Faculty of Engineering, School of Computer Science & Engineering
Department of Artificial Intelligence & Machine Learning
Degree: B. Tech. (Hons) CSE (AIML) Total Credit: 178 (160 + 18*)

	Third Semester						**Fourth Semester**			•	
Code	**Subject Name**	**L**	**T**	**P**	**C**	**Code**	**Subject Name**	**L**	**T**	•	**C**
MAS21XX[i]	Statistics & Probability	3	0	0	3	**MEE22XX**	Engineering Economics	3	0	•	3
MBB21XX	Management of Technology	3	0	0	3	**AIM2201**	Design and Analysis of Algorithms	3	1	•	4
AIM2101	Data Structures and Algorithms	3	1	0	4	**AIM2202**	Operating Systems	3	1	•	4
AIM2102	Relational Database Management System	3	1	0	4	**AIM2220/AIM2221**	Software Engineering & Project Management /Agile Software Development	3	1	•	4
AIM2103	Principles of Artificial Intelligence	3	1	0	4	**AIM22XX**	Program Elective 1	3	0	•	3
AIM2120/ AIM2121	Object Oriented Programming using Python/ Object Oriented Programming using Java	3	1	0	4	**AIM0001**	Open Elective 1	3	0	•	3
AIM2130	Data Structures and Algorithms Lab	0	0	2	1	**AIM2230**	Design and Analysis of Algorithms Lab	0	0	•	1
AIM2131	Relational Database Management System Lab	0	0	2	1	**AIM2231**	Operating Systems Lab	0	0	•	1
AIM2170	Project-based Learning 1	0	0	2	1	**AIM2270**	Project-based Learning 2	0	0	•	1
		18	4	6	25			18	3	•	24
	Total Contact Hours (L+T+P)	**28**					**Total Contact Hours (L+T+P)**	• • **27**			
	Fifth Semester						**Sixth Semester**			•	
Code	**Subject Name**	**L**	**T**	**P**	**C**	**Code**	**Subject Name**	**L**	**T**	•	**C**
AIM3102	Machine Learning	3	1	0	4	**AIM3201**	Deep Learning	3	1	•	4
AIM3102	Automata Theory & Compiler Design	3	1	0	4	**AIM32XX**	Program Elective 4	3	0	•	3
AIM3120/ AIM3121	Computer Networks/ Data Communication and Networking	3	1	0	4	**AIM32XX**	Program Elective 5	3	0	•	3
AIM31XX	Program Elective 2	3	0	0	3	**AIM32XX**	Program Elective 6	3	0	•	3
AIM31XX	Program Elective 3	3	0	0	3	**AIM0003**	Open Elective 3	3	0	•	3
AIM0002	Open Elective 2	3	0	0	3	**AIM3202**	Professional Practice	0	0	•	1

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AIM3130	Machine Learning Lab	0	0	2	1	AIM3230	Deep Learning Lab	0	0	•	1
AIM3131	Computer Networks Lab/ Data Communication and Networking Lab	0	0	2	1	AIM3231	Emerging Tools and Technologies Lab	0	0	•	1
AIM3170	Project-based Learning 3	0	0	2	1	AIM3270	Project-based Learning 4	0	0	•	3
AIM3180	Research Methodology	1	0	0	1	AIM328X*	Honors Elective1	3	0	•	3
		19	3	6	25			18	1	•	22
	Total Contact Hours (L+T+P)	**28**					**Total Contact Hours (L+T+P)**	• • **31**			
	Seventh Semester						**Eighth Semester**			•	
Code	**Subject Name**	**L**	**T**	**P**	**C**	**Code**	**Subject Name**	**L**	**T**	•	**C**
AIM41XX	Program Elective 7	3	0	0	3	AIM4270	Major Project	_	_	•	12
AIM41XX	Program Elective 8	3	0	0	3	AIM428X*	Honors Project	_	_	•	8
AIM00XX	Open Elective 4	3	0	0	3					•	
AIM00XX	Open Elective 5	3	0	0	3					•	
AIM4170	Internship (Industry or Research)	0	0	2	1					•	
AIM418X*	Honors Elective 2	3	0	0	3					•	
AIM418X*	Honors Elective 3	3	0	0	3					•	
		18	0	2	19					•	20
	Total Contact Hours (L+T+P)	**20**					**Total Contact Hours (L+T+P)**			•	

Flexi Core		
Flexi Core 1 (III Sem)	**Flexi Core 2 (IV Sem)**	**Flexi Core 3 (V Sem)**
AIM2120: Object Oriented Programming using Python **AIM2121:** Object Oriented Programming using Java	**AIM2220:** Software Engineering & Project Management **AIM2221**: Agile Software Development	**AIM3120:** Computer Networks **AIM3121:** Data Communication and Networking.

Program Electives			
IV	**V**	**VI**	**VII**
Example - PE1 • **AIM2240**: Computer Organization and Architecture • **AIM2241**: Cloud Computing	**Example - PE2** • **AIM3140**: Web Technologies • **AIM3141:** NoSQL Databases • **AIM3142:** Linux System Administration and Shell Scripting **Example - PE3** • **AIM3143:** Recommender Systems • **AIM3144:** High Performance Computing	**Example - PE 4** • **AIM3240:** Computer Vision • **AIM3241:** Natural Language Processing **Example - PE5** • **AIM3242:** Sentiment Analysis and Opining Mining • **AIM3243:** Artificial Intelligence in Cyber Security **Example - PE6** • **AIM3244:** Explainable AI • **AIM3245:** Generative AI	**Example - PE 7** • **AIM4140:** Big Data Analytics • **AIM4141:** Human Computer Interaction **Example - PE8** • **AIM4142:** MLOps • **AIM4143:** Reinforcement Learning

Open Electives	
Graded OE	**Non-Graded OE**
OE1 AIM0001: Python Programming **OE2 AIM0002**: Data Structures **OE3 AIM0003**: Introduction to Machine Learning **OE4 AIM0004**: Data Visualization Techniques **OE5 AIM0005**: Introduction to Deep Learning	

Program Electives for Honors
VI / VII
AIM3280: AI for Medical Image Analysis **AIM3281**: Soft Computing Paradigm **AIM4180**: Robotics & Intelligent Systems **AIM4181**: Remote Sensing and GIS **AIM4182**: Social Networks Analysis **AIM4183**: Augmented and Virtual Reality

[i] Statistics & Probability: CSE, AIML, SEEC students will take in 3rd semester. Engineering Economics: SIT, SCCE, All Core (-) SEEC will take in 3rd semester. In 4th semester, these courses are switched.