

**The LNM Institute of Information Technology, Jaipur
(Deemed-to-be-University)**

**Seventieth Meeting of the
Academic Council**

**Tuesday, November 28, 2023
10.00 a.m.**

**LNMIIT Campus
Rupa-Ki-Nangal
Post-Sumel, Via-Jamdoli,
Jaipur - 302031**

Minutes of Meeting

THE LNM INSTITUTE OF INFORMATION TECHNOLOGY, JAIPUR

Minutes 70th (Emergent) Meeting of Academic Council

Date: November 28, 2023

Time: 10:00 AM

Venue: VC Room

Sub: Minutes of 70th Meeting of Academic Council held on November 28, 2023 at 10:00 AM in hybrid mode

A. Following members attended the meeting offline:

1.	Prof. Rahul Banerjee, Director	Chairperson
2.	Dr. Sakthi Balan M., Dean of Sponsored & Industrial Research	Member
3.	Dr Sandeep Saini, Dean of Academic Affairs I/C	Member
4.	Prof. Somnath Biswas, DoAR	Member
5.	Dr. Amit Neogi, Dean of Alumni Relations & Engagement	Member
6.	Dr. Vikas Gupta, Dean of Faculty Affairs I/C	Member
7.	Dr. Anirudh Agarwal, Acting Dean of Student Affairs I/C	Member
8.	Dr. Nikhil Sharma, HoD, ECE	Member
9.	Prof. Manju Dhariwal, Dean of International Student Enablement & Gender Sensitization	Member
10.	Dr. Jayaprakash Kar, HoD, CSE	Member
11.	Dr. Ashok Garai, HoD, Physics	Member
12.	Dr. Manish Garg, HoD, Maths	Member
13.	Dr. Surinder Singh Nehra, HoD, HSS	Member
14.	Dr. Sunil Kumar, HoD, CCE	Member
15.	Prof. Sunil Pandey, Distinguished Professor, MME	Member
16.	Prof. Ranjan Gangopadhyay, Research Professor, ECE	Member
17.	Prof. M. K. Kadalbajoo, Distinguished Professor, Mathematics	Member
18.	Prof. Ganesh Datt Sharma, Emeritus Professor, Physics & ECE	Member
19.	Dr. Preety Singh, Associate Professor, CSE	Member
20.	Dr. Kusum Lata, Associate Professor, ECE	Member
21.	Mr. Purnendu Karmakar, Assistant Professor, ECE	Member
22.	Dr. Mohit Makkar, HoD MME	Member
23.	Dr. Pawan Kumar Paras, Registrar	Member Secretary

B. Following members attended the meeting online:

1	Mr. Giridhar M. Kunkur	Member
2	Mr. Naman Jain	Student Member
3	Ms. Kazia Saini	Student Member

C. Following members could not attend the meeting:

1.	Prof. Ponnurangam Kumarguru	Member
2.	Prof. Subrat Kar	Member
3.	Dr. Sudip Mishra	Member
4.	Prof. Raghuvir S. Tomar, Emeritus Professor, ECE	Member
5.	Prof. Anupam Singh, Dean of Admissions	Member
6.	Dr. Anu Malik, Assistant Professor, HSS	Member
7.	Tushar Sharma, Student Representative - UG	Student Member
8.	Rinka Ghosh	Student Member

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08/12/2023
Acting Director

At the outset Prof. Rahul Banerjee, Chairperson Academic Council welcomed all the members of Academic Council. Prof. Banerjee presented the agenda items for discussion as under:

