

PROGRAM STRUCTURE

I SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|---|---------------|-------------------|------------------|--|
| 1 | 173MC1T01 | C Programming And Data Structures | | ✓ | | Students are able to develop the ability to express fluently in both written as well as oral form of language which is very much essential for the career growth |
| 2 | 173MC1T02 | Computer Organization | | ✓ | | Students are able to acquire skills related to problem solving techniques of Data structures to different sorting searching algorithms and data structures like stack, queue, linked list, Trees and Graphs. |
| 3 | 173MC1T03 | Discrete Mathematical Structures And Graph Theory | | ✓ | | Students are able to acquire skills related to develop the ability to understand the structure of R Program, e knowledge on mathematical functions, Graphical functions, distribution functions and regression models. |
| 4 | 173MC1T04 | Statistical Programming With R | | ✓ | | Students are able to demonstrate programming skill in java programming that helps them to gain problem-solving skills i.e. to solve a problem in a logical as well as creative way in an manner. |
| 5 | 173MC1T05 | Accounting And Financial Management | | | | |
| 6 | 173MC1L01 | English Language Communication Skills Lab | | ✓ | | Students are able to demonstrate problem solving skills by ELCS to develop the ability to express fluently in both written as well as oral form of language which is very much essential for the career |

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| 7 | 173MC1L02 | C Programming Lab | | ✓ | | Students are able to acquire skills related to problem solving techniques of Data structures to different sorting searching algorithms and data structures like stack, queue, linked list, Trees and Graphs. |
| 8 | 173MC1L03 | Statistical Programming With R Lab | | ✓ | | Students are able to acquire skills related to develop the ability to understand the structure of R Program, e knowledge on mathematical functions, Graphical functions, distribution functions and regression models. |

II SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|-------------------------|---------------|-------------------|------------------|--|
| 9 | 173MC1T06 | Oops Through Java | | ✓ | | Students are able to demonstrate Problem solving skills to analyze the real time problem, and creative solutions using JAVA Programming language. |
| 10 | 173MC1T07 | Operating Systems | | ✓ | | Students are able to acquire skills related to problem solving techniques of Operating Systems to understand the process flow, task scheduling, Organizing memory, process, processor, etc., which is very much essential for the career growth. |
| 11 | 173MC1T08 | Software Engineering | | ✓ | | Students are able to demonstrate Problem solving skills to analyze the software engineering and design patterns to achieve the "best" design of software's by imparting the suitable design pattern. |
| 12 | 173MC1T09 | Optimization Techniques | | | | |
| 13 | 173MC1T10 | Computer Graphics | ✓ | | | Students are able to acquire related 2D,3D graphical representations and basic graphic programming using openGL enabling them to employed as graphic designer. |
| 14 | 173MC1L04 | Oops Through Java Lab | | ✓ | | Students are able to demonstrate programming skill in java programming that helps them to gain problem-solving skills i.e. to solve a problem in a logical as well as creative way in an manner. |
| 15 | 173MC1L05 | Data Structures Lab | | ✓ | | Students are able to acquire skills related to problem solving techniques of Data structures to different sorting searching algorithms and data structures like stack, queue, linked list, Trees |

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| | | | | | | and Graphs. |
| 16 | 173MC1L06 | Operating System & Computer Graphics Lab | ✓ | | | Students are able to acquire related 2D,3D graphical representations and basic graphic programming using OpenGL enabling them to employed as graphic designer. |

III SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|-----------------------------------|---------------|-------------------|------------------|---|
| 17 | 173MC1T11 | Data Base Management Systems | ✓ | | | Students are able to acquire skills related to SQL commands, constraints, views, models, transactions, storage and indexing enabling them to be employed for backend developer |
| 18 | 173MC1T12 | Computer Networks | | ✓ | | Students are able to demonstrate Problem solving skills to analyze basics of CN, different models of Computer Networks, layers protocol suite and Detailed study of the OSI reference model and the TCP IP architectures. |
| 19 | 173MC1T13 | Unix Programming | | ✓ | | Students are able to demonstrate programming solving skills by Identifying and using UNIX utilities to create and manage simple file processing operations |
| 20 | 173MC1T14 | Management Information System | | ✓ | | Student can able to understand the basics of MIS, structure of MIS, Information Systems for Competitive Advantage, Business Intelligence and knowledge Management System, Information System Planning, Evaluation & Maintenance of IS, and IS Security and Control. |
| 21 | 173MC1T15 | Design And Analysis Of Algorithms | | ✓ | | Students are able to demonstrate problem solving skills by apply knowledge of computing and mathematics to algorithm design |
| 22 | 173MC1L07 | Data Base Management Systems Lab | ✓ | | | Students are able to acquire skills related to SQL commands, constraints, views, models, transactions, storage and indexing enabling them to be employed for backend developer |

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| 23 | 173MC1L08 | Unix Programming Lab | | ✓ | | Students are able to demonstrate programming solving skills by Identifying and using UNIX utilities to create and manage simple file processing operations |
| 24 | 173MC1L09 | Computer Networks Lab | | ✓ | | Students are able to demonstrate Problem solving skills to analyze basics of CN, different models of Computer Networks, layers protocol suite and Detailed study of the OSI reference model and the TCP IP architectures. |

