

# ANNEXURE - I

Sl. No	Name of the Course	Available on the Platform	Category (Major/Minor /MDC/VAC/AEC/SEC)	Name of the programme to be opted for	DURATION	NO. OF CREDITS
1	Software Engineering	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
2	Data Mining	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
3	Computer Applications in Business	Yes	Major/Minor/MDC	FYUGP	16 Weeks	5
4	Information Security	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
5	Introduction to Data Structures	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
6	Introductory Concepts of Digital Computing	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
7	Software Conceptual Design	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
8	Computer Architecture	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
9	Cloud Infrastructure and Services	Yes	AEC/SEC/VAC	FYUGP		4
10	MCS-211 : Design and Analysis of Algorithms	Yes	AEC/SEC/VAC	FYUGP	5 Weeks	4
11	MCS-226: Data Science and Big Data	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
12	Database Management System	Yes	AEC/SEC/VAC	FYUGP	12 weeks	4
13	Data Science Using Python	Yes	AEC/SEC/VAC	FYUGP	12 weeks	4
14	Introduction to Algebraic Graph Theory	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
15	Distributed Optimization and Machine Learning	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
16	Social Network Analysis	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
17	Data Science for Engineers	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
18	Social Networks	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
19	The Joy of Computing using Python	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
20	Python for Data Science	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
21	Deep Learning - IIT Ropar	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
22	Cloud Computing	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
23	Software Engineering	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
24	Software Project Managemen	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
25	Programming In Java	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
26	Human Computer Interaction (In Hindi)	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
27	Software Testing	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
28	C Programming and Assembly Language	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
29	Cyber Security and Privacy	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
30	Privacy and Security in Online Social Media	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
31	Responsible & Safe AI Systems	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
32	Introduction to programming in C	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
33	Practical Cyber Security for Cyber Security Practitioners	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
34	Computational Arithmetic - Geometry for Algebraic Curves	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
35	Introduction to Graph Algorithms	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
36	Demystifying Networking	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
37	Introduction to Computer and Network Performance Analysis	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1



38	Big Data Computing	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
39	Computer Graphics	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
40	Multi-Core Computer Architecture	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
41	Design & Implementation of Human-Computer Interfaces	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
42	Mathematical Foundations for Machine Learning	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
43	Programming With Generative AI	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
44	Foundations and Applications of Machine Learning (Bengali)	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
45	Problem Solving Through Programming in C	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
46	Computer Vision	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
47	Programming in Modern C++	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
48	Data Base Management System	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
49	Data Structure and Algorithms using Java	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
50	Introduction To Machine Learning - IITKGP	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
51	Introduction To Algorithms and Analysis	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
52	Algorithmic Game Theory	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
53	Artificial Intelligence for Economics	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
54	Approximation Algorithm	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
55	Computer Architecture And Organization	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
56	Hardware Modeling Using Verilog	Yes	AEC/SEC/VAC	FYUGP	8 weeks	2
57	Machine Learning For Earth System Sciences	Yes	AEC/SEC/VAC	FYUGP	8 weeks	2
58	Second Level Algorithms	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
59	Artificial Intelligence : Concepts and Techniques	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
60	Scalable Data Science	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
61	Mobile Virtual Reality and Artificial Intelligence	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
62	Data Structures and Algorithms Design	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
63	Artificial Intelligence : Search Methods For Problem solving	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
64	Programming, Data Structures And Algorithms Using Python	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
65	Design and analysis of algorithms	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
66	Introduction to Machine Learning	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
67	Deep Learning for Computer Vision	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
68	Introduction to Quantum Computing: Quantum Algorithms a	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
69	Parameterized Algorithms	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
70	Getting Started with Competitive Programming	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
71	Applied Accelerated Artificial Intelligence	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
72	Introduction to Machine Learning (Tamil)	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
73	Artificial Intelligence using Prolog Programming	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
74	CIT-001: Fundamentals of Computer Systems	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
75	CIT-002: Introduction to Information Technology	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
76	CIT-003: Web Based Technologies and Multimedia Applicatio	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4

77	Data Structure using C Programming	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
78	Image Processing Using Python	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
79	Introduction to Cyber Security	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
80	Web Technology	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
81	Machine Learning (ML) In Hindi	Yes	Major/Minor/MDC	FYUGP	12 Weeks	3
82	Foundations of Algorithmic Problem-Solving A Comprehensive	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
83	A Basic Course in Machine Learning for All	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	0
84	Business Intelligence with PowerBI: From Data to Strategic De	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	3
85	Data Analytics and Visualization with MS Power BI	Yes	AEC/SEC/VAC	FYUGP	6 Weeks	0
86	Data-Driven Marketing Decision Making	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	3
87	Generative AI and Large Language Models	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	3
88	Mastering Deep Learning	Yes	AEC/SEC/VAC	FYUGP	6 Weeks	3
89	System Design for Sustainability	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
90	Geographic Information System	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
91	Environmental pollution and Sustainable management	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
92	MEVE-013: Environmental Biotechnology	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
93	Water, Society And Sustainability	Yes	AEC/SEC/VAC	FYUGP	4 Weeks	1
94	Fundamentals of Sports Training, Load Management and reco	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
95	Handling Large-Scale Unit Level Data	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
96	Sustainable Happiness	Yes	AEC/SEC/VAC	FYUGP	8 Weeks	2
97	Logistics & Supply Chain Management	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
98	Retail Business Management	Yes	Major/Minor/MDC	FYUGP	15 Weeks	4
99	Marine Biotechnology	Yes	Major/Minor/MDC	FYUGP	15 Weeks	4
100	Fundamentals of Artificial Intelligence	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
101	Campus Recruitment Training	Yes	AEC/SEC/VAC	FYUGP	9 Weeks	4
102	Bandit Algorithm (Online Machine Learning)	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3
103	Machine Learning for Core Engineering Disciplines	Yes	AEC/SEC/VAC	FYUGP	12 weeks	3
104	Communication and Extension for Sustainable Development	Yes	Major/Minor/MDC	FYUGP	15 Weeks	4
105	Cyber Security, Tools, Techniques and Counter Measures	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
106	Domestic Equipment Maintenance	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
107	Fundamentals of Financial Inclusion and Cyber Safety	Yes	AEC/SEC/VAC	FYUGP		4
108	Generative AI for Everyday Life	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
109	MJM-024: Media, Information and Empowerment	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
110	MJM024: Media, Information and Empowerment (Hindi)	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
111	MSD 019: Global Strategies to Sustainable Development	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
112	MSD-011: Sustainability Science	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
113	MSD-016: Strategies and Models for Sustainability	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
114	MSD-017: Challenges to Sustainable Development	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
115	Open Source Software for Academia	Yes	Major/Minor/MDC	FYUGP	12 Weeks	4
116	Sustainable Power Generation Systems	Yes	AEC/SEC/VAC	FYUGP	12 Weeks	3