Program Code & Name:**P132::B.Tech. (Computer Science and Engineering)**

System: **Semester**   Year of Admission: **2023**   Duration in Years: **4**

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
Term 1									P132-1-2023
1		CORE ELECTIVE 1	3	1	0	4.0	4.0	CE	ESC
2		CORE ELECTIVE 2	2	0	0	2.0	2.0	CE	BSC
3		CORE ELECTIVE 3	0	0	2	1.0	2.0	CE	BSC
4	CSE111	ORIENTATION TO COMPUTING-I	2	0	0	2.0	2.0	CR	DSC
5	CSE326	INTERNET PROGRAMMING LABORATORY	0	0	3	2.0	3.0	CR	DSC
6	INT108	PYTHON PROGRAMMING	3	0	2	4.0	5.0	CR	DSC
7	MTH174	ENGINEERING MATHEMATICS	3	1	0	4.0	4.0	CR	BSC
8	PES318	SOFT SKILLS-I	1	2	0	3.0	3.0	CR	LCS
TOTAL			14.0	4.0	7.0	22.0	25.0		

CORE ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	ECE249	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	3	1	0	4.0	4.0
2	MEC136	ENGINEERING GRAPHICS AND DIGITAL FABRICATION	2	2	0	4.0	4.0

CORE ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CHE110	ENVIRONMENTAL STUDIES	2	0	0	2.0	2.0
2	PHY110	ENGINEERING PHYSICS	3	0	0	3.0	3.0

CORE ELECTIVE 3 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	ECE279	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY	0	0	2	1.0	2.0

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
Term 2									P132-2-2023
1		CORE ELECTIVE 1	3	1	0	4.0	4.0	CE	ESC
2		CORE ELECTIVE 2	2	0	0	2.0	2.0	CE	BSC
3		CORE ELECTIVE 3	0	0	2	1.0	2.0	CE	BSC
4		LANGUAGE ELECTIVE 1	1	0	3	3.0	4.0	LE	LCS
5	CSE101	COMPUTER PROGRAMMING	2	0	4	4.0	6.0	CR	DSC
6	CSE121	ORIENTATION TO COMPUTING-II	2	0	0	2.0	2.0	CR	DSC
7	CSE320	SOFTWARE ENGINEERING	3	0	0	3.0	3.0	CR	DSC
8	INT306	DATABASE MANAGEMENT SYSTEMS	3	0	2	4.0	5.0	CR	DSC
9	MTH401	DISCRETE MATHEMATICS	3	0	0	3.0	3.0	CR	BSC
TOTAL			19.0	1.0	11.0	26.0	31.0		

CORE ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	ECE249	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	3	1	0	4.0	4.0
2	MEC136	ENGINEERING GRAPHICS AND DIGITAL FABRICATION	2	2	0	4.0	4.0

CORE ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CHE110	ENVIRONMENTAL STUDIES	2	0	0	2.0	2.0
2	PHY110	ENGINEERING PHYSICS	3	0	0	3.0	3.0

CORE ELECTIVE 3 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	ECE279	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY	0	0	2	1.0	2.0

LANGUAGE ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	PEL121	COMMUNICATION SKILLS-I	1	0	3	3.0	4.0
2	PEL130	ADVANCED COMMUNICATION SKILLS-I	1	0	3	3.0	4.0
3	PEL125	UPPER INTERMEDIATE COMMUNICATION SKILLS-I	1	0	3	3.0	4.0

Term 3									P132-3-2023
S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
1		CORE ELECTIVE 4	3	0	0	3.0	3.0	CE	DSC
2		CORE ELECTIVE 5	0	0	2	1.0	2.0	CE	DSC
3		LANGUAGE ELECTIVE 2	1	0	3	3.0	4.0	LE	LCS
4	CSE202	OBJECT ORIENTED PROGRAMMING	3	0	2	4.0	5.0	CR	DSC
5	CSE205	DATA STRUCTURES AND ALGORITHMS	3	0	2	4.0	5.0	CR1	DSC
6	CSE211	COMPUTER ORGANIZATION AND DESIGN	3	1	0	4.0	4.0	CR	DSC
7	CSE306	COMPUTER NETWORKS	3	0	0	3.0	3.0	CR1	DSC
8	CSE307	INTERNETWORKING ESSENTIALS	0	0	2	1.0	2.0	CR1	DSC
9	GEN231	COMMUNITY DEVELOPMENT PROJECT	0	0	4	2.0	4.0	CR3	PRC
TOTAL			16.0	1.0	15.0	25.0	32.0		

CORE ELECTIVE 4 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CSE316	OPERATING SYSTEMS	3	0	0	3.0	3.0
2	MTH302	PROBABILITY AND STATISTICS	3	1	0	4.0	4.0

CORE ELECTIVE 5 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CSE325	OPERATING SYSTEMS LABORATORY	0	0	2	1.0	2.0

LANGUAGE ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	PEL134	UPPER INTERMEDIATE COMMUNICATION SKILLS-II	1	0	3	3.0	4.0
2	PEL132	COMMUNICATION SKILLS-II	1	0	3	3.0	4.0
3	PEL136	ADVANCED COMMUNICATION SKILLS-II	1	0	3	3.0	4.0

Term 4									P132-4-2023

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
1		APTITUDE ELECTIVE 1	2	1	0	3.0	3.0	APE	EEA
2		CORE ELECTIVE 4	3	0	0	3.0	3.0	CE	DSC
3		CORE ELECTIVE 5	0	0	2	1.0	2.0	CE	DSC
4		ENGINEERING MINOR ELECTIVE 1	3	0	0	3.0	3.0	EM	DSC
5		ENGINEERING MINOR ELECTIVE 2	3	0	0	3.0	3.0	EM	DSC
6	CSE310	PROGRAMMING IN JAVA	3	0	2	4.0	5.0	CR	DSC
7	CSE408	DESIGN AND ANALYSIS OF ALGORITHMS	3	0	0	3.0	3.0	CR	DSC
8	INT428	ARTIFICIAL INTELLIGENCE ESSENTIALS	3	0	1	4.0	4.0	CR	DSC
TOTAL			20.0	1.0	5.0	24.0	26.0		

APTITUDE ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	PEA305	ANALYTICAL SKILLS-I	2	1	0	3.0	3.0	
2	PEA307	ADVANCED ANALYTICAL SKILLS-I	2	1	0	3.0	3.0	

