R.M.K.ENGINEERINGCOLLEGE

RSMNagar,Kavaraipettai–601206

Department of Computer Science andEngineering

Course Outcomes – Semester 2023-2024

(Odd/Even)

Semester	Theory/ Practical	SubjectCode	CourseCode/ Course Name
3	Theory	22MA301	DiscreteMathematics
3	Theory	22CS302	Computer Organization and Architecture
3	Theory	22CS301	Advanced Java Programming
3	Theory	22CS303	Design and Analysis of Algorithms
3	Theory	22CS304	Operating Systems
3	Theory	20CS311	Tamils and Technology
3	Practical	22ME311	Product Development Lab - 3
3	Practical	22CS311	Aptitude and Coding Skills I
3	Practical	22CS312	Internship and Seminar
5	Theory	20CS501	Computer Networks
5	Theory	20AI401	Artificial Intelligence
5	Theory	20CS503	Theory of Computation
5	Theory	20CS929	Google Cloud Computing Foundations
5	Theory	20CE003	Geographic Information System
5	Practical	20AI411	Artificial Intelligence Laboratory
5	Practical	20CS512	Advanced Aptitude and Coding Skills - I
5	Practical	20CS513	Mini Project and Design Thinking Practices Laboratory
5	Theory	20CS917	Data science Fundamentals
5	Theory	20AI702	Natural Language Processing
7	Theory	MG8591	20CS701 Cloud Computing
7	Theory	CS8792	20AI402 Data Analytics
7	Theory	CS8791	20EC004 Industrial IoT Applications
7	Theory	OME752	20CS920 Block Chain Technologies
7	Theory	20IT928	Professional Readiness for Innovation, Employability & Entrepreneurship
7	Theory	20AI701	Deep Learning Techniques
7	Practical	20CS711	CloudComputingLaboratory
7	Practical	20CS712	Data Analytics and Machine Learning Laboratory
7	Practical	20CS713	Project Phase I

3rdSemester–B.E.CSE

22MA301- **DiscreteMathematics**	
Upon completion of the course, the students will be able to:….	
CO1	Validate the arguments using connectives and rule of inference.
CO2	Solve linear recurrence relations.
CO3	Determine Euler's path and Hamilton paths.
CO4	Identify algebraic structures of groups, rings, and fields
CO5	Interpret lattices as algebraic structures.

22CS302- Computer Organization and Architecture	
COs	Upon completion of the course, the students will be able to:
CO1	Explain the basic principles and operations of digital computers.
CO2	Design Arithmetic and Logic Unit to perform fixed and floating-point operations
CO3	Develop pipeline architectures for RISC Processors.
CO4	Summarize Various Memory systems & I/O interfacings.
CO5	Recognize Parallel Processor and Multi Processor Architectures.

22CS301 -Advanced Java Programming	
Upon completion of the course, the students will be able to:	
CO1	Apply collections and IO Streams to efficiently manage and process data structures and perform input/output operations in Java.
CO2	Apply Java Stream API and Junits to streamline data manipulation and perform unit testing for robust code development.
CO3	Develop a Seamlessly integrate object-oriented programming with database operations for web applications using hibernate.
CO4	Construct the power of the Spring Framework to provide a solid foundation for building scalable and maintainable applications.
CO5	Organize application logic, user interface, and data flow using the Spring MVC framework for efficient and modular development.

22CS303-Design and Analysis of Algorithms	
	Upon completion of the course, the students will be able to:
CO1	Solve mathematically the efficiency of recursive and non-recursive algorithms
CO2	Design and Analyze the efficiency of divide and conquer and transform and conquer algorithmic techniques
CO3	Implement and analyze the problems using dynamic programming
CO4	Solve the problems using and greedy technique and iterative improvement technique for optimization
CO5	Compute the limitations of algorithmic power and solve the problems using backtracking and branch and bound technique.

22CS304 -Operating Systems	
	Upon completion of the course, the students will be able to:
CO1	Implement the basic concepts of operating systems and process.
CO2	Analyse various CPU scheduling algorithms and thread mechanism.
CO3	Implement the concepts of process synchronization and deadlocks.
CO4	Design various memory management schemes to given situation.
CO5	Implement various I/O and file management techniques.

