

SRI RAMAKRISHNA MISSION VIDYALAYA COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS) COIMBATORE – 641 020

For candidates admitted from academic year **2020-2021** onwards under New CBCS.

Department of Information Technology

Programme Objectives

1. Developing graduates to identify understand the problem and use appropriate problem solving techniques.
2. Graduates of the programme will continue to develop and update their knowledge and skills throughout their career.
3. Graduates of this programme will establish as effective professional by acquiring technological concepts and skills to meet the industry needs and can pursue higher education.
4. Developing graduates with good communication skills to promote ideas, goals and personality skills to work in a team and undertake leadership roles when appropriate.
5. Make positive contributions to the community by applying skills, abilities and ethics culture learned.

Programme Outcomes

1. Ability to apply the knowledge of mathematics and science to develop real time systems
2. Ability to design and conduct experiments / practical's
3. An ability to function on multidisciplinary teams
4. An ability to communicate effectively and engage in lifelong learning.
5. Student recognize the need for continuing professional development, ethical, legal, social issues and responsibilities

Programme Specific Outcome:

1. Students are able to apply the fundamental concepts and methodologies of computer system.

2. The student understands the programming skill on their own to solve the real world problems.
3. Students use appropriate system design notations and apply system design engineering process and technologies in order to design, plan and implement software system.
4. The programme enhances students' knowledge to establish themselves as successful entrepreneurs.

Course Title : Programming in C

Course Code: 20UIT1C01

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Know the logics of solving the problems	K1
CO2	Understand the concepts of C programming	K2
CO3	Analyze and discover bugs in the program	K4
CO4	Develop an application using memory management functions.	K3
CO5	Analyze the concepts and develop programs to solve real-time problems	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	M	S	L		S	S	M	L
CO2	S	S	M	S	M		S	S	L	L
CO3	S	S	M	S	M		S	S	M	L
CO4	S	S	M	S	M		S	S	M	M
CO5	S	S	M	S	M		S	S	M	M

S- Strong; M-Medium; L-Low

Course Title : PC Software

Course Code: 20UIT1C02

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Understanding the concepts of Basic Computer Skills, Internet	K1
CO2	Ability to perform documentation skills	K2 & K3
CO3	Acquiring and Develop knowledge in Spreadsheet and Presentation Skills	K2 & K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	M	M	M	M	L		M	L	M	M
CO2	L	M	M	M	L		S	M	L	M
CO3	S	M	M	M	L		M	M	M	M

S- Strong; M-Medium; L-Low

Course Title : Allied Mathematics -I

Course Code : 20UIT1AL1

COURSE OUTCOMES (CO)

CO1	Applying problem solving techniques to solve algebraic and transcendental equations.	K3
CO2	Understanding the concept of measures of central tendency, measures of dispersion.	K2
CO3	Analyzing the concepts of correlation and regression.	K4
CO4	Knowing to solve simultaneous linear algebraic equations.	K2 & K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 - Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	L	M	L		S	S	S	S	L
CO2	S	S	M	M	L		S	M	S	M	L
CO3	S	S	L	M	M		S	S	S	M	L
CO4	S	S	M	L	M		S	S	L	M	S

S – Strong; M – Medium; L - Low

Course Title : Programming in C Lab

Course Code : 20UIT1CP1

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Recall the mathematical functions while creating a program	K1
CO2	Understand the fundamental programming concepts	K2
CO3	Illustrate the programming technique to analyze software problems	K3
CO4	Apply the concepts to find solution for the problems	K3
CO5	Design and develop the simple application.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	S	M	M		S	M	M	L
CO2	S	S	M	S	M		S	M	M	L
CO3	S	S	M	S	M		S	M	M	L
CO4	S	S	M	M	M		S	M	M	L
CO5	S	S	L	M	M		S	M	M	L

