

DEPARTMENT OF AIML-Curriculum Draft

1st Year Semester I

sr.no	Broad Category	Category code	Paper Code	Course	Contact Hours/ Week				Credit Points	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total
Part A: UG Certificate course															
1	Basic Sciences	BSC			3	0	1		4	25	25	50			100
	Basic Sciences	BSC			3	0	0		3	25	25	50			100
2	Engineering Science	ESC			3	0	0		3	25	25	50			100
	Engineering Science	ESC			3	0	0		3	25	25	50			100
4	Ability Enhancement Course	AEC		Communication skill	2	0	0		2	25	25	50			100
	Engineering Science	ESC			0	2	0		1				25	25	50
	Basic Sciences	BSC			0	2	0		1				25	25	50
	Engineering Science	ESC			0	2	0		1				25	25	50
3	Vocational and Skill Enhancement Course (VSEC)	VSEC		practical of any ESC can be taken	0	4	0		2					25	25
5	Co-curricular Courses (CC)	CC		Yoga		4	0		2				25	0	25
			rs:		14	14	1		22						700

1st Year Semester II

sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total
Part B: UG Certificate course															
1	Basic Sciences	BSC			3	0	0		3	25	25	50			100
2	Basic Sciences	BSC			3	0	0		3	25	25	50			100
3	Engineering Science	ESC			3	0	0		3	25	25	50			100

4	Engineering Science	ESC			3	0	0		3	25	25	50			100
5	Programme Core	PCC			3	0	0		3	25	25	50			100
6	General Knowledge	IKS		BASICS OF ART	1	0	0		1				25	0	25
7	Basic Sciences	BSC			0	2	0		1				25	25	50
8	Engineering Science	ESC			0	2	0		1				25	25	50
9	Vocational and Skill	VSEC		practical of any PCC can be take	0	4	0		2				25	25	50
10	Programme Core	PCC			0	2	0		1				25	25	50
11	Co-curricular Courses	CC		NSS / NCC / Club Activities	0	0	2		2				25	0	25
12	Non credit mandatory	AU		SOFT SKILL	2	0	0		0				0	0	0
			S:		18	10	2		23						750

2nd Year Semester III

sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total
Part A: Diploma certificate course															
1	than a particular	OE		From Open Elective Bucket	3	0	0		3	25	25	50			100
2	Programme Core Course	PCC		Algorithm	2	0	0		2	25	25	50			100
3	Programme Core Course	PCC		Mathematic Foundation for AI	3	0	0		3	25	25	50			100
4	Programme Core Course	PCC		Computer Organization & Architecture	3	0			3	25	25	50			100
5	Multidisciplinary Minor	MDM		From MDM Bucket	2	0	0		2	25	25	50			100
6	Economics/	EMC		Engineering Management - I	2	0	0		2	25	25	50			100
7	Value Education Course	VEC		Environmental Science (SWAYAM/NPTEL)	2	0	0		2				50	0	50
8	Programme Core Course	PCC		Data Structures Lab	0	2	0		1				25	25	50
10	Commr. Engg. Project /Field Project	CEP / FP		MINI PROJECT	0	4	0		2				50	0	50
	Non credit mandatory	AU		Constitution of India	2				0						
11	Non credit mandatory	AU		UHV I	2				0						
				Total Hours:	21	6	0		20						750

UHV - I Non credit mandatory course to be taken

2nd Year Semester IV

sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme						
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total	
Part B: Diploma certificate course																
1	than a particular	OE		From Open Elective Bucket	2	0	0		2	25	25	50			100	
2	Programme Core	PCC		Artificial Intelligence #	3	0	0		3	25	25	50			100	
3	Programme Core Course	PCC		OOP in Java	3	0	0		3	25	25	50			100	
4	Programme Core Course	PCC		Operating Systems	3	0	0		3	25	25	50			100	
5	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100	
6	Economics/	EMC		Engineering Management - II	2	0	0		2	25	25	50			100	
7	Value Education Course	VEC		UHV - II	2	0	0		2				50	0	50	
8	Programme Core	PCC		OOP in Java Lab	0	2	0		1				25	25	50	
10	Ability Enhancement Course	AEC		Technical Report writing/ PROFESSIONAL SKILL	0	4	0		2				25	25	50	
11	Vocational and Skill Enhancement Course	VSEC		Advance Python Programming	0	2	0		1				25	25	50	
12	Non credit mandatory	AU		AMBEDKAR / CH. SHIVAJI	2											
			s:		20	8	0		22						800	

