

B.E. COMPUTER AND COMMUNICATION ENGINEERING**Regulation 2023****Semester I**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
	-	Induction Program	-	-	-	-	-	-
1	U23MA201	Calculus for Engineers	BS	4	3	1	0	4
2	U23CS301	Problem Solving using C	ES	3	3	0	0	3
THEORY CUM PRACTICAL								
3	U23HS181	Technical English	HS	4	2	0	2	3
4	U23CS381	Application Design and Development	ES	4	2	0	2	3
5	U23PH282	Semiconductor Physics	BS	5	3	0	2	4
PRACTICALS								
6	U23GE351	Engineering Practices Laboratory	ES	2	0	0	2	1
7	U23CS351	Problem Solving using C Laboratory	ES	4	0	0	4	2
PROFESSIONAL DEVELOPMENT								
8	U23EM751	Soft Skills	EM	2	0	0	2	1
MANDATORY COURSE								
9	U23MC901	தமிழர் மரபு/Heritage of Tamils	HSMC	1	1	0	0	1
TOTAL				29	14	1	14	22

Semester II

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23MA205	Complex Variables and Transforms	BS	4	3	1	0	4
2	U23CS401	Data Structures	PC	3	3	0	0	3
3	U23CS402	Object Oriented Programming using C++	PC	3	3	0	0	3
	U23NCC01	NCC Credit Course Level I#	-	2	2	0	0	2*
THEORY CUM PRACTICAL								
4	U23HS1XX	Language Elective	HS	4	2	0	2	3
5	U23CS382	Python Programming	ES	5	3	0	2	4
6	U23CC481	Microprocessors and Microcontrollers	PC	4	2	0	2	3
PRACTICALS								
7	U23CS451	Data Structures Laboratory	PC	4	0	0	4	2
8	U23CS452	Object Oriented Programming using C++ Laboratory	PC	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
9	U23EM752	Logical Thinking	EM	2	0	0	2	1
MANDATORY COURSE								
10	U23MC902	தமிழரும் தொழில்நுட்பமும் /Tamils and Technology	HSMC	1	1	0	0	1
TOTAL				32	17	1	14	25

Semester III

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23MA207	Linear Algebra and Partial Differential Equations	BS	4	3	1	0	4
3	U23CS405	Java Programming	PC	3	3	0	0	3
3	U23CS404	Database Management Systems	PC	3	3	0	0	3
4	U23CS403	Design and Analysis of Algorithms	PC	3	3	0	0	3
THEORY CUM PRACTICAL								
5	U23EC382	Digital Principles and Computer Organization	ES	5	3	0	2	4
PRACTICALS								
6	U23CS455	Java Programming Laboratory	PC	2	0	0	2	1
7	U23CS454	Database Management Systems Laboratory	PC	2	0	0	2	1
8	U23CS453	Design and Analysis of Algorithms Laboratory	PC	4	0	0	4	2
PROFESSIONAL DEVELOPMENT								
9	U23EM703	Advanced Logical Thinking	EM	2	0	0	2	1
MANDATORY COURSE								
	U23MC903	Environmental Science	MC	1	1	0	0	NC
TOTAL				29	16	1	12	22

Semester IV

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23MA209	Probability and Statistics	BS	4	3	1	0	4
2	U23CB401	Operating Systems	PC	3	3	0	0	3
3	U23CS406	Full Stack Development	PC	3	3	0	0	3
	U23NCC02	NCC Credit Course Level 2 [#]	-	3	3	0	0	3*
THEORY CUM PRACTICAL								
4	U23EC484	Computer Networks	PC	5	3	0	2	4
5	U23CC482	Signals and Linear Systems	PC	5	3	0	2	4
PRACTICALS								
6	U23CB451	Operating Systems Laboratory	PC	2	0	0	2	1
7	U23CS456	Full Stack Development Laboratory	PC	2	0	0	2	1
PROJECT WORK								
8	U23CC651	Project using Design thinking (Product/Software Development Life Cycle)	PW	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
9	U23EM754	Summer Internship	EM	-	-	-	-	1
MANDATORY COURSE								
	U23MC904	Universal Human Values	MC	1	1	0	0	NC
TOTAL				27	16	1	10	22

