

Curriculum

Programme Name: B. Tech. AIML

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						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						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						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						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) /UHM	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						20			
USC101		Differential Calculus	4	0	0	4	None	None	Science
USC102		Linear 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						10			
UVC101	Online	Human Values and Ethics	2	0	0	2	None	None	NGCR
UVC202	Online	Indian Constitution	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

Program Core Min. Credit Requirements ----->**43**

Course	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			
Program Electives Min. Credit Requirements ----->						24			
Course	Category	Course Title	L	T	P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
		Any course to fulfill the basket requirements							
CSE205		Foundations for Data Analytics	3	0	0	3	CSE201	None	Engineering
CSE205P		Foundations for Data Analytics Lab	0	0	2	1			
CSE207		Introduction to Machine Learning	3	0	0	3	None	None	Engineering
CSE207P		Introduction to Machine Learning Lab	0	0	2	1			
CSE307		Knowledge Representation and Reasoning	3	0	0	3	None	None	Engineering
CSE307P		Knowledge Representation and Reasoning Lab	0	0	2	1			
CSE308		Distributed Systems	3	0	0	3	None	None	Engineering
CSE308P		Distributed Systems Lab	0	0	2	1			
CSE309		NoSQL Database	3	0	0	3	CSE204	None	Engineering
CSE309P		NoSQL Database Lab	0	0	2	1			
CSE310		Cloud Computing	3	0	0	3	None	None	Engineering
CSE310P		Cloud Computing Lab	0	0	2	1			
CSE311		Agent Based Intelligent Systems	3	0	0	3	CSE303	None	Engineering
CSE311P		Agent Based Intelligent Systems Lab	0	0	2	1			
CSE402		Data Visualization	3	0	0	3	UCS102	None	Engineering
CSE402P		Data Visualization Lab	0	0	2	1			
CSE403		Natural Language Processing	3	0	0	3	CSE303	None	Engineering
CSE403P		Natural Language Processing Lab	0	0	2	1			
CSE404		Introduction to Cognitive Modelling	3	0	0	3	CSE207	None	Engineering
CSE404P		Introduction to Cognitive Modelling Lab	0	0	2	1			
CSE405		DataBase Administration	3	0	0	3	CSE204	None	Engineering
CSE405P		DataBase Administration Lab	0	0	2	1			
CSE406		Reinforcement Learning	3	0	0	3	CSE207	None	Engineering
CSE406P		Reinforcement Learning Lab	0	0	2	1			
CSE407		Generative AI	3	0	0	3	CSE303	None	Engineering
CSE407P		Generative AI Lab	0	0	2	1			
CSE408		Computer Vision	3	0	0	3	CSE325	CSE415	Engineering
CSE408P		Computer Vision Lab	0	0	2	1			
CSE418		Deep learning	3	0	0	3	CSE207	None	Engineering
CSE418P		Deep learning Lab	0	0	2	1			
Open Electives Min. Credit Requirements ----->						9			
Course	Category	Course Title	L		P	C	Pre/Co-Requisite	Anti-requisite	Course Discipline
Any Course after fulfilling Programme Core & Unified Core requirements without duplicity can be taken as Open Elective									

Credit Distribution

AIML	Credits
University Core Courses	88
Engineering Foundation	20
Science Basket	20
Projects and Internships	18
Humanities	20
Value Added Courses	10
Program Core Courses	43
Program/ Specialization Elective Courses	24
Open Elective Courses	9
Total Credits	164