A.D.M. COLLEGE FOR WOMEN

(Autonomous)

Affiliated to Bharathidasan University

(Nationally Accredited with "A" Grade by NAAC – 3rd Cycle)

NAGAPATTINAM 611 001.

DEPARTMENT OF COMPUTER SCIENCE

Programme: B.C.A

PO No.	ProgrammeOutcomes *Upon completion of the BCA Programme, the graduate will be ableto*
PO 1:	Academic Excellence: Academic excellence through effective delivery of course contents. Goal-Oriented and Life-Long Education: Setting short term, medium, and long term goals and achieving them in a global competitive perspective.
PO 2:	Social Consciousness : Develop committed and socially responsible individuals and help them take up active and positive roles in society
PO 3:	Technical Knowledge: To find, utilize and create content using information technologies and the internet.
PO 4:	Entrepreneurial Development: They would develop business acumen, analytical skills, financial literacy necessary to appreciate the dynamic nature of commerce and industry
PO 5:	Research and practical knowledge: Using research knowledge and aptitude acquired in the course of study for solving problems and face modern day challenges. Project Work and Viva: To help them develop the ability to participate in academic discussions.

PSO No.	Programme Specific Outcomes *Upon completion of these courses thestudent would*
PSO 1:	Acquire skill and information not only about computer and information technology but also in organization and management. Prepare student for roles pertaining to computer applications and IT industry
PSO 2:	Develop programming skills, networking skills, learn applications, packages, programming languages and modern techniques of IT
PSO 3:	Learn programming language such as Java, C++, HTML, SQL, Dotnet, etc… Prepare the learners to get placed in reputed organisations
PSO 4:	Provide information about various computer applications and latest development in IT and communication system
PSO 5:	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Course Title	MAJOR CORE 1 – C PROGRAMMING		
Code	KUA		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Understand the basic terminology of algorithm, flowchart and gain awareness used in computer programming.	PSO 1	U,R
CO-2	Design programs involving the various concepts like decision structures, loops, functions of C language.	PSO 4	Ap
CO-3	Demonstrate the single, multi-dimensional arrays, String functions and user defined functions.	PSO 2	U,An
CO-4	Compare the structure and union of C and apply it to construct array of structures and structure function.	PSO 3	An
CO-5	Understand the dynamics of memory by the use of pointers and pointers with functions	PSO 4	U,An

Course Title	MAJOR CORE 4: OBJECT ORIENTED PROGRAMMING USING C++		
Code	KUD		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Learn the basic concepts in Object-Oriented programming	PSO 2	U
CO-2	Develop programming skills by applying Object-Oriented programming	PSO 2	An
CO-3	Discuss the function overloading and Member Functions	PSO 2	An
CO-4	Understand the concepts of Constructors and Inheritance	PSO 5, PSO1	An
CO-5	An Ability to incorporate Exception Handling in Object-Oriented programs and analyze File Input/Output Streams.	PSO 1. PSO 3	C

Course Title	1 ALLIED COURSE II – ELEMENTS OF ACCOUNTING		
Code	KUA2		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Preparing financial statements in accordance with appropriate standards.	PSO 1	C
CO-2	Prepare ledger accounts using double entry bookkeeping and record journal entries accordingly.	PSO 2	Ap
CO-3	Interpreting the business implications of financial statement information	PSO 2	Ap
CO-4	Communicating complex ideas in writing and through oral presentations and Working effectively in diverse team settings	PSO 3	An
CO-5	Effectively coordinating and motivating a group to achieve its best output	PSO 4	U

Course Title	CORE COURSE VI JAVA PROGRAMMING		
Code	KUF		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Read and understand Java-based software code of medium-to-high complexity.	PSO 4	U
CO-2	Use standard and third party Java's API's when writing applications.	PSO 2	A
CO-3	Understand the basic principles of creating Java applications with graphical user interface (GUI).	PSO 5	U
CO-4	Understand the basic approaches to the design of software applications.	PSO 2	A
CO-5	Read and make elementary modifications to Java programs that solve real-world problems.	PSO 3	R, U

Course Title	CORE COURSE VIII DATABASE SYSTEMS		
Code	KUH		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Emphasize the need, role, importance and uses of databases in application development	PSO 1	R, U
CO-2	Design E-R modeling for a given situation and provide the foundation for development of relational database structure.	PSO 2	U
CO-3	Identify the advantages of the database approach over the file based data storage system.	PSO 2	U
CO-4	Distinguish between different models of file organizing, storing and using of data.	PSO 3	U
CO-5	Understand the relational model and relational algebra operations.	PSO 4	An