CORE ELECTIVE 4 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE316	OPERATING SYSTEMS	3	0	0	3.0	3.0	
2	MTH302	PROBABILITY AND STATISTICS	3	1	0	4.0	4.0	

CORE ELECTIVE 5 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE325	OPERATING SYSTEMS LABORATORY	0	0	2	1.0	2.0	

ENGINEERING MINOR ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT330	MANAGING CLOUD SOLUTIONS	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT242	CYBER SECURITY ESSENTIALS	2	0	2	3.0	4.0	CYBER SECURITY
3	INT217	INTRODUCTION TO DATA MANAGEMENT	2	0	2	3.0	4.0	DATA SCIENCE
4	INT219	FRONT END WEB DEVELOPER	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE217	INTRODUCTION TO INTERNET OF THINGS (IOT)	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
6	INT254	FOUNDATIONS OF MACHINE LEARNING	2	0	2	3.0	4.0	MACHINE LEARNING
7	CSE374	ADVANCE SOFTWARE ENGINEERING	3	0	0	3.0	3.0	SOFTWARE METHODOLOGIES AND TESTING

ENGINEERING MINOR ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT362	CLOUD ARCHITECTURE AND IMPLEMENTATION-I	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT249	SYSTEM ADMINISTRATION	2	0	2	3.0	4.0	CYBER SECURITY
3	INT375	DATA SCIENCE TOOLBOX: PYTHON PROGRAMMING	2	0	2	3.0	4.0	DATA SCIENCE
4	INT220	SERVER SIDE SCRIPTING	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE341	PROGRAMMING IOT	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
6	INT354	MACHINE LEARNING-I	2	0	2	3.0	4.0	MACHINE LEARNING
7	CSE375	SOFTWARE TESTING	3	0	0	3.0	3.0	SOFTWARE METHODOLOGIES AND TESTING

Term 5										P132-5-2023
S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature	
1		ENGINEERING MINOR ELECTIVE 3	2	0	2	3.0	4.0	EM	DSC	
2		ENGINEERING MINOR ELECTIVE 4	2	0	2	3.0	4.0	EM	DSC	
3		OPEN MINOR 1	3	0	0	3.0	3.0	OM	OEM	
4		PATHWAY ELECTIVE 1	2	0	1	3.0	3.0	PW	PWE	

5		PATHWAY ELECTIVE 2	2	0	1	3.0	3.0	PW	PWE
6		TRAINING ELECTIVE 1	0	0	6	3.0	6.0	TE	TCS
7	CSE322	FORMAL LANGUAGES AND AUTOMATION THEORY	3	0	0	3.0	3.0	CR	DSC
TOTAL			14.0	0.0	12.0	21.0	26.0		

ENGINEERING MINOR ELECTIVE 3 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT363	CLOUD MICROSERVICES	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT250	DIGITAL EVIDENCE ANALYSIS	2	0	2	3.0	4.0	CYBER SECURITY
3	INT374	DATA ANALYTICS WITH POWER BI	2	0	2	3.0	4.0	DATA SCIENCE
4	INT252	WEB APP DEVELOPMENT WITH REACTJS	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE128	INTRODUCTION TO IOT NETWORKING PROTOCOLS	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
6	INT344	NATURAL LANGUAGE PROCESSING	2	0	1	3.0	3.0	MACHINE LEARNING
7	CSE376	AUTOMATED TESTING	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING

ENGINEERING MINOR ELECTIVE 4 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT364	CLOUD ARCHITECTURE AND IMPLEMENTATION-II	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT244	SECURING COMPUTING SYSTEMS	2	0	2	3.0	4.0	CYBER SECURITY
3	INT234	PREDICTIVE ANALYTICS	2	0	2	3.0	4.0	DATA SCIENCE
4	INT222	ADVANCED WEB DEVELOPMENT	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE237	ARCHITECTING SMART IOT DEVICES	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
6	INT423	MACHINE LEARNING-II	2	0	2	3.0	4.0	MACHINE LEARNING
7	CSE377	ADVANCE TESTING TECHNOLOGIES	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING

PATHWAY ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	PEA306	ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	GOVERNMENT JOBS
2	PEA308	ADVANCED ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	GOVERNMENT JOBS
3	PEA306	ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	HIGHER STUDIES
4	PEA308	ADVANCED ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	HIGHER STUDIES
5	CSE329	PRELUDE TO COMPETITIVE CODING	2	0	1	3.0	3.0	PRODUCT BASED
6	PEA306	ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	SERVICE BASED
7	PEA308	ADVANCED ANALYTICAL SKILLS-II	2	1	0	3.0	3.0	SERVICE BASED

PATHWAY ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE333	COMBINATORIAL STUDIES-I	2	0	2	3.0	4.0	GOVERNMENT JOBS
2	CSE333	COMBINATORIAL STUDIES-I	2	0	2	3.0	4.0	HIGHER STUDIES

3	CSE330	COMPETITIVE CODING APPROACHES-TECHNIQUES	2	0	1	3.0	3.0	PRODUCT BASED
4	PEV301	VERBAL ABILITY	2	2	0	4.0	4.0	SERVICE BASED

TRAINING ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE343	TRAINING IN PROGRAMMING	0	0	6	3.0	6.0	
2	CSE443	SEMINAR ON SUMMER TRAINING	0	0	6	3.0	6.0	

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
1		ENGINEERING MINOR ELECTIVE 5	2	0	2	3.0	4.0	EM	DSC
2		OPEN MINOR 2	3	0	0	3.0	3.0	OM	OEM
3		PATHWAY ELECTIVE 3	2	0	1	3.0	3.0	PW	PWE
4		PATHWAY ELECTIVE 4	1	2	0	3.0	3.0	PW	PWE
5	CSE332	INDUSTRY ETHICS AND LEGAL ISSUES	2	0	0	2.0	2.0	CR	DSC
6	CSE393	ONLINE ACADEMIC COURSE	3	0	0	3.0	3.0	CR	DSC
TOTAL			13.0	2.0	3.0	17.0	18.0		

ENGINEERING MINOR ELECTIVE 5 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT327	CLOUD INFRASTRUCTURE AND RESOURCE MANAGEMENT	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT245	PENETRATION TESTING	2	0	2	3.0	4.0	CYBER SECURITY
3	INT312	BIG DATA FUNDAMENTALS	2	0	2	3.0	4.0	DATA SCIENCE
4	INT221	MVC PROGRAMMING	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE129	IOT FOR DIGITAL SOCIETY	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
6	INT345	COMPUTER VISION	2	0	2	3.0	4.0	MACHINE LEARNING
7	CSE378	WEBSERVICES API AUTOMATION TESTING	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING

