B.Tech(CSE(N))–CURRICULUM(KITSW-URR24)
SEMESTER-wiseCurriculumwithSCHEMEOFINSTRUCTIONS

Abbreviations

L	LectureHour	O	OutsidetheClassWork(SelfStudy)Hours
T	TutorialHour	E	TotalEngagementinHours
P	PracticalHour	C	CreditAssigned

ISEMESTER

Stream–II

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
-	IKSC	U24IK100	AICTE Mandated Student Induction Programme (UniversalHumanValues-I)						-
1	BSC	U24MH101	DifferentialCalculus and Ordinary Differential Equations	2	1	-	6	9	3
2	BSC	U24CY102B	EngineeringChemistry	2	1	2	5	10	4
3	ESC	U24CI111	DigitalLogicDesign	2	1	-	4	7	3
4	ESC	U24CN104	ProgrammingforProblem SolvingwithC	2	1	2	5	10	4
5	HSMC	U24MH105	EnglishCommunication andReportWriting	2	-	-	3	5	2
6	VAC	U24VA106	Sports&Yoga	-	-	2	3	5	1
7	AEC	U24AE107	Engineering Graphics&CAD	-	-	2	2	4	1
8	ELC	U24EL108	Practicum-1	-	-	-	4	4	1
9	VAC	U24VA109XXXXX	SEA–I/SAA-1	-	-	-	2	2	1
10	AEC	U24AE110	Expert TalkSeries-1	-	-	-	1	1	1
			Total:	10	4	8	35	57	21
Summer/Inter-semBridge Courses (Approved by BoS and Dean,AA):1weekto10days:1credittoeachBridgecourseunder additionallearning(willbe printedongrade sheet)									

Stream-II

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	**BSC**	U24MH201	**MatrixTheoryandVector Calculus**	2	1	-	6	9	3
2	**BSC**	U24PY202B	**EngineeringPhysics**	2	1	2	5	10	4
3	**PCC**	U24CN203	**ComputerArchitectureand Organization**	2	1	-	4	7	3
4	**ESC**	U24CN204	**DataStructuresthrough C**	2	1	2	5	10	4
5	**ESC**	U24EE205B	**BasicElectricalEngineering**	2	1	2	5	10	4
6	**VAC**	U24VA206	**EnvironmentalStudies**	2	-	-	2	4	-
7	**ESC**	U24AE207	**IDEALabMakerspace**	-	-	2	2	4	1
8	**SEC**	U24SE208	**Programming Skill Development (PSD) Lab - 1**	-	-	2	2	4	1
9	**ELC**	U24EL209	**Practicum-2**	-	-	-	4	4	1
10	**VAC**	U24VA210XX XX X	**SEA-2/SAA-2**	-	-	-	2	2	1
11	**AEC**	U24AE211	**Expert TalkSeries-2**	-	-	-	1	1	1
			Total:	10	5	12	38	65	23
Summer/Inter-semBridge Courses (Approved byBoS and Dean,AA): 1 weekto10days:1credittoeach Bridge course underadditionallearning (willbeprintedongradesheet									

Pool–I(Physics)		
Sr.No.	**CourseCode**	**CourseTitle**
1.	U24PY202A	EngineeringPhysics *(forMechanicalEngineering)*
2.	U24PY202B	EngineeringPhysics *(CommontoCSM,CSD,CSN,CSO&IT)*

Pool–II(BasicElectrical&ElectronicsEngineering)		
Sr.No.	**CourseCode**	**CourseTitle**
1.	U24EE205A	BasicElectricalandElectronicsEngineering *(forMechanicalEngineering)*
2.	U24EE205B	BasicElectricalEngineering *(CommontoCSM,CSD,CSN,CSO&IT)*

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	**PCC**	U24CN301	**AutomataTheoryand CompilerDesign**	2	1	-	6	9	3
2	**PCC**	U24CN302	**OperatingSystems**	2	1	-	4	7	3
3	**PCC**	U24CN303	**AdvancedDataStructures**	2	1	2	5	10	4
4	**PCC**	U24CN304	**ComputerNetworks**	2	1	2	5	10	4
5	**PCC**	U24CN305	**Object oriented programming through java**	2	1	2	5	10	4
6	**VAC**	U24VA306B	**Soft&InterpersonalSkills**	-	-	2	2	4	1
7	**SEC**	U24SE307	**Programming Skill DevelopmentLab-02**	-	-	2	2	4	1
8	**ELC**	U24EL308	**Practicum-3**	-	-	-	4	4	1
9	**VAC**	U24VA309XXXXX	**SEA-3/SAA-3**	-	-	-	2	2	1
10	**AEC**	U24AE310	**ExpertTalkSeries-3**	-	-	-	1	1	1
			Total:	10	5	10	36	61	23
Summer/Inter-semBridgeCourses(ApprovedbyBoSand Dean,AA):1weekto10days:1credittoeachBridgecourseunder additional learning (will be printed on grade sheet)									

* DeanAAwillallotthecoursesSoft&InterpersonalSkills, QALRtothebranchesasperStream-I and Stream-II.

