course students would be able to		
CO 1	Interpret the fundamental of algorithms	
CO 2	Analyse the performance of algorithms	
CO 3	Select appropriate algorithm design techniques for solving problems	
CO 4	Find solutions for problems using dynamic programming	
CO 5	Analyse the complexities of various problems in different domains	
Course Name – Design and Analysis of Algorithms Practical		Course Code - P1R3CSCC2P
Upon Completion of the course students would be able to		
CO 1	Explain the problem solving techniques effectively	
CO 2	Analyse the paradigms of divide and conquer technique	
CO 3	Determine the computational complexity of algorithms.	
CO 4	illustrate the efficiency of dynamic programming and its related problems	
CO 5	Experiment with backtracking algorithms	
Course Name – Advanced Web Technology		Course Code – P1R3CSCC3
Upon Completion of the course students would be able to		
CO 1	Understand .Net Framework and .Net Languages	
CO 2	Design a web page with Web form fundamentals and web control classes.	
CO 3	Identify the importance of validation control, cookies and session.	
CO 4	Apply the knowledge of ASP.NET object, ADO.NET data access and SQL to develop a client server	
CO 5	Create an online shopping site for web services	
Course Name - Advanced Web Technology Practical		Course Code – P1R3CSCC4P
Upon Completion of the course students would be able to		



CO 1	Explain how to create dynamic Web pages by using ASP.NET.
CO 2	Create a user interface on an ASP.NET page by using standard Web server controls.
CO 3	Display dynamic data from a data source by using ADO.Net and data binding.
CO 4	Create a user control and a custom server control and add them to an ASP.NET page.
CO 5	Deploy an ASP.NET application to a production Web server.

Course Name - Internet of Things

Course Code – P2R3CSCC5

Upon Completion of the course students would be able to

CO 1	Understand the meaning of the Internet of Things and its importance.
CO 2	Interpret the state of Art architecture in IoT
CO 3	Determine the market perspective of IoT
CO 4	Develop knowledge about the use of Devices, Gateways and Data management in IoT
CO 5	Interpret the vision of IoT from a global context

Course Name – Advanced Java Programming

Course Code – P2R3CSCC6

Upon Completion of the course students would be able to

CO 1	Demonstrate the basics of networking and Develop Java client/server applications
CO 2	Able to develop a Graphical User Interface (GUI) with Applet and Swing.
CO 3	Analyze about JDBC and its classes and able to connect with back end resources.
CO 4	Develop servlets, handle cookies and session tracking
CO 5	Adapt to run, debug Lambda expression

Course Name - Advanced Java Programming
Practical

Course Code – P2R3CSCC7P

Upon Completion of the course students would be able to

CO 1	Experiment with applets
CO 2	Access database Java Data Base Connectivity (JDBC)
CO 3	Construct Cookies.



CO 4	Make use of Servlets and work on it
CO 5	Perform common stream operation
Course Name - Advanced Database Management Systems	
Course Code – P2R3CSCC8	
Upon Completion of the course students would be able to	
CO 1	Classify the various data models and work on Database architecture
CO 2	Improve knowledge on patterns and object oriented databases
CO 3	Demonstrate Predicate calculus and Deductive database systems
CO 4	Analyze and implement XML databases
CO 5	Examine the issues related to Temporal and Multimedia databases
Course Name – Mobile Computing	
Course Code – P2R3CSCC9	
Upon Completion of the course students would be able to	
CO 1	Explain the basics of mobile system
CO 2	Construct Application using GPRS Technology
CO 3	Develop Mobile Application
CO 4	Interpret the Mobile Ad hoc networks and its routing
CO 5	Classify the different types of security features
Course Name - Digital Image Processing	
Course Code – P3R3CSCC10	
Upon Completion of the course students would be able to	
CO 1	Examine the fundamental concepts of a digital image processing system and Analyze images in the frequency domain using various transforms
CO 2	Evaluate the techniques for image enhancement and image restoration. Categorize various compression techniques
CO 3	Interpret Image compression standards, and Interpret image segmentation and representation techniques
CO 4	Apply the techniques of Image Restoration
CO 5	Develop knowledge on Image Segmentation a Apply Basic Morphological Algorithms



Course Name - Image Processing Practical		Course Code – P3R3CSCC11P
CO 1	Illustrate the algorithms and techniques involved in Digital Image Processing	
CO 2	Experiment the advanced image enhancement techniques	
CO 3	Categories the image compression techniques	
CO 4	Apply the techniques of image restoration	
CO 5	Analyse and apply the techniques of segmentation	
Course Name - Machine Learning		Course Code – P3R3CSCC12
Upon Completion of the course students would be able to		
CO 1	Demonstrate the fundamental issues and challenges of machine learning	
CO 2	Identify and apply machine learning algorithms to real- world applications	
CO 3	Justify the underlying mathematical relationships within and across Machine Learning algorithms and the paradigms of supervised and un-supervised learning	
CO 4	Improve knowledge on Instant based learning and its techniques	
CO 5	Design and implement various machine learning algorithms	
Course Name - Data Science and Big Data Analytics		Course Code – P3R3CSCC13
Upon Completion of the course students would be able to		
CO 1	Interpret Big data and its analytics in real world	
CO 2	Apply Hadoop ecosystem components	
CO 3	Build statistical models suitable for real time applications	
CO 4	Survey on standard data visualization and formal inference procedures and can comment on the results	
CO 5	Design more complex algorithms involving more complex data structures and can implement their solutions in multiple languages	
Course Name - Cloud Computing		Course Code - P3R3CSCC14
Upon Completion of the course students would be able to		