PATHWAY ELECTIVE 3 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE334	COMBINATORIAL STUDIES-II	2	0	2	3.0	4.0	GOVERNMENT JOBS
2	CSE334	COMBINATORIAL STUDIES-II	2	0	2	3.0	4.0	HIGHER STUDIES
3	CSE331	CODING PEARLS	2	0	1	3.0	3.0	PRODUCT BASED
4	CSE357	COMBINATORIAL STUDIES	2	0	2	3.0	4.0	SERVICE BASED

PATHWAY ELECTIVE 4 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	PES319	SOFT SKILLS-II	1	2	0	3.0	3.0	PRODUCT BASED
2	PES319	SOFT SKILLS-II	1	2	0	3.0	3.0	SERVICE BASED

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
1		DEPARTMENT ELECTIVE 1	3	0	0	3.0	3.0	DE	DSC

			L	T	P	Credit	Contact Hours	Type	Nature
2		DEPARTMENT ELECTIVE 1 LAB	0	0	2	1.0	2.0	DE	DSC
3		ENGINEERING MINOR ELECTIVE 6	0	0	4	3.0	4.0	EM	DSC
4		OPEN MINOR 3	3	0	0	0.0	3.0	OM	OEM
5		PATHWAY ELECTIVE 4	2	0	2	3.0	4.0	PW	PWE
6	CSE339	CAPSTONE PROJECT-I	0	0	4	2.0	4.0	CR	PRJ
TOTAL			8.0	0.0	12.0	12.0	20.0		

DEPARTMENT ELECTIVE 1 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE304	COMPUTER GRAPHICS AND VISUALIZATION	3	1	0	4.0	4.0	
2	CSE327	SIMULATION AND MODELLING	3	0	0	3.0	3.0	
3	CSE406	ADVANCED JAVA PROGRAMMING	3	0	2	4.0	5.0	
4	CSE434	GAME DEVELOPMENT IN 3D	3	0	2	4.0	5.0	
5	CSE436	BLOCKCHAIN	3	0	2	4.0	5.0	
6	INT402	MODERN WEB PROGRAMMING TOOLS AND TECHNIQUES	3	0	2	4.0	5.0	

DEPARTMENT ELECTIVE 1 LAB BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE328	SIMULATION AND MODELLING LABORATORY	0	0	2	1.0	2.0	

ENGINEERING MINOR ELECTIVE 6 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	INT328	NETWORK VIRTUALIZATION AND CLOUD SECURITY	2	0	2	3.0	4.0	CLOUD COMPUTING
2	INT251	MALWARE ANALYSIS AND CYBER DEFENCE	2	0	2	3.0	4.0	CYBER SECURITY
3	INT315	CLUSTER COMPUTING	2	0	2	3.0	4.0	DATA SCIENCE
4	INT253	WEB DEVELOPMENT IN PYTHON USING DJANGO	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
5	ECE140	WORKSHOP ON IOT FOR DIGITAL SOCIETY	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
6	INT422	DEEP LEARNING	2	0	2	3.0	4.0	MACHINE LEARNING
7	CSE379	MOBILE AUTOMATED TESTING	0	0	4	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING

PATHWAY ELECTIVE 4 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
1	CSE335	COMBINATORIAL STUDIES-III	2	0	2	3.0	4.0	GOVERNMENT JOBS
2	CSE335	COMBINATORIAL STUDIES-III	2	0	2	3.0	4.0	HIGHER STUDIES

Term 7 (For those students who opt for industrial internship)								P132A-7-2023	
S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
1	CSE447	INDUSTRY CO-OP PROJECT-I	0	0	32	16.0	32.0	CR	TCF
TOTAL			0.0	0.0	32.0	16.0	32.0		

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
		Term 8 (For those students who opt for course work)							P132-8-2023
1		DEPARTMENT ELECTIVE 2	3	0	0	3.0	3.0	DE	DSC
2		DEPARTMENT ELECTIVE 2 LAB	0	0	2	1.0	2.0	DE	DSC
3		OPEN MINOR 4	3	0	0	3.0	3.0	OM	OEM
4	CSE435	COMPREHENSIVE SEMINAR	0	0	2	1.0	2.0	CR	SMN
5	CSE439	CAPSTONE PROJECT-II	0	0	16	8.0	16.0	CR	PRJ
TOTAL			6.0	0.0	20.0	16.0	26.0		

DEPARTMENT ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CSE493	LINUX SYSTEM ADMINISTRATION	3	0	2	4.0	5.0
2	CSE403	NETWORK SECURITY AND CRYPTOGRAPHY	3	0	2	4.0	5.0
3	CSE504	STORAGE TECHNOLOGY FOUNDATION	3	0	0	3.0	3.0
4	INT411	SOFTWARE PROJECT MANAGEMENT	3	0	0	3.0	3.0

DEPARTMENT ELECTIVE 2 LAB BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CSE507	STORAGE TECHNOLOGY FOUNDATION LABORATORY	0	0	2	1.0	2.0
2	INT416	SOFTWARE PROJECT MANAGEMENT LABORATORY	0	0	3	2.0	3.0

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Type	Nature
		Term 8 (For those students who opt for industrial internship)							P132A-8-2023
1		TRAINING ELECTIVE 2	0	0	32	16.0	32.0	TE	TCF
TOTAL			0.0	0.0	32.0	16.0	32.0		

TRAINING ELECTIVE 2 BASKET

S. No	Course Code	Course Title	L	T	P	Credit	Contact Hours
1	CSE441	INDUSTRY INTERNSHIP PROJECT	0	0	32	16.0	32.0
2	CSE448	INDUSTRY CO-OP PROJECT-II	0	0	32	16.0	32.0

S.No	Course Code	Course Title	L	T	P	Credit	Contact Hours	Elective Area
		Open Minor Elective (OM) Basket						
1	CSE224	FUNDAMENTALS OF ANDROID	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
2	CSE225	DEVELOPING ANDROID APPS	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
3	CSE226	ANDROID APP DEPLOYMENT	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
4	CSE227	ADVANCED ANDROID APP DEVELOPMENT	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
5	INT397	WEB DEVELOPMENT AND ANDROID HYBRID APP DEVELOPMENT	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
6	INT398	DIGITAL MARKETING AND MEDIA HANDLING	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
7	INT399	ENTREPRENEURSHIP AND PROJECT LEADERSHIP	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT
8	INT400	FINANCIAL MARKETS AND CAREER SKILLS	2	0	2	3.0	4.0	ANDROID APPLICATION DEVELOPMENT

