IDHAYA ENGINEERING COLLEGE FOR WOMEN

CHINNASALEM-606 201, VILLUPURAM DISTRICT, TAMIL NADU, INDIA.
Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai.
An ISO 9001: 2015 Certified Institution
A Christian Minority Institution run by the Franciscan Sisters of the Immaculate Heart of Mary Society, Puducherry.
Phone: 04151-258325, 258326

Website: www.iecw.edu.in   Email ID: idhaya@iecw.edu.in

COURSE OUTCOMES FOR

M.E. COMPUTER SCIENCE AND ENGINEERING

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	MA5160-Applied Probability and Statistics
C101.1	**Basic** probability axioms and rules and the moments of discrete and continuous random variables.
C101.2	**Consistency,** efficiency and unbiasedness of estimators, method of maximum likelihood estimation and Central Limit Theorem.
C101.3	**Use** statistical tests in testing hypotheses on data.
C101.4	**Perform** exploratory analysis of multivariate data, such as multivariate normal density, calculating descriptive statistics, testing for multivariate normality.
	CP5151-Advanced Data Structures and Algorithms
C102.1	**Design** data structures and algorithms to solve computing problems
C102.2	**Design** algorithms using graph structure and various string matching algorithms to solve real-life problems
C102.3	**Apply** suitable design strategy for problem solving
	CP5152-Advanced Computer Architecture
C103.1	**Identify** the limitations of ILP.
C103.2	**Discuss** the issues related to multiprocessing and suggest solutions
C103.3	**Point** out the salient features of different multicore architectures and how they exploit parallelism
C103.4	**Discuss** the various techniques used for optimising the cache performance
C103.5	**Design** hierarchal memory system
C103.6	**Point** out how data level parallelism is exploited in architectures
	CP5153-Operating System Internals
C104.1	To **explain** the functionality of a large software system by reading its source.
C104.2	To revise any algorithm present in a system.
C104.3	To **design** a new algorithm to replace an existing one.
C104.4	To appropriately **modify** and use the data structures of the linux kernel for a different software system
	CP5154-Advanced Software Engineering
C105.1	**Understand** the advantages of various Software Development Lifecycle Models
C105.2	**Gain** knowledge on project management approaches as well as cost and schedule estimation strategies
C105.3	**Perform** formal analysis on specifications
C105.4	**Use** UML diagrams for analysis and design
C105.5	**Architect** and design using architectural styles and design patterns
C105.6	**Understand** software testing approaches
C105.7	**Understand** the advantages of DevOps practices
	CP5191-Machine Learning Techniques
C106.1	**Distinguish** between, supervised, unsupervised and semi-supervised learning
C106.2	**Apply** the appropriate machine learning strategy for any given problem
C106.3	**Suggest** supervised, unsupervised or semi-supervised learning algorithms for any given problem

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C106.4	**Design** systems that uses the appropriate graph models of machine learning
C106.5	**Modify** existing machine learning algorithms to improve classification efficiency
	CP5161-Data Structures Laboratory
C107.1	**Design** and implement basic and advanced data structures extensively.
C107.2	**Design** algorithms using graph structures
C107.3	**Design** and develop efficient algorithms with minimum complexity using design techniques
	CP5201-Network Design and Technologies
C208.1	Identify the components required for designing a network
C208.2	Design a network at a high-level using different networking technologies
C208.3	**Analyze** the various protocols of wireless and cellular networks
	CP5291-Security Practices
C209.1	**Understand** the core fundamentals of system security
C209.2	**Apply** the security concepts related to networks in wired and wireless scenario
C209.3	**Implement** and Manage the security essentials in IT Sector
C209.4	**Able** to explain the concepts of Cyber Security and encryption Concepts
C209.5	Able to attain a through knowledge in the area of Privacy and Storage security and related Issues.
	CP5292-Internet of Things
C210.1	**Analyze** various protocols for IoT
C210.2	**Develop** web services to access/control IoT devices.
C210.3	**Design** a portable IoT using Rasperry Pi
C210.4	**Deploy** an IoT application and connect to the cloud.
C210.5	**Analyze** applications of IoT in real time scenario
	CP5293-Big Data Analytics
C211.1	**Understand** how to leverage the insights from big data analytics
C211.2	**Analyze** data by utilizing various statistical and data mining approaches
C211.3	**Perform** analytics on real-time streaming data
C211.4	**Understand** the various NoSql alternative database models
	CP5092 - Cloud Computing Technologies
C212.1	**Employ** the concepts of storage virtualization, network virtualization and its management
C212.2	**Apply** the concept of virtualization in the cloud computing
C212.3	**Identify** the architecture, infrastructure and delivery models of cloud computing
C212.4	**Develop** services using Cloud computing
C212.5	**Apply** the security models in the cloud environment

