Curriculum

Programme Name:	B. Tech.CSE(Internet of Things)
Curriculum applicable to (for admitted year xxxx-xx	AY 2025-26
Curriculum Version:	1.0
Approved by & Date	1st Academic Council

University Core Min. Credit Requirements ------------> 88

Course Code	Category	Course Title	L	T	P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
	Projects and Internships	**All are compulsory courses except for choices**				18			
BIP402		Industrial Internship/ Senior Design Project	0	0	20	10	None	None	Engineering
CAP401		Capstone	0	0	8	4	None	None	Engineering
SIT301		Summer Internship / Global Industry Certification	0	0	4	2	None	None	Engineering
ECS201		Engineering Clinics - Multi Disciplinary Project	0	0	4	2	None	None	Engineering
	Engineering Foundation	**All are compulsory**				12			
UCS101		Introduction to Programming	3	0	0	3	None	None	Engineering
UCS101P		Introduction to Programming Lab	0	0	2	1			
UCS102		Problem Solving using Python	3	0	0	3	None	None	Engineering
UCS102P		Problem Solving using Python Lab	0	0	2	1			
UEC101		Basics of Electrical and Electronics Engineering	3	0	0	3	None	None	Engineering
UEC101P		Basics of Electrical and Electronics Engineering Lab	0	0	2	1			
	Discipline Linked Engineering	**Any 8 Credits based on Discipline**				8			
UCS201		Data Structures and Algorithms	3	0	0	3	None	None	Engineering
UCS201P		Data Structures and Algorithms Lab	0	0	2	1			
UCS202		Object Oriented Programming using JAVA	3	0	0	3	None	None	Engineering
UCS202P		Object Oriented Programming using JAVA Lab	0	0	2	1			
UME101		Workshop Practice	1	0	4	3	None	None	Engineering
UME102		Engineering Graphics Design	1	0	4	3	None	None	Engineering
UME103		Elements of Mechanical Engineering	2	0	0	2	None	None	Engineering
UCE101		Elements of Civil Engineering	2	0	0	2	None	None	Engineering
	Humanities Basket								
		All are cumpulsory				12			
USS101		Industry Specific Communication	3	0	0	3	None	None	Humanities
USS102		Quantitative Aptitude & Logical Reasoning	3	0	0	3	None	None	Humanities
USS201		Advanced Quantitative & Analytical Reasoning	3	0	0	3	USS102	None	Humanities
USS202		Industry oriented Programming skills	3	0	0	3	USS201	None	Humanities
		Any two English courses depending on SKEPT result				6			
UHM101		English for Essential Communication	2	0	0	2	EPT (Not Cleared)	None	Humanities
UHM101P		English for Essential Communication Lab	0	0	2	1			
UHM102		English for Effective Communication	2	0	0	2	EPT (Cleared) /UHM1	None	Humanities
UHM102P		English for Effective Communication Lab	0	0	2	1			
UHM103		Technical English Communication	2	0	0	2	UHM102	None	Humanities
UHM103P		Technical English Communication Lab	0	0	2	1			
		Any one Foreign Language course				2			
UFR101		Basic French	2	0	0	2	None	None	Humanities
UFR102		Basic Spanish	2	0	0	2	None	None	Humanities
UFR103		Basic German	2	0	0	2	None	None	Humanities
UFR104		Basic Japanese	2	0	0	2	None	None	Humanities
	Science Basket	**All are Compulsory**				20			
USC101		Differential Calculus	4	0	0	4	None	None	Science
USC102		Linera Algebra and Differential Equations	4	0	0	4	USC101	None	Science
USC201		Applied Statistics	3	0	0	3	None	None	Science
USC201P		Applied Statistics Lab	0	0	2	1			
USC103		Modern Physics	3	0	0	3	None	None	Science
USC103P		Modern Physics Lab	0	0	2	1			
USC105		Engineering Chemistry	3	0	0	3	None	None	Science
USC105P		Engineering Chemistry Lab	0	0	2	1			
	Non Graded Credit Courses	**All are Compulsory**				10			
UVC101	Online	Human Values and Ethics	2	0	0	2	None	None	NGCR
UVC202	Online	Indian Constituiton	2	0	0	2	None	None	NGCR
UVC103		Environmental Studies	2	0	0	2	None	None	
UVC203	Online	Indian Knowledge System	1	0	0	1	None	None	NGCR
EMC101		Entrepreneurship Setup and Launch	0	0	4	2	None	None	Entrepreneurship & Management
UVC201	Student Club Activities	Co/Extra Curricular	0	0	2	1	None	None	NGCR

