



Integral University, Lucknow
Department of Computer Science and Engineering
Study and Evaluation Scheme

Program: M.Tech. Computer Science & Engineering with specialization in Advanced Computing & Data sciences (ACDS)

Semester I

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub-Total	Credit	Total Credits	Attributes						United Nations Sustainable Development Goals (SDGs)		
				L	T	P	CT	TA	Tot	ES E				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value		Professional Ethics	
THEORIES																						
1	CS 518	Soft Computing	DC	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4,9	
2	CS 546	Mathematical Programming	DC	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					4,8	
3	CS 516	Advance Data Structures & Algorithm	DC	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4,8,9	
4	CS 525	Advanced concepts of database design	DC	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4,9	
PRACTICAL																						
5	CS 519	Soft Computing Lab	DC	0	0	2	30	30	60	40	100	0:0:2	2	√	√	√						
6	CS 543	Advanced Database System Lab	DC	0	0	2	30	30	60	40	100	0:0:2	2	√	√	√						
Total				12	4	4	220	140	360	240	600		20									

DC- Departmental Core

DE- Departmental Elective



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Semester II

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Tot	ES				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES																					
1	CS 520	Advance Distributed Operating Systems	DC	3	1	0	40	20	60	40	100	3:1:0	4			√					
2	CS 544	Machine Learning: Theory and Methods	DC	3	1	0	40	20	60	40	100	3:1:0	4			√					4,8,9,17
3		Elective 1	DE	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					
4		Elective 2	DE	3	1	0	40	20	60	40	100	3:1:0	4			√					
PRACTICAL																					
5	CS 545	R Programming Lab	DC	0	0	2	30	30	60	40	100	0:0:2	2	√	√	√					
6	CS 549	Machine learning Tools Lab	DC	0	0	2	30	30	60	40	100	0:0:2	2	√	√	√					4,9
Total				12	4	4	220	140	360	240	600	20	20								

DC- Departmental Core DE- Departmental Elective

Electives											United Nations Sustainable Development	
S. No.	Electives	Course code	Course Title	Type of Paper	Attributes							Goals (SDGs)
					Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	Elective-1*	CS-540	Advanced Human Computer Interaction			√						4,9
		CS-524	Software Testing & Quality Management	√	√	√						4,8,9
		CS-525	Advance Concepts of Database Design	√	√							4,9
		CS-526	Advance Cryptography & Network security			√						

Electives											United Nations Sustainable Development	
S. No.	Electives	Course code	Course Title	Type of Paper	Attributes							Goals (SDGs)
					Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	Elective-2*	CS-527	Advance Real Time Systems			√						
		CS-528	Forensic & Cyber Crime	√	√	√						4,9
		CS-529	Digital Image Processing & its applications	√	√							4,9
		CS-530	Applied Data mining and Warehousing			√						