3rd Year Semester V

sr.no	Broad Category	Category	er Cod	Course	Contact	Hours/ Week			Credit Points	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total
Part A: Bachelors degree certificate course															
1	than a particular	OE		From Open Elective Bucket	3	0	0		3	25	25	50			100
2	Programme Core	PCC		Machine Learning #	3	0	0		3	25	25	50			100
3	Programme Core	PCC		Theory of Computations	3	0	0		3	25	25	50			100
4	Programme Core	PCC		Database Systems	3	0	0		3	25	25	50			100
5	Programme Elective	PEC		From PEC Bucket	3	0	0		3	25	25	50			100
6	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100

7	Programme Core Course	PCC		Database Systems Lab	0	2	0		1				25	25	50
8	Programme Core Course	PCC		Machine Learning Lab	0	2	0		1				25	25	50
10	Programme Elective Course	PEC		From PEC Bucket	0	2	0		1				25	25	50
11	Indian Knowledge System	IKS		Modern Indian Language:	1				1						
12	Non credit mandatory	AU		AMBEDKAR / CH. SHIVAJI	2										
			S:		21	6	0		22						750

3rd Year Semester VI

sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme						
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total	
Part B: Bachelors degree certificate course																
1	Programme Core Course	PCC		Deep Learning #	3	0	0		3	25	25	50			100	
2	Programme Core Course	PCC		Natural Language Processing	3	0	0		3	25	25	50			100	
3	Programme Core Course	PCC		Prompt Engineering	3	0	0		3	25	25	50			100	
4	Programme Elective Course	PEC		From PEC Bucket	4	0	0		4	25	25	50			100	
5	Programme Elective Course	PEC		From PEC Bucket	3	0	0		3	25	25	50			100	
6	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100	
8	Vocational and Skill Enhancement Course	VSEC		Natural Language Processing	0	4	0		2				25	25	50	
9	Vocational and Skill Enhancement Course	VSEC		Deep Learning Lab #	0	2	0		1				25	25	50	
10	Programme Elective Course	PEC		From PEC Bucket	0	2	0		1				25	25	50	
11	Non credit mandatory	AU			2											
			S:		21	8	0		23						750	

4th Year Semester VII

sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme						
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total	
Part B: Bachelors Honours certificate course																
1	Programme Core Course	PCC		Computer Vision	3	0	0		3	25	25	50			100	

2	Programme Core Course	PCC		Information Retrieval in AI	2	0	0		2	25	25	50			100
3	Programme Elective Course	PEC		From PEC Bucket	4	0	0		4	25	25	50			100
4	Programme Elective Course	PEC		From PEC Bucket	3	0	0		3	25	25	50			100
5	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100
6	Programme Elective Course	PEC		From PEC Bucket	0	2	0		1				25	25	50
8	Project	PRJ - I			0	4	0		2				100	50	150
			S:		15	6	0		18						700

4th Year Semester VIII

Sr.no	Broad Category	Category	er Cod	Course	Contact Hours/ Week				Credit Points	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	ICA	ESE	Total
Part A: Bachelors Honours certificate course															
1	Internship/ Job training	OJT			0	24	0		12				100	50	150
2	Project	PRJ - II			0	4	0		2				100	150	250
4	Research methodology	RM		A survey / review paper must be published	4	0	0		4				25	25	50
			S:		4	28	0		18						450

Total credits for all the 04 years for completing one major / one minor degree course	per above scheme
168	5650

OPEN ELECTIVES

Sr No	Subject Name	Sem
1	Digital Electronics & Logic Design	III
2	Basics of Electronics	III
3	Object Oriented Modeling & Design	III
1	Research Methodology	IV
2	Predictive Analytics	IV
3	Introduction to Business Intelligence	IV
1	Mobile Computing	V
2	Quantum Computing	V
3	Introduction to Soft Computing	V

PEC Theory

SR No	Subject Name	Sem
1	Pattern Recognition and Optimization	Sem V
2	Fundamental of Digital Image Processing	
3	Human-Computer Interaction (HCI) / UI-UX	
1	Cloud Computing	Sem VI
2	High Performance Database	
3	Large Language Models (LLMs)	
1	Generative AI	Sem VII
2	Data Analytics and Visualization	
3	Software Testing and Quality Assurance	

Sr. No	PEC Theory	Sem
1 *	Prompt Engineering	V
2 *	Data Analytics	
3 *	Reinforcement Learning	
1	Computer Network	VI
2	Cyber Security	
3	Software Testing Methodologies	
1	Blockchain Technology	VII
2	Virtual Reality	
3	Social Network Analysis	

PEC Lab

Subject Name	Sem
Pattern Recognition and Optimization Lab	Sem V
Image Processing Lab	
UI UX Design Lab	
Cloud Lab	Sem VI
High Performance Database Lab	
LLM Lab (Prompt tuning, fine-tuning)	
Generative AI Lab	Sem VII
Power BI and Tableau	
Software Testing and Quality Assurance Lab	