S- Strong; M-Medium; L-Low

Course Title : Object Oriented Programming with C++

Course Code : 20UIT2C03

COURSE OUTCOMES

After learning the course, the students will able to

CO1	Understand the OOPS concepts.	K2
CO2	Learn data types and control structures in C++	K1
CO3	Demonstrate the Reusability by applying the types of Inheritance and know Polymorphism	K3
CO4	Demonstrate the use of pointers in virtual functions.	K3
CO5	Analyze the features of C++ including templates, exceptions and file handling.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	M	M	S		S	S	M	L
CO2	S	S	M	M	L		S	S	M	L
CO3	S	S	L	M	M		S	S	M	L
CO4	S	S	L	M	M		M	S	L	L
CO5	S	S	M	L	L		M	S	S	L

S – Strong; M – Medium; L – Low

Course Title : IT Essentials

Course Code : 20UIT2C04

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Understanding the concepts of Computer components and OS Installation	K1 & K2
CO2	Understanding the functionalities importance of Device manager and software installation	K2 & K3
CO3	Acquiring knowledge on network configuration.	K3 & K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	M	M	M	M	M		S	S	M	S
CO2	M	M	L	M	M		M	M	M	M
CO3	M	M	L	M	L		S	L	M	S

S- Strong; M-Medium; L-Low

T-

Course Title : Allied Mathematics II

Course Code : 20UIT2AL2

COURSE OUTCOMES (CO)

CO1	Understanding the basic concepts of probability theory.	K2
CO2	Applying the concepts of formal languages and automata.	K3 & K4
CO3	To know the basic ideas of normal forms.	K1
CO4	Analyzing the use of probability distributions.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 - Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	M	L	M		S	S	M	S	L
CO2	S	S	M	S	L		S	M	S	M	M
CO3	S	S	L	M	M		S	M	S	M	L

CO4	S	S	S	L	M		S	S	L	M	S
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S – Strong; M – Medium; L - Low

Course Title : Object Oriented Programming with C++ Lab Course Code : 20UIT2CP2

COURSE OUTCOME

After learning the course, the students will able to

CO1	Learn and Apply control Structure for mathematical problems.	K1 & K3
CO2	Develop programs using OOP concepts.	K3
CO3	Develop programs using file handling techniques	K3
CO4	Develop programs to solve real-time problems.	K3
CO5	Analyze the design reusable applications.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	M		S	M	M	M
CO2	S	S	M	S	M		S	M	M	M
CO3	S	M	M	S	M		S	M	M	L
CO4	S	M	S	S	L		S	M	M	L
CO5	S	M	M	M	L		S	M	M	L

S – Strong; M – Medium; L – Low

Course Title : Java Programming

Course Code : 20UIT3C05

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Learn and Understand the concepts of Core Java.	K1 & K2
CO2	Identify the logic behind process handling by using threads	K2
CO3	Identify the logic behind Network Programming.	K2
CO4	Develop the Window based application using Applet, Event Handling and Swing.	K3
CO5	Analyze the JDBC concept to solve real-time problems.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	M	M	M		S	S	M	M
CO2	S	S	L	M	M		S	S	M	M
CO3	S	S	L	M	M		S	S	M	M
CO4	S	S	M	M	M		S	S	S	M
CO5	S	S	M	M	M		S	S	S	S

S-Strong; M-medium; L-low

Course Title : Data File Structure

Course Code : 20UIT3C06

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Acquire knowledge about algorithms and concepts of linear and non linear	K1
CO2	Apply stack, queue and linked list in real world problem	K2
CO3	Have knowledge of tree and graphs concepts	K2
CO4	Apply various searching and sorting techniques	K3
CO5	Analyze the various algorithms to implement in real time application.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	L	M	M		S	S	M	M
CO2	S	S	L	M	M		S	S	M	M
CO3	S	S	L	M	S		S	S	M	M
CO4	S	S	L	M	M		S	S	M	M
CO5	S	S	L	M	M		S	S	S	M

S – Strong; M – Medium; L – Low

Course Title : Digital Computer Fundamentals

Course Code : 20UIT3C07

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Learn and understand various number system and codes	K1 & K2
CO2	Understand Boolean laws and rules to simplify expressions	K2
CO3	Experiment combinational and sequential circuits	K3
CO4	Identify and illustrate basic organization of computer	K2