20CS311-Tamils and Technology	
	Upon completion of the course, the students will be able to:
CO1	Identify the role of weaving and ceramic technology in ancient Tamil Culture.
CO2	Assess the design and construction technology ideas in the current Tamil society
CO3	Identify the different types of manufacturing technology used in Tamil society and their significance.
CO4	Classify agricultural and irrigation technologies in ancient Tamil society and its current relevance.
CO5	Discuss the fundamentals of scientific Tamil and Tamil computing.

Laboratory

22ME311-Product Development Lab - 3	
Upon completion of the course, the students will be able to:	
CO1	Enhance their skills in design concepts, rules and procedures.
CO2	Develop their cognitive strategy to think, organize, learn and behave.
CO3	Demonstrate the ability to provide conceptual design strategies for a product.

22CS311-Aptitude and Coding Skills I	
Upon completion of the course, the students will be able to:	
CO1	Develop vocabulary for effective communication and reading skills..
CO2	Build the logical reasoning and quantitative skills.
CO3	Develop error correction and debugging skills in programming.

22CS312- Internship and Seminar	
….	
CO1	Developvocabularyforeffective communicationandreadingskills.
CO2	Buildthelogicalreasoningandquantitativeskills
CO3	Developerrorcorrectionanddebuggingskills inprogramming

5thSemesterB.E.CSE

20CS501- Computer Networks	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto ….**
CO1	Introducethebasicnotionsofgroupswhichwillbeusedtosolvegrouptheoryrelated problems.
CO2	Introducethebasicnotionsofrings,fieldswhichwillthenbeusedtosolverelated problems.
CO3	Introduceand applythe concepts ofrings,finitefields andpolynomials.
CO4	Understandthebasicconceptsinnumbertheory.
CO5	Examinethekeyquestions intheTheoryof Numbers.
CO6	Giveanintegratedapproachto numbertheoryandabstract algebra,and providea firm basisforfurther readingand studyin thesubject.

20AI401- Artificial Intelligence	
At the end of this course, the students will be able to: ….	
CO1	Illustrate the structure of agents and to implement various Intelligent agents.
CO2	Apply search strategies in problem solving and game playing using heuristic function
CO3	Implement logical agents and first-order logic problems.
CO4	Apply problem-solving strategies with knowledge representation mechanism for solving hard problems.
CO5	Demonstrate the basics of expert systems and to develop models using machine learning techniques.

20CS503- Theory of Computation	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Describethearchitectureof8086,addressingmodesandmachinelanguageinstruction formats.
CO2	DifferentiateminimumandmaximummodesofI/OProgramming
CO3	Describe8255 modesof operation,interfacingAtoD,DtoAconverters
CO4	Applytheprogrammingtechniquesindesigningsimpleassemblylanguageprogramsfor solving simple problems by using instruction sets ofmicrocontroller
CO5	Describethearchitectureof8051microcontrolleranditsaddressingmodes
CO6	Designamicrocontrollerbased system

CS8501-Theoryof Computation	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Studentsshouldbeabletodesignanautomatafor anygivenpattern
CO2	Studentsshould beableto specifyregularexpression foranystring pattern
CO3	Studentsshouldbeabletowritecontextfreegrammarforanylanguage
CO4	Studentsshould beabletoapplyturingmachine toproposecomputation solution
CO5	Studentsshouldbeabletointerpretwhetheraproblemisdecidableornot
CO6	StudentsshouldbeabletointerpretNPclass problems

CS8592-ObjectOrientedAnalysisand Design	
COs	**CourseOutcome:Thestudents,afterthecompletion ofthecourse,areexpectedto ….**
CO1	ExplainOOADconceptsand variousUMLdiagrams.
CO2	Illustrateaboutdomainmodelsandconceptualclasses
CO3	ExplainDynamicandimplementationUMLdiagram.
CO4	Selectanappropriatedesignpattern
CO5	DevelopCodefromDesign,Compareandcontrastvarious testingtechniques
CO6	DemonstratevariousdesigningTechniques