			L	T	P			
9	FIN314	CAPITAL MARKET OPERATIONS	3	0	0	3.0	3.0	BANKING AND FINANCIAL SERVICES
10	FIN318	MONEY, BANKING AND FINANCIAL SERVICES	3	0	0	3.0	3.0	BANKING AND FINANCIAL SERVICES
11	FIN319	INVESTMENT BANKING AND FINANCIAL SERVICES	3	0	0	3.0	3.0	BANKING AND FINANCIAL SERVICES
12	FIN901	FUNDAMENTALS OF BANKING AND INSURANCE	3	0	0	3.0	3.0	BANKING AND FINANCIAL SERVICES
13	LAW252	BASICS OF CONTRACT	3	0	0	3.0	3.0	BUSINESS LAWS
14	LAW255	SPECIAL CONTRACTS	3	0	0	3.0	3.0	BUSINESS LAWS
15	LAW256	BASICS OF COMPANY LAW	3	0	0	3.0	3.0	BUSINESS LAWS
16	LAW257	BASICS OF INVESTMENT LAW	3	0	0	3.0	3.0	BUSINESS LAWS
17	INT327	CLOUD INFRASTRUCTURE AND RESOURCE MANAGEMENT	2	0	2	3.0	4.0	CLOUD COMPUTING
18	INT328	NETWORK VIRTUALIZATION AND CLOUD SECURITY	2	0	2	3.0	4.0	CLOUD COMPUTING
19	INT330	MANAGING CLOUD SOLUTIONS	2	0	2	3.0	4.0	CLOUD COMPUTING
20	INT362	CLOUD ARCHITECTURE AND IMPLEMENTATION-I	2	0	2	3.0	4.0	CLOUD COMPUTING
21	INT363	CLOUD MICROSERVICES	2	0	2	3.0	4.0	CLOUD COMPUTING
22	INT364	CLOUD ARCHITECTURE AND IMPLEMENTATION-II	2	0	2	3.0	4.0	CLOUD COMPUTING
23	INT373	AGILE DRIVEN DEVELOPMENT AND PROJECT MANAGEMENT	2	0	2	3.0	4.0	CLOUD, DEVOPS, AND AGILE SYSTEMS ENGINEERING
24	INT377	CLOUD COMPUTING AND DEVOPS ESSENTIALS	2	0	2	3.0	4.0	CLOUD, DEVOPS, AND AGILE SYSTEMS ENGINEERING
25	INT378	ADVANCEMENTS IN CLOUD AND DEVOPS	2	0	2	3.0	4.0	CLOUD, DEVOPS, AND AGILE SYSTEMS ENGINEERING
26	INT379	SITE RELIABILITY ENGINEERING	2	0	2	3.0	4.0	CLOUD, DEVOPS, AND AGILE SYSTEMS ENGINEERING
27	INT242	CYBER SECURITY ESSENTIALS	2	0	2	3.0	4.0	CYBER SECURITY
28	INT244	SECURING COMPUTING SYSTEMS	2	0	2	3.0	4.0	CYBER SECURITY
29	INT245	PENETRATION TESTING	2	0	2	3.0	4.0	CYBER SECURITY
30	INT249	SYSTEM ADMINISTRATION	2	0	2	3.0	4.0	CYBER SECURITY
31	INT250	DIGITAL EVIDENCE ANALYSIS	2	0	2	3.0	4.0	CYBER SECURITY
32	INT251	MALWARE ANALYSIS AND CYBER DEFENCE	2	0	2	3.0	4.0	CYBER SECURITY
33	INT217	INTRODUCTION TO DATA MANAGEMENT	2	0	2	3.0	4.0	DATA SCIENCE
34	INT233	DATA VISUALIZATION	2	0	2	3.0	4.0	DATA SCIENCE
35	INT234	PREDICTIVE ANALYTICS	2	0	2	3.0	4.0	DATA SCIENCE
36	INT312	BIG DATA FUNDAMENTALS	2	0	2	3.0	4.0	DATA SCIENCE
37	INT315	CLUSTER COMPUTING	2	0	2	3.0	4.0	DATA SCIENCE
38	INT374	DATA ANALYTICS WITH POWER BI	2	0	2	3.0	4.0	DATA SCIENCE
39	INT375	DATA SCIENCE TOOLBOX: PYTHON PROGRAMMING	2	0	2	3.0	4.0	DATA SCIENCE
40	INT331	FUNDAMENTALS OF DEVOPS	2	0	2	3.0	4.0	DEVOPS
41	INT332	DEVOPS VIRTUALIZATION AND CONFIGURATION MANAGEMENT	2	0	2	3.0	4.0	DEVOPS
42	INT333	DEVOPS ADVANCE CONFIGURATION MANAGEMENT	2	0	2	3.0	4.0	DEVOPS
43	INT334	ENTERPRISE APPLICATION AUTOMATION	2	0	2	3.0	4.0	DEVOPS
44	MKT311	DIGITAL MARKETING	0	0	3	2.0	3.0	DIGITAL MARKETING
45	MKT905	SEARCH ENGINE OPTIMIZATION	3	0	0	3.0	3.0	DIGITAL MARKETING
46	MKT906	SOCIAL MEDIA MARKETING	0	0	3	2.0	3.0	DIGITAL MARKETING