CO5	Illustrate the memory concepts, I/O devices and peripherals	K3
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K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	L	M	M		S	S	M	L	M
CO2	S	M	L	M	M		S	M	M	M	M
CO3	S	M	L	M	M		S	M	M	M	M
CO4	S	M	L	M	M		S	M	M	L	M
CO5	M	S	L	M	S		L	S	M	M	M

S – Strong; M – Medium; L – Low

Course Title : Allied : Operation Research

Course Code : 20UIT3AL3

COURSE OUTCOMES:

On the successful completion of the course, students will be able to

CO1	Remembering the formulation of Business Problems.	K1
CO2	understanding the methods of problem solving	K2
CO3	Applying the mathematical calculations in Industrial Problems.	K3
CO4	Analyzing mathematical methods and applications.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M	L	M	M	L		L	L	L	L	L
CO2	M	M	M	L	L		M	M	L	L	L

CO3	M	M	M	M	L		L	L	L	L	L
CO4	M	M	M	M	L		L	L	L	L	L

S- Strong; M-Medium; L-Low

Course Title : Java Programming Lab

Course Code : 20UIT3CP3

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Understand the fundamental programming concepts	K1
CO2	Make use of process handling method by multithreading while developing a program.	K2
CO3	Identify the suitable problem-solving technique to develop a Network programs able to solve network related problems.	K2 & K3
CO4	Develop the Window based application using Applet, Event Handling and Swing.	K3
CO5	Analyze the concept to solve real-time problems.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	L	M	M		S	S	S	M
CO2	S	S	L	M	M		S	M	M	L
CO3	S	S	L	M	M		S	M	M	L
CO4	S	S	M	M	M		S	S	M	M
CO5	S	S	M	M	M		S	S	S	S

S – Strong; M – Medium; L – Low

Course Title : Data Structure using C++ Lab

Course Code : 20UIT3CP4

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Understand the concept of building algorithms and Programs	K2
CO2	Apply the concept of Stack , Queue and Linked list to solve real world problems	K3
CO3	Analysis the working of Non-linear data structure such as tree and graphs	K4
CO4	Implement the correct searching and sorting techniques for real time application	K3
CO5	Analyze the concept of Indexing and Hashing Techniques	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	L	M	M		S	S	M	M
CO2	S	S	L	M	M		S	S	S	M
CO3	S	S	L	M	S		S	S	S	M
CO4	S	S	L	M	M		S	S	S	M
CO5	S	S	L	M	M		S	S	S	M

S – Strong; M – Medium; L – Low

Course Title : Visual Programming

Course Code : 20UIT4C08

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Understand to work with the basic c sharp console Program to Create Console Applications	K2
CO2	Apply to make familiar to develop c sharp windows application	K3
CO3	Apply to work with ADO.net and its Application	K3

CO4	Analyze to have knowledge of Database Connectivity and Report Generation using C Sharp.	K4
CO5	Analyze to working with ASP.net and its Basic Programs.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	M	M	L	M		L	M	M	M
CO2	M	S	M	M	M		M	M	S	S
CO3	S	S	M	S	M		M	S	S	S
CO4	S	S	S	S	M		M	S	M	S
CO5	M	M	M	S	S		M	M	M	S

S-Strong; M-Medium; L-Low

Course Title : Relational Database Management System Course Code : 20UIT4C09

COURSE OUTCOME:

After learning the course, the students will able to

CO1	The Learner will be able to describe data models and schemas in DBMS	K1
CO2	To Understand the Features of database management systems and Relational database	K2
CO3	To use SQL-Standard Language of Relational databases	K3
CO4	To understand the functional dependencies and design of the database	K2
CO5	To understand the concept of transaction and query processing	K2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	M	M	L	M		M	M	S	M
CO2	M	M	M	S	S		M	S	M	M
CO3	S	S	M	S	S		M	S	S	M
CO4	L	M	M	M	S		M	M	M	M
CO5	S	S	M	S	S		M	S	S	S

