



Annai College of Arts & Science
Quality Education for Today & Tomorrow
Kovilacheri, Kumbakonam. 612 503. Ph: 0435 2453007
Accredited by NAAC with "B" Grade & Recognized by UGC under Section 2(f) & 12(B)
Affiliated to Bharathidasan University, Tiruchirappalli. E-Mail: acasdmn@gmail.com

PG DEPARTMENT OF COMPUTER SCIENCE

**Programme outcome, Programme Specific outcome
and
Course outcome**

HOD

IQAC

PRINCIPAL



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Programme Outcome:

PO1: Ability to understand, analyze, and apply academic knowledge to a practical environment.

PO2: Recognize the relationship between theory and application.

PO3: Possess an appropriate set of practical skills to ensure a positive career.

PO4: Work effectively under stress under pressure. Identify and relate the connection between theory and applications.

PO5: Exhibit positive attitudes and values toward the discipline, so that they can contribute to society.

PO6: Develop effective communication skills for betterment in employability.

PO7: Communication effectively with whom they are communicating and the society to make effective presentations, and deliver clear instructions.

PO8: Function effectively as an individual, and can able to be a member or leader even diverse in teams.

Programme Specific Outcome:

As a quality assurance analyst, the following core competencies will be required:

PSO1: Think critically.

PSO2: Recognize and understand information, and be able to identify, locate, evaluate, and effectively deal with any issue or problem.

PSO3: Developing logically and at a high rate of accuracy.

PSO4: Acquire depth knowledge and be able to apply it.

PSO5: To understand, formulate, and determine how to utilize live projects that arise in various stages of life.

PSO6: To be able to master the software to complete the tasks.

PSO7: To encourage the students' creativity to develop new techniques to benefit society.

PSO8: Develop an understanding of the precise knowledge of computer application, and able to integrate commercial with their logical skills.

PSO9: Be a life- long learner who can able to develop his/her life skills.



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Course Outcomes:

Name of the Course with Subject Code	Course Outcomes
MATHEMATICAL FOUNDATION FOR COMPUTER SCIENCE -P16CS11	CO1: Ability to apply mathematical logic to solve problems. CO2: Understand sets, relations, functions, and discrete structures. CO3: Able to use logical notation to define and reason about fundamental mathematical concepts such sets, relations, and functions. CO4: Able to formulate problems and solve recurrence relations CO5: Able to model and solve real-world problems using graphs and trees.
WEB TCHNOLOGIES - P16CS12	CO1: Understand the essentials of web oriented services and find the importance in web page creation. CO2: Understand the meaning of derivative of a function. CO3: Gain knowledge of acquiring data in Web Pages, and web Browser and error Handling. CO4: Knowledge in different file handling. CO5: Understand the concepts of Working with database. CO6: Understand the concept of cookies. CO7: Acquire the idea about File Transfer Protocol. CO8: Understand various theorem using Ajax.
DESIGN AND ANALYSIS OF ALGORITHMS – P16CS13	CO1: Describe the divide and conquer paradigm and explain when an algorithmic design situation calls for it. CO2: Describe the greedy paradigm and explain when an algorithmic situation calls for it. CO3: Explain the major graph algorithm and their analysis. CO4: Explain the different ways to analyze randomized algorithms (expected running time, probability of error) CO5: Explain what competitive analysis is and to which situation it applies and perform competitive analysis.



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DISTRIBUTED OPERATING SYSTEM – P16CS14	<p>CO1: To provide hardware and software issues in modern distributed systems.</p> <p>CO2: To get knowledge in distributed architecture, naming, synchronization, consistency and replication.</p> <p>CO3: To analyze the current popular distributed system such as peer-to-peer system will also be analyzed.</p> <p>CO4: To know about shared memory techniques.</p> <p>CO5: Have sufficient knowledge about file access.</p> <p>CO6: Have knowledge of synchronization and deadlock.</p>
OOAD & UML –P16CS21	<p>CO1: Specify, analyze and design the use case driven requirements for a particular system.</p> <p>CO2: Model the event driven state of object and transform them into implementation specific layouts.</p> <p>CO3: Identify, analyze the sub system, various components and collaborate them interchangeably.</p> <p>CO4: Importance of modeling in the software development life cycle.</p> <p>CO5: To know how to employ the UML notation to create effective and efficient system design.</p> <p>CO6: To know the object oriented approach to analyzing and designing system and software solution.</p>
DISTRIBUTED TECHNOLOGIES –P16CS22	<p>CO1: Understand the design principle in distributed systems and the architectures for distributed systems.</p> <p>CO2: Apply various distributed algorithms related to clock synchronization, concurrency control, deadlock detection, load balancing, voting etc.,</p> <p>CO3: Analyze fault tolerance and recovery in distributed systems and algorithm for the same.</p> <p>CO4: Analyze the design and functions of existing distributed system and file system.</p> <p>CO5: Implement different distributed algorithm over current distributed platforms.</p>