SECTION-1: DISCUSSION ITEMS			
Agenda Item No	AC-M-	:	To discuss the proposed curriculum structure of B. Tech programmes in CCE, CSE, ECE, ME and B. Tech-M. Tech (Integrated) programmes in CSE & ECE.
70.01.01			
<p>Based on the recommendation of Board of Studies of CCE, ECE, CSE, ME Departments, Dean-Academic Affair presented the detailed curriculum structure before the members of Academic Council. He presented the course and credits of each programme for each semester. He informed to the Academic Council that the proposed curriculum structure of B.Tech programmes in CCE, CSE, ECE, ME and B.Tech-M.Tech (Integrated) programmes in CSE & ECE were deliberated in 45th, 46th & 47th meetings of AC-AAC held on September 20, 2023, November 7, 2023 & November 9, 2023, respectively.</p> <p>He further told that guidelines as suggested under NEP-2020 has already been considered while preparation of revised curriculum of all UG Programme. AC-AAC recommended the proposed curriculum structure to the Academic Council for approval. Placed at Annexure 70.01.01.</p> <p>The Members of the Academic Council deliberated the curriculum structure and compared the same as per the guidelines of NEP-2020. After due deliberation, the Academic Council approved the curriculum structure of B.Tech programmes in CCE, CSE, ECE, ME and B.Tech-M. Tech (Integrated) programmes in CSE & ECE.</p>			
Agenda Item No	AC-M-	:	To approve the Academic Calendar 2024
70.01.02			
<p>Dean-Academic Affair presented the proposed Academic Calendar 2024 and is placed at Annexure 70.01.02. He told that Academic Calendar is prepared on the basis of all the activities and academic delivery required as per mandatory statutory requirements.</p> <p>The Academic Council discussed the dates of various activities as proposed in the Academic Calendar. After due deliberation, the Academic Council approved the Academic Calendar 2024.</p>			
Agenda Item No	AC-M-	:	To approve Vision and Mission of ECE and ME Department.
70.01.03			
<p>Head-ECE presented the Vision and Mission of ECE Department before the Members of Academic Council which is placed at Annexure-AC-A-70.01.03 (a).</p> <p>Head-ME presented the Vision and Mission of ME Department before the Members of Academic Council which is placed at Annexure-AC-A-70.01.03 (b).</p>			

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The Academic Council discussed the proposed Vision and Mission of both the department and found in line with the Vision and Mission of the LNMIIT. After due deliberation, the Academic Council approved the Vision and Mission of ECE Department and ME Department.

SECTION-2: ANY OTHER ITEMS

Agenda Item No AC-M-
70.06.01

: Any other item with the permission of Chair

There being no other item on agenda

The meeting ended with a vote of thanks by the Chair.

Dr. Pawan Kumar Paras
(Member Secretary)
Academic Council

f 08/12/2023
Acting Director

Prof. Rahul Banerjee
(Chairperson)
Academic Council

CCE

1st Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

Total Credits 22

2nd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	CS123	Digital Systems	PC	3	0	2	4
8	CS124	Discrete Mathematics	PC	3	0	0	3

Total Credits 22

Summer Term

Exit option with UG Certificate* by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

3rd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	BSC	3	1	0	4
2	CS215	Design and Analysis of Algorithms	PC	3	0	2	4
3	CC212	Signals and Systems	PC	3	1	0	4
4	CC211	Computer Organization and Architecture	PC	3	0	0	3
5	CS213	Database Management Systems	ESC	3	0	2	4
6	CS214	Object Oriented Programming	PC	3	0	2	4

Total Credits 23

4th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	CS221	Web Programming	PC	0	0	2	1
3	CS223	Operating Systems	PC	3	0	2	4
4	CC221	Computer Communication Networks	PC	3	0	2	4
5	EC221	Analog and Digital Communication	PC	3	0	0	3
6	EC221L	Analog and Digital Communication Lab	PC	0	0	3	1.5
7	CC222	Embedded Systems and IoT	PC	3	0	3	4.5
8	CC223	Introduction to AI and ML	PC	3	0	2	4

Total Credits 23

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	EC311	Wireless Communication	PC	3	0	0	3
4	EC311L	Wireless Communication lab	PC	0	0	3	1.5
5	CS311	Software Engineering	PC	3	0	0	3
6	EC313	Digital Signal Processing	PC	3	0	0	3
7	EC313L	Digital Signal Processing Lab	PC	0	0	3	1.5
8	CS314	Software Development Lab	PC	0	0	2	1
9		Program Elective – 1	PE	3	0	0	3
Total Credits							23