CourseTitle	SKILL BASED ELECTIVE I R PROGRAMMING LAB		
Code	KUS1Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Understand the fundamental syntax of R through demonstrations and writing R code	PSO 1	R, U
CO-2	Apply concepts such as data types, iteration, control structures, functions, and boolean operators using R	PSO 1 & PSO 2	R
CO-3	Able to import a variety of data formats into R using R Studio	PSO 2	U
CO-4	Explore data-sets to perform appropriate statistical tests using R	PSO 2	U
CO-5	Acquire skills to generate charts and graphs visualization using R	PSO 1 & PSO 2	An

CourseTitle	CORE COURSE X COMPUTER NETWORKS		
Code	KUJ		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Work with internet concepts	PSO 5	E, U
CO-2	Be familiar with the functionality of each layer of OSI and TCP/IP reference model.	PSO 2	U
CO-3	Build up a clear concern on the networking technologies	PSO 2	U
CO-4	Understand the data communication system, components and the purpose of layered architecture.	PSO 1	An
CO-5	Understand the services of data link layer and protocols	PSO 5	An

Course Title	CORE COURSE XI PYTHON PROGRAMMING		
Code	KUK		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Describe the basic built-in functions and syntax of Python programming.	PSO 1	R, U
CO-2	Explain the mapping and file concept.	PSO 5	R, A
CO-3	Explain the object oriented programming concept.	PSO 1	U
CO-4	Illustrate the concepts of decision making and construct statements.	PSO 1	R, A
CO-5	Illustrate the usage of database and regular expression	PSO 3	A

Course Title	MAJOR BASED ELECTIVE I MOBILE COMPUTING		
Code	KUE3		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	To explore Mobile security issues.	PSO 4	U
CO-2	To integrate multimedia, camera and Location based services in Android Application	PSO 2	A
CO-3	To be familiarized with Intent, Broadcast receivers and Internet services.	PSO 5	U
CO-4	To learn activity creation and Android UI designing.	PSO 2	A
CO-5	To understand IP and TCP layers of Mobile Communication.	PSO 3	R, U

Course Title	CORE COURSE XII SOFTWARE ENGINEERING		
Code	KUL		
CO No.	**Course Outcomes**	**PSOs Addressed**	Cognitive **Level**
CO-1	An ability to design and conduct experiments, as well as to analyze and interpret data.	PSO 2	R, U
CO-2	An ability to function on multi-disciplinary teams.	PSO 2,6	R, An
CO-3	An ability to identify, formulate, and solve engineering problems.	PSO 2	U, A
CO-4	An understanding of professional and ethical responsibility.	PSO 3	R
CO-5	Students can apply the knowledge, techniques, and skills in the development of a software product.	PSO 4	R,An

Course Title	MAJOR BASED ELECTIVE I BIG DATA ANALYTICS		
Code	KUE3		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Demonstrate the working of row and column oriented data stores	PSO 4	U
CO-2	Describe the Hadoop architecture and File system	PSO 2	A
CO-3	Apply the MapReduce Programming model for real-world problems	PSO 5	U
CO-4	Distinguish NoSQL databases from RDBMS	PSO 2	A
CO-5	Define the big data, types of data and understand the need of bigdata analytics	PSO 3	R, U

Course Title	SKILL BASED ELECTIVE II PYTHON AND BIO INFORMATICS LAB		
Code	KUS2Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	On completion of the Course, the learner will be able to	PSO 4	U
CO-2	Practice the Python programming language from its scratch: its syntax, idioms, patterns and styles.	PSO 2	A
CO-3	Illustrate the essentials of the Python library, and learn how to learn about other parts of the library when you need them.	PSO 5	U
CO-4	Interpret the mathematical results in physical and other forms.	PSO 2	A
CO-5	Identify, formulate and solve the Linear Differential Equations.	PSO 3	R, U

Course Title	SKILL BASED ELECTIVE II OPEN SOURCE PRODUCT LAB		
Code	KUS2Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Implement various applications using build systems	PSO 4	U
CO-2	Understand the installation of various packages in open source operating systems	PSO 2	A
CO-3	Create simple GUI applications	PSO 5	U
CO-4	Explore different open source technology like Linux, PHP & MySQL with different packages.	PSO 2	A
CO-5	Execute programs of PHP with MySQL connection	PSO 3	R, U

