

 Criterion : II - Teaching-Learning and Evaluation
 Metric : 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE
 Year : 2015 - 2020



FATIMA COLLEGE (AUTONOMOUS), MADURAI - 625018

NAME OF THE PROGRAMME: B.SC COMPUTER SCIENCE

PROGRAMME CODE: UACS

PROGRAMME OUTCOMES:

The learners will be able to

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

PROGRAMME SPECIFIC OUTCOMES:

- On completion of B.Sc. Computer Science programme, the students are expected to
- **PSO 1:** Develop professionally competent citizens by applying the scientific knowledge of Computer Science with the ability to think clearly, rationally and creatively to support in evolving solutions to the social/public/scientific issues with responsible democratic participation
- **PSO 2:** Enterprising resourcefulness to identify, plan, formulate, design and evaluate solutions for complex computing problems that address the specific needs with appropriate consideration for Societal, Cultural, Environmental and Industrial domains.

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- **PSO 3:** Holistic development to ignite the lateral thinking ability in problem solving, acquisition of new skills, open-minded and organized way of facing problems with self awareness and evolving analytical solutions
- **PSO 4:** Create and initiate innovations effectively and communicate efficiently with the computing community and society at large to bridge the gap between computing industry and academia
- **PSO 5:** Through Digital Literacy, understand, assess and commit to professional and ethical principles, norms and responsibilities of the cyber world and the ability for work efficacy as a part of a team and engage effectively with diverse stakeholders
- **PSO 6:** Ability and willingness to embark on new ventures and initiatives with critical thinking and desire for more continuous learning focusing on life skills.



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2019 - 2020

COURSE CODE	Course Title	COURSE OUTCOMES
19B1CC1	Programming in C	 CO1: Identify the basic concepts needed for program development CO2: Apply the basic concepts and develop program to find solutions for simple problems CO3: Design programs to solve complex problems by using suitable control statements CO4: Analyze the problem and design efficient program using functions CO5: Use array and structure to handle volume of data
19B1CC2	Lab – I (Programming in C)	 CO1: Develop algorithms to find solutions for simple problems CO2: Analyze the source code and rectify errors if any and bring out necessary solution CO3: Utilize proper control statements to find solution for a given problem CO4: Develop source code using arrays to handle volume of data



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		CO5: Design source code for console applications
19B1NME1	Animation Techniques (NME)	 CO1: Create a movie with simple animation using built-in animation techniques. CO2: Create a movie with improved animation and background using Frame by frame animation. CO3: Design a movie with many scenes using motion tween technique and multilayer concept. CO4: Design a complex movie with more objects and enhanced animation using symbols. CO5: Design a interactive animation using buttons and movie clip symbols.
19B2CC3	Programming in C++	 CO1: Compare Procedure-oriented programming and the evolution of Object oriented programming CO2: Identify basic concepts of OOP, benefits and its applications. CO3: Write object oriented programs using classes and objects. CO4: Design object oriented programs that can focus on reusability



		CO5: Utilize runtime polymorphism with pointers and virtual functions and File concepts.
19B2CC4	Lab – II (Programming In C++)	 CO1: Write programs using Object oriented programming paradigm Encapsulation (Classes and objects), Polymorphism and Inheritance. CO2: Apply various features like constructors and destructors, overloading- function and operators CO3: Utilize different types of inheritance to suit different applications. CO4: Design to write programs using Object oriented programming paradigm that enables runtime polymorphism using pointers and virtual functions. CO5: Apply Object oriented programming paradigm for flat file organization. (Sequential and Random access)
19B2AC2	Computer System Architecture (Allied -II)	CO1: Outline the structure of a basic computer system and explain the role of functional units

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		CO2: Explain the instruction cycle according to the type and addressing mode of the instruction CO3: Design the control logic circuit for various digital circuits such	

		CO2. Explain the instruction cycle according to the type and
		addressing mode of the instruction
		CO3: Design the control logic circuit for various digital circuits such
		as registers, memory and adder - logic circuit of a basic
		computer system
		CO4: Identify the memory requirement of a CPU, select the memory
		chips and design a mapping circuit
		CO5: Explain the structure and the usage of various interfacing
		devices needed for connecting peripheral devices with the CPU
19B2NME2	Animation Techniques	CO1: Create a movie with simple animation using built-in animation
	(NME)	techniques.
		CO2: Create a movie with improved animation and background
		using Frame by frame animation.
		CO3: Design a movie with many scenes using motion tween
		technique and multilayer concept.
		CO4: Design a complex movie with more objects and enhanced
		animation using symbols.