OCE552-GeographicInformationSystem	
COs	**CourseOutcome:Thestudents,afterthecompletion ofthecourse,areexpected to ….**
CO1	Outlinethebasicideaaboutfundamentals ofGIS.
CO2	Understandthetypes ofspatial datamodels.
CO3	Discussaboutthedatainputand topology.
CO4	Understandthedatamanagementfunctionsanddataoutput.
CO6	Outlinetheapplicationof GIS.
CO6	ApplytheGIStoolstodeveloprealtimeapplications.

EC8681-MicroprocessorsandMicrocontrollers Laboratory	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	WriteALPProgrammes forfixedandFloatingPointandArithmeticoperations.
CO2	InterfacedifferentI/Oswithprocessor.
CO3	GeneratewaveformsusingMicroprocessors.
CO4	ExecutePrograms in 8051.
CO5	Explainthedifferencebetweensimulatorand Emulator.

CS8582-ObjectOrientedAnalysisandDesignLaboratory	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	PerformOO analysisanddesignforagivenproblemspecification.
CO2	Identifyand mapbasicsoftwarerequirements inUMLmapping.
CO3	Improvethesoftwarequalityusingdesignpatternsandtoexplaintherationalebehind applying specific design patterns.
CO4	Testthecomplianceofthesoftwarewith theSRS.

CS8581-NetworksLaboratory	
COs	**CourseOutcome:Thestudents,afterthecompletion ofthecourse,areexpectedto ….**
CO1	ImplementvariousprotocolsusingTCPandUDP.
CO2	Compareheperformanceofdifferenttransportlayerprotocols.
CO3	Usesimulationtoolstoanalyzetheperformanceofvariousnetworkprotocols.
CO4	Analyzevariousroutingalgorithms.
CO5	Implementerrorcorrectioncodes.

7thSemesterB.E.CSE

MG8591-PrinciplesofManagement	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Describethehistoricalevolutionofmanagementtheoriesforbusiness organizations
CO2	Demonstratetheuseofplanningtools forstrategicmanagement.
CO3	Identifythemostappropriateorganizationalstructure.
CO4	DiscussHRstrategiesforplanning,recruitingand trainingemployees.
CO5	Explainthetheoriesofmotivationandleadershiptomanageagroup.
CO6	Summarizethecontrollingmethodsandtoolstoincreaseproductivityofthe Organization.

CS8792-CryptographyandNetworkSecurity	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Understandthefundamentalsofnetworkssecurity,securityarchitecture,threatsand vulnerabilities
CO2	Applythedifferentcryptographicoperationsofsymmetriccryptographicalgorithms
CO3	Applythedifferentcryptographicoperations ofpublickeycryptography
CO4	Applythevarious Authenticationschemestosimulatedifferent applications.
CO5	UnderstandvariousSecuritypractices
CO6	UnderstandSystemsecuritystandards

CS8791-CloudComputing	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	DescribetheprinciplesofParallelandDistributedComputingandevolutionofcloud computing from existing technologies
CO2	ImplementdifferenttypesofVirtualizationtechnologiesandServiceOriented Architecturesystems
CO3	Elucidatetheconcepts ofNISTCloudComputingarchitectureanditsdesign challenges
CO4	AnalysetheissuesinResourceprovisioningandSecuriztygovernancein clouds
CO5	Chooseamongvariouscloudtechnologiesforimplementingapplications
CO6	Installandusecurrentcloudtechnologies

OME752-SupplyChainManagement	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Understandfundamental supplychainmanagementconcepts.
CO2	Understandthedesignfactorsandvariousdesignoptionsofdistributionnetworksin industries
CO3	Understandtheframeworkofsupplychainnetworks and functions
CO4	Understandthefoundationalroleoflogisticsasitrelatestotransportationand warehousing.
CO5	Understandthevarious sourcingdecisionsin supplychain
CO6	UnderstandthesupplychainmanagementinITindustries

GE8077-TotalQualityManagement	
COs	**CourseOutcome:Thestudents, afterthecompletion of thecourse,areexpectedto ….**
CO1	Understandthequalityphilosophiesandcustomerfocusedmanagerial system
CO2	Summarizethequalitymanagementprinciples
CO3	Applysixsigmaconceptin manufacturingandservicesector
CO4	Determinethetoolsandtechniquesforqualityimprovement.
CO5	Analyzestandardsandauditingsystemonimplementationof TQM.
CO6	Analyzestandardsforthe operationofEMS.

