



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



FATIMA COLLEGE (AUTONOMOUS), MADURAI – 625018

NAME OF THE PROGRAMME: M.Sc. INFORMATION TECHNOLOGY

PROGRAMME CODE: PSIT

PROGRAMME OUTCOMES:

Students will be able to

- PO1:** Apply acquired scientific knowledge to solve major and complex issues in the society/industry.
- PO2:** Attain research skills to solve complex cultural, societal and environmental issues.
- PO3:** Employ latest and updated tools and technologies to solve complex issues.
- PO4:** Demonstrate Professional Ethics that foster Community, Nation and Environment Building Initiatives.

PROGRAMME SPECIFIC OUTCOMES:

- PSO 1:** Understand the concepts and applications in the field of Computing Sciences like Web designing and development, Mobile application development, and Network and communication technologies.
- PSO 2:** Apply the learning from the courses and develop applications for real world problems.



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



- PSO 3:** Understand the technological developments in the usage of modern design and development tools to analyze and design for a variety of applications
- PSO 4:** Communicate in both oral and written forms, demonstrating the practice of professional ethics and the concerns for social welfare.
- PSO 5:** Demonstrate understanding of the principles and working of the hardware and software aspects of computer systems
- PSO 6:** Ability to understand the structure and development methodologies of software systems. Possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.
- PSO 7:** Be acquainted with the contemporary issues, latest trends in technological development and thereby innovate new ideas and solutions to existing problems.



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



2019 - 2020

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/NATIONAL/REGIONAL/GLOBAL)	COURSE DESCRIPTION	COURSE OUTCOMES
19PG1IT1	Data Structures And Algorithm Analysis	Global	This course provides in-depth coverage of data structures and Algorithmic analysis.	CO1 :To learn about Linear Data Structures CO2: Develop knowledge on different design techniques CO3: learn about the non-linear data structures – Trees CO4:To Implement appropriate operations for Graphs and sorting CO5: Implement appropriate operations like sorting and searching techniques.
19PG1IT2	Object Oriented	Global	Object Oriented software Engineering	CO1: Differentiate traditional and object oriented software engineering



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



	Software Engineering		provides object oriented programming techniques. And explains various object oriented development cycles with appropriate testing methods	CO2: Explain various SDLC methods of OOSE CO3: Describe techniques used in OOSE CO4: Explain OOSE testing methods CO5: Analyze and choose necessary method for a particular project
19PG1IT3	Data Storage And Management	Global	This course provides an in-sight to learn and understand the concepts of relational database management and its programming techniques	CO1: To understand and apply Outline the features of DBMS and Relational Database design CO2: To Design conceptual models of a database using ER model CO3: To implement normalization techniques in database design CO4: To Retrieve information from database by formulating complex SQL Queries. CO5: To Utilize PL/SQL programming to



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



				solve problems
19PG1IT4	Distributed Operating System	Global	To understand the concept of design and implementation in the context of distributed operating systems	<p>CO1: Discuss the core concepts of distributed systems.</p> <p>CO2: Analyze various message passing mechanisms with its model.</p> <p>CO3: Identify the inherent difficulties that arise due to distribution of computing resources.</p> <p>CO4: Explain migration with the process management policies.</p> <p>CO5: Explain the basic concepts, design and structure of the LINUX operating system.</p>
19PG1IT5	Lab I : C++ And Data Structure	Global	This course provides to apply the use of various OOPs concepts with the help of programs	<p>CO1: Develop solutions for a range of problems using objects and classes.</p> <p>CO2: implementation of constructors, destructors and operator</p>



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



				<p>overloading.</p> <p>CO3: Apply fundamental algorithmic problems including type casting, inheritance, and polymorphism</p> <p>CO4: Understand generic Data structures programming like Stack, Queue and Linked List.</p> <p>CO5: Implement the concept of Sorting and Searching techniques</p>
19PG1IT6	LAB II : RDBMS	Global	This course provides to understand the Data storage, management and organisation techniques	<p>CO1: Implement Basic DDL, DML and DCL commands.</p> <p>CO2: Develop sub queries and understand their purpose.</p> <p>CO3: Use Aggregate and group functions to summarize data.</p> <p>CO4: Understand the PL/SQL architecture and write PL/SQL code</p>



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



				for procedures, triggers, cursors, exception handling etc CO5:Implement the complex queries
19IT1EDC	Business Information System	Global	To know Information Systems and its application in organizations. The paper would expose the students to the Business relating to information systems and help them identify and evaluate various options in Organisational Information Systems	CO1:understand business organization and role of information technology CO2: To learn about the technology infrastructure CO3:Explain various Intra and Inter organizational system CO4:To learn about Intelligent system for business. CO5: To learn about the Planning, Implementing and Managing strategies of information system
19PG2IT7	Java & J2EE	Global	This course provides various techniques of	CO1: To understand the structure and model of the Java programming