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		CO5: Design a interactive animation using buttons and movie clip symbols.
COURSE CODE	COURSE TITLE	COURSE OBJECTIVES
B3CC5	Data Structures and Algorithms	 Identify data structures needed to solve specific problems Analyse the data structures for effective use in problem solving Design and develop efficient algorithms in terms of Space and Time Troubleshoot algorithms Analyse time complexity of algorithms
B3CC6	Lab –III (Data Structures in C++)	 Write efficient programs consuming less memory Compile and Execute programs using required data structures Implement the algorithms using C++ Debug programs
B3SB1	Skill Based Elective- Internet Programming	• Discuss the way in which internet is used, classify the different types of connections.

			NAAC - 4 CICLL - Self Study Report (SSR)
AND A COLOR	Criterion Metric	 II – Teaching-Learning and Eu 2.6.1 – Programme Outcomes Course Outcomes (COs) – B.Se 2015 – 2020 	valuation (POs), Programme Specific Outcomes (PSOs) and c. COMPUTER SCIENCE
B4	CC7	Paper I Introduction To Internet Relational Database System Concepts	 Describe the working of web browsers and demonstrate searching the web using effective web browsing tips Design a simple web site and discuss the method for web hosting. Identify internet addressing and various internet protocols used for the communication. Explain the tips and techniques for managing the e-mails and protecting the privacy. Explain basic architecture, major components behind relational databases, various set operations and their implementation in RDBMS and key advantages of using RDBMS in real world computing. Assess how SQL evolves as the communication language to access the data. Discuss functional dependencies and various forms of normalization in maintaining the integrity of data. Prepare E-R diagram which represents the data their

ANDURAL REAL	Criterion Metric Year	 II - Teaching-Learning and Evaluation 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE 2015 - 2020 	Fains Cologe
		relationship.	

		• Demonstrate implementation of the relational operators in SQL, Boolean and Arithmetic operators, Pattern matching techniques and Utilize group, date and time functions to handle complex queries.
B4CC8	Lab - IV (Visual	• Write simple programs in VB
	Programming)	• Compile, Debug and Execute programs in VB
		• Design and simulate simple game applications
		• Write programs for the data base applications
		• Write programs using menu editors and MDI forms
B4SB2	Skill Based Elective-	• Create simple web page using physical tags
	Internet Programming	• Present the information in standard form in a web page using
	Paper- II Web	structure tags supported by the browsers
	Designing Using Html	• Design the layout for a web page using browser support tags
		• Develop a web site with the provision to go around all pages



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		• Design layout for a web document using frames
B5CC9	Programming in Java	 Explain the fundamental concepts of object-oriented programming and acquire programming skills using the basic language constructs and the core APIs provided by Java. Design, write, compile, execute, test, and debug object-oriented programs in Java. Develop well-documented and structured event handling programs using Applet Identify the use of Java in a variety of technologies and on different platforms. Implement GUI based client applications and TCP/ IP and UDP based Network programs
B5CC10	Operating System Concepts	 Explain what operating systems are, what they do and how they are designed and constructed. Describe the services an operating system provides to users, processes and other systems

$NAAC = 4^{th}CVCIE = Solf Study Report (SSR)$

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THAN COLUER	Criterion Metric Year	 II - Teaching-Learning and Eu 2.6.1 - Programme Outcomes Course Outcomes (COs) - B.S. 2015 - 2020 	valuation (POs), Programme Specific Outcomes (PSOs) and c. COMPUTER SCIENCE
			 Outline the process concept and assess the methods for process scheduling, Inter-process communication and deadlock handling. Assess the management of various resources – Process, Memory, Information and Devices and the effective utilization. Describe the various security threats and attacks and the countermeasures to them.

B5CC11

Lab-V (Programming In	• Design, write, compile, execute, test, and debug object-oriented
Java)	prog <mark>ram</mark> s in Java.

- Write packages, access specifies and interfaces in a program .
- Write programs to handle exception and implement • Multithreading
- Develop simple graphical user interfaces for Java Applications • and Applets using GUI components such as labels, buttons and Layout Manager
- Create Java event-handling model to respond to events arising • from the GUI components

Criterion : II – Teaching-Learning and Metric : 2.6.1 – Programme Outcome Course Outcomes (COs) – B. Year : 2015 - 2020		II — Teaching-Learning and Eu 2.6.1 — Programme Outcomes Course Outcomes (COs) — B.Sc. 2015 - 2020	Evaluation es (POs), Programme Specific Outcomes (PSOs) and Sc. COMPUTER SCIENCE		
	B5CC12 B5ME1		Project - I Major Elective – I Software Engineering	 Analyze. Plan and Design a software system Apply Project Management, Requirement analysis and other Software engineering concepts Exhibit the skill of documenting . Simulate and test the project with real-time data. Acquire presentation skills Explain the basic concepts and techniques. Plan for building efficient and reliable software. Analyze the challenges of small to large scale software development. Identify suitable model for various kind of projects. Explain the concept of time management, managerial and technical skill required by human resources. 	
	B5ME2		Latest computing Technologies	• Explain the key technologies, architecture, strengths, limitations and applications of cloud computing	