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Course Code	Category	Course Title	L	T	P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
CSE201		Discrete Mathematical Structures	4	0	0	4	None	None	Science
CSE202		Digital Logic Design	3	0	0	3	UEC101	None	Engineering
CSE202P		Digital Logic Design Lab	0	0	2	1			
CSE203		Software Engineering	3	0	0	3	None	None	Engineering
CSE204		Database Management Systems	3	0	0	3	CSE201	None	Engineering
CSE204P		Database Management Systems Lab	0	0	2	1			
CSE301		Computer Architecture and Organization	4	0	0	4	CSE202	None	Engineering
CSE302		Operating Systems	3	0	0	3	None	None	Engineering
CSE302P		Operating Systems Lab	0	0	2	1			
CSE303		Artificial Intelligence	3	0	0	3	None	None	Engineering
CSE303P		Artificial Intelligence Lab	0	0	2	1			
CSE304		Design and Analysis of Algorithms	3	0	0	3	UCS201	None	Engineering
CSE304P		Design and Analysis of Algorithms Lab	0	0	2	1			
CSE305		Computer Networks	3	0	0	3	None	None	Engineering
CSE305P		Computer Networks Lab	0	0	2	1			
CSE306		Theory of Computation	4	0	0	4	None	None	Engineering
CSE401		Web Technologies	3	0	0	3	UCS202	None	Engineering
CSE401P		Web Technologies Lab	0	0	2	1			

Specialization Electives Min. Credit Requirements ---------->

Course Code	Category	Course Title	L	T	P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
						24			
		Any course to fulfill the basket requirements							
CSE208		Internet of Things	3	0	0	3	None	None	Engineering
CSE208P		Internet of Things Lab	0	0	2	1			
CSE213		IoT Architecture and Protocols	3	0	0	3	CSE208	None	Engineering
CSE213P		IoT Architecture and Protocols Lab	0	0	2	1			
CSE214		Embedded Systems and Microcontrollers	3	0	0	3	CSE202	None	Engineering
CSE214P		Embedded Systems and Microcontrollers Lab	0	0	2	1			
CSE326		Wireless Sensor Networks	3	0	0	3	CSE305	None	Engineering
CSE326P		Wireless Sensor Networks Lab	0	0	2	1			
CSE327		Big Data Analytics for IoT	3	0	0	3	CSE204	None	Engineering
CSE327P		Big Data Analytics for IoT Lab	0	0	2	1			
CSE421		IoT Security and Privacy	3	0	0	3	CSE208	None	Engineering
CSE421P		IoT Security and Privacy Lab	0	0	2	1			
CSE422		Blockchain for IoT Applications	3	0	0	3	CSE208	None	Engineering
CSE423		Smart Cities and Industrial IoT Applications	3	0	0	3	CSE208	None	Engineering
CSE424		Cloud Computing for IoT	3	0	0	3	CSE208	None	Engineering

Open Electives Min. Credit Requirements ---------->

Course Code	Category	Course Title	T		P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
						9			
Any Course after fulfilling Programme Core & Unified Core requirements without duplicity can be taken as Open Elective									

Credit Distribution

CSE(Internet of Things)	Credits
University Core Courses	**88**
Engineering Foundation	20
Science Basket	20
Projects and Internships	18
Humanities	20
Value Added Courses	10
Programme Core Courses	**43**
Programme/ Specialization Elective Courses	**24**
Open Elective Courses	**9**
Total Credits	**164**