S- Strong; M-Medium; L-Low

Course Title : Advanced Networking

Course Code : 20UIT4C10

COURSE OUTCOME:

After learning the course, the students will able to

CO1	To understand the concepts of functions, components, and models of the computer networks	K1 & K2
CO2	Understanding the concepts of IP addressing and sub netting calculation	K2
CO3	Analyze the different types of routing protocols and metrics	K4
CO4	Analyze the functionalities of VLAN and inter-VLAN routing	K4
CO5	Apply Packet Tracer tool to implement advanced Networking Concept	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	M	S	L	M	M		S	M	L	M
CO2	S	S	L	M	M		S	M	L	M
CO3	S	S	L	M	M		S	M	M	M
CO4	S	S	L	M	M		S	M	M	M

CO5	S	S	L	M	M		S	M	M	M
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S – Strong; M – Medium; L – Low

Course Title : Financial Accounting

Course Code : 20UIT4AL4

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Relate accounting concepts and reproduce financial statements	K1
CO2	Familiarize the students with the steps involved and understand the relationship between Profit & Loss Account and Balance Sheet.	K2
CO3	Demonstrate knowledge of each step in the various subsidiary books of accounting	K1 & K2
CO4	Understand and explain the conceptual framework of Cost Accounting	K1 & K2
CO5	Prepare budgets and demonstrate budget control techniques	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	M	M		M	S	S	M	S
CO2	S	M	S	S	M		M	S	S	M	S
CO3	M	S	M	S	S		S	M	M	S	M
CO4	M	S	S	M	S		S	S	M	S	S
CO5	S	S	M	S	M		S	S	M	S	S

S-Strong; M-Medium; L-Low

Course Title : Visual Programming & RDBMS Lab

Course Code : 20UIT4CP5

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Ability to have knowledge about Array and String Function in c sharp console	K1
CO2	Understand about ADO.Net using Database Connectivity Programs with windows application	K2
CO3	Able to manipulate data as per business requirement by using various logical operator and built-in function.	K2
CO4	The learner can construct join query and sub query as per need.	K3
CO5	Apply and relate the concept of transaction, concurrency control and recovery in database.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	M	M	M	L	M		L	M	M	M
CO2	S	S	M	S	M		M	S	S	S
CO3	L	M	M	M	M		L	L	M	M
CO4	M	M	M	M	S		M	S	S	S
CO5	M	M	M	S	S		M	M	M	S

S-Strong; M-Medium; L-Low

Course Title : Python Programming

Course Code : 20UIT5C11

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Have a sound knowledge on the methodologies and essentials of Python programming.	K1
CO2	Understand the basic concepts of python modules and packages.	K2
CO3	Gain awareness in creating simple predictions using Python.	K1
CO4	Know about the various interpretations in python.	K2
CO5	Apply the skills of real time datasets with python packages	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	S
CO4	S	S	S	S	S		M	M	S	S
CO5	S	S	S	S	S		S	S	S	S

S - Strong; M - Medium; L - Low

Course Title : Web Technology

Course Code : 20UIT5C12

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Ability to design web page using HTML5.	K1
CO2	Understanding the Features of CSS and Bootstrap CSS and how to apply this in the web page.	K2
CO3	Understanding the concept of Server Side Scripting language PHP and MySQL. Ability to write code in PHP and save the data into the MySQL database Table.	K2
CO4	Understand the concept of Java Script in web programming.	K2
CO5	Ability to understand the functional dependencies of AJAX in PHP	K2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	M	M	S	S		L	M	M	M
CO2	S	S	L	M	M		L	M	L	M
CO3	M	S	M	S	S		M	S	S	S
CO4	L	M	M	M	M		L	M	M	M
CO5	M	M	M	S	S		M	M	M	M