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A COLOR	Criterion Metric	 II - Teaching-Learning and E 2.6.1 - Programme Outcomes Course Outcomes (COs) - B.S 	valuation s (POs), Programme Specific Outcomes (PSOs) and Sc. COMPUTER SCIENCE
B5M	Ξ3	Data Mining And Data Warehousing	 Describe soft computing techniques and their roles in building intelligent machines Explain the genesis and applications of grid computing Explain the approaches to green computing and its future Describe wireless and mobile communications systems Explain the data extraction and transformation techniques. List the association rule mining techniques and understand association mining to correlation analysis, constraint based association mining. Describe operational database, warehousing and multidimensional need of data base to meet industrial needs. Explain the components of warehousing, classification methods and clustering analysis. Identify and discuss the Business analysis, query tools and application, OLAP etc
P5ME	CB1	Programming With C	• Explain the Fundamentals of C programming language.

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		(Elective Offered To Physics)	 Write Programs using Control Statements and Loop Structures. Describe the concept of Array and String Functions. Explain the concepts of structure and File. 	

		•	Demonstrate the concept of pointers and solve the problem using pointers
B5SB3	Skill Based Elective-	•	Design a website with boosted styles using style sheets
	Internet Programming		Design uniform layout for all pages of a website through tags and
	Paper - III – Client Side		style sheets
	Programming Using Java Script & CSS	5	Create a webpage with menu bar to navigate through different
			pages of a website.

- Create a dynamic webpage using java script
- Create a webpage with a facility to collect and validate data
- Define the Basic Concepts, Architecture and Components of .NET Framework.
- Discuss and use Web Forms with Standard Controls.

Skill Based Elective-

Internet Programming

Paper IV – Server Side

Programming Using

B5SB4

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		Asp.Net	 Apply validations to standard controls of web form. Design and develop web applications using navigation controls. Write basic SQL commands and develop web applications with DML operations using SQL commands. 	
B6CC	13	J2ee Programming	 Explain J2EE Architecture and Standard Services used Create Remote methods and apply it in J2EE applications using RMI Develop Server side Java Applications using Servlet and JSP Design programs with Data Base Connectivity using JDBC Identify the type of Java Messaging Service 	
B6CC	14	Data Communications And Networking	 Explain the structure of internet according to OSI model Analyse the capacity, efficiency and the usage of different transmission medium Outline the different switching techniques used for data transmission 	

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			NAAC – 4 th CYCLE – Self Study Report (SSR
A COLLEGE A COLL	Criterion Metric Year	 II - Teaching-Learning and Eu 2.6.1 - Programme Outcomes Course Outcomes (COs) - B.S. 2015 - 2020 	valuation (POs), Programme Specific Outcomes (PSOs) and c. COMPUTER SCIENCE
			 Explain the various error and flow control algorithms used for effective communication Outline the various addressing used for communication between source and destination through internet Compare the format of data transmission using TCP and UDP protocols Explain the standard algorithms used for data security
B6C	C15	Lab-VI (J2ee Programming)	 Write program for network chatting Write programs to access Data Base using JDBC Create remote methods in Remote Server and write Client program to access it Develop Server side Java Applications using Servlet

		Develop Server side Java Applications using JSP
B6CC16	Project – II (Outside)	 Analyze. Plan and Design a software system Apply Project Management, Requirement analysis and other



		 Software engineering concepts Exhibit the skill of documenting . Simulate and test the project with real-time data. Acquire presentation skills
B6ME4	Major Elective – II	• Identify the basic concepts used in computer graphics.
	Computer Graphics	 Analyze different output primitives. Explain the techniques of transformations and three dimensional graphics with display methods. Discuss the importance of viewing and clipping.
	Ŕ	• Explain the fundamentals of animation and virtual reality
B6ME5	Software Testing	 Explain various testing processes and continuous quality improvement Describe White box testing and Black box testing
		Discuss integration testing and its types
		• Discuss integration testing and its types
		Explain Performance and Regression testing



