Computer Engineering				
Sem	Course Code	Course Name	CO Number	Course Outcome Statements
IV	CSC401	Engineering MathematicsIV	CSC4011	Apply the concepts of eigenvalues and eigenvectors in engineering problems.
			CSC4012	Use the concepts of Complex Integration for evaluating integrals, computing residues & evaluate various contour integrals.
			CSC4013	Apply the concept of Z- transformation and inverse in engineering problems.
			CSC4014	Use the concept of probability distribution and sampling theory to engineering problems.
			CSC4015	Apply the concept of Linear Programming Problems to optimization.
			CSC4016	Solve Non-Linear Programming Problems for optimization of engineering problems.
IV	CSC402	Analysis of Algorithm	CSC4021	Analyse the running time and space complexity of algorithms.
			CSC4022	Analyse the complexity of divide and conquer strategy.
			CSC4023	Analyse the complexity of greedy strategy.
			CSC4024	Analyse the complexity of dynamic programming strategy.
			CSC4025	Apply backtracking, branch and bound and string matching techniques to deal with some hard problems.
			CSC4026	Describe the classes P, NP, and NP-Complete and prove that a certain problem is NP-Complete.
IV	CSC403	Database Management System	CSC4031	Describe the fundamentals of a database systems
			CSC4032	Describe the concept of transaction, concurrency and recovery.
			CSC4033	Explain different database Models and Apply different rules for conversion of conceptual model to relational model
			CSC4034	Solve database queries using relational algebra and SQL.
			CSC4035	Construct ER and EER diagram for the real life problems.
			CSC4036	Explain and apply different constraints on Database Design.
			CSC4041	Explain the objectives, functions and structure of OS
			CSC4042	Analyze the concept of process management and evaluate performance of process scheduling algorithms.
			CSC4043	Apply the concepts of synchronization and deadlocks
			CSC4044	Evaluate performance of Memory allocation and replacement policies

IV	CSC404	Operating System	CSC4045	Explain the concepts of file management.	
			CSC4046	Apply concepts of I/O management and analyze techniques of disk scheduling.	
IV	CSC405	Microprocessor	CSC4051	Describe Architecture and Working of x86 processor.	
			CSC4052	Design the program in Assembly and Higher Level Languages for intel x86.	
			CSC4053	Elaborate Execution of Interrupts.	
			CSC4054	Apply concept for interfacing 8086 processor with peripherals.	
			CSC4055	Analyze the architecture of intel 80386 processor	
			CSC4056	Apply basics of microprocessor to infer pentium	
IV	CSL401	Analysis of Algorithm Lab	CSL4011	Analyze the complexities of various problems in different domains.	
			CSL4012	Prove the correctness and analyse the running time of the basic algorithms for those classic problems in various domains.	
			CSL4013	Develop efficient algorithms for the new problem with suitable designing techniques.	
			CSL4014	Implement the algorithms using different strategies.	
IV	CSL402	Database Management System Lab	CSL4021	Construct ER and EER diagram for the real life problem with software tool.	
			CSL4022	Apply different rules for Creating and updating database and tables with different DDL and DML statements.	
			CSL4023	Apply integrity constraints and provide security to data.	
			CSL4024	Construct simple and Complex SQL queries.	
			CSL4025	Apply triggers and procedures for specific module/task	
			CSL4026	Illustrate Handing of concurrent transactions and access data through front end (using JDBC ODBC connectivity.)	
			CSL4031	Implement basic Operating system Commands, Shell scripts, System Calls and API wrt Linux	
			CSL4032	Implement various process scheduling algorithms and evaluate their performance.	
			CSL4033	Implement and analyze concepts of synchronization and deadlocks.	
			CSL4034	Implement various Memory Management techniques and evaluate their performance.	

			CSL4035	Demonstrate and analyze concepts of file management and I/O management techniques.
IV	CSL403	Operating System Lab	CSL4036	Demonstrate capabilities of self-learning which leads to lifelong learning
IV	CSL404	Microprocessor Lab	CSL4041	Implement interactive program using interrupts
			CSL4042	Use machine control group of instructions in an assembly language program
			CSL4043	Use string and arithmetic instructions for assembly language programming
			CSL4044	Write mixed language program for arithmetic operations
			CSL4045	Apply architectural knowledge to interface different peripherals with 8086
			CSL4046	Use basic concepts of 8086 in learning advance peripherals
IV	CSL405	Skill Base Lab Course: Python Programming	CSL4051	Demonstrate basic concepts in Python.
			CSL4052	Illustrate file handling and Database handling in Python.
			CSL4053	Build user defined packages and modules in Python.
			CSL4054	Demonstrate two way communication between client and server using Socket Programming in Python.
			CSL4055	Demonstrate concept of Multithreading, Numpy and Pandas
			CSL4056	Develop python based web applications.