CO 1	Define cloud computing and memorize the different cloud service and deployment models
CO 2	Apply and design suitable Virtualization concept, Cloud Resource Management and design scheduling algorithms
CO 3	Utilize and Examine different cloud computing services
CO 4	Design different workflows according to requirements and apply Map-Reduce programming model
CO 5	Design different workflows according to requirements and apply Map-Reduce programming model
Course Name - WAP and XML Course Code - P1R3CSDSE1:1	
Upon Completion of the course students would be able to	
CO 1	Apply XML concepts to develop Web application Use WAP gateways
CO 2	Develop SOA application using XML and Web Services
CO 3	Define XML and WML elements efficiently
CO 4	Construct their own WML scripts
CO 5	Analyze and Interpret XML scripts
Course Name - Cryptography and Network Security Course Code - P1R3CSDSE1:2	
Upon Completion of the course students would be able to	
CO 1	Interpret the fundamentals of networks security, security architecture, threats and vulnerabilities
CO 2	Apply different cryptographic operations of symmetric cryptographic algorithms
CO 3	Apply the different cryptographic operations of public key cryptography
CO 4	Analyze the various Authentication schemes to simulate different applications
CO 5	Develop various Security practices and System security standards
Course Name - Data Mining and Data Warehousing Course Code - P2R3CSDSE2:1	
Upon Completion of the course students would be able to	
CO 1	Demonstrate basic data mining algorithms, methods, and tools.
CO 2	Analyze and Interpret data models for real world applications



CO 3	Experiment with classification algorithms
CO 4	Improve knowledge on clustering techniques
CO 5	Know the importance of spatial, text and web mining
Course Name - Object Oriented Systems Development Course Code - P2R3CSDSE2:2	
Upon Completion of the course students would be able to	
CO 1	Distinguish object-oriented approach from the traditional approach to systems analysis and design
CO 2	Analyse, design, document the requirements through use case driven approach
CO 3	Explain the importance of modelling and how the Unified Modelling Language (UML) represents an object-oriented system using a number of modelling views
CO 4	Identify the difference between various object relationships: inheritance, association and aggregation
CO 5	Illustrate the role and function of test cases, testing strategies and test plans in developing object-oriented software
Course Name - Soft Computing Course Code - P3R3CSSEC1:1	
Upon Completion of the course students would be able to	
CO 1	Apply the fuzzy logic and the concept of fuzziness involved in various systems and fuzzy set theory
CO 2	Interpret the concepts of fuzzy sets, knowledge representation using fuzzy rules, approximate reasoning, fuzzy inference systems, and fuzzy logic
CO 3	Interpret the fundamental theory and concepts of neural networks, Identify different neural network architectures, algorithms, applications and their limitations
CO 4	Interpret appropriate learning rules for each of the architectures and learn several neural network paradigms and its applications
CO 5	Explain different applications of these models to solve engineering and other problems
Course Name - Compiler Design Course Code - P3R3CSSEC1:2	
Upon Completion of the course students would be able to	
CO 1	List the various phases of compiler and its use
CO 2	Demonstrate compilation of coding
CO 3	Construct the steps in Intermediate code generation



CO 4	Develop the various code optimization techniques, and machine code generation
CO 5	Determine various parsing Technique
Course Name - Ethical Hacking	
Course Code - P4R3CSGEC1:1	
Upon Completion of the course students would be able to	
CO 1	Recall the basic knowledge of security and various attacks to protect the user's data effectively in a real time
CO 2	Explain the various foot printing tools to be aware the problems involved in daily lives and ensure protect environment.
CO 3	Apply the safe ethical techniques in the World Wide Web to be beneficial to the society.
CO 4	Examine various techniques of Key loggers and Spyware for protect the private and public data in a real time.
CO 5	Evaluate the concept of penetration testing and improve testing techniques to solve problems and promote social harmony
Course Name - Digital Marketing	
Course Code - P4R3CSGEC1:2	
Upon Completion of the course students would be able to	
CO 1	Show the acquaintance of the concepts of Digital Marketing and Display Advertising
CO 2	Identify the concepts of Search Engine Advertising.
CO 3	Classify the knowledge of Facebook Marketing and Twitter Marketing.
CO 4	Distinguish various applications of Search Engine Optimization and social media.
CO 5	Elaborate various techniques of Web Analytics.


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