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



			Java Programming and help them to create effective programs in this language	<p>language.</p> <p>CO2: To explain the concepts of Packages, Interfaces and strings.</p> <p>CO3: To develop software implementing Exception handling mechanisms</p> <p>CO4: To design software for database connectivity and able to design GUI applications</p> <p>CO5: To implement server side programming using SERVLETS</p>
19PG2IT8	Network Security	Global	This course provides knowledge on the security issues on the network.	<p>CO1: To understand the Attacks, Services and Mechanisms.</p> <p>CO2: To explain the concepts cryptography</p> <p>CO3: To understand the concepts of Email and IP security</p> <p>CO4: To know about the web security</p>



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



				issues and various protocols CO5: To understand the concepts of virus and firewall .
19PG2IT9	Mobile Application Development Using Android Studio	Global	The primary goals will be design the next generation of mobile website, apps and other mobile interfaces across multiple platform such as IOS, android, windows and mobile web	CO1: Design scripts to meet given interface and media control requirements CO2: Utilize variables, properties and other code elements appropriately to implement the code design CO3: Implement and evaluate techniques for the installation of mobile applications CO4: Explain the principles of technologies which support media production and delivery on a variety of platforms CO5: Evaluate alternative mobile frameworks, and contrast different



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



				programming platforms
19PG2IT10A	Cloud Computing	Global	This course provides current cloud computing technologies, including technologies for different cloud services.	<p>CO1: To understand the fundamental principles of cloud computing and its model</p> <p>CO2: To apply concepts of IAAS, SASS, PAAS</p> <p>CO3: To develop business models that underlie Cloud Computing.</p> <p>CO4: To describe the importance of virtualization in distributed computing</p> <p>CO5: To analyse the importance of cloud security</p>
19PG2IT10B	Multimedia Systems	Global	This course provides an introduction to multimedia systems, multimedia	<p>CO1: To identify and use the elements and principles of design in multimedia.</p> <p>CO2: To understand terminology</p>



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



			compression, and multimedia information systems.	<p>associated with the concepts, techniques, and processes used throughout the multimedia environment.</p> <p>CO3: To Demonstrate an advanced knowledge of photo editing including: image manipulation, color correction, compositing, toning, and preparing for distribution.</p> <p>CO4: To explain the concepts of importing, exporting, effects, transitions, color correcting, and flow.</p> <p>CO5: To describe Image compression Standards</p>
19PG2IT10C	Management Information System	Global	This course provides a formal discipline within business education that	CO1: To define an information system from both a technical and business perspective and distinguish between



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



			bridges the gap between information technology and organization.	<p>computer literacy and information systems literacy.</p> <p>CO2: To assess the relationship between the electronic commerce, electronic business and internet technology.</p> <p>CO3: To identify the major management challenges to building and using information systems in organizations.</p> <p>CO4: To understand managerial risks related to information system organization processing and utilizing</p> <p>CO5: To evaluate the benefits and limitations of enterprise systems and industrial networks.</p>
19PG2IT11	Lab III : Java	Global	This course provides programming skills on	CO1: To understand the concept of Object Oriented Programming & Java



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



	Programming		various concepts in JAVA.	<p>Programming Constructs.</p> <p>CO2: To practice the concepts of operators, classes, objects, inheritance, packages ,Enumeration and various keywords</p> <p>CO3: To apply exception handling mechanisms.</p> <p>CO4: To design the applications of Java & Java applet, Swings and JDBC</p> <p>CO5: To Analyze and implement server side programming using SERVLETS</p>
19PG2IT12	Lab IV: Android Studio	Global	To Mobile User Interface (UI) Design is also essential in the creation of Mobile Apps. mobile UI considers constraints, context,	<p>CO1: Develop enterprise-level mobile solutions.</p> <p>CO2: Install and configure Android application development tools</p> <p>CO3: Demonstrate Save State information</p>



Criterion : I – Curricular Aspects

Metric : 1.1.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – M.Sc. INFORMATION TECHNOLOGY

Year : 2015 - 2020



			screen, input, and mobility as outlines for design	across important operating system events CO4: Develop advanced application programs using Android CO5: Design and develop mobile applications
19IT2EDC	Animation Software	Global	To introduce the concept of 3D animation software	CO1: Explain the basic concepts in computer graphics. CO2: understand the Alice Environment CO3: Build a program in Alice. CO4: Apply event handlers CO5: Develop 3D animations