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN321	B.Tech. Project (BTP)	Project	0	0	8	4
2	HS321	Introduction to Economics	HSMC	3	0	0	3
3	LN322	Seminar and Presentation Skills	Project	0	0	2	1
4	CC321	Information Theory and Coding	PC	3	0	0	3
5	EC	Control System Engineering	PC	3	0	0	3
6		Program Elective – 2	PE	3	0	0	3
7		Program Elective – 3	PE	3	0	0	3
Total Credits							20

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN411	B.Tech. Project (BTP)	Project	0	0	8	4
2		Program Elective – 4	PE	3	0	0	3
3		Program Elective – 5	PE	3	0	0	3
4		Open Elective – 1	OE	3	0	0	3
5		Open Elective – 2	OE	3	0	0	3
Total Credits							16

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN421	Industrial SLI	Project	0	0	24	12
Option 2	LN422	Thesis	Project	0	0	24	12
Option 3		4 Elective Courses	OE/PE	12	0	0	12
Option 4	LN423	Project	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Option 5	LN424	Internship	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Total Credits							12

Total Curriculum Credits							161
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CSE							
1st Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1
A 3-week Mandatory Induction Program							
Total Credits							22

2nd Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	CS123	Digital Systems	PC	3	0	2	4
8	CS124	Discrete Mathematics	PC	3	0	0	3
Total Credits							22

Summer Term							
Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

3rd Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	BSC	3	1	0	4
2	EC211	Signals and Systems	PC	3	0	0	3
3	CS211	Computer Organization and Architecture	PC	3	0	2	4
4	CS213	Database Management Systems	PC	3	0	2	4
5	CS214	Object Oriented Programming	PC	3	0	2	4
6	CS215	Design and Analysis of Algorithms	PC	3	0	2	4
7							
8							
Total Credits							23

4th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	HS222	Principles of Management	HSMC	3	0	0	3
3	CS221	Web Programming	PC	0	0	2	1
4	CS222	Theory of Computation	PC	3	0	0	3
5	CS223	Operating Systems	PC	3	0	2	4
6	CS224	Computer Networks	PC	3	0	2	4
7	CS225	Data Science	PC	3	0	0	3
8		Program Elective 1	PE	3	0	0	3
Total Credits							22

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	CS311	Software Engineering	PC	3	0	0	3
4	CS312	Artificial Intelligence	PC	3	0	2	4
5	CS313	Computer System Security	PC	3	0	2	4
6	CS314	Software Development Lab	PC	0	0	2	1
7		Program Elective 2	PE	3	0	0	3
Total Credits							22

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN321	B.Tech. Project (BTP)	Project	0	0	8	4
2	HS321	Introduction to Economics	HSMC	3	0	0	3
3	LN322	Seminar and Presentation Skills	Project	0	0	2	1
4	MT321	Numerical Analysis and Scientific Computing	BSC	3	1	0	4
5		Program Elective 3	PE	3	0	0	3
6		Program Elective 4	PE	3	0	0	3
7		Open Elective 1	OE	3	0	0	3
Total Credits							21

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN411	B.Tech. Project (BTP)	Project	0	0	8	4
2		Program Elective 5	PE	3	0	0	3
3		Program Elective 6	PE	3	0	0	3
4		Open Elective 2	OE	3	0	0	3
5		Open Elective 3	OE	3	0	0	3
Total Credits							16

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN421	Industrial SLI	Project	0	0	24	12
Option 2	LN422	Thesis	Project	0	0	24	12
Option 3		4 Elective Courses	OE/PE	12	0	0	12
Option 4	LN423	Project	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Option 5	LN424	Internship	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Total Credits							12

Total Curriculum Credits							160
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CSE (B.Tech.-M.Tech)

1st Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

Total Credits **22**

2nd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	CS123	Digital Systems	PC	3	0	2	4
8	CS124	Discrete Mathematics	PC	3	0	0	3

Total Credits **22**

Summer Term

Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

3rd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	BSC	3	1	0	4
2	EC211	Signals and Systems	ESC	3	0	0	3
3	CS211	Computer Organization and Architecture	PC	3	0	2	4
4	CS213	Database Management Systems	PC	3	0	2	4
5	CS214	Object Oriented Programming	PC	3	0	2	4
6	CS215	Design and Analysis of Algorithms	PC	3	0	2	4
7							
8							

