

B.Sc Computer Science with Artificial Intelligence
CURRICULUM FRAMEWORK 2025 – 2028 Batch

SEM	PART	COURSE COMPONENT	COURSE CODE	TITLE OF THE PAPER	CREDITS	CIA	ESE
I YEAR I SEMESTER	I	Foundation Course	25ULTFC1S01/ 25ULHFC1S01/ 25ULSFC1S01/ 25ULFFC1S01	Tamil-I/ Hindi -I/ Sanskrit-I/ French-I	3	40	60
	II	Foundation Course	25UGEFC1S01	English-I	3	40	60
	III	Core Theory-I	25UGAICT1001	Python Programming	3	40	60
		Core Theory-II	25UGAICT1002	Principles of Artificial Intelligence	3	40	60
		Core Theory-III	25UGAICT1003	Data Analytics	3	40	60
		Core Practical - I	25UGAICP1001	Python and Data Analytics - lab	3	40	60
		Generic Specific Elective I (Theory)	25UAIGT1001	Mathematical Foundations for AI	5	40	60
	IV	Life Skill - 1		Problem solving through Activities - I	2		
I YEAR II SEMESTER	I	Foundation Course		Tamil-II/ Hindi -II/ Sanskrit-II/ French-II	3	40	60
	II	Foundation Course		General English-II	3	40	60
	III	Core Theory-IV		Java Programming	3	40	60
		Core Theory-V		Operating Systems	3	40	60
		Core Theory-VI		Data Structures and Algorithms	3	40	60
		Core Practical - II		Data Structures and Algorithms using Java Lab	3	40	60
		Generic Specific Elective II (Theory)		Numerical Methods	5	40	60
	IV	Life Skill-II		Universal Human Values	2	50	
		Value Education		Environmental Studies	2	50	
		Students Progression Bodies		Students Progression Activities	2		

II YEAR III SEMESTER	I	Foundation Course		Tamil-III/ Hindi -III/ Sanskrit-III/ French-III	3	40	60
	II	Foundation Course		English-III	3	40	60
	III	Core Theory-VII		Generative Artificial Intelligence	3	40	60
		Core Theory-VIII		Database Management Systems	3	40	60
		Core Theory-IX		Data Ethics And Privacy	2	40	60
		Core Practical - III		Database Management Systems - Lab	3	40	60
		Generic Specific Elective III (Theory)		Descriptive Statistics	5	40	60
	IV	Non Major Elective I		Office Automation	2	50	
		Value Education		Yoga and Wellness	2	50	
II YEAR IV SEMESTER	I	Foundation Course		Tamil-IV/ Hindi -IV/ Sanskrit-IV/ French-IV	3	40	60
	II	Foundation Course		General English-IV	3	40	60
	III	Core Theory- X		Machine Learning	3	40	60
		Core Theory - XI		Full Stack Web Development	2	40	60
		Core Theory – XII		Computer Vision	2	40	60
		Core Practical - IV		Machine Learning and Computer Vision - Lab	3	40	60
		Generic Specific Elective IV (Theory)		Applied Statistics	5	40	60
	IV	Non Major Elective II		Advanced Web Development	2	50	
		Life Skill-III		Essentials of Effective Communicatio n Skill	2	50	
				One Month Internship			

III YEAR V SEMESTER	III	Core Theory- XIII		Explainable Artificial Intelligence	3	40	60
		Core Theory-XIV		Natural Language Processing	3	40	60
		Core Theory - XV		Reinforcement Learning	3	40	60
		Core Practical - V		Artificial Intelligence and Natural Language Processing - Lab	3	40	60
		Discipline Specific Elective I (Theory)		Full Stack Web Development/ Principles of Cyber Security / Data Warehousing and Mining	5	40	60
	IV	Skill Based Elective		Fundamentals of Recruitment and Talent Acquisition	3	50	
		Life Skill-IV		NPTEL/Swayam	2	50	
		Ability Enhancement-I		Embedded Systems	2	50	
III YEAR VI SEMESTER	III	Core Theory - XVI		Deep Learning	3	40	60
		Core Elective - I		Capstone Project	5	40	60
		Discipline Specific Elective II (Theory)		Applications of Artificial Intelligence/ Robotic Process Automation/ Cloud Computing	5	40	60
		Skill Enhancement		Online Certification Courses	3	50	
	IV	Ability Enhancement-II		Social Media Analytics	2	50	
		Skill Development		Add on Courses	2		
	V	Extra Credits		Sports	1	-	-
TOTAL					150		

Discipline Specific Electives

<u>List of Courses Offered in V Semester</u>	<u>List of Courses Offered in VI semester</u>
Full Stack Web Development	Applications of Artificial Intelligence
Principles of Cyber Security	Robotic Process Automation
Data Warehousing and Mining	Cloud Computing

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