S- Strong; M-Medium; L-Low

Course Title : Operating System

Course Code : 20UIT5C12

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Know, how process scheduling algorithms works	K1
CO2	Understand the concepts of Operating System and its components.	K2
CO3	Apply the various paging, demand paging and page replacement Concept	K3
CO4	Apply the various file system can be implemented and Disk Structures Concept	K3
CO5	Analyze the features of WINDOWS 2000 and WINDOWS XP Operating System.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	L	M	M		S	M	M	L
CO2	S	S	L	M	M		S	M	M	L
CO3	S	S	L	M	M		S	M	M	L
CO4	S	S	L	M	M		S	M	M	L

CO5	S	S	L	M	M		S	M	M	L
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S – Strong; M – Medium; L – Low

Course Title : Data Mining and Warehousing

Course Code : 20UIT5C14

COURSE OUTCOMES:

After learning the course, the students will be able to

CO1	Understand the basic concepts of Data mining	K2
CO2	Apply the association rules for mining the data	K3
CO3	Design and deploy appropriate classification techniques	K3
CO4	Cluster the high dimensional data for better organization of the data	K3
CO5	Evaluate various mining techniques on complex data objects	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	M
CO4	S	S	M	S	S		S	M	M	M
CO5	S	S	S	S	S		S	M	S	S

S - Strong; M - Medium; L - Low

Course Title : Python Programming Lab

Course Code: 20UIT5CP6

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Understand the essentials of Python programming	K2
CO2	know basic programs using python modules and packages	K1
CO3	Interpret algorithm and visualize the results with real time datasets	K3
CO4	Able to create database and connect.	K3
CO5	Apply the skills of real time datasets with python packages	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	S	M	M		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	M	M	S	S		S	S	S	S
CO4	S	S	M	M	M		S	M	S	S
CO5	S	M	S	S	S		S	S	S	S

S - Strong; M - Medium; L - Low

Course Title : Web Technology

Course Code: 20UIT5CP7

COURSE OUTCOME

After learning the course, the students will able to

CO1	Ability to design web page using HTML5.	K3
CO2	Understanding the Features of CSS and Bootstrap CSS and how to apply this in the web page.	K2
CO3	Apply the concept of Server Side Scripting language PHP and MySql.	K3
CO4	Understand the JavaScript basics and apply the validation in HTML forms.	K2

CO5	Ability to understand the functional dependencies of AJAX in PHP.	K2
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K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	M	M	S	S		L	M	M	M
CO2	S	S	L	M	M		L	M	L	M
CO3	M	S	M	S	S		M	S	S	S
CO4	L	M	M	M	M		L	M	M	M
CO5	M	M	M	S	S		M	M	M	M

S- Strong; M-Medium; L-Low

Course Title : Mobile Application Development

Course Code: 20UIT6C15

COURSE OUTCOMES:

After learning the course, the students will be able to

CO1	Understand the existing state of mobile app development via researching existing apps, meeting with industry professionals, and formulating new ideas.	K2
CO2	Understand the limitations and features of developing for mobile devices.	K2
CO3	Create a complete Mobile app with a significant programming component, involving the sensors and hardware features of the phone.	K3
CO4	Understand features of the app marketplace by offering the app for download.	K2
CO5	Develop GUI applications, use built-in widgets and components, work with the database to store data locally, and much more.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	S
CO4	S	S	S	S	S		M	M	S	S
CO5	S	S	S	S	S		S	S	S	S

S-Strong; M-Medium; L-Low

Course Title : Software Engineering

Course Code: 20UIT6C16

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Learn the concepts of process of Software Development.	K1
CO2	Understanding model of high level designs in the software projects.	K2
CO3	Develop a metrics for performing product measurements in individual software processes.	K3
CO4	Implement the methods and techniques to develop a small project.	K3
CO5	Analyze the strategies of testing works with various methods.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	M	M	M		S	S	S	M
CO2	S	S	M	M	M		S	S	M	M
CO3	S	S	M	M	M		M	S	S	M