47	MKT907	WEB ANALYTICS	0	0	3	2.0	3.0	DIGITAL MARKETING
48	INT397	WEB DEVELOPMENT AND ANDROID HYBRID APP DEVELOPMENT	2	0	2	3.0	4.0	DIGITAL SYNERGY AND PROFESSIONAL EMPOWERMENT
49	INT398	DIGITAL MARKETING AND MEDIA HANDLING	2	0	2	3.0	4.0	DIGITAL SYNERGY AND PROFESSIONAL EMPOWERMENT
50	INT399	ENTREPRENEURSHIP AND PROJECT LEADERSHIP	2	0	2	3.0	4.0	DIGITAL SYNERGY AND PROFESSIONAL EMPOWERMENT
51	INT400	FINANCIAL MARKETS AND CAREER SKILLS	2	0	2	3.0	4.0	DIGITAL SYNERGY AND PROFESSIONAL EMPOWERMENT
52	ECO214	INTRODUCTION TO ECONOMIC ANALYSIS	3	0	0	3.0	3.0	ECONOMICS
53	ECO215	INDIAN ECONOMIC ISSUES AND POLICIES	3	0	0	3.0	3.0	ECONOMICS
54	ECO324	ECONOMICS OF MONEY AND BANKING	3	0	0	3.0	3.0	ECONOMICS
55	ECO325	ECONOMICS OF TRADE	3	0	0	3.0	3.0	ECONOMICS
56	ENG606	CONTEMPORARY SHORT STORIES	3	0	0	3.0	3.0	ENGLISH
57	ENG607	CONTEMPORARY PROSE AND POETRY	3	0	0	3.0	3.0	ENGLISH
58	ENG608	CONTEMPORARY DRAMA	3	0	0	3.0	3.0	ENGLISH
59	ENG609	CONTEMPORARY FICTION	3	0	0	3.0	3.0	ENGLISH
60	FST801	FASHION STUDIES	3	0	0	3.0	3.0	FASHION BASICS
61	FST802	INDIAN CULTURE STUDIES	3	0	0	3.0	3.0	FASHION BASICS
62	FST803	FASHION DESIGN PROCESS	0	0	5	3.0	5.0	FASHION BASICS
63	FST804	SURFACE DEVELOPMENT	0	0	5	3.0	5.0	FASHION BASICS
64	FIN214	INTRODUCTION TO FINANCIAL MARKETS	3	0	0	3.0	3.0	FINANCIAL MARKETS
65	FIN215	MUTUAL FUNDS AND EXCHANGE TRADED FUNDS	3	0	0	3.0	3.0	FINANCIAL MARKETS
66	FIN314	CAPITAL MARKET OPERATIONS	3	0	0	3.0	3.0	FINANCIAL MARKETS
67	FIN358	DERIVATIVE MARKET OPERATIONS	3	0	0	3.0	3.0	FINANCIAL MARKETS
68	FRN114	ELEMENTARY FRENCH I	3	0	0	3.0	3.0	FRENCH
69	FRN115	ELEMENTARY FRENCH II	3	0	0	3.0	3.0	FRENCH
70	FRN116	ELEMENTARY FRENCH III	3	0	0	3.0	3.0	FRENCH
71	FRN117	ELEMENTARY FRENCH IV	3	0	0	3.0	3.0	FRENCH
72	INT219	FRONT END WEB DEVELOPER	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
73	INT220	SERVER SIDE SCRIPTING	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
74	INT221	MVC PROGRAMMING	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
75	INT222	ADVANCED WEB DEVELOPMENT	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
76	INT252	WEB APP DEVELOPMENT WITH REACTJS	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
77	INT253	WEB DEVELOPMENT IN PYTHON USING DJANGO	2	0	2	3.0	4.0	FULL STACK WEB DEVELOPMENT
78	FIN212	BASIC FINANCIAL MANAGEMENT	3	0	0	3.0	3.0	FUNDAMENTALS OF FINANCE
79	FIN213	INDIAN FINANCIAL SYSTEM	3	0	0	3.0	3.0	FUNDAMENTALS OF FINANCE
80	FIN308	BANKING AND INSURANCE	3	0	0	3.0	3.0	FUNDAMENTALS OF FINANCE
81	FIN314	CAPITAL MARKET OPERATIONS	3	0	0	3.0	3.0	FUNDAMENTALS OF FINANCE
82	CAP818	GAME TOOL-I	0	0	5	3.0	5.0	GAMING
83	CAP819	GAME TOOL-II	0	0	5	3.0	5.0	GAMING
84	CAP820	GAME TOOL-III	0	0	5	3.0	5.0	GAMING

85	CAP821	PROJECT	0	0	5	3.0	5.0	GAMING
86	SSC231	INDIAN CULTURE AND HISTORY	4	0	0	4.0	4.0	GENERAL STUDIES
87	SSC232	INDIAN GEOGRAPHY AND SOCIETY	4	0	0	4.0	4.0	GENERAL STUDIES
88	SSC233	INDIAN POLITY, GOVERNANCE AND INTERNATIONAL RELATIONS	4	0	0	4.0	4.0	GENERAL STUDIES
89	SSC234	INDIAN ECONOMY	4	0	0	4.0	4.0	GENERAL STUDIES
90	GEO295	PHYSICAL GEOGRAPHY	3	0	0	3.0	3.0	GEOGRAPHY
91	GEO296	HUMAN GEOGRAPHY	3	0	0	3.0	3.0	GEOGRAPHY
92	GEO297	GEOGRAPHY OF INDIA-I	3	0	0	3.0	3.0	GEOGRAPHY
93	GEO298	GEOGRAPHY OF INDIA-II	3	0	0	3.0	3.0	GEOGRAPHY
94	GER107	ELEMENTARY GERMAN I	3	0	0	3.0	3.0	GERMAN
95	GER108	ELEMENTARY GERMAN II	3	0	0	3.0	3.0	GERMAN
96	GER109	ELEMENTARY GERMAN III	3	0	0	3.0	3.0	GERMAN
97	GER110	ELEMENTARY GERMAN IV	3	0	0	3.0	3.0	GERMAN
98	HIS291	ANCIENT INDIAN HISTORY AND CULTURE	3	0	0	3.0	3.0	HISTORY
99	HIS292	MEDIEVAL INDIAN HISTORY AND CULTURE	3	0	0	3.0	3.0	HISTORY
100	HIS293	HISTORY OF THE BRITISH RAAJ IN INDIA	3	0	0	3.0	3.0	HISTORY
101	HIS294	MODERN WORLD HISTORY	3	0	0	3.0	3.0	HISTORY
102	HRM203	HUMAN RESOURCE PLANNING AND DEVELOPMENT	3	0	0	3.0	3.0	HUMAN RESOURCE MANAGEMENT
103	HRM204	COMPENSATION MANAGEMENT	3	0	0	3.0	3.0	HUMAN RESOURCE MANAGEMENT
104	HRM301	INDUSTRIAL PSYCHOLOGY	3	0	0	3.0	3.0	HUMAN RESOURCE MANAGEMENT
105	HRM302	CONFLICT MANAGEMENT AND NEGOTIATION	3	0	0	3.0	3.0	HUMAN RESOURCE MANAGEMENT
106	INT323	DATABASE ESSENTIALS TOWARD INFORMATICA	2	0	2	3.0	4.0	INFORMATICA
107	INT324	INFORMATICA DATA QUALITY MANAGEMENT	2	0	2	3.0	4.0	INFORMATICA
108	INT325	INFORMATICA DATA INTEGRATION	2	0	2	3.0	4.0	INFORMATICA
109	INT326	CLOUD APPLICATION INTEGRATION PROCESSES	2	0	2	3.0	4.0	INFORMATICA
110	LAW351	COPYRIGHTS AND DESIGNS LAW	3	0	0	3.0	3.0	INTELLECTUAL PROPERTY AND CYBER LAWS
111	LAW352	TRADEMARKS AND ALLIED LAWS	3	0	0	3.0	3.0	INTELLECTUAL PROPERTY AND CYBER LAWS
112	LAW353	PATENTS AND GEOGRAPHICAL INDICATIONS	3	0	0	3.0	3.0	INTELLECTUAL PROPERTY AND CYBER LAWS
113	LAW354	CYBER LAWS	3	0	0	3.0	3.0	INTELLECTUAL PROPERTY AND CYBER LAWS
114	IFD801	FUNDAMENTALS OF DESIGN	3	0	0	3.0	3.0	INTERIOR DESIGN
115	IFD802	STUDIES IN FORM	0	0	3	2.0	3.0	INTERIOR DESIGN
116	IFD803	COMPUTER SKILLS	0	0	5	3.0	5.0	INTERIOR DESIGN
117	IFD804	SET DESIGN STUDIO	0	0	3	2.0	3.0	INTERIOR DESIGN
118	FIN348	INTERNATIONAL FINANCIAL MANAGEMENT	3	0	0	3.0	3.0	INTERNATIONAL BUSINESS
119	MGN220	INTRODUCTION TO INTERNATIONAL BUSINESS	3	0	0	3.0	3.0	INTERNATIONAL BUSINESS
120	MGN902	EXPORT IMPORT PROCEDURE AND DOCUMENTATION	3	0	0	3.0	3.0	INTERNATIONAL BUSINESS
121	MKT211	INTERNATIONAL MARKETING	3	0	0	3.0	3.0	INTERNATIONAL BUSINESS