CS8079-HumanComputerInteraction	
COs	**CourseOutcome:Thestudents, afterthecompletion of thecourse,areexpectedto ….**
CO1	ExaminetheeffectivedialogforHCI
CO2	Inspectinteractivedesignprocessinhumancomputerinteraction
CO3	InteractionInspectsoftwaredesignprocessinhumancomputerinteraction
CO4	Examinevariousmodels andtheoriesrelated tohumancomputer interaction
CO5	Utilizethe HCIimplications fordesigningmultimedia/ e-commerce/ e-learning Web sites
CO6	Buildmeaningfuluser interface

Laboratory

CS8711-CloudComputing Laboratory	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto ….**
CO1	ConfigurevariousvirtualizationtoolssuchasVirtualBox,VMwareworkstation
CO2	DesignanddeployawebapplicationinaPaaS environment
CO3	Learnhowtosimulateacloudenvironmenttoimplementnew schedulers
CO4	Installanduseagenericcloudenvironmentthatcanbeusedasaprivatecloud.
CO5	Manipulatelargedatasetsinaparallel environment

IT8761–SecurityLaboratory	
COs	**CourseOutcome:Thestudents, afterthecompletionofthecourse,areexpectedto ….**
CO1	DevelopcodeforclassicalEncryptionTechniquestosolvetheproblems
CO2	Buildcryptosystems byapplyingsymmetricandpublickeyencryptionalgorithms
CO3	Constructcodeforauthenticationalgorithms
CO4	DevelopasignatureschemeusingDigitalsignaturestandard
CO5	Demonstratethenetworksecuritysystemusingopensourcetools

CourseOutcomes–EVEN Semester 2023-2024

Sl.No.	Semester	Theory/ Practical	CourseCode/ CourseName
1)	4	Theory	22EC441 - Microcontrollers and Embedded Systems
2)	4	Theory	22MA401 - Probability and Statistics(LabIntegrated)
3)	4	Theory	22CS401 - Distributed and Cloud Computing(LabIntegrated)
4)	4	Theory	22CS402 - Web Development Frameworks (LabIntegrated)
5)	4	Theory	22AI301 - Artificial Intelligence (LabIntegrated)
6)	4	Theory	22CS907-Cloud Foundations (LabIntegrated)
7)	4	Practical	22CS901-Ethical Hacking
8)	4	Practical	22CS913- UI/UX Design
9)	4	Practical	20CS413-Internship
10)	4	Practical	20CS414-AptitudeandCodingSkills-II
11)	6	Theory	20CS601-CompilerDesign(Labintegrated)
12)	6	Theory	20CS602-CryptographyandNetworkSecurity
13)	6	Theory	20CS603-MobileComputing
14)	6	Theory	20AI502-MachineLearning
15)	6	Theory	20CS917-DataScienceFundamentals
16)	6	Theory	20CS918-GoogleCloud:ArchitectingwithGoogleCompute Engine
17)	6	Practical	20CS611-MobileApplicationDevelopmentLaboratory
18)	6	Practical	20CS612-Security Laboratory
19)	6	Practical	20CS613-Internship
20)	6	Practical	20CS614-AdvancedAptitudeandCodingSkills-II

EVENSemester2020-2021

4thSemester–B.E.CSE

22EC441 - Microcontrollers and Embedded Systems	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Understandthefundamentalknowledgeofmodernprobabilitytheoryandstandarddistributions.
CO2	Categorizetheprobabilitymodelsandfunctionofrandomvariablesbasedononeandtwodimensional randomvariables.
CO3	Employtheconceptoftestingthehypothesisinreallifeproblems.
CO4	Implementtheanalysisofvarianceforreallifeproblems.
CO5	Applythestatisticalqualitycontrolinengineeringandmanagementproblems.

