Annexure # 01

List of Courses Offered

A. Compulsory Courses:

Branch /SEM	Course Title	Course Code
ECE/III		
1.	Signals and Systems	EC201
2.	Electronic Devices	EC202
3.	Fundamentals of Data structures and Algorithms	CS210
4.	Digital Logic Circuits	EC203
5.	Sociology of Design	DS202
6.	Linear Algebra	DS201
7.	Fundamentals of Data structures and Algorithms Practice	CS211
8.	Digital Logic Circuits Practice	EC204
ME/III		
1.	Linear Algebra	DS201
2.	Thermal Engineering – Concepts & Applications	ME201T
3.	Mechanics of Materials	ME202T
4.	Basic Concepts in Manufacturing Processes	ME203T
5.	Kinematics of Machines	ME204T
6.	Electrical Drives	ME205I
7.	Machine Drawing & Manufