Degree: B. Tech. CSE (AIML)   Total Credit: 160

Third Semester						Fourth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
MAS21XX[i]	Statistics & Probability	3	0	0	3	MEE22XX	Engineering Economics	3	0	0	3
MBB21XX	Management of Technology	3	0	0	3	AIM2201	Design and Analysis of Algorithms	3	1	0	4
AIM2101	Data Structures and Algorithms	3	1	0	4	AIM2202	Operating Systems	3	1	0	4
AIM2102	Relational Database Management System	3	1	0	4	AIM2220/AIM2221	Software Engineering & Project Management /Agile Software Development	3	1	0	4
AIM2103	Principles of Artificial Intelligence	3	1	0	4	AIM22XX	Program Elective 1	3	0	0	3
AIM2120/ AIM2121	Object Oriented Programming using Python/ Object Oriented Programming using Java	3	1	0	4	AIM0001	Open Elective 1	3	0	0	3
AIM2130	Data Structures and Algorithms Lab	0	0	2	1	AIM2230	Design and Analysis of Algorithms Lab	0	0	2	1
AIM2131	Relational Database Management System Lab	0	0	2	1	AIM2231	Operating Systems Lab	0	0	2	1
AIM2170	Project-based Learning 1	0	0	2	1	AIM2270	Project-based Learning 2	0	0	2	1
		18	4	6	25			18	3	6	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	P	C
AIM3102	Machine Learning	3	1	0	4	AIM3201	Deep Learning	3	1	0	4
AIM3102	Automata Theory & Compiler Design	3	1	0	4	AIM32XX	Program Elective 4	3	0	0	3
AIM3120/ AIM3121	Computer Networks / Data Communication and Networking	3	1	0	4	AIM32XX	Program Elective 5	3	0	0	3
AIM31XX	Program Elective 2	3	0	0	3	AIM32XX	Program Elective 6	3	0	0	3
AIM31XX	Program Elective 3	3	0	0	3	AIM0003	Open Elective 3	3	0	0	3
AIM0002	Open Elective 2	3	0	0	3	AIM3202	Professional Practice	0	0	2	1
AIM3130	Machine Learning Lab	0	0	2	1	AIM3230	Deep Learning Lab	0	0	2	1
AIM3131	Computer Networks Lab/ Data Communication and Networking Lab	0	0	2	1	AIM3231	Emerging Tools and Technologies Lab	0	0	2	1
AIM3170	Project-based Learning 3	0	0	2	1	AIM3270	Project-based Learning 4	0	0	6	3
		18	3	6	24			15	1	12	22
	Total Contact Hours (L+T+P)		27				Total Contact Hours (L+T+P)				28

	Seventh Semester	L	T	P	C	Eighth Semester		L	T	P	C
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
AIM41XX	Program Elective 7	3	0	0	3	AIM4270	Major Project	-	-	-	12
AIM41XX	Program Elective 8	3	0	0	3						
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						
		12		2	13						12
	Total Contact Hours (L+T+P)	**14**					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	

[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.