22MA401 - Probability and Statistics(LabIntegrated)	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Explainthebasicprinciplesandoperationsofdigital computers.
CO2	DesignArithmeticandLogicUnittoperformfixedandfloatingpointoperations
CO3	DeveloppipelinearchitecturesforRISCProcessors.
CO4	SummarizeVariousMemorysystems&I/Ointerfacings.
CO5	RecognizeParallelProcessorandMultiProcessorArchitectures.

22CS401 - Distributed and Cloud Computing(LabIntegrated)	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Analysetheefficiencyofrecursiveandnon-recursivealgorithmsmathematically.
CO2	Analysetheefficiencyofbruteforce,divideandconquer,decreaseandconquer,Transformand conquer algorithmic techniques.
CO3	Implementandanalysetheproblemsusingdynamicprogrammingandgreedytechnique algorithmic techniques.
CO4	Solvetheproblemsusingiterativeimprovementtechniqueforoptimization.
CO6	OutlinethelimitationsofAlgorithmpower.

22CS401 - Distributed and Cloud Computing(LabIntegrated)	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto ….**
CO1	ConstructabasicwebsiteusingHTMLandCascadingStyle Sheets
CO2	BuilddynamicwebpagewithvalidationusingJavaScriptobjectsandbyapplyingdifferent event handlingmechanisms.
CO3	DevelopserversideprogramsusingServletsandJSP.
CO4	ConstructsimplewebpagesinPHPandtorepresent datainXMLformat.
CO6	Explainthedifferentadvanceddatabases

22CS402 - Web Development Frameworks (LabIntegrated)	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Implementthebasicconceptsofoperatingsystemsandprocess.
CO2	AnalysevariousCPUschedulingalgorithmsandthreadmechanism.
CO3	Implementtheconceptsofprocesssynchronizationanddeadlocks.
CO4	Designvariousmemorymanagementschemestogivensituation.
CO5	ImplementvariousI/Oandfilemanagementtechniques.

20EC441-MicroprocessorsandInterfacing(Lab Integrated)	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Acquireknowledgeofbasicarchitecture,operation,programmingofmicroprocessor8086.
CO2	Summarizethedesignofbasicandmultiprocessorsystemsandtheirbustimings.
CO3	Designthe8086interfaceswithmemory,I/Oandotherperipheralchips.
CO4	Describethebasicarchitectureandprogrammingofmicrocontroller8051.
CO5	Applyprogrammingconceptstoimplementmicrocontrollerinterfacesfordifferentapplications.
CO6	DesignandconstructMicroprocessorandMicrocontrollerbasedsystems.

Laboratory

20CS411-InternetProgrammingLaboratory	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	CreatewebpagesusingHTML/XMLandstylesheets.
CO2	DesignuserinterfacesusingJavaframesandapplets.
CO3	Developdynamicwebpagesusingserver-sidescriptingandPHPprogramming.
CO4	BuildapplicationswithAJAX.

CS8461-OperatingSystemsLaboratory	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	Practicesystemcallsandshell programming.
CO2	ImplementvariousCPUschedulingalgorithms.
CO3	Buildinterprocesscommunicationdeadlockdetectionandavoidancealgorithms.
CO4	Designpagereplacementanddiskschedulingalgorithms.
CO5	Implementfileallocationstrategies.

20CS414-AptitudeandCodingSkills-II	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	Developadvancedvocabularyforeffectivecommunicationandreadingskills.
CO2	Buildanenhancedleveloflogicalreasoningandquantitativeskills.
CO3	Developerrorcorrectionanddebuggingskillsinprogramming.
CO4	Applydatastructuresandalgorithmsinproblemsolving.