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		Discuss Internationalization Testing and Ad-hoc testing procedures
B6ME6	Cloud Computing	 Define cloud computing and related concepts Explain the key dimensions of the challenges of Cloud Computing Discuss the assessment of the economics , financial, and technological implications for selecting cloud computing for an organization Describe the benefits of cloud computing and to understand different layers of the cloud technologies, practical solutions Explain the challenges of cloud computing and determine the suitability of in-house v/s hosted solutions
B6ME7	Major Elective – III Introduction To Artificial Intelligence	 Differentiate AI method of problem solving from normal method Identify heuristics for a given problem Explain the various search techniques Explain predicate logic



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		• Describe the fundamentals of Game Playing, NLP, NN and Expert Systems
B6ME8	Principles Of Mobile Computing	 Explain Pervasive Computing Identify different operating systems Discuss the importance of Security Explain Internet Protocols Describe different Gateways
B6ME9	Big Data Fundamentals	 Explain the fundamental concepts of Big data Describe Big data Adoption and Planning Explain Big data Storage Concept Utilize Big data and Processing Concepts Demonstrate Big Data Analysis Techniques.
B6SB5	Skill Based Elective- Internet Programming Paper V - Server Side	 Explain fundamental concepts of PHP Identify and use array and array related functions



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	Programming Using Php	Design and Develop Form with PHP	Code.
		Develop File operations.	
		Demonstrate Data Manipulation co	nmands in MYSQL
B6SB6	Skill Based Elective-	Define the Web Services that conver	t application into a Web-
	Internet Programming	pplication	
	Paper VI -Web Services	analyze the differences between HT	ML and XML
	Development Using XML	pply XML mark-up language for tr	ansferring data
		Crea <mark>te</mark> and validate XML documents	3
		Discuss Simple Object Access Proto	col in detail







2018 - 2019

COURSE CODE	Course Title	Course Objectives
B1CC1	Programming In C	 To introduce and form a firm foundation in programming To stress the importance of clarity , simplicity and the efficiency in writing programs
B1CC2	Lab – I (Programming in C)	 Improve the skill of writing programs in C Utilize various features in C to various situations
B1NME1	Animation Techniques (NME)	• To offer a job oriented course and teach them to design animated applications
B2CC3	Programming in C++	• To introduce Object Oriented Programming concepts using C++ and improve their OOP Skill.
B2CC4	Lab – II (Programming in C++)	• To enable the learner to write, debug and test the programs written using OOP

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MADURAL	Year	: 2015 - 2020	

B2AC2	Computer System Architecture (Allied -II)	 To understand the organization and design of basic digital computer. To understand the procedure for implementing the arithmetic algorithm in digital hardware. To discuss the techniques that computers use to
		communicate with I/O devices and Memory.
B2NME2	Animation Techniques (NME)	• To offer a job oriented course and teach them to design animated applications
B3CC5	Data Structures And Algorithms	• To inculcate the skill of developing an algorithm with the apt Data Structures.
B3CC6	Lab – III (Data Structures in C++)	• Programs to be written using OOP concepts to implement data structures.
B3SB1	Skill Based Elective- Internet Programming Paper I Introduction To	 To facilitate the students to explore the basics of internet. To introduce how data can be shared and accessed thru' internet



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	Internet	
B4CC7	Rdbms With Oracle	 To impart complete understanding of Relational database concepts and its usage in the real world applications To encapsulate the implementation of database system concepts in SQL
B4CC8	Lab - Iv (Visual Programming)	• Programs to be written using IDE for window applications
B4SB2	Skill Based Elective- Internet Programming Paper II Html	• To teach the basic concept of designing a Web page.
B5CC9	Programming in Java	• To understand the fundamental concepts of object-oriented programming and be familiar with the basic language constructs and the core APIs provided by Java
B5CC10	Operating System Concepts	• To develop critical thinking, inquiring, technology skills to describe and to paraphrase what operating systems are, what



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		they do and how they are designed & construct.
B5CC11	Lab-V (Programming in Java)	• To develop error-free, well-documented , structured Java programs and to compile, execute, test, and debug the same
B5CC12	Project - I	• The project work motivates them and also gives insights about Software Development.
B5ME1	Major Elective – I Software Engineering	• Creating students with knowledge to solve real-world problems by providing thorough understanding of all concepts and techniques.
B5ME2	Latest Computing Technologies	• To introduce the basics of various computing technologies like Mobile Computing, Soft Computing, Grid computing, Cloud Computing and Green Computing
P5MEB1	Programming With C (Elective offered to Physics)	• To introduce and form a firm foundation in programming
B5SB3	Skill Based Elective -	To understand the JavaScript language