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MOBILE COMMUNICATION - P16CSE1	<p>CO1: Discuss the cellular system design and technical challenges.</p> <p>CO2: Analyze the mobile radio propagation, fading, diversity concepts and the channel modeling.</p> <p>CO3: Analyze the design parameters, link design, smart antenna, beam forming and MIMO system.</p> <p>CO4: Analyze multi user system, CDMA, WCDMA, Network planning and OFDM concepts.</p> <p>CO5: Summarize the principles and applications of wireless systems and standard</p>
ARTIFICIAL INTELLIGENCE –P16CSE2	<p>CO1: Solve basic AI based problems.</p> <p>CO2: Define the concepts of Artificial Intelligence.</p> <p>CO3: Apply AI techniques to real-world problems to develop intelligent systems.</p> <p>CO4: Select appropriately from a range of techniques when implements.</p> <p>CO5: To impart knowledge about the concepts of machine learning</p> <p>CO6: To introduce the fundamental concepts of distributed nature of operating system, network, data and processes.</p> <p>CO7: To enable the students to understand the concepts of computing environment where computations do not take place at one system and accordingly enable them to solve related problems.</p>
DATA MINING AND WARE HOUSING –P16CS31	<p>CO1: Understand the functionality of the various data mining and data warehousing components.</p> <p>CO2: Appreciate the strengths and limitations of various data mining and data warehousing models.</p> <p>CO3: Explain the analyzing techniques of various data.</p> <p>CO4: Describe different methodologies used in data mining and data warehousing.</p> <p>CO5: Compare different approaches of data warehousing and data mining with various technologies.</p>



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COMPILER DESIGN – P16CS32	<p>CO1: Basic knowledge of compilation steps, ability to apply automata theory and knowledge on formal languages.</p> <p>CO2: Ability to design and implement scanner modules in compilers.</p> <p>CO3: Ability to identify and select suitable parsing strategies for a compiler for various cases. knowledge in alternative methods(top- down or bottom-up, etc).</p> <p>CO4: Knowledge and ability to devise, select, and use modern techniques and tools needed to design and implement compilers.</p>
NETWORK SECURITY – P16CSE4	<p>CO1: Identify some of the factors driving the need for networks.</p> <p>CO2: Identify and classify particular examples of attacks.</p> <p>CO3: Define the terms vulnerability, threat and attack.</p> <p>CO4: Identify physical points of vulnerability in simple networks.</p> <p>CO5: Compare and contrast symmetric and asymmetric encryption systems and their vulnerability of attacks, and explain the characteristics of hybrid systems.</p>
CLOUDCOMPUTING- P16CS41	<p>CO1: Explain the core concepts of the cloud computing paradigm.</p> <p>CO2: Apply fundamentals concepts in cloud infrastructure to understand the tradeoffs in power, efficiency and cost, and then study how to leverage and manage single and multiple datacenters to built and deploy cloud application that are resilient, elastic and cost-efficient.</p> <p>CO3: Discuss system, network and storage virtualization and outline their role in enabling the cloud computing system model.</p> <p>CO4: Analyze various cloud programming model and apply them to solve problems on the cloud.</p> <p>CO5: Illustrate the fundamental concepts of cloud storage and demonstrate their use in storage systems such as Amazon S3 and HDFS.</p>



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WIRELESS SENSOR NETWORK –P16CS42	<p>CO1: Explain the basic concepts of wireless sensor network, sensing, computing and communication tasks.</p> <p>CO2: Describe and explain the hardware, software and communication for wireless sensor network nodes.</p> <p>CO3: Describe and explain radio standards and communication protocols adapted in wireless sensor network.</p> <p>CO4: Explain the architecture, features, and performance for wireless sensor network systems and platforms.</p> <p>CO5: Describe and analyze the specific requirements of application in wireless sensor network for energy efficiency, computing, storage and transmission.</p>
WEB TECHNOLOGIES LAB(P) –P16CS15P	<p>CO1: To analyze a web page and identify its elements and attributes</p> <p>CO2: To create web pages using XHTML</p> <p>CO3: To build dynamic web pages using JavaScript (Client side programming).</p> <p>CO4: To create XML documents and Schemas.</p> <p>CO5: Understand the concepts of Working with database, cookies and various theorem</p>
DISTRIBUTED TECHNOLOGIES LAB(P) –P16CS23P	<p>CO1: To develop the record using Grid view, details view, form view controls.</p> <p>CO2: To make use of image control involving two hotspots in a web page.</p> <p>CO3: Establishing the security features in a simple websites with five pages.</p> <p>CO4: Using state management concepts in a mobile web application.</p> <p>CO5: Develop a web service to fetch a data from the table and send it across to the client</p>



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DATA MINING LAB (P) – P16CS33P	<p>CO1: Be familiar with mathematical foundations of data mining tools.</p> <p>CO2: Understand and implement classical models and algorithms in data warehouses and data mining.</p> <p>CO3: Characterize the kinds of patterns that can be discovered by association rule mining, classification and clustering.</p> <p>CO4: Master data mining techniques in various applications like social, scientific and environmental context.</p> <p>CO5: Develop skill in selecting the appropriate data mining algorithm for solving practical problems.</p>
OPEN SOURCE LAB (P) – P16CS43P	<p>CO1: Implement various applications using build systems.</p> <p>CO2: Understand the installation of various packages in open source operating systems.</p> <p>CO3: Create simple GUI applications using Gambas3.</p> <p>CO4: Understand various version control systems.</p> <p>CO5: Understand the kernel configuration and virtual environment.</p>