CO4	S	S	M	M	M	S	S	S	M
CO5	S	S	M	M	M	S	S	S	M

S – Strong; M – Medium; L – Low

Course Title : Mobile Application Development

Course Code: 20UIT6CP8

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Understand the limitations and features of developing for mobile devices.	K1
CO2	Create a complete Mobile app with a significant programming component, involving the sensors and hardware features of the phone.	K3
CO3	Utilize several Flash tools and tactics, and utilize the timeline and Motion tween affects to produce animation.	K3
CO4	It is built and designed to meet the demands of today's working designer to create ads or collateral for print or for the web.	K2
CO5	Apply the various platform and get to understand the animation techniques.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	S	M	M		S	S	M	S
CO2	S	S	M	M	S		S	M	M	S
CO3	S	M	M	S	S		S	S	S	S
CO4	S	S	M	M	M		M	M	S	M
CO5	S	S	S	S	S		S	S	S	S

S-Strong; M-Medium; L-Low

**Course Title : Elective-I: Artificial Intelligence and
Expert System**

Course Code: 20UIT5EA1

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Describe the modern view of AI as the study of agents that receive precepts from the Environment and perform actions.	K1
CO2	Demonstrate awareness of informed search and exploration methods.	K2
CO3	Explain about AI techniques for knowledge representation, planning and uncertainty Management.	K3
CO4	Develop knowledge of decision making and learning methods.	K4
CO5	Describe the use of AI to solve English Communication problems.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	S
CO4	S	S	S	S	S		M	M	S	S
CO5	S	S	S	S	S		S	S	S	S

S - Strong; M - Medium; L - Low

Course Title : Cloud Computing

Course Code: 20UIT5EB1

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Able to define cloud computing and memorize the different cloud service and deployment models.	K1
CO2	Use and Examine different cloud computing services	K3
CO3	Identify the architecture and infrastructure of cloud computing, including SaaS, Private cloud, hybrid cloud, etc.	K2
CO4	Able to connect with two or more service providers for the purpose of load balancing traffic and accommodating spikes in demand.	K3
CO5	Able to analyze and find the solution for security issues.	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	L	M	M	M		M	L	M	M
CO2	M	M	L	M	M		M	M	L	M
CO3	M	S	M	M	M		S	S	M	M
CO4	S	S	M	M	M		L	M	M	S
CO5	M	M	L	M	M		L	M	M	M

S-Strong; M-Medium; L-Low

Course Title : Elective-I: Client / Server Technology

Course Code: 20UIT5EC1

COURSE OUTCOMES:

After learning the course, the students will able to

CO1	Devise popular servers with two tier scenarios.	K1
CO2	Understand the concept of middleware, and communication protocols.	K2
CO3	Understand the different component of N Tier and Three Tier application.	K2
CO4	Understand the underlying concepts in client server development using common access databases	K2
CO5	Compare various application deployment mechanisms and the use of digital certificates.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	L	L	M	M	M		L	M	L	L
CO2	M	M	M	L	M		S	M	M	M
CO3	M	M	M	M	S		S	S	M	M
CO4	S	M	M	M	M		M	M	S	S
CO5	L	L	L	M	M		M	S	S	M

S- Strong; M-Medium; L-Low

Course Title :Elective-I: Fundamentals of Cyber Security

Course Code: 20UIT5ED1

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Understand the knowledge about Information Systems	K1
CO2	Initiate about Information Security and Application Security	K2
CO3	Ability to understand about Security Threats and Secure Information System	K2
CO4	Assess cyber security risk management policies in order to adequately protect critical information and assets	K3
CO5	Analyse the Information Security Standards	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	L	S	M		S	M	S	L
CO2	S	M	L	S	M		S	M	S	L
CO3	S	M	L	S	S		S	M	S	L
CO4	S	M	L	S	S		S	M	S	M
CO5	S	M	L	S	S		S	M	S	M

S – Strong; M – Medium; L – Low

Course Title : Elective-I: Geographical Information

Course Code: 20UIT5EE1

System

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Comprehend fundamental concepts and practices of Geographic Information Systems (GIS) and advances in Geospatial Information Science and Technology (GIS&T).	K1
CO2	Apply basic graphic and data visualization concepts such as color theory, symbolization, and use of white space.	K3
CO3	Demonstrate organizational skills in file and database management.	K3
CO4	Give examples of interdisciplinary applications of Geospatial Information Science and Technology.	K4
CO5	Apply GIS analysis to address geospatial problems and/or research questions.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	S
CO4	S	S	S	S	S		M	M	S	S
CO5	S	S	S	S	S		S	S	S	S

