DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE OUTCOMES(COS)

Semester No:	I-I		
Course Title:	Programing For Problem Solving	**Course Code:**	CS103ES
Course Outcome No:	**Course Outcome Statement**		
CS103ES.1	**Illustrate** algorithms and to draw flowcharts for solving problems[understanding]		
CS103ES.2	**Translate** algorithms to flowcharts to C programs.[Analyzing]		
CS103ES.3	**Apply** and test a given logic in C programming language[Applying]		
CS103ES.4	**Analyze** a problem into functions and to develop modular reusable code.[Analyzing]		
CS103ES.5	**Evaluate** arrays, pointers, strings and structures to write C programs[Evaluating]		
CS103ES.6	**Discuss** Searching and Sorting techniques.[Creating]		

Semester No:	I-II		
Course Title:	Data Structures	**Course Code:**	CS203ES
Course Outcome No:	**Course Outcome Statement**		
CS203ES.1	**select** data structures that effectively model the information in a problem.[Remembering]		
CS203ES.2	**Analyze** efficiency Trade-offs among different data structure implementations or combinations. [Analyzing]		
CS203ES.3	**Apply** and understand the application of algorithms for sorting and pattern matching[Applying]		
CS203ES.4	**Design** programs using a variety of data structures including hash tables, binary and general tree structures, search trees ,tries ,heaps ,graphs and AVL trees.[Creating]		
CS203ES.5	**Design** programs using variety of data structure using tries. [Creating]		

Semester No:	II-I		
Course Title:	Database Management Systems	**Course Code:**	CS301PC
Course Outcome No:	**Course Outcome Statement**		
CS301PC.1	**Illustrate** the fundamentals of DBMS, database design, and normal forms.[Understanding]		
CS301PC.2	**Construct** the basics of SQL for retrieval and management of data. [Applying]		
CS301PC.3	**Analyze** with the basics of transaction processing and concurrency control. [Analyzing]		
CS301PC.4	**Choose** database storage structures and access techniques.[Evaluating]		
CS301PC.5	**Discuss** about external storage, file organization, indexing and tuning techniques[Creating]		

Semester No:	II-I		
Course Title:	Operating Systems	**Course Code:**	CS303PC
Course Outcome No:	**Course Outcome Statement**		
CS303PC.1	**Illustrate** and remember the operating systems concepts, types of operating systems, system calls, etc.[Understanding]		
CS303PC.2	**Examine** the CPU Scheduling algorithms and Process management.[Analyzing]		
CS303PC.3	**Analyze** the Deadlock handling and processes synchronization, Semaphores, and Classical Problems of Synchronization.[Analyzing]		
CS303PC.4	**Compare** and **contrast** the Memory management techniques and virtual memory such as Paging, Segmentation, Demand, Paging, and Page Replacement Algorithms. [Evaluating]		
CS303PC.5	**Design** file system interfaces and operations and recall the basic commands/ functions of Unix operating systems. [Creating]		

Semester No:	II-II		
Course Title:	Software Engineering	Course Code:	CS405PC
Course Outcome No:	Course Outcome Statement		
CS405PC.1	**Illustrate** the software process models and software engineering process.[Understanding]		
CS405PC.2	**Apply** end-user requirements into system and software requirements, using e.g.UML, and structure the requirements in a Software Requirements Document[SRD].[Applying]		
CS405PC.3	**Develop** and **apply** appropriate software architectures and patterns to carry out highlevel design of a system and be able to critically compare alternative choices.[Creating]		
CS405PC.4	**Analyze** types of testing problems and develop a simple testing report.[Analyzing]		
CS405PC.5	**Evaluate** metrics for process product and Risk Management use quality assurance tools and techniques.[Evaluating]		

Semester No:	III-I		
Course Title:	Formal Languages and Automata Theory	Course Code:	CS504PC
Course Outcome No:	Course Outcome Statement		
CS504PC.1	**Define** grammar and automata with rigorously formal mathematical methods.[Remembering]		
CS504PC.2	**Interpret** regular expressions and context-free grammars accepting or generating a certain language.[Understanding]		
CS504PC.3	**Illustrate** about the language accepted by automata or generated by a regular expression or a context-free grammar. [Understanding]		
CS504PC.4	**Define** push down automata to determine acceptance by final state. [Remembering]		
CS504PC.5	**Design** complex problems and determine decidability of problems. [Creating]		

Semester No:	III-II		
Course Title:	Compiler Design	Course Code:	CS601PC
Course Outcome No:	Course Outcome Statement		
CS601PC.1	**Demonstrate**Acquire knowledge of different phases and passes of the compiler and also able to use the compiler tools like LEX, YACC, etc. [Understanding]		
CS601PC.2	**Determine** and Understand the parser and its types i.e. Top-Down and Bottom-up parsers and construction of LL, SLR, CLR, and LALR parsing table.[Evaluating]		
CS601PC.3	**Develop** and Implement the compiler using syntax-directed translation method and get knowledge about the synthesized and inherited attributes. [Applying]		
CS601PC.4	**Design** and Acquire knowledge about run time data structure like symbol table organization and different techniques[Creating]		
CS601PC.5	Understand and **Design** the target machine's run time environment, its instruction set for code generation and techniques used for code optimization[Creating]		

Semester No:	III-II		
Course Title:	Web Technologies	Course Code:	CS603PC
Course Outcome No:	Course Outcome Statement		
CS603PC.1	**Choose** of server-side scripting with PHP language.[Remembering]		
CS603PC.2	**Illustrate** the representation of data in XML format and Parses the data using various Java Parsers.[Understanding]		
CS603PC.3	**Construct** server side programming with java servlets.[Applying]		
CS603PC.4	Apply JSP concepts to **Discover** dynamic web pages by reducing the code complexity and store data in database.[Analyzing]		
CS603PC.5	**Develop** appropriate client-side scripting programs using Java Script and AJAX.**[Creating]** & **Determine** the appropriate web technology and builds web applications. [Creating]		

Semester No:	IV-I		
Course Title:	Data Mining	Course Code:	CS701PC
Course Outcome No:	Course Outcome Statement		
CS701PC.1	**Illustrate** to perform the preprocessing of data and apply mining techniques on it. [Understanding].		
CS701PC.2	**Identify** the Problem definition and use association rules generation and implement Algorithms [APRIORI,FP-Growth]. [Applying]		
CS701PC.3	**Solve** the classification problem and implement the Algorithm for decision tree induction. [Creating].		
CS701PC.4	**Evaluate** the clusters in large data sets to solve real world problems in business and scientific information using data mining.[Evaluating]		
CS701PC.5	**Classify** web pages and hierarchical categories of Text mining, extracting knowledge from the web. [Analyzing]		

Semester No:	IV-I		
Course Title:	Internet of Things	Course Code:	CS702PC
Course Outcome No:	Course Outcome Statement		
CS702PC.1	**Illustrate** basic concepts and terminology, technology different IOT levels and its application.[Understanding]		
CS702PC.2	**Discuss** about M2M [machine to machine] Select best protocols [YANG, SNMP NETOPEER]for IOT application .[Analyzing]		
CS702PC.3	**Analyze** python language concepts and Apply python packages develop best IOT application. [Applying]		
CS702PC.4	**Apply** Python programming with Raspberry PI with focus of interfacing external gadgets.[Evaluating]		
CS702PC.5	**Develop** and Experiment IOT device to work with Cloud Computing Backend.[Creating]		