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	**BSC**	**U24MH401D**	**DiscreteMathematics and Probability, Statistics**	2	1	-	4	7	3
2	**PCC**	**U24CN402**	**DatabaseManagement Systems**	2	1	2	5	10	4
3	**PCC**	**U24CN403**	**DesignandAnalysisof Algorithms**	2	1	-	4	7	3
4	**PCC**	**U24CN404**	**Internetworksa nd Virtualization**	2	1	2	5	10	4
5	**PCC**	**U24CN405**	**PythonProgramming**	2	1	2	5	10	4
6	**VAC**	**U24VA406A**	**Quantitative Aptitude and Logical Reasoning**	2	-	-	2	4	2
7	**SEC**	**U24SE407**	**Programming Skill DevelopmentLab-03**	-	-	2	2	4	1
8	**ELC**	**U24EL408**	**Practicum-4**	-	-	-	4	4	1
9	**VAC**	**U24VA409XXX XX**	**SEA-4/SAA-4**	-	-	-	2	2	1
10	**AEC**	**U24AE410**	**Expert TalkSeries-4**	-	-	-	1	1	1
11	**VAC***	**U24CH411***	**EnvironmentalStudies***	2*	1*	-	2*	5*	3*
			Total:	12	5	8	34	59	24
Summer/Inter-semBridgeCourses(ApprovedbyBoSand Dean,AA):1weekto10days:1credittoeachBridgecourseun der additional learning (will be printed on grade sheet)									

ForLateralEntryStudentsOnly

*BranchSpecificMathematics:

BranchSpecificMathematics(Pool-4)			
S. No.	Course Code	CourseTitle	Commonto
1.	U24MH401A	NumericalandStatisticalMethods	**CE**
2.	U24MH401B	AppliedMathematicsforMechanicalEngineering	**ME**
3.	U24MH401C	AppliedMathematics	**EEE,ECE,ECI**
4.	U24MH401D	DiscreteMathematicsandProbability,Statistics	**CSE, IT,CSN,CSO**
5.	U24MH401E	EssentialMathematicsandStatisticsforMachine learning	**CSM**
6.	U24MH401F	EssentialMathematicsandStatisticsforDatascience	**CSD**

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	MOPEC	U24OE501YYX	MOPECElective–I	2	1	-	3	6	3
2	PCC	U24CN502	ArtificialIntelligenceand MachineLearning	2	1	2	5	10	4
3	PCC	U24CN503	WebProgramming	2	1	2	5	10	4
4	PCC	U24CN504	NetworkAutomation	2	1	2	5	10	4
5	HSMC	U24MB505X	ManagementBasket	2	1	-	2	5	3
6	IKSC	U24IK506B	UHV-II	2	-	-	2	4	2
7	SEC	U24CN507	DesignandAnalysisof AlgorithmsLab	-	-	2	2	4	1
8	HSMC	U24MH508	TechnicalEnglish	-	-	2	2	4	1
9	ELC	U24CN509	Seminar	-	-	-	2	2	1
10	AEC	U24AE510	Expert TalkSeries-5	-	-	-	1	1	1
			Total:	12	5	10	29	56	24
AdditionalLearning@:Maximumcreditsallowed for Honours/Minor				-	-	-	-	-	5
TotalcreditsforHonours/Minorstudents:				-	-	-	-	-	29
Summer/Inter-semBridgeCourses(ApprovedbyBoSand Dean,AA):1weekto10days:1credittoeachBridgecourse underadditional learning (willbeprintedongradesheet)									

#MULTIDISCIPLINARYOPENELECTIVES:Studenthastoselectonecourseas multidisciplinaryopen elective from any of the MOPEC Basket of courses offered by other departments.

* DeanAAwillallotthecourses**S&EBasket,ManagementCourseBasket**,tothebranchesa sper Stream-I and Stream-II.