Total Credits **23**

4th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	HS222	Principles of Management	HSMC	3	0	0	3
3	CS221	Web Programming	PC	0	0	2	1
4	CS222	Theory of Computation	PC	3	0	0	3
5	CS223	Operating Systems	PC	3	0	2	4
6	CS224	Computer Networks	PC	3	0	2	4
7	CS225	Data Science	PC	3	0	0	3
8		Program Elective 1	PE	3	0	0	3

Total Credits **22**

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	CS311	Software Engineering	PC	3	0	0	3
4	CS312	Artificial Intelligence	PC	3	0	2	4
5	CS313	Computer System Security	PC	3	0	2	4
6	CS314	Software Development Lab	PC	0	0	2	1
7		Program Elective 2	PE	3	0	0	3
8							
Total Credits							22

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS321	Introduction to Economics	HSMC	3	0	0	3
2	MT321	Numerical Analysis and Scientific Computing	BSC	3	1	0	4
3		Program Elective 3	PE	3	0	0	3
4		Program Elective 4	PE	3	0	0	3
5		Open Elective 1	OE	3	0	0	3
Total Credits							16

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN412	Thesis	Project	0	0	8	4
2	CS511	Advanced Data Structures	PC	3	0	2	4
3		Program Elective 5	PE	3	0	0	3
4		Program Elective 6	PE	3	0	0	3
5		Open Elective 2	OE	3	0	0	3
		Open Elective 3	OE	3	0	0	3
Total Credits							20

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN425	Thesis	Project	0	0	8	4
2	LN322	Seminar and Presentation Skills	Project	0	0	2	1
3	CS521	Advanced Algorithms	PC	3	0	2	4
4		Program Elective 7	PE	3	0	0	3
5		Program Elective 8	PE	3	0	0	3
		Open Elective 4	OE	3	0	0	3
Total Credits							18

Summer Term							
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9th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN511	Thesis	Project	0	0	24	12
2		Program Elective 9	PE	3	0	0	3
3		Program Elective 10	PE	3	0	0	3
4		Open Elective 5	OE	3	0	0	3
Total Credits							21

10th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN521	Thesis	Project	0	0	24	12
Option 2	LN522	Internship	Project	0	0	24	12
Total Credits							12

Total Curriculum Credits							198
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ECE							
1st Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1
A 3-week Mandatory Induction Program							
Total Credits							22

2nd Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	EC121	Semiconductor Devices and Circuits	PC	3	0	0	3
8	EC122	Analog Electronics	PC	3	0	0	3
9	EC122L	Analog Electronics Lab	PC	0	0	3	1.5
Total Credits							22.5

Summer Term							
Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

3rd Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	PC	3	1	0	4
2	EC211	Signals and Systems	PC	3	0	0	3
3	EC211L	Signals and Systems Lab	PC	0	0	3	1.5
4	EC213	Digital Circuit and Systems	PC	3	0	0	3
5	EC213L	Digital Circuit and Systems Lab	PC	0	0	3	1.5
6	EC214	Engineering Electromagnetics	PC	3	0	0	3
7	EC215	Microprocessor and Microcontroller	PC	3	0	0	3
8	EC215L	Microprocessor and Microcontroller Lab	PC	0	0	3	1.5
9	EC216	Network Analysis and Synthesis	PC	3	0	0	3
Total Credits							23.5

4th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	EC221	Analog and Digital Communication	PC	3	0	0	3
3	EC221L	Analog and Digital Communication Lab	PC	0	0	3	1.5
4	EC222	Fundamentals of VLSI	PC	3	0	0	3
5	EC222L	VLSI Lab	PC	0	0	3	1.5
6	EC223	Microwave Engineering	PC	3	0	0	3
7	EC223L	Microwave Engineering Lab	PC	0	0	3	1.5
8	EC224L	Design and Project Lab	PC	0	0	3	1.5
9	CC223	Introduction to AI and ML	PC	3	0	2	4
Total Credits							20