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		Course Outcomes (COs) - B.Sc. CO	MPUTER SCIENCE
AL	Year	<mark>:</mark> 2015 - 2020	
		Internet Programming Paper III – Client Side Programming Using Java Script& Css	To alter, show, hide and move objects on a web page
B5SB4	4	Skill Based Elective- Internet Programming Paper IV – Server Side Programming Using Asp.Net	• Define basic concepts of NET FrameWork3.5, Architecture of .NET Frame Work and Components of .NET Framework .
B6CC	13	J2ee Programming	• To Understand J2EE as an architecture and platform for building and deploying web-based, n-tier enterprise applications.
B6CC	14	Data Communications And Networking	• To provide detailed knowledge and understanding in the concepts of internet model of telecommunications and networking.
B6CC	15	Lab-VI (J2ee	• To introduce the students the principles, foundations, and applications of different computing technologies, and its

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	Programming)	significance in reshaping information technology processes.
B6CC16	Project – II	 Students are offered career training as part of the curriculum through the Project. Project work motivates them and also gives insights about Software Development.
B6ME3	Major Elective – Ii Computer Graphics	 To learn the fundamentals of Computer Graphics concepts and algorithms To provide wider scope on transformations and Interactive GUI
B6ME4	Software Testing	• To introduce the software development life cycle to develop error-free quality software.
B6ME5	Major Elective – III Introduction To Artificial Intelligence	• To orient towards the latest concepts of the emerging technology.
B6ME6	Principles of Mobile Computing	• To enable the students to understand the OS, protocols and security used in mobile technology and enable them to



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		know in detail about mobile computing.
B6SB5	Skill Based Elective- Internet Programming Paper V- Server Side Programming Using Php	 To understand and write PHP code, and use it to build dynamic web pages To further their knowledge of web application development with PHP
B6SB6	Skill Based Elective- Internet Programming Paper VI -Web Services Development	 To Know about Web Services that convert application into a Web-application To understand the differences between HTML and XML





2017 - 2018

COURSE CODE	COURSE TITLE	COURSE OBJECTIVE	
B1CC1	Programming in C	• To introduce and form a firm foundation in programming	
		• To stress the importance of clarity , simplicity and the	
		efficiency in writing programs	
B1CC2	Lab – I (Programming in C)	• Improve the skill of writing programs in C	
		• Utilize various features in C to various situations	
B1NME1	Animation	• To offer a job oriented course and teach them to design	
	Using Flash (NME)	animated applications	
		N LIGHT	
B2CC3	Programming in C++	• To introduce Object Oriented Programming concepts using	
		C++ and improve their OOP Skill.	
B2CC4	Lab – II (Programming in C++)	• To enable the learner to write, debug and test the programs	



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		written using OOP
B2AC2	Computer System Architecture (Allied -II)	• To understand the organization and design of basic digital computer.
		• To understand the procedure for implementing the arithmetic algorithm in digital hardware.
		• To discuss the techniques that computers use to communicate with I/O devices and Memory.
B2NME2	Animation Using Flash (NME)	• To offer a job oriented course and teach them to design animated applications
B3CC5	Data Structures And Algorithms	• To inculcate the skill of developing an algorithm with the apt Data Structures.
B3CC6	Lab –III (Data Structures In C++)	• Programs to be written using OOP concepts to implement data structures.
B3SB1	Skill Based Elective- Internet Programming	 To facilitate the students to explore the basics of internet. To introduce how data can be shared and accessed thru'



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	Paper I Introduction To Internet	internet
B4CC7	Rdbms With Oracle	 To impart complete understanding of Relational database concepts and its usage in the real world applications To encapsulate the implementation of database system concepts in SQL
B4CC8	Lab - IV (Visual Programming)	• Programs to be written using IDE for window applications
B4SB2	Skill Based Elective- Internet Programming Paper II Html	• To teach the basic concept of designing a Web page.
B5CC9	Programming in Java	• To understand the fundamental concepts of object-oriented programming and be familiar with the basic language constructs and the core APIs provided by Java
B5CC10	System Software And Operating Systems	• To present a general model of a compiler that may be used as a basis for designing and studying compilers.



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		• To explore the structure and effectiveness of an operating system in terms of resource management.
B5CC11	Lab-V (Programming in Java)	• To develop error-free, well-documented , structured Java programs and to compile, execute, test, and debug the same
B5CC12	Project - I	• The project work motivates them and also gives insights about Software Development.
B5ME1	Major Elective – I Software Engineering	• Creating students with knowledge to solve real-world problems by providing thorough understanding of all concepts and techniques.
B5ME2	Computer Graphics	 To learn the fundamentals of Computer Graphics concepts and algorithms To provide wider scope on transformations and Interactive GUI
P5MEB1	Programming With C (Elective Offered To Physics)	• To introduce and form a firm foundation in programming

