

Indian Institute of Information Technology Design and Manufacturing Kurnool

SCHEME OF INSTRUCTION

B.Tech (All Branches) Course Structure

I-Year I-Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	DS101	Differential and Integral Calculus	BSC	3	0	3
2	DS201	Linear Algebra	BSC	4	0	4
3	CS101 EC101	Problem Solving and Computer Programming (or) Basic Electrical and Electronics Engineering	BEC BEC	3 3	0 0	3 3
4	ME101	Concepts in Engineering Design	DES	3	0	3
5	DS103 DS11x	Technical and Professional Communication (or) Humanities Course 1	HMC HMC	2 2	2 0	3 2
6	DS12x DS104	Humanities Course 2 (or) Earth, Environment and Design	DES DES	2 2	0 0	0 0
7	ME103	Engineering Graphics	DES	0	3	2
8	CS102	Problem Solving and Computer Programming Practice	BEC	0	3	2
9	ME105	Design Realization	DES	0	3	2
Total				17	11	22
				17	9	21

Humanities Course 1: Design History or History of Science and Technology

Humanities Course 2 : Professional ethics or Universal Human Values

I-Year II-Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	DS108	Managerial Economics and Financial Accountancy	HMC	3	0	3
2	DS107	Engineering Electromagnetics	BSC	3	0	3
3	EC101 CS101	Electrical and Electronics Engineering (or) Problem Solving and Computer Programming	BEC	3	0	3
			BEC	3	0	3
4	AD101	Python Programming	BEC	3	0	3
5	AD102	Tools and Data Management	PEC	3	0	3
6	DS11x DS103	Humanities Course 1 (or) Technical and Professional Communication	HMC	2	0	2
			HMC	2	2	3
7	DS104 DS12x	Earth, Environment and Design (or) Humanities Course 2	DES	2	0	0
			DES	2	0	0
8	ME106	Industrial Design sketching	DES	0	3	2
9	DS109	Engineering Electromagnetics Practice	BSC	0	3	2
10	AD103	Python programming practice	BEC	0	3	2
Total				19	9	23
				19	11	24

II-Year I-Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	DS251	Probability and Statistics	BSC	3	0	3
2	AD201(CS202)	Data Structures and Algorithms	PEC	4	0	4
3	AD202(CS203)	Discrete Mathematics	PEC	3	0	3
4	AD203(CS201)	Object oriented Programming	PEC	3	0	3
5	EC209	Digital Circuits Design	PEC	3	0	3
6	AD204(CS204)	Data Structures and Algorithms Practice	PEC	0	3	2
7	AD205	Object Oriented Programming Practice	PEC	0	3	2
8	EC210	Digital Circuits Design Practice	PEC	0	3	2
Total				16	9	22

II-Year II -Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD251	Introduction to Artificial Intelligence and Data Science	BSC	3	0	3
2	AD252(CS252)	Design and Analysis of Algorithms	PEC	3	0	3
3	AD253(CS253)	Database Management Systems	PEC	3	0	3
4	AD254	Data Analysis and Visualization	PEC	3	0	3
5	AD255(CS260)	Principles of Programming Languages	PEC	3	0	3
6	AD256	Data Analysis and Visualization Practices	PEC	0	3	2
7	AD257(CS255)	Design and Analysis of Algorithms Practice	PEC	0	3	2
8	AD258(CS256)	Database Management Systems Practice	PEC	0	3	2
Total				15	9	21

III-Year I-Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD301(CS301)	Operating Systems	PEC	3	0	3
2	AD302(CS202)	Data Communication and Networks	PEC	3	0	3
3	AD303(CS203)	Soft Computing	PEC	3	0	3
4	AD304(CS309)	Machine Learning	PEC	3	2	4
5	AD305(CS352)	Software Engineering	PEC	3	0	3
6	AD306	Hadoop and Map Reduce Programming Practice	PEC	0	3	2
7	AD307(CS305)	Operating Systems Practice	PEC	0	3	2
8	AD308(CS306)	Data Communication and Networks Practice	PEC	0	3	2
Total				15	11	22

III-Year II -Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD301(CS356)	Game Theory	PEC	3	0	3
2	AD302(CS357)	Big Data Analytics	PEC	3	0	3
3	AD303(CS358)	Internet of Things	PEC	3	0	3
4	AD304(CS359)	High Performance Computing	PEC	3	0	3
5	AD36x(CS36x)	Departmental Elective – I	PEC	3	0	3
6	AD37x(CS36x)	Departmental Elective - II	PEC	0	3	2
7	AD305	Big Data Analytics Practice	PEC	0	3	2
8	AD306	Internet of Things Practice	PEC	0	3	2
Total				15	9	21

IV-Year I-Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD401(CS401)	Internship	PCD	0	10	5
2	AD46x(CS46x)	Departmental Elective - III	PEC	3	0	3
3	AD449(CS449)	Design Project	DES	0	10	5
Total				-	-	13

IV-Year II -Semester

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD451(CS356)	Design Elective	DES	3	0	3
2	AD47x(CS47x)	Departmental Elective – IV	PEC	3	0	3
3		Open Elective	PEC	3	0	3
4	AD499	Project	PCD	0	20	10
Total				-	-	19

List of I and II Electives for III Year

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD361	Design Patterns	PEC	3	0	3
2	AD362	Probability and Graphical Models for Data Science	PEC	3	0	3
3	AD363	Social Media and Network Analysis	PEC	3	0	3
4	AD364	Marketing Science and Predictive Analysis	PEC	3	0	3
5	AD365	Quantum Computing	PEC	3	0	3
6	AD366	Business Analytics	PEC	3	0	3
7	AD367	Decision Sciences	PEC	3	0	3
8	AD368(CS361)	Advanced Data Structures and Algorithms	PEC	3	0	3
9	AD369(CS363)	Approximation and Randomized Algorithms	PEC	3	0	3
10	AD370(CS372)	Computer Vision	PEC	3	0	3
11	AD371(CS374)	Pattern Recognition	PEC	3	0	3
12	AD372	Datamining	PEC	3	0	3

List of III and IV Electives for IV Year

Sl. No.	Course Code	Course Name	Category Code	I	P	No. of Credits
1	AD461	Scalable Data Science	PEC	3	0	3
2	AD462	Deep Learning	PEC	3	0	3
3	AD463	NoSQL Databases	PEC	3	0	3
4	AD464	Healthcare Analytics	PEC	3	0	3
5	AD465	Cyber Forensics	PEC	3	0	3
6	AD466	Advanced Statistical Learning	PEC	3	0	3
7	AD467	Financial Analytics	PEC	3	0	3
8	AD468	Information Theory and Coding	PEC	3	0	3
9	AD469	Design of Large-Scale Integration Systems	PEC	3	0	3
10	AD470(CS467)	Natural Language Processing	PEC	3	0	3
11	AD471(CS477)	Block chain Architecture and Design	PEC	3	0	3
12	AD472(CS373)	Digital Image Processing	PEC	3	0	3
13	AD471(CS374)	Pattern Recognition	PEC	3	0	3
14	AD472(CS466)	Cloud Computing	PEC	3	0	3
15	AD473(CS461)	Information Retrieval	PEC	3	0	3
16	AD474(CS468)	Business Intelligence	PEC	3	0	3
17	AD475(CS463)	Parallel and Distributed Systems	PEC	3	0	3