Course Title	SKILL BASED ELECTIVE III ANDROID LAB		
Code	KUS3Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Use Intent , Broadcast receivers and Internet services in Android App.	PSO 4	U
CO-2	Design and implement Database Application and Content providers.	PSO 2	A
CO-3	Use multimedia, camera and Location based services in Android App.	PSO 5	U
CO-4	Discuss various security issues in Android platform.	PSO 2	A
CO-5	Demonstrate their understanding of the fundamentals of Android operating system	PSO 3	R, U

Course Title	SKILL BASED ELECTIVE III MULTIMEDIA LAB		
Code	KUS3Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	To learn and understand technical aspect of Multimedia System	PSO 4	U
CO-2	To Design and implement an animation for various themes.	PSO 2	A
CO-3	To Prepare multimedia advertisement.	PSO 5	U
CO-4	To Develop various Multimedia Systems applicable in real time.	PSO 2	A
CO-5	To develop multimedia application and analyze the performance of the same.	PSO 3	R, U

Course Title	CORE COURSE XIII OPERATING SYSTEMS		
Code	KUM		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Understand the basic concept of Computer System and Operating System Structure	PSO 4	U
CO-2	Gain Knowledge of the fundamental aspects of process and processor managements with deadlocks and CPU scheduling	PSO 2	A
CO-3	Introduce memory and virtual memory techniques	PSO 5	U
CO-4	Understand files, directories and its accessing methods and its structures	PSO 2	A
CO-5	Ability to know mass storage devices and its scheduling	PSO 3	R, U

Course Title	CORE COURSE XIV WEB TECHNOLOGY		
Code	KUN		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Illustrate the web technology concept to create schemas and dynamic web pages.	PSO 4	U
CO-2	Understand the concept of CSS for dynamic presentation effect in HTML and XML documents.	PSO 2	A
CO-3	Describe the mark-up languages for processing, identifying and presenting information in web pages.	PSO 5	U
CO-4	Apply scripting languages in HTML document to add interactive components to web pages	PSO 2	A
CO-5	Define the knowledge about HTML document with element types, hyperlinks, images, list, tables and forms	PSO 3	R, U

Course Title	MAJOR BASED ELECTIVE II COMPUTER GRAPHICS		
Code	KUE4		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Understand the basics of computer graphics, different graphics systems and applications of computer graphics.	PSO 4	U
CO-2	Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis.	PSO 2	A
CO-3	Use of geometric transformations on graphics objects and their application in composite form.	PSO 5	U
CO-4	Extract scene with different clipping methods and its transformation to graphics display device.	PSO 2	A
CO-5	Understands light interaction with 3D scenes	PSO 3	R, U

Course Title	MAJOR BASED ELECTIVE II CYBER SECURITY		
Code	KUE4		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure.	PSO 4	U
CO-2	Design, develop, test and evaluate secure software.	PSO 2	A
CO-3	Develop policies and procedures to manage enterprise security risks.	PSO 5	U
CO-4	Analyze the techniques of Symmetric Key.	PSO 2	A
CO-5	Algorithms and Public Key Algorithms.	PSO 3	R, U

Course Title	MAJOR BASED ELECTIVE III WEB TECHNOLOGY AND BIOINFORMATICS LAB		
Code	KUE5Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Identify the operators to learn the basic HTML commands	PSO 4	U
CO-2	Understand the concept of Hyperlinks, Use of Cascading Style sheets.	PSO 2	A
CO-3	Implement HTML concept in developing simple applications	PSO 5	U
CO-4	Implementing the techniques for DNA Transcription and Mutation.	PSO 2	A
CO-5	Analyze a web page and identify its elements and attributes	PSO 3	R, U

Course Title	MAJOR BASED ELECTIVE III UI/UX Design and Animation Lab using Open Source Tools Lab		
Code	KUE5Y		
CO No.	**Course Outcomes**	**PSOs Addressed**	**Cognitive Level**
CO-1	Understand the Usability of Interactive systems.	PSO 4	U
CO-2	Understand Guidelines and Principles	PSO 2	A
CO-3	Be able to manage the development process and interaction styles.	PSO 5	U
CO-4	Explain the functionality of different design related software	PSO 2	A
CO-5	Use learned skills to solve problems of various layouts	PSO 3	R, U