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	EC311	Wireless Communication	PC	3	0	0	3
4	EC311L	Wireless Communication lab	PC	0	0	3	1.5
5	EC312	Control System Engineering	PC	3	0	2	4
6	EC313	Digital Signal Processing	PC	3	0	0	3
7	EC313L	Digital Signal Processing Lab	PC	0	0	3	1.5
8		Program Elective 1	PE	3	0	0	3
Total Credits							23

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN321	B.Tech. Project (BTP)	Project	0	0	8	4
2	HS321	Introduction to Economics	HSMC	3	0	0	3
3	LN322	Seminar and Presentation Skills	Project	0	0	2	1
4	EC321	5G Wireless Systems and beyond	PC	3	0	0	3
5	CC221	Computer Communication Networks	PC	3	0	2	4
6		Program Elective 2	PE	3	0	0	3
7		Program Elective 3	PE	3	0	0	3
8		Open Elective 1	OE	3	0	0	3
Total Credits							24

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN411	B.Tech. Project (BTP)	Project	0	0	8	4
2		Program Elective 4	PE	3	0	0	3
3		Program Elective 5	PE	3	0	0	3
4		Open Elective 2	OE	3	0	0	3
5		Open Elective 3	OE	3	0	0	3
Total Credits							16

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN421	Industrial SLI	Project	0	0	24	12
Option 2	LN422	Thesis	Project	0	0	24	12
Option 3		4 Elective Courses	OE/PE	12	0	0	12
Option 4	LN423	Project	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Option 5	LN424	Internship	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Total Credits							12

Total Curriculum Credits							163
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ECE (B.Tech.-M.Tech)

1st Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program

Total Credits **22**

2nd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	EC121	Semiconductor Devices and Circuits	PC	3	0	0	3
8	EC122	Analog Electronics	PC	3	0	0	3
9	EC122L	Analog Electronics Lab	PC	0	0	3	1.5

Total Credits **22.5**

Summer Term

Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

3rd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	PC	3	1	0	4
2	EC211	Signals and Systems	PC	3	0	0	3
3	EC211L	Signals and Systems Lab	PC	0	0	3	1.5
4	EC213	Digital Circuit and Systems	PC	3	0	0	3
5	EC213L	Digital Circuit and Systems Lab	PC	0	0	3	1.5
6	EC214	Engineering Electromagnetics	PC	3	0	0	3
7	EC215	Microprocessor and Microcontroller	PC	3	0	0	3
8	EC215L	Microprocessor and Microcontroller Lab	PC	0	0	3	1.5
9	EC216	Network Analysis and Synthesis	PC	3	0	0	3

Total Credits **23.5**

4th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	EC221	Analog and Digital Communication	PC	3	0	0	3
3	EC221L	Analog and Digital Communication Lab	PC	0	0	3	1.5
4	EC222	Fundamentals of VLSI	PC	3	0	0	3
5	EC222L	VLSI Lab	PC	0	0	3	1.5
6	EC223	Microwave Engineering	PC	3	0	0	3
7	EC223L	Microwave Engineering Lab	PC	0	0	3	1.5
8	EC224L	Design and Project Lab	PC	0	0	3	1.5
9	CC223	Introduction to AI and ML	PC	3	0	2	4

Total Credits **20**

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Mini Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	EC311	Wireless Communication	PC	3	0	0	3
4	EC311L	Wireless Communication lab	PC	0	0	3	1.5
5	EC312	Control System Engineering	PC	3	0	2	4
6	EC313	Digital Signal Processing	PC	3	0	0	3
7	EC313L	Digital Signal Processing Lab	PC	0	0	3	1.5
8		Program Elective 1	PE	3	0	0	3
Total Credits							23

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS321	Introduction to Economics	HSMC	3	0	0	3
2	EC321	5G Wireless Systems and beyond	PC	3	0	0	3
3	CC221	Computer Communication Networks	PC	3	0	2	4
4		Program Elective 2	PE	3	0	0	3
5		Program Elective 3	PE	3	0	0	3
6		Open Elective 1	OE	3	0	0	3
7							
Total Credits							19

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN412	Thesis	Project	0	0	8	4
2		Program Elective 4	PE	3	0	0	3
3		Program Elective 5	PE	3	0	0	3
4		Program Elective 6	PE	3	0	0	3
5		Open Elective 2	OE	3	0	0	3
6		Open Elective 3	OE	3	0	0	3
Total Credits							19