122	ECE128	INTRODUCTION TO IOT NETWORKING PROTOCOLS	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
123	ECE129	IOT FOR DIGITAL SOCIETY	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
124	ECE140	WORKSHOP ON IOT FOR DIGITAL SOCIETY	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
125	ECE217	INTRODUCTION TO INTERNET OF THINGS (IOT)	3	0	0	3.0	3.0	INTERNET OF THINGS (IOT)
126	ECE237	ARCHITECTING SMART IOT DEVICES	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
127	ECE341	PROGRAMMING IOT	1	0	3	3.0	4.0	INTERNET OF THINGS (IOT)
128	INT254	FOUNDATIONS OF MACHINE LEARNING	2	0	2	3.0	4.0	MACHINE LEARNING
129	INT344	NATURAL LANGUAGE PROCESSING	2	0	1	3.0	3.0	MACHINE LEARNING
130	INT345	COMPUTER VISION	2	0	2	3.0	4.0	MACHINE LEARNING
131	INT354	MACHINE LEARNING-I	2	0	2	3.0	4.0	MACHINE LEARNING
132	INT422	DEEP LEARNING	2	0	2	3.0	4.0	MACHINE LEARNING
133	INT423	MACHINE LEARNING-II	2	0	2	3.0	4.0	MACHINE LEARNING
134	ACC211	FINANCIAL ACCOUNTING	3	0	0	3.0	3.0	MANAGEMENT FUNDAMENTALS
135	FIN212	BASIC FINANCIAL MANAGEMENT	3	0	0	3.0	3.0	MANAGEMENT FUNDAMENTALS
136	HRM203	HUMAN RESOURCE PLANNING AND DEVELOPMENT	3	0	0	3.0	3.0	MANAGEMENT FUNDAMENTALS
137	MKT202	MARKETING MANAGEMENT	3	0	0	3.0	3.0	MANAGEMENT FUNDAMENTALS
138	MKT202	MARKETING MANAGEMENT	3	0	0	3.0	3.0	MARKETING AND SALES
139	MKT257	PERSONAL SELLING SKILLS	0	0	3	2.0	3.0	MARKETING AND SALES
140	MKT258	SALES MANAGEMENT	3	0	0	3.0	3.0	MARKETING AND SALES
141	MKT311	DIGITAL MARKETING	0	0	3	2.0	3.0	MARKETING AND SALES
142	MKT202	MARKETING MANAGEMENT	3	0	0	3.0	3.0	MARKETING MANAGEMENT
143	MKT203	PRODUCT AND BRAND MANAGEMENT	3	0	0	3.0	3.0	MARKETING MANAGEMENT
144	MKT302	MOBILE MARKETING	3	0	0	3.0	3.0	MARKETING MANAGEMENT
145	MKT303	WEB AND SOCIAL MEDIA ANALYTICS	0	0	3	2.0	3.0	MARKETING MANAGEMENT
146	MTH265	DISCRETE MATHEMATICS FOR COMPUTING	3	0	0	3.0	3.0	MATHEMATICS FOR PROGRAMMER
147	MTH280	LINEAR ALGEBRA	3	0	0	3.0	3.0	MATHEMATICS FOR PROGRAMMER
148	MTH381	NUMBER THEORY AND CRYPTOGRAPHY	3	0	0	3.0	3.0	MATHEMATICS FOR PROGRAMMER
149	MTH563	COMPUTATIONAL TECHNIQUES	0	0	3	2.0	3.0	MATHEMATICS FOR PROGRAMMER
150	POL371	POLITICAL CRISIS MANAGEMENT AND COMMUNICATION	3	0	0	3.0	3.0	POLITICAL SCIENCE
151	POL372	THE GLOBAL DIPLOMACY	3	0	0	3.0	3.0	POLITICAL SCIENCE
152	POL373	ETHNIC STUDIES	3	0	0	3.0	3.0	POLITICAL SCIENCE
153	POL374	MORAL FOUNDATIONS OF POLITICS	3	0	0	3.0	3.0	POLITICAL SCIENCE
154	PID801	FUNDAMENTALS OF DESIGN	3	0	0	3.0	3.0	PRODUCT DESIGN
155	PID802	PRODUCT DESIGN STUDIO-I	0	0	3	2.0	3.0	PRODUCT DESIGN
156	PID803	PRODUCT DESIGN STUDIO-II	0	0	5	3.0	5.0	PRODUCT DESIGN
157	PID804	PACKAGING DESIGN	0	0	3	2.0	3.0	PRODUCT DESIGN
158	PSY291	PSYCHOLOGICAL TESTING	3	0	0	3.0	3.0	PSYCHOLOGY
159	PSY292	POSITIVE PSYCHOLOGY	3	0	0	3.0	3.0	PSYCHOLOGY
160	PSY293	PSYCHOLOGY OF HIGH PERFORMANCE	3	0	0	3.0	3.0	PSYCHOLOGY