@List of courses for additional learning through MOOCs towards Honours/Minor in Engineeringshall be prescribed by the department under Honours/ Minor Curricula

ManagementCoursesBasket		
Sr. No.	CourseCode	CourseTitle
1.	**U24MB505A**	ManagerialEconomicsandAccountancy
2.	**U24MB505B**	IndustrialPsychology
3.	**U24MB505C**	E-CommerceandDigitalMarketing
4.	**U24MB505D**	OrganizationalBehavior
5.	**U24MB505E**	AnyothercourseapprovedbyBoSChairandDeanAA

VI SEMESTER

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	PEC	U24CN601X	ProgramElective–I/MOOCs-I	2	1	-	3	6	3
2	PCC	U24CN602	CryptographyandNetwork Security	2	1	2	5	10	4
3	PCC	U24CN603	DevOps	2	1	2	5	10	4
4	PCC	U24CN604	InternetofThings	2	1	2	5	10	4
5	STEC	U24ST605X	S&EBasket	2	1	-	2	5	3
6	IKSC	U24IK606A	EITK	2	-	-	2	4	2
7	SEC	U24CN607	FullStackDevelopment	-	-	2	2	4	1
8	ELC	U24CN608	MiniProject	-	-	2	2	4	1
9	AEC	U24AE609	Expert TalkSeries-6	-	-	-	1	1	1
			Total:	12	5	10	27	54	23
	AdditionalLearning@:Maximumcreditsallowedfor Honours/Minor			-	-	-	-	-	5
	TotalcreditsforHonours/Minorstudents:			-	-	-	-	-	28
	Summer/Inter-semBridgeCourses(ApprovedbyBoSand Dean,AA):1weekto10days:1credittoeachBridgecourse underadditionallearning (will beprintedongradesheet)								

#MULTIDISCIPLINARYOPENELECTIVES:Studenthastoselectonecourseasmultidisciplinary open elective from any of the MOPEC Basket of courses offered by other departments.

@List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula

B.TechHonourswithResearch:

Students opting for B. Tech Honours with Research, shall undergo a 2-Month Mandatory ResearchInternship-II(5Credits)atrespectivedepartmentduringthesummervacationafterVI Semester.

Startups&EntrepreneurshipBasket		
Sr. No.	CourseCode	CourseTitle

1.	**U24ST605A**	DesignThinking	
2.	**U24ST605B**	Innovative ProductDesignandDevelopment	
3.	**U24ST605C**	Entrepreneurship	
4.	**U24ST605D**	DesignStudio	
5.	**U24ST606E**	AnyothercourseapprovedbyBoSChairandDeanAA	

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	MOPEC	U24OE701YYX	MOPECElective–II	2	1	-	3	6	3
2	PEC	U24CN702	PE-II/MOOCS-II	2	1	-	4	7	3
3	PCC	U24CN703	Computer Aided Software Engineering	2	1	2	5	10	4
4	PCC	U24CN704	DataCenterNetworking	2	1	2	5	10	4
5	ELC	U24CN705	InternshipEvaluation*	-	-	2	-	2	1
6	ELC	U24CN706	MajorProject,Phase-1/ IndustrialInternship-1	-	-	8	6	14	4
			Total:	10	5	12	25	52	19
	AdditionalLearning@:Maximumcreditsallowedfor Honours/Minor			-	-	-	-	-	4
	TotalcreditsforHonours/Minorstudents:			-	-	-	-	-	23

#MULTIDISCIPLINARYOPENELECTIVES:Studenthastoselectonecourseas multidisciplinary open elective from any of the MOPEC Basket of courses offered by other departments.

@ List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula

B.TechHonourswithResearch

   Students opting for B. Tech Honours with Research, shall complete Research Methodology Course(4 Credits) through MOOCS (OR) a workshop / FDP of not less than one week on "Research Methodologies" (4 Credits).

   Internship Evaluation for the students opting B. Tech Honours with Research,will be done on the 2-Month Research internship-II.

VIII Semester

Sl. No.	Category	CourseCode	CourseTitle	Lectures/week					Credits
				L	T	P	O	E	C
1	MOPEC	U24OE801YYX	MOPECElective–III	2	1	-	3	6	3
2	PEC	U24CN802	PE-III/MOOCS-III	2	1	-	4	7	3
3	PEC	U24CN803	PE-IV/MOOCS-IV	2	1	-	4	7	3
4	ELC	U24CN804	MajorProject,Phase–2/ IndustrialInternship-2	-	-	12	4	16	6
			Total:	6	3	12	15	36	15
AdditionalLearning@:Maximumcreditsallowedfor Honours/Minor				-	-	-	-	-	4
TotalcreditsforHonours/Minorstudents:				-	-	-	-	-	19

#MULTIDISCIPLINARYOPENELECTIVES:Studenthastoselectonecourseas multidisciplinary open elective from any of the MOPEC Basket of courses offered by other departments.

@ List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula

B.TechHonourswithResearch
StudentsoptingforB.TechHonourswithResearch,shallPublisharesearchpaperina reputed journal indexed by SCI / SCOPUS/Web of Science(4 Credits).

Summary

Semester	I	II	III	IV	V	VI	VII	VIII	Total
Credits	21	25	23	24	24	23	19	15	172