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B5SB3	ar	Skill Based Elective- Internet Programming Paper III –Web Designing Using CSS & Java Script	 To understand the JavaScript language To alter, show, hide and move objects on a web page
B5SB4		Skill Based Elective- Internet Programming Paper IV –Dot Net Programming in Asp.Net	• Define basic concepts of NET FrameWork3.5, Architecture of .NET Frame Work and Components of .NET Framework .
B6CC13		J2EE Programming	• To Understand J2EE as an architecture and platform for building and deploying web-based, n-tier enterprise applications.
B6CC14		Data Communications and Networking	• To provide detailed knowledge and understanding in the concepts of internet model of telecommunications and networking.
B6CC15		Lab-VI (J2EE Programming)	Write program for network chatting

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B6CC16	Project – II (External)	 Students are offered career training as part of the curriculum through the Project. Project work motivates them and also gives insights about Software Development.
B6ME3	Major Elective – II Latest Computing Technologies	 To introduce the basics of various computing technologies like Mobile Computing, Soft Computing, Grid computing, Cloud Computing and Green Computing To introduce the students the principles, foundations, and applications of different computing technologies, and its significance in reshaping information technology processes.
B6ME4	Software Testing	• To introduce the software development life cycle to develop error-free quality software.
B6ME5	Major Elective –III Introduction to artificial Intelligence	• To orient towards the latest concepts of the emerging technology.
B6ME6	Principles of Mobile Computing	• To enable the students to understand the OS, protocols and



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		security used in mobile technology and enable them to
		know in detail about mobile computing.
B6SB5	Skill Based Elective- Internet	• To Know about Web Services that convert application into a
	Programming	Web-application
	Paper V - Web Services Using Xml	• To understand the differences between HTML and XML
B6SB6	Skill Based Elective- Internet	• To understand and write PHP code, and use it to build
	Programming	dynamic web pages
	Paper VI – Web Programming	• To further their knowledge of web application development
	Using Disp. And MYCOI	
	Using Php And MYSQL	with PHP





2016 -2017

COURSE CODE	Course Title	COURSE OBJECTIVE
B1CC1	Programming in C	 To introduce and form a firm foundation in programming To stress the importance of clarity , simplicity and the efficiency in writing programs
B1CC2	Lab – I (Programming in C)	 Improve the skill of writing programs in C Utilize various features in C to various situations
B1NME1	Animation Using Flash (NME)	• To offer a job oriented course and teach them to design animated applications
B2CC3	Programming in C++	• To introduce Object Oriented Programming concepts using C++ and improve their OOP Skill.
B2CC4	Lab – II (Programming in C++)	• To enable the learner to write, debug and test the programs written using OOP

TIMA COLLA	Criterion	: II - Teaching-Learning and Evaluation	
	Metric	: 2.6.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and	
		Course Outcomes (COs) – B.Sc. COMPUTER SCIENCE	
MADURAL	Year	: 2015 - 2020	

B2AC2	Computer System Architecture	• To understand the organization and design of basic digital
	(Allied -II)	 computer. To understand the procedure for implementing the arithmetic algorithm in digital hardware. To discuss the techniques that computers use to communicate with I/O devices and Memory.
B2NME2	Animation Using Flash (NME)	• To offer a job oriented course and teach them to design animated applications
B3CC5	Data Structures and Algorithms	• To inculcate the skill of developing an algorithm with the apt Data Structures.
B3CC6	Lab –III (Data Structures in C++)	• Programs to be written using OOP concepts to implement data structures.
B3SB1	Skill Based Elective- Internet Programming Paper I Introduction To Internet	 To facilitate the students to explore the basics of internet. To introduce how data can be shared and accessed thru' internet

TIMA COLLE	Criterion	: II - Teaching-Learning and Evaluation	Fatima College
	Metric	: 2.6.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and	
		Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE	
MADURAL	Year	: 2015 - 2020	

B4CC7	RDBMS With Oracle	 To impart complete understanding of Relational database concepts and its usage in the real world applications To encapsulate the implementation of database system concepts in SQL
B4CC8	Lab - IV (Visual Programming)	Programs to be written using IDE for window applications
B4SB2	Skill Based Elective- Internet Programming Paper II Html	• To teach the basic concept of designing a Web page.
B5CC9	Programming in Java	• To understand the fundamental concepts of object- oriented programming and be familiar with the basic language constructs and the core APIs provided by Java.
B5CC10	System Software and Operating Systems	 To present a general model of a compiler that may be used as a basis for designing and studying compilers. To explore the structure and effectiveness of an operating



