

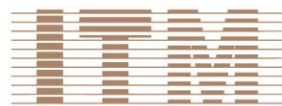
B.Tech. Computer Science

Semester-Wise Course List with Course Codes & Credits

Category	Semester	Course Code	Course Name	Credits
HSMC (Humanities & Social Sciences including Management Courses)	I	HUL0201	Communication Skills	3
	II	HUL0301	Humanities-I (Making of Modern India)	2
	III	HUL0502	Humanities II - Personality Development and Communication Skills	2
	IV	HUL0602	Principles of Managerial Economics	4
	VII	HUL0702	Soft Skills – (CRT)	2
Total HSMC Credits				17

Category	Semester	Course Code	Course Name	Credits
BSC (Basic Science Courses)	I	CHL0101	Engineering Chemistry	5
	II	PHL0201	Physics-I	5
	II	MAL0201	Statistics for Engineers	4
	III	MAL0305	Discrete Structure and Matrices	3
Total BSC Credits				24

Category	Semester	Course Code	Course Name	Credits
ESC (Engineering Science Courses)	I	EEL0101	Basic Electrical Engineering	5
	I	MEL0102	Engineering Graphics	4
	II	MEL0203	Workshop/Manufacturing Practices	3
	III	CSL0310	Computer System Organization (includes Digital Electronics)	4
	IV	CSL0402	Data Communication and Computer Networks	4
Total ESC Credits				21



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“ CELEBRATING DREAMS ”

Category	Semester	Course Code	Course Name	Credits
PCC (Professional Core Courses)	III	CSP0309	Object Oriented Programming using Java	3
	III	CSL0311	Database Management System	4
	IV	CSL4010	Operating Systems (Linux Lab)	4
	IV	CSL4011	Design & Analysis of Algorithms	4
	V	CSL0509	Cryptography	4
	V	CSL0502	Theory of Computation	4
	V	CSL0504	Data Warehousing & Data Mining	4
	VI	CSL0609	Cloud Computing	4
	VI	CSL0601	Internet of Things	4
	VII	CSL0702	Software Testing	4
	VIII	CSL0804	Entrepreneurship and Startup Culture	2
Total PCC Credits				64

Category	Semester	Course Code	Course Name	Credits
PEC (Professional Elective Courses)	VI	CSE0629	Full Stack Development	4
	VI	CSE0611	Compiler Design	4
	VII	CSE0729	DevOps	4
	VII	CSE0710	Software Testing	4
	VII	CSE0717	Quantum Computing Basics	4
	VIII	CSE0731	Generative AI	4
Total PEC Credits				12

Category	Semester	Course Code	Course Name	Credits
OEC (Open Elective Courses)	VII	CSE0732	Data Governance	3
	VII	CSE0733	Advanced Big Data Analytics	3
	VIII	CSE0803	MOOC Course (Management Oriented)	3



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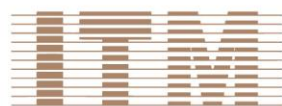
“CELEBRATING DREAMS”

Category	Semester	Course Code	Course Name	Credits
Total OEC Credits				9

Category	Semester	Course Code	Course Name	Credits
LC (Laboratory Courses & Projects)	I	CSAU01021	Programming Logics (Scratch Programming)	3
	II	CSL02011	Programming for Problem Solving using C	5
	III	CSL0311	Database Management System Lab	4
	IV	CSP0406	Advanced Java	3
	V	CSD05022	Seminar II	1
	VI	CSD06032	Project-1	2
	VII	CSD07052	Major Project I - Advanced Trends in Computing	2
	VIII	CSD08042	Internship/Capstone Project	10
Total LC Credits				22

Category	Semester	Course Code	Course Name	Credits
MC (Mandatory Courses - Non-Graded)	I	NCC-01012	NCC (Optional)	2
	II	NCC-02022	NCC (Optional)	2
	III	NCC-03034	NCC (Optional)	2
	IV	NCC-04033	NCC (Optional)	2
	V	NCC-05054	NCC (Optional)	2
	VI	NCC-06063	NCC (Optional)	2
Total MC Credits				-

Category	Semester	Course Code	Course Name	Credits
MOOC (Massive Open Online Courses)	III	MOOC1	MOOC Course	2
	VI	MOOC2	MOOC Course	2
	VII	MOOC3	MOOC Course	2
Total MOOC Credits				6



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“CELEBRATING DREAMS”

Category	Semester	Course Code	Course Name	Credits
IKS (Indian Knowledge System)	II	IKS-015	Indian Knowledge System	2
	IV	IKS-024	Indian Knowledge System	2
	VI	IKS-034	Indian Knowledge System	2
	VIII	IKS-043	Indian Knowledge System	2
Total IKS Credits				8

Summary of Total Credits:

Category	Total Credits
HSMC (Humanities & Social Sciences including Management Courses)	17
BSC (Basic Science Courses)	24
ESC (Engineering Science Courses)	21
PCC (Professional Core Courses)	64
PEC (Professional Elective Courses)	12
OEC (Open Elective Courses)	9
LC (Laboratory Courses & Projects)	22
MOOC (Massive Open Online Courses)	6
IKS (Indian Knowledge System)	8