IV SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|-------------------------------------|---------------|-------------------|------------------|--|
| 25 | 173MC1T16 | Object Oriented Analysis And Design | | ✓ | | Students are able to demonstrate Problem solving skills to analyze the Object oriented analysis and design fundamentals of object modelling, differentiate Unified Process from other approaches, static and dynamic UML diagrams. |
| 26 | 173MC1T17 | Advanced Java & Web Technologies | ✓ | | | Students are able to acquire skills related to developing web pages, enabling them to be employed as front end developers. |
| 27 | 173MC1T18 | Data Warehousing And Mining | ✓ | | | Students are able to demonstrate different method of organizing and compiling data into one database, whereas data mining deals with fetching important data from databases. |
| 28 | 173MC4E01 | Mobile Computing | ✓ | | | Students are able to acquire skills related to Mobile Computing to understand the cellular networks, Technologies, BTS, communication in mobility and advanced concepts. |
| 29 | 173MC4E02 | Human Computer Interaction | | ✓ | | Students are able to demonstrate GUI components such as Menus, Forms, Dialog boxes and gain knowledge on various design paradigms, online documentation concepts, information retrieval and its presentation. |
| 30 | 173MC4E03 | Cloud Computing | ✓ | | | Students are able to acquire skills related to Cloud computing and distributed computing enabling them to be employed for cloud services sector. |
| 31 | 173MC4E04 | Software Project | ✓ | | | Students are able to acquire skills related to SPM, to understand the different models of software project developing, different |

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| | | Management | | | | approaches in developing and solving problems while developing projects. |
| 32 | 173MC4E05 | Artificial Intelligence | ✓ | | | Students are able to acquire technical skills to understand the evaluation of the AI, problem solving approaches, expert systems, or in Expert systems and fuzzy logic problem solutions. |
| 33 | 173MC4E06 | Embedded Systems | | | | |
| 34 | 173MC1L10 | Advanced Java & Web Technologies Lab | ✓ | | | Students are able to acquire skills related to developing web pages, enabling them to be employed as front end developers. |
| 35 | 173MC1L11 | Data Warehousing And Mining Lab | ✓ | | | Students are able to demonstrate different method of organizing and compiling data into one database, whereas data mining deals with fetching important data from databases. |
| 36 | 173MC1L12 | Object Oriented Analysis And Design Lab | | ✓ | | Students are able to demonstrate Problem solving skills to analyze the Object oriented analysis and design fundamentals of object modelling, differentiate Unified Process from other approaches, static and dynamic UML diagrams. |

V SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------|-------------|---------------------|---------------|-------------------|------------------|---|
| 37 | MC1651 | Big Data Analytics | ✓ | | | Students are able to acquire skills related to Big Data Use Cases and Big Data Analytics, the building blocks of Hadoop, Map Reduce approach to solve data analytics problems and PIG and Hive programming tools of Hadoop ecosystem |
| 38 | MC1652 | Network Programming | ✓ | | | Students are able to acquire skills related to Network Programming, how a client will interact with server, socket programming, I/o multiplexing and UDP socket programming. |
| 39 | MC1653 | Python Programming | ✓ | | | Students are able to acquire skills related to Python Programming to give solutions to Realtime problems in creative way. |
| 40 | MC1654 | Cyber Security | ✓ | | | Students are able to acquire skills related to Designing and Developing 3d User Interfaces, 3D Interaction Techniques and Virtual Reality applications that enabling them to be employed as interior designers and developer in industry. |
| 41 | MC1655 | Computer Forensics | ✓ | | | Students are able to acquire skills related to introduced the computer forensics, Both privately owned businesses as well as government entities such as the FBI, CIA, and NSA. |
| 42 | MC1656 | E-Commerce | | ✓ | | Students are able to acquire technical skills to identify different categories and trends in e-commerce applications, understanding technologies used behind e-commerce, pro's and con's of e-commerce applications |

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| 43 | MC1657 | Internet Of Things | ✓ | | | Students are able to acquire skills related to Internet of Things and enabling them to be employed for IoT sector. |
| 44 | MC1658 | Multimedia Application Development | | | | |
| 45 | MC1659 | Software Testing Methodologies | ✓ | | | Students are able to acquire technical skills to understand the various strategies or approaches used to test an application to ensure it behaves and looks as expected. |
| 46 | MC165A | Big Data Analytics Lab | ✓ | | | Students are able to acquire skills related to Big Data Use Cases and Big Data Analytics, the building blocks of Hadoop, Map Reduce approach to solve data analytics problems and PIG and Hive programming tools of Hadoop ecosystem |
| 47 | MC165B | Network Programming Lab | ✓ | | | Students are able to acquire skills related to Network Programming, how a client will interact with server, socket programming, I/o multiplexing and UDP socket programming. |
| 48 | MC165C | Python Programming Lab | ✓ | | | Students are able to acquire skills related to Python Programming to give solutions to Realtime problems in creative way. |

VI SEMESTER

| S. No | Course Code | Name of the Course | Employability | Skill Development | Entrepreneurship | Remarks |
|-------------------|-------------|----------------------|---------------|-------------------|------------------|---|
| 49 | MC165D | Project Seminar | ✓ | | | students will be able to demonstrate problem identification, analysis, design solutions or applications in electronics and communication domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |
| 50 | 173MC6P01 | Dissertation/ Thesis | ✓ | | | students will be able to demonstrate problem identification, analysis, design solutions or applications in electronics and communication domain through the acquired technical, cognitive, communication and creative skills to address societal needs. |
| Total No. Courses | | 50 | 24 | 22 | 0 | |

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