 Criterion : II – Teaching-Learning and Evaluation
 Metric : 2.6.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – B.Sc. COMPUTER SCIENCE
 Year : 2015 - 2020



		system in terms of resource management.
B5CC11	Lab-V (Programming in Java)	• To develop error-free, well-documented , structured Java programs and to compile, execute, test, and debug the same
B5CC12	Project - I	• The project work motivates them and also gives insights about Software Development.
B5ME1	Major Elective – I Software Engineering	• Creating students with knowledge to solve real-world problems by providing thorough understanding of all concepts and techniques.
B5ME2	Computer Graphics	 To learn the fundamentals of Computer Graphics concepts and algorithms To provide wider scope on transformations and Interactive GUI
P5MEB1	Programming With C (Elective offered to Physics)	• To introduce and form a firm foundation in programming

Crit Met Yea	rion : II – Teaching-Learning and Evaluation ric : 2.6.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) – B.Sc. COMPUTER SCIENCE : 2015 - 2020
B5SB3	Skill Based Elective- Internet Programming• To understand the JavaScript languagePaper III –Web Designing CSS & Java Script• To alter, show, hide and move objects on a web page
B5SB4	Skill Based Elective- Internet Programming• Defline basic concepts of NET FrameWork3.5, Architecture of .NET Frame Work and Components of .NET Framework .Paper IV -Dot Net Programming In Asp.Net• Defline basic concepts of NET FrameWork3.5, Architecture of .NET FrameWork and Components of .NET Framework .
B6CC13	 J2ee Programming To Understand J2EE as an architecture and platform for building and deploying web-based, n-tier enterprise applications To Acquire knowledge on how various J2EE technologies are used together to build enterprise applications To Understand J2EE as an architecture and platform for building and deploying web-based, n-tier enterprise applications
B6CC14	Data Communications and • To provide detailed knowledge and understanding in the

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 Criterion : II - Teaching-Learning and Evaluation
 Metric : 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE
 Year : 2015 - 2020



	Networking	concepts of internet model of telecommunications and networking.
B6CC15	Lab-VI (J2EE Programming)	 To Understand the concept of Servlet and JSP as dynamic content generation technologies (Web-Server & support Technologies) To Understand RMI as Distributed-Objects Technology To Understand the use of Java Messaging Service
B6CC16	Project – II (External)	 Students are offered career training as part of the curriculum through the Project. Project work motivates them and also gives insights about Software Development.
B6ME3	Major Elective – II Latest Computing Technologies	 To introduce the basics of various computing technologies like Mobile Computing, Soft Computing, Grid computing, Cloud Computing and Green Computing To introduce the students the principles, foundations, and applications of different computing technologies, and its significance in reshaping information technology



Criterion: II - Teaching-Learning and EvaluationMetric: 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and

Course Outcomes (COs) – B.Sc. COMPUTER SCIENCE



Year : 2015 - 2020

	processes.
Software Testing	• To introduce the software development life cycle to develop error-free quality software.
Major Elective – III Introduction to Artificial Intelligence	• To orient towards the latest concepts of the emerging technology.
Principles of Mobile Computing	• To enable the students to understand the OS, protocols and security used in mobile technology and enable them to know in detail about mobile computing.
Skill Based Elective- Internet Programming Paper V - Web Services Using Xml	 To Know about Web Services that convert application into a Web-application To understand the differences between HTML and XML
Skill Based Elective- Internet Programming Paper VI – Web Programming using PHP and MYSQL	 To understand and write PHP code, and use it to build dynamic web pages To further their knowledge of web application development with PHP
	Software TestingMajor Elective – III Introduction to Artificial IntelligencePrinciples of Mobile ComputingSkill Based Elective- Internet ProgrammingPaper V - Web Services Using XmlSkill Based Elective- Internet ProgrammingPaper VI - Web Programming using PHP and MYSQL



2015 -2016

COURSE CODE	Course Title	COURSE OBJECTIVES
B1CC1	Introduction to Programming in C	• To introduce and form a firm foundation in programming
		• To stress the importance of clarity , simplicity and the efficiency in writing programs
B1CC2	Lab – I (Programming in C)	• Improve the skill of writing programs in C
		• Utilize various features in C to various situations
B1NME1	Animation Using Flash (NME)	• To offer a job oriented course and teach them to design animated applications
B2CC3	Advanced Programming in C	• To provide contemporary approach to programming
		• To learn higher concepts and to strengthen the
		programming skill
		• To stress the importance of clarity, legibility, modularity
		and emciency of program design.