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN425	Thesis	Project	0	0	8	4
2	LN322	Seminar and Presentation Skills	Project	0	0	2	1
3		Program Elective 7	PE	3	0	0	3
4		Program Elective 8	PE	3	0	0	3
5		Open Elective 4	OE	3	0	0	3
6		Open Elective 5	OE	3	0	0	3
Total Credits							17

Summer Term							
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9th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN511	Thesis	Project	0	0	24	12
2		Program Elective 9	PE	3	0	0	3
3		Program Elective 10	PE	3	0	0	3
Total Credits							18

10th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN521	Thesis	Project	0	0	24	12
Option 2	LN522	Internship	Project	0	0	24	12
Total Credits							12
Total Curriculum Credits							196

ME**1st Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1

A 3-week Mandatory Induction Program**Total Credits 22****2nd Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Lab	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	ME122	Introduction to Mechanical Engineering	PC	1	0	0	1
8	ME123	Engineering Drawing and Graphics	PC	0	0	3	1.5
9	ME124	Workshop Practices	PC	0	0	3	1.5
10	ME125	Engineering Physical Metallurgy	PC	3	0	0	3

Total Credits 22**Summer Term**

Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

3rd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	BSC	3	1	0	4
2	ME211	Mechanics of Solids	PC	3	0	2	4
3	ME212	Rigid Body Dynamics	PC	2	0	0	2
4	ME213	Engineering Thermodynamics	PC	3	1	0	4
5	ME214	Welding and Casting	PC	3	0	2	4
6	ME215	Electrical Technology	PC	2	0	2	3

Total Credits 21**4th Semester:**

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	ME221	Design of Machine Elements	PC	3	0	0	3
3	ME222	Fluid Mechanics and Machinery	PC	3	1	2	5
4	ME223	Machining and Metal Forming	PC	3	0	2	4
5	ME224	Mechanisms and Machines	PC	2	0	2	3
6	ME225	Introduction to Computational Methods	PC	0	0	2	1
7	ME226	Industrial Measurements	PC	3	0	2	4

Total Credits 21

Summer Term							
Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

5th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Project	Project	0	0	8	4
2	ME311	Heat Transfer	PC	3	0	2	4
3	ME312	Design of Transmission Elements	PC	3	0	2	4
4	ME313	Digital Manufacturing	PC	3	0	2	4
5	ME314	Robotics and Control	PC	2	0	2	3
6	ME315	Mechatronics & IoT	PC	2	0	2	3
Total Credits							22

6th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN321	B.Tech. Project (BTP)	Project	0	0	8	4
2	HS321	Introduction to Economics	HSMC	3	0	0	3
3	LN322	Seminar and Presentation Skills	Project	0	0	2	1
4	ME321	IC Engines	PC	3	0	2	4
5	ME322	Finite Element Methods	PC	3	0	0	3
6	ME323	Industrial Engineering and Management	PC	3	0	0	3
7		Program Elective 1	PE	3	0	0	3
Total Credits							21

Summer Term							
Exit option with B.Sc. by Completing 120 credits from 6 semesters and additional 6 credits from an Internship or skill based courses in the summer term							

7th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN411	B.Tech. Project (BTP)	Project	0	0	8	4
2		Open Elective 1	OE	3	0	0	3
3		Program Elective 2	PE	3	0	0	3
4		Program Elective 3	PE	3	0	0	3
5		Program Elective 4	PE	3	0	0	3
6		Open Elective 2	PE	3	0	0	3
Total Credits							19

8th Semester:							
S. No.	CCODE	Course Name	Type	L	T	P	Credits
Option 1	LN421	Industrial SLI	Project	0	0	24	12
Option 2	LN422	Thesis	Project	0	0	24	12
Option 3		4 Elective Courses	OE/PE	12	0	0	12
Option 4	LN423	Project	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Option 5	LN424	Internship	Project	0	0	12	6
		2 Elective Courses	OE/PE	6	0	0	6
Total Credits							12

Total Curriculum Credits							160
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