S - Strong; M - Medium; L – Low

Course Title :Elective-II: Software Testing
Course Code: 20UIT6EA2

COURSE OUTCOME:

After learning the course, the students will able to

CO1	Familiarize the principles in software testing, implement and manage various test processes in a project	K1
CO2	Understand the importance of performance testing	K2
CO3	Understand the needs of software test automation and purpose of existing tools	K2
CO4	Describe the structure of test plan, test case design and to generate a testing Report	K3
CO5	Analyse Testing applications using different automated testing tools	K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	S	L	M	M		S	S	S	M
CO2	S	S	L	M	M		S	S	S	M
CO3	S	S	L	M	M		S	S	S	M
CO4	S	S	L	M	M		S	S	S	M
CO5	S	S	L	M	M		S	S	S	M

S – Strong; M – Medium; L – Low

Course Title :Elective-II: Embedded System

Course Code: 20UIT6EB2

COURSE OUTCOMES:

After learning the course, the students will be able to

CO1	Understand the general process of embedded system development.	K2
CO2	Able to handle external interrupts and timer utilization in system.	K3
CO3	Able to connect with peripheral devices and understand the concept of Analogue to digital.	K3
CO4	Understand various input and output ports and connect with peripheral devices.	K2
CO5	Able to apply various data structure and scheduling algorithms for memory management.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	M	S	S
CO4	S	S	S	S	S		M	M	M	S
CO5	S	S	S	S	S		S	M	S	S

S - Strong; M - Medium; L – Low

Course Title :Elective-II: Compiler Design

Course Code: 20UIT6EC2

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	To realize basics of compiler design and apply for real time applications.	K1
CO2	To introduce different translation languages	K3
CO3	To understand the importance of code optimization	K3
CO4	To know about compiler generation tools and techniques	K4
CO5	To learn working of compiler and non-compiler applications	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	S	M	S
CO3	S	S	S	M	S		S	S	S	S
CO4	S	S	S	S	S		M	M	S	S
CO5	S	S	S	S	S		S	S	S	S

S - Strong; M - Medium; L - Low

Course Title :Elective-II: Multimedia

Course Code: 20UIT6ED2

COURSE OUTCOMES

After learning the course, the students will be able to

CO1	Identify and describe the function of the general skill sets in the Multimedia industry.	K1
CO2	Understand the representation and characteristics in different medias.	K2

CO3	Initiate about the visual and audio systems to take in to design and implementation.	K1
CO4	Ability to understand and develop the multimedia applications.	K2
CO5	Understanding the graphical design, animation and to learn about the web design and development.	K3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4
CO1	S	M	M	M	S		S	S	M	S
CO2	S	S	M	M	S		S	M	M	S
CO3	S	S	S	M	S		S	M	S	S
CO4	S	S	S	M	S		M	M	M	S
CO5	S	S	S	M	S		S	S	S	S

S - Strong; M - Medium; L – Low

Course Title : Elective-II: Computer Graphics

Course Code: 20UIT6EE2

COURSE OUTCOME:

After learning the course, the students will able to


CO1	Understand the basic concepts used in computer graphics.	K1 & K2
CO2	Implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, and clipping.	K2 & K3
CO3	Understand the importance of viewing and projections.	K2 & K3
CO4	Analyse the technical aspect of Multimedia Systems	K3
CO5	Analyse various file formats for audio, video and text media.	K3 & K4

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4
CO1	S	S	M	L	M	S	M	L	S
CO2	S	S	M	M	M	S	M	L	S
CO3	S	S	M	M	M	S	M	L	S
CO4	S	M	M	M	M	S	L	L	S
CO5	S	M	M	M	M	S	L	L	S

S – Strong; M – Medium; L – Low




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