Semester V

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23CC402	Discrete Time Signal Processing	PC	4	3	1	0	4
2	U23EC404	Analog and Digital Communication	PC	3	3	0	0	3
3	U23XXXXX	Professional Elective I*	PE	3	3	0	0	3
4	U23AM407	Artificial Intelligence and Machine Learning for Communication Engineers	PC	3	3	0	0	3
5	U23OXXXX	Open Elective I*	OE	3	3	0	0	3
THEORY CUM PRACTICAL								
6	U23CC483	Information Theory and Coding	PC	4	2	0	2	3
7	U23AD481	Data Science	ES	5	3	0	2	4
PRACTICALS								
8	U23CC451	Discrete Time Signal Processing Laboratory	PC	2	0	0	2	1
9	U23EC453	Communication Systems Laboratory	PC	2	0	0	2	1
10	U23AM457	Artificial Intelligence and Machine Learning for Communication Engineers Laboratory	PC	2	0	0	2	1
11	U23IECXX	Industry Oriented Course	EM	1	1	0	0	1
TOTAL				32	21	1	10	27

Semester VI

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23IT402	Cloud Computing	PC	3	3	0	0	3
2	U23OXXXX	Open Elective II*	OE	3	3	0	0	3
3	U23CS408	Cryptography and Cybersecurity	PC	3	3	0	0	3
4	U23XXXXX	Professional Elective II*	PE	3	3	0	0	3
	U23NCC03	NCC Credit Course Level 3#	-	3	3	0	0	3*
THEORY CUM PRACTICAL								
5	U23CC484	Wireless Mobile Communication	PC	4	2	0	2	3
6	U23EC383	Embedded Systems and IOT	ES	5	3	0	2	4
PRACTICALS								
7	U23IT451	Cloud Computing Laboratory	PC	2	0	0	2	1
8	U23CS457	Cyber Security Laboratory	PC	2	0	0	2	1
PROJECT WORK								
9	U23CC652	Innovative / Multi-Disciplinary Project	PW	2	0	0	2	1
TOTAL				27	17	0	10	22

*Open Elective/PE - LTP C for Open Electives can either be 3 0 0 3 or 2 0 2

#NCC Credit Course level 3 is offered for NCC students only.

Semester VII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	U23CB101	Principles of Management	HS	3	3	0	0	3
2	U23XXXXX	Professional Elective III*	PE	3	3	0	0	3
3	U23XXXXX	Professional Elective IV*	PE	3	3	0	0	3
4	U23XXXXX	Professional Elective V*	PE	3	3	0	0	3
5	U23OXXXX	Open Elective III*	OE	3	3	0	0	3
6	U23CB102	Project Management and Finance	MC	1	1	0	0	1
PROJECT WORK								
7	U23CC653	Project Work - Phase I	PW	6	0	0	6	3
TOTAL				22	16	0	6	19

Semester VIII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
PROJECT WORK								
1	U23CC654	Project Work - Phase II	PW	16	0	0	16	8
TOTAL				16	0	0	16	8

* Open Elective/PE - LTPC for Open Electives can either be 3 0 0 3 or 2 0 2 3

Total Number of Credits: 167

SUMMARY

Sl. No.	Course Category	Credits per Semester								Credits	Credit %
		I	II	III	IV	V	VI	VII	VIII		
1	HS	3	3	-	-	-	-	3	-	9	5.42
2	BS	8	4	4	4	-	-	-	-	20	12.04
3	ES	9	4	4	-	4	4	-	-	25	15.06
4	PC	-	12	13	16	16	11	-	-	68	40.96
5	PE	-	-	-	-	3	3	9	-	15	9.03
6	OE	-	-	-	-	3	3	3	-	9	5.42
7	PW	-	-	-	1	-	1	3	8	13	7.83
8	EM	1	1	1	1	1	-	-	-	5	2.40
9	NC	-	-	✓	✓	✓	-	-	-	-	-
10	MC	1	1	✓	✓	-	-	1	-	2	1.20
Total		22	25	22	22	27	22	19	8	167	100