

BRANCH XII: DIPLOMA IN INFORMATION TECHNOLOGY

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	FE	Total
SEMESTER 1								
THEORY								
X21101	ENGINEERING MATHEMATICS-I	4	1	-	5	25	75	100
X21102	PHYSICS	4	1	-	5	25	75	100
X21103	CHEMISTRY	4	-	-	4	25	75	100
X21104	ENGLISH	4	-	-	4	25	75	100
I21105	BASIC ENGINEERING GRAPHICS	2	-	3	3.5	25	75	100
PRACTICALS								
X21151	PHYSICS LABORATORY	-	-	2	1	25	75	100
X21152	CHEMISTRY LABORATORY	-	-	2	1	25	75	100
I21153	PROGRAMMING USING PYTHON LABORATORY	-	-	3	1.5	25	75	100
I21154	INPLANT TRAINING	-	-	3	1.5	-	-	GRADE
X21155	PHYSICAL EDUCATION -I	-	-	2	1	-	-	GRADE
	TOTAL	18	2	15	27.5	200	600	800
SEMESTER 2								
THEORY								
X21201	ENGINEERING MATHEMATICS-II	4	1	-	5	25	75	100
X21202	CALCULUS AND ITS APPLICATIONS	4	1	-	5	25	75	100
I21203	APPLIED PHYSICS	4	-	-	4	25	75	100
I21204	CHEMISTRY OF ELECTRONIC MATERIALS	4	-	-	4	25	75	100
I21205	PROBLEM SOLVING TECHNIQUES USING C	4	1	-	5	25	75	100
PRACTICALS								
I21251	APPLIED PHYSICS LABORATORY	-	-	2	1	25	75	100
I21252	ENGINEERING CHEMISTRY LABORATORY	-	-	2	1	25	75	100
I21253	PROBLEM SOLVING TECHNIQUES USING C LABORATORY	-	-	3	1.5	25	75	100
I21254	COMMUNICATIVE ENGLISH LABORATORY	1	-	2	2	25	75	100
X21255	PHYSICAL EDUCATION -II	-	-	2	1	-	-	GRADE
	TOTAL	21	3	11	29.5	225	675	900
SEMESTER 3								
THEORY								
I21301	STATISTICS AND PROBABILITY MODELS	4	1	-	5	25	75	100
I21302	MODERN DIGITAL ELECTRONICS	4	1	-	5	25	75	100
I21303	RELATIONAL DATABASE MANAGEMENT SYSTEM	4	-	-	4	25	75	100
I21304	DATA STRUCTURES	4	1	-	5	25	75	100
PRACTICALS								
I21351	MODERN DIGITAL ELECTRONICS LABORATORY	-	-	3	1.5	25	75	100
I21352	RELATIONAL DATABASE MANAGEMENT SYSTEM LABORATORY	-	-	3	1.5	25	75	100
I21353	DATA STRUCTURES LABORATORY	-	-	3	1.5	25	75	100
I21354	ADVANCED INTERNET TECHNOLOGIES LABORATORY	2	-	2	3	25	75	100
I21355	TECHNICAL COMMUNICATION LABORATORY	1	-	2	2	25	75	100
	TOTAL	19	3	13	28.5	225	675	900

Legend: **CA**–Continuous Assessment; **FE**–Final Examination;

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SEMESTER 4								
THEORY								
I21401	OBJECT ORIENTED PROGRAMMING USING JAVA	4	1	-	5	25	75	100
I21402	OPERATING SYSTEM CONCEPTS	4	1	-	5	25	75	100
I21403	COMPUTER ORGANIZATION	4	1	-	5	25	75	100
I21404	SOFTWARE ENGINEERING METHODOLOGIES	4	1	-	5	25	75	100
PRACTICALS								
I21451	OBJECT ORIENTED PROGRAMMING USING JAVA LABORATORY	-	-	3	1.5	25	75	100
I21452	OPERATING SYSTEM CONCEPTS LABORATORY	-	-	3	1.5	25	75	100
I21453	SOFTWARE PRODUCT DESIGN AND TESTING LABORATORY	-	-	3	1.5	25	75	100
I21454	MOBILE AND LAPTOP TROUBLESHOOTING LABORATORY	-	-	3	1.5	25	75	100
I21455	GAME ART AND DESIGN LABORATORY	-	-	3	1.5	25	75	100
I21456	INTERNSHIP [#]	-	-	-	3	-	-	GRADE
	TOTAL	16	4	15	30.5	225	675	900
SEMESTER 5								
THEORY								
I21501	COMPUTER NETWORKS AND ADMINISTRATION	4	1	-	5	25	75	100
I21502	CLOUD COMPUTING AND SECURITY	4	1	-	5	25	75	100
I21Exx	ELECTIVE THEORY- I	4	1	-	5	25	75	100
PRACTICALS								
I21551	COMPUTER NETWORKS AND ADMINISTRATION LABORATORY	-	-	3	1.5	25	75	100
I21552	CLOUD COMPUTING AND SECURITY LABORATORY	-	-	3	1.5	25	75	100
I21553	MACHINE LEARNING LABORATORY	2	-	3	3.5	25	75	100
I21554	IT BASED AUTOMATION LABORATORY	-	-	3	1.5	25	75	100
I21555	MINI PROJECT AND ENTREPRENEURSHIP	3	-	3	4	25	75	100
	TOTAL	17	3	15	27	200	600	800
SEMESTER 6								
THEORY								
I21601	CRYPTOGRAPHY AND INFORMATION SECURITY	4	-	-	4	25	75	100
I21602	AUGMENTED AND VIRTUAL REALITY	4	-	-	4	25	75	100
I21Exx	ELECTIVE THEORY- II	4	1	-	5	25	75	100
PRACTICALS								
I21651	CRYPTOGRAPHY AND INFORMATION SECURITY LABORATORY	-	-	3	1.5	25	75	100
I21652	AUGMENTED AND VIRTUAL REALITY LABORATORY	-	-	3	1.5	25	75	100
I21653	DATA SCIENCE LABORATORY	1	-	3	2.5	25	75	100
I21654	MOBILE APP DEVELOPMENT LABORATORY	-	-	3	1.5	25	75	100
I21655	PROJECT WORK AND VIVA VOCE	-	-	9	4	25	75	100
	TOTAL	13	1	21	24	200	600	800

ELECTIVE COURSES (Two to be opted)

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		Lecture	Tutorial	Practical		CA	FE	Total
THEORY								
I21E01	ADVANCED DATABASE MANAGEMENT SYSTEM	4	1	-	5	25	75	100
I21E02	DEEP LEARNING	4	1	-	5	25	75	100
I21E03	SOCIAL MEDIA MARKETING AUTOMATION	4	1	-	5	25	75	100
I21E04	DATA WAREHOUSING AND DATA MINING	4	1	-	5	25	75	100
I21E05	BLOCK CHAIN	4	1	-	5	25	75	100
I21E06	ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS	4	1	-	5	25	75	100
I21E07	SATELLITE AND UAV COMMUNICATION SYSTEMS	4	1	-	5	25	75	100

Legend: **CA**–Continuous Assessment; **FE**–Final Examination;
[#] -Internship will be arranged for 4 weeks during the vacation at the end of 4th semester.