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	CP5072 - Software Architectures and Design
C213.1	**Understand** the need of software architecture for sustainable dynamic systems
C213.2	Have a sound knowledge on design principles and to **apply** for large scale systems
C213.3	**Design** architectures for distributed heterogeneous systems
C213.4	Have good **knowledge** on service oriented and model driven architectures and the aspect oriented architecture
C213.5	Have a working knowledge to **develop** appropriate architectures through various case studies
	CP5261-Data Analytics Laboratory
C214.1	**Process** big data using Hadoop framework
C214.2	**Build** and apply linear and logistic regression models
C214.3	**Perform** data analysis with machine learning methods
C214.4	**Perform** graphical data analysis
	CP5281-Term Paper Writing and Seminar
C215.1	**Identify** the Domain Specific Objective
C215.2	**Summarize** the literature Survey
C215.3	**Analyzing** different Methodologies
C215.4	**Produce** Final Draft of the Research Paper
C215.5	**Prepare** Presentation for the research undergone
	CP5005 - Software Quality Assurance
C301.1	**Perform** functional and nonfunctional tests in the life cycle of the software product
C301.2	**Understand** system testing and test execution process
C301.3	**Identify** defect prevention techniques and software quality assurance metrics
C301.4	**Apply** techniques of quality assurance for typical applications
	CP5097 - Mobile Application Development
C302.1	**Describe** the requirements for mobile applications
C302.2	**Explain** the challenges in mobile application design and development
C302.3	**Develop** design for mobile applications for specific requirements.
C302.4	**Implement** the design using Android SDK.
C302.5	**Implement** the design using Objective C and iOS.
C302.6	**Deploy** mobile applications in Android and iPhone marketplace for distribution
	CP5073 - Embedded Software Development
C303.1	**Understand** different architectures of embedded processor, microcontroller and peripheral devices. Interface memory and peripherals with embedded systems
C303.2	**Work** with embedded network environment
C303.3	**Understand** challenges in Real time operating systems
C303.4	**Design** and **analyze** applications on embedded systems

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	CP5311-Project Work Phase – I
C304.1	**Identify** the problem by applying acquired knowledge
C304.2	**Construct** and organize executable project modules through proper designing
C304.3	**Choose** efficient tools for implementation of the designed modules
C304.4	**Analyze** and categorize the outcomes of the implementation and derive inferences.
C304.5	**Examine** the completed task and compile the project report
	CP5411-Project Work Phase – II
C401.1	**Plan** and **construct** improved methods for an identified problem by applying acquired knowledge
C402.2	**Experiment** and **Develop** effective solutions through proper designing
C401.2	**Analyze** and **categorize** the outcomes of the implementation and derive inferences.
C402.3	**Assess** the acquired outcomes based on evaluation metrics
C401.3	**Examine** the completed task and compile the project report

ABBREVIATIONS

C101.1   **C stands for Course**

                1 stands for year of study

                01 stands for first paper as per the curriculum

                .1 stands for Outcomes for particular course

[*]The same format is followed for remaining years and courses