161	PSY294	PSYCHOMETRICS	3	0	0	3.0	3.0	PSYCHOLOGY
162	PSY281	FOUNDATIONS OF PSYCHOLOGY-I	3	0	0	3.0	3.0	PSYCHOLOGY (UPSC)
163	PSY282	FOUNDATIONS OF PSYCHOLOGY - II	3	0	0	3.0	3.0	PSYCHOLOGY (UPSC)
164	PSY283	ISSUES AND APPLICATIONS OF PSYCHOLOGY-I	3	0	0	3.0	3.0	PSYCHOLOGY (UPSC)
165	PSY284	ISSUES AND APPLICATIONS OF PSYCHOLOGY-II	3	0	0	3.0	3.0	PSYCHOLOGY (UPSC)
166	PBA396	INTRODUCTION TO PUBLIC ADMINISTRATION	3	0	0	3.0	3.0	PUBLIC ADMINISTRATION
167	PBA397	INTRODUCTION TO ADMINISTRATIVE BEHAVIOR	3	0	0	3.0	3.0	PUBLIC ADMINISTRATION
168	PBA398	COMPARATIVE PUBLIC ADMINISTRATION	3	0	0	3.0	3.0	PUBLIC ADMINISTRATION
169	PBA399	PUBLIC POLICY AND ANALYSIS	3	0	0	3.0	3.0	PUBLIC ADMINISTRATION
170	INT346	ROBOTIC PROCESS AUTOMATION	2	0	2	3.0	4.0	ROBOTIC PROCESS AUTOMATION
171	INT347	SOFTWARE BOTS	2	0	2	3.0	4.0	ROBOTIC PROCESS AUTOMATION
172	INT348	BOT AUTOMATION	2	0	2	3.0	4.0	ROBOTIC PROCESS AUTOMATION
173	INT349	ROBOTICS AND AUTOMATION	2	0	2	3.0	4.0	ROBOTIC PROCESS AUTOMATION
174	SOC371	SOCIOLOGY OF MEDIA	3	0	0	3.0	3.0	SOCIOLOGY
175	SOC372	SOCIOLOGY OF AGING	3	0	0	3.0	3.0	SOCIOLOGY
176	SOC373	ENVIRONMENT AND SOCIETY	3	0	0	3.0	3.0	SOCIOLOGY
177	SOC374	UNDERSTANDING CRIMINOLOGY	3	0	0	3.0	3.0	SOCIOLOGY
178	CSE374	ADVANCE SOFTWARE ENGINEERING	3	0	0	3.0	3.0	SOFTWARE METHODOLOGIES AND TESTING
179	CSE375	SOFTWARE TESTING	3	0	0	3.0	3.0	SOFTWARE METHODOLOGIES AND TESTING
180	CSE376	AUTOMATED TESTING	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING
181	CSE377	ADVANCE TESTING TECHNOLOGIES	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING
182	CSE378	WEBSERVICES API AUTOMATION TESTING	2	0	2	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING
183	CSE379	MOBILE AUTOMATED TESTING	0	0	4	3.0	4.0	SOFTWARE METHODOLOGIES AND TESTING
184	SPA107	ELEMENTARY SPANISH I	3	0	0	3.0	3.0	SPANISH
185	SPA108	ELEMENTARY SPANISH II	3	0	0	3.0	3.0	SPANISH
186	SPA109	ELEMENTARY SPANISH III	3	0	0	3.0	3.0	SPANISH
187	SPA110	ELEMENTARY SPANISH IV	3	0	0	3.0	3.0	SPANISH
188	IXD801	INTERACTION DESIGN	0	0	5	3.0	5.0	USER INTERFACE AND EXPERIENCE DESIGN
189	IXD802	FUNDAMENTALS TOOLS OF USER INTERFACE	0	0	4	2.0	4.0	USER INTERFACE AND EXPERIENCE DESIGN
190	IXD803	DESIGN OF USER INTERFACE AND EXPERIENCE	0	0	5	3.0	5.0	USER INTERFACE AND EXPERIENCE DESIGN
191	IXD804	HUMAN COMPUTER INTERACTIONS	0	0	3	2.0	3.0	USER INTERFACE AND EXPERIENCE DESIGN

The list of Open Minor Elective courses to be offered in a term is subject to change from time to time.

Important Points

• The calculation of Total Contact hours in Lecture (L), Tutorial (T) and Practical (P) for Elective Course slots reflecting the minimum L, T and P of a course in Elective Basket.
• Every Course has a 'Type' and 'Nature' which defines its character.

Program Structure

Program Code: P132::B.Tech. (Computer Science and Engineering)
Program Batch: 2023

Category	Category Description	Sub Category	Number of Theory (T)/Practical (P) BYOD (B)	Total Credits
A1	Language & Communication Skills (LCS)	*PES (Soft Skills)*	*1T*	3
		Language & Communication Skills(LCS)	*2T 2B*	6
B1	Basic Science(BSC)	*Maths*	*2T*	7
		Basic Science(BSC)	*2T 2P*	6
C1	Discipline Core(DSC)	*Discipline Core(DSC)*	*25T 7P 10B*	90
D	Open Minor/Open Elective(OEM)	*Open Minor/Open Elective(OEM)*	*4T*	9
E	Project (including Capstone Project and Research Project)(PRJ)	*Project (including Capstone Project and Research Project)(PRJ)*	*2P*	10
F	Community Development Project (PRC)	*Community Development Project(PRC)*	*1P*	2
	Employability Enhancement Activities (EEA)	*Employability Enhancement Activities (EEA)*	*1T*	3
	Engineering Science (ESC)	*Engineering Science(ESC)*	*2T*	8
	Pathway Elective(PWE)	*Pathway Elective(PWE)*	*5T 4B*	15
	Seminar(SMN)	*Seminar(SMN)*	*1P*	1
	Training Compulsory - Summer (TCS)	*Training Compulsory - Summer (TCS)*	*1P*	3
		Total	*44T 14P 16B*	163

Note	
1	For applicable programs, students can graduate with 2 Minors (1 within discipline and 1 outside discipline and as depicted in the structure under the headings Discipline Minors and Open Elective/Minors respectively).
2	Discipline Core (DSC) are be mapped with GATE/UGCNET/CSIRNET/IES/AMCAT/ICAR as per applicability.

