

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA												
Department of Information Technology												
B.Tech. (Information Technology)												
Scheme-2024												
SEMESTER-5TH												
Module Name	Course Category	Course Code	Course Title	Theory/ Integrated/ Practical	Lecture/ Tutorial/ Practical Hours per Week			Credits	Contact Hours	Marks Distribution		
					Lectures	Tutorials	Practicals			CA	ESE	Total
Web and Cloud Technologies	Professional Core	CIT110	Cloud of Things	Integrated	4	0	4	6	8	90	60	150
Systems Architecture, Design and Administration	Professional Core	CIT111	Computer Organization and Architecture	Integrated	3	0	2	4	5	90	60	150
Algorithms and Programming	Professional Core	CIT112	Design and Analysis of Algorithms	Integrated	3	1	2	5	6	90	60	150
Data and Intelligent Systems	Professional Core	CIT113	Machine Learning	Integrated	3	1	2	5	6	90	60	150
	Professional Elective	EITXXX	Professional Elective-I	Integrated	3	0	2	4	5	90	60	150
Indian Knowledge Foundations	Mandatory (Non-Credit)	MC102	Essence of Indian Knowledge Tradition\$	Theory	2	0	0	0	2	50	0	50
Ideation and Creativity	Engineering Science/ Program Specific Course	ESIT102	Design Thinking	Practical	0	0	2	1	2	50	0	50
Experiential Learning	Project Work, Seminar and Internship	TRIT102	Training-II* (4-week Industrial Training)	Practical	0	0	120	1	0	60	40	100
Life Skills	Mentoring and Professional Development	MPD103	Mentoring and Professional Development-3#	Practical	0	0	1	0	1	0	0	0
Total					18	2	135	26	35	610	340	950
\$ The minimum criteria for passing Non Credit course is securing 40% marks in internal exams.												
*Industrial Training-II will be imparted at the end of 4thsemester in the institute or students can go to industry for four weeks.												
# There will be one period per week for Mentoring and Professional Development; final evaluation of this course will be done based on the combined assessment of odd and even semester of respective year of study.												
CA - Continous Assessment												
ESE - End Semester Examination												

Professional Elective-I (Module Name)

EIT101 - Artificial Intelligence (Data and Intelligent Systems)
 EIT102 - Advanced Computer Networks (Network Security and Threat Intelligence)
 EIT103 - Advanced Web Technologies (Web and Cloud Technologies)
 EIT104 - Blockchain Architecture and its Applications (Blockchain and Decentralized Technologies)
 EIT105 - Advanced Java (Algorithms and Programming)
 EIT106 - Software Modeling and Analysis (Systems Architecture, Design and Administration)
 EIT107 - Business Intelligence and Data Analytics (Data and Intelligent Systems)
 EIT108 - Digital Image Processing (Data and Intelligent Systems)
 EIT109 - Quantum Computing (Advanced Computing Systems and Enterprise IT)