6thSemester–B.E.CSE

CS8651-InternetProgramming	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	CreateabasicwebsiteusingHTMLandCascadingStyleSheets
CO2	Designandimplementdynamicwebpagewithvalidationusing JavaScriptobjectsandby applying different event handling mechanisms
CO3	AccessJSONdatafiles andusethecontentwithinJavaScript
CO4	DesignandimplementserversideprogramsusingServlets,JDBCandJSP
CO5	DesignandimplementsimplewebpageinPHP,andtopresentdatainXMLformat
CO6	Designasimpleweb pageusingAJAX

CS8691-ArtificialIntelligence	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	UseappropriatesearchalgorithmsforanyAIproblem.
CO2	Representaproblemusingfirstorderandpredicatelogic.
CO3	Providetheapt agentstrategytosolveagiven problem.
CO4	Designsoftwareagents tosolveaproblem.
CO5	DesignapplicationsforNLPthatuseArtificialIntelligence.

CS8601-MobileComputing	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Understandthebasicconcepts ofmobilecomputing
CO2	Explainthebasicsofmobiletelecommunicationsystems
CO3	Illustratethegenerationsoftelecommunicationsystemsinwirelessnetworks
CO4	DemonstratethefunctionalityofMAC,networklayerandIdentifyaroutingprotocolfor a given Ad hoc network
CO5	ExplainthefunctionalityofTransport andApplication layers
CO6	Developamobileapplicationusingandroid/blackberry/ios/WindowsSDK

CS8602-CompilerDesign	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Designvariousphasesofcompiler,alexicalanalyzeranduseLEXtool.
CO2	Designasyntax analyzeranduseYACCtool.
CO3	Discussintermediatecodegeneration.
CO4	Discussthevariousstorageallocationstrategiesandimplement acode generator.
CO5	Applythevariousoptimizationtechniques.

CS8603-Distributed Systems	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse, areexpectedto ….**
CO1	Elucidatethefoundationsandissuesofdistributed systems.
CO2	Understandthevarioussynchronizationissuesandglobalstatefordistributedsystems.
CO3	ComprehendtheMutualExclusionandDeadlockdetectionalgorithmsindistributed systems.
CO4	Showtheuseofagreementprotocols andfaulttolerancemechanismsin distributed systems
CO5	Relatethefeaturesofpeer-to-peeranddistributedsharedmemorysystems
CO6	Interpretthereal-timedistributedsystemapplications

IT8076-SoftwareTesting	
COs	**CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpected to ….**
CO1	Designtestcases suitableforasoftwaredevelopmentfordifferent domains
CO2	Identifysuitabletests tobecarriedout
CO3	Preparetestplanningbasedon thedocument
CO4	Documenttestplansandtestcasesdesigned
CO5	Useautomatictestingtools
CO6	Developandvalidateatestplan

Laboratory

CS8661-InternetProgrammingLaboratory	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	ConstructWebpages usingHTML/XMLandstylesheets.
CO2	BuilddynamicwebpageswithvalidationusingJavaScriptobjectsandbyapplying different event handling mechanisms.
CO3	Developdynamicwebpagesusingserversidescripting.
CO4	UsePHPprogrammingtodevelopweb applications.
CO5	Constructwebapplications usingAJAXandwebservices

CS8662-MobileApplicationDevelopment Laboratory	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	DevelopmobileapplicationsusingGUIandLayouts.
CO2	DevelopmobileapplicationsusingEventListener.
CO3	DevelopmobileapplicationsusingDatabases.
CO4	DevelopmobileapplicationsusingRSSFeed,Internal/ExternalStorage,SMS, MultithreadingandGPS.
CO5	Analyzeanddiscoverownmobileapp forsimpleneeds.

CS8611MiniProject	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	OnCompletionoftheminiprojectstudentswillbeinapositiontotakeupchallengingreal world problems and find solution using appropriate methodology

HS8581ProfessionalCommunication	
COs	CourseOutcome:Thestudents,afterthecompletionofthecourse,areexpectedto....
CO1	Makeeffectivepresentations
CO2	ParticipateconfidentlyinGroupDiscussions.
CO3	Attendjobinterviewsandbesuccessfulinthem
CO4	DevelopadequateSoftSkillsrequiredfortheworkplace