ANNA COLLAND	ALLE -	Criterion Metric Year	 II - Teaching-Learning and Evaluation 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE 2015 - 2020 			
	B2CC4		Lab – II (Advanced Programming in C)	• To introduce and form a firm foundation in programming by practicing programs (To write, test and programs)		
	B2AC2		Computer System Architecture	• To understand the organization and design of basic digital	1	

B2AC2	Computer System Architecture (Allied -II)	 To understand the organization and design of basic digital computer. To understand the procedure for implementing the arithmetic algorithm in digital hardware. To discuss the techniques that computers use to communicate with I/O devices and Memory.
B2NME2	Animation Using Flash (NME)	• To offer a job oriented course and teach them to design animated applications
B3CC5	Data Structures and Algorithms	• To inculcate the skill of developing an algorithm with the apt Data Structures.
B3CC6	Lab –III (Data Structures in C++)	• Programs to be written using OOP concepts to implement data structures.
B3SB1	Skill Based Elective- Internet	• To facilitate the students to explore the basics of internet.



 Criterion : II - Teaching-Learning and Evaluation
 Metric : 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE
 Year : 2015 - 2020



	Programming	• To introduce how data can be shared and accessed thru'
	Paper I Introduction To Internet	internet
B4CC7	RDBMS with Oracle	 To impart complete understanding of Relational database concepts and its usage in the real world applications To encapsulate the implementation of database system concepts in SQL
B4CC8	Lab - IV (Visual Programming)	• Programs to be written using IDE for window applications
B4SB2	Skill Based Elective- Internet Programming Paper II Html	• To teach the basic concept of designing a Web page.
B5CC9	Programming In Java	• To understand the fundamental concepts of object- oriented programming and be familiar with the basic language constructs and the core APIs provided by Java.
B5CC10	System Software And Operating Systems	 To present a general model of a compiler that may be used as a basis for designing and studying compilers. To explore the structure and effectiveness of an operating



 Criterion : II - Teaching-Learning and Evaluation
 Metric : 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCE
 Year : 2015 - 2020



		system in terms of resource management.
B5CC11	Lab-V (Programming In Java)	• To develop error-free, well-documented , structured Java programs and to compile, execute, test, and debug the same
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B5ME2	Computer Graphics	 To learn the fundamentals of Computer Graphics concepts and algorithms To provide wider scope on transformations and Interactive GUI
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ADURAL Criterion Metric Year	Criterion: II - Teaching-Learning and EvaluationMetric: 2.6.1 - Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) - B.Sc. COMPUTER SCIENCEYear: 2015 - 2020		
B5SB3	Skill Based Elective- Internet Programming Paper III –Web Designing Using CSS and Java Script	 To understand the JavaScript language To alter, show, hide and move objects on a web page 	
B5SB4	Skill Based Elective- Internet Programming Paper IV – Dot Net Programming in Asp.Net	• Define basic concepts of NET FrameWork3.5, Architecture of .NET Frame Work and Components of .NET Framework .	
B6CC13	J2ee Programming	• To Understand J2EE as an architecture and platform for building and deploying web-based, n-tier enterprise applications.	
B6CC14	Data Communications And Networking	• To provide detailed knowledge and understanding in the concepts of internet model of telecommunications and networking.	
B6CC15	Lab-VI (J2EE Programming)	• To Understand the concept of Servlet and JSP as dynamic content generation technologies (Web-Server & support	



		Technologies)
		• To Understand RMI as Distributed-Objects Technology
	N.A	• To Understand the use of Java Messaging Service
B6CC16	Project – II (External)	• Students are offered career training as part of the
		curriculum through the Project.
		• Project work motivates them and also gives insights about
		Software Development.
B6ME3	Major Elective – II	• To introduce the basics of various computing technologies
	Latest Computing Technologies	like Mobile Computing, Soft Computing, Grid computing,
	AS I	Cloud Computing and Green Computing
		• To introduce the students the principles, foundations,
		and applications of different computing technologies, and
	A NDI	its significance in reshaping information technology
		processes.
B6ME4	Software Testing	• To introduce the software development life cycle to develop
		error-free quality software.

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Year

Criterion : II - Teaching-Learning and Evaluation : 2.6.1 – Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Metric **Course Outcomes (COs) – B.Sc. COMPUTER SCIENCE** : 2015 - 2020



B6ME5	Major Elective – III introduction To Artificial Intelligence	• To orient towards the latest concepts of the emerging technology.
B6ME6	Principles of Mobile Computing	• To enable the students to understand the OS, protocols and security used in mobile technology and enable them to know in detail about mobile computing.
B6SB5	Skill Based Elective- Internet Programming Paper V - Web Services using Xml	 To Know about Web Services that convert application into a Web-application To understand the differences between HTML and XML To understand XML as a markup language for transferring data To learn XML syntax and to create and validate XML documents
B6SB6	Skill Based Elective- Internet Programming Paper VI - Web Programming Using PHP And MYSQL	 To understand and write PHP code, and use it to build dynamic web pages To further their knowledge of web application development with PHP