Term-wise Credits

Term	Semester	Path	Credit (without rounding)	Credit(with rounding)
1	Term 1	Common	21.5	22.0
2	Term 2	Common	25.5	26.0
3	Term 3	Common	24.5	25.0
4	Term 4	Common	23.5	24.0
5	Term 5	Common	20	21.0
6	Term 6	Common	16.5	17.0
7	Term 7 (For students who opt for industrial internship)	A	16	16.0

7	Term 7 (For students who opt for course work)	Common	14	12.0
8	Term 8 (For students who opt for industrial internship)	A	16	16.0
8	Term 8 (For students who opt for course work)	Common	16	16.0

Term path wise Credits (Including Common Term)

Path	Credit (without rounding)	Credit(with rounding)
A	163.5	167.0
B	161.5	163.0

Course Prerequisites

Term 8 (For students who opt for course work)

CSE439-CAPSTONE PROJECT-II
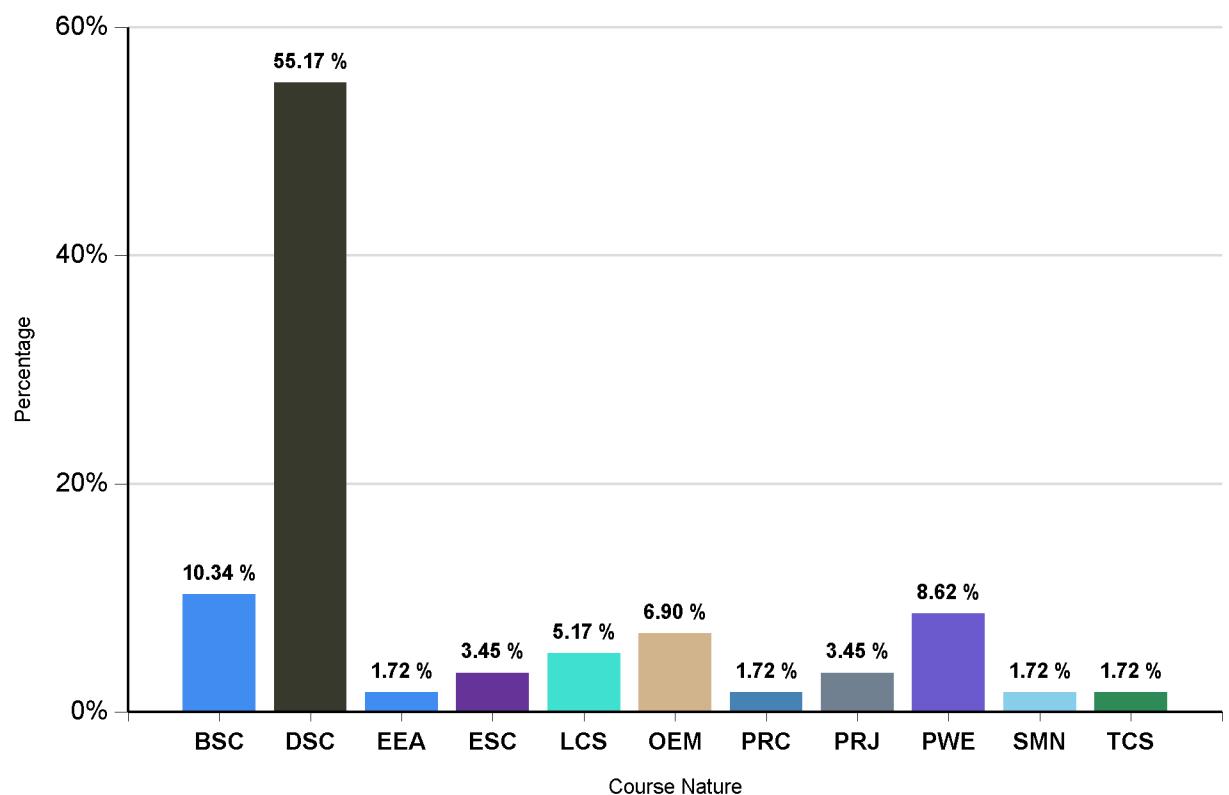
Course Code	Course Title	L	T	P	Credit	Type	Nature
CSE439	CAPSTONE PROJECT-II	0.0	0.0	16.0	8.0	CR	PRJ

Term-8	Course Prerequisite Data				
Course Code	Course Name	L	T	P	Credit
CSE339	CAPSTONE PROJECT-I	0.0	0.0	4.0	2.0

Course Type	
APE	Aptitude Elective
CE	Core Elective
CR	Core Course
CR1	CORE-I
CR3	
DE	Departmental Elective
EM	Engineering Minor
LE	Language Elective
OM	Open/Minor
PW	Pathway Elective
TE	Training Elective

Course Nature	
BSC	Basic Science
DSC	Discipline Core
EEA	Employability Enhancement Activities
ESC	Engineering Science
LCS	Language & Communication Skills
OEM	Open Minor/Open Elective
PRC	Community Development Project
PRJ	Project (including Capstone Project and Research Project)
PWE	Pathway Elective
SMN	Seminar
TCF	Training Compulsory – Full term
TCS	Training Compulsory - Summer

Program Structure

Sr No	NAME	Nature Name	Total
1	BSC	Basic Science	6
2	DSC	Discipline Core	32
3	EEA	Employability Enhancement Activities	1
4	ESC	Engineering Science	2
5	LCS	Language & Communication Skills	3
6	OEM	Open Minor/Open Elective	4
7	PRC	Community Development Project	1
8	PRJ	Project (including Capstone Project and Research Project)	2
9	PWE	Pathway Elective	5
10	SMN	Seminar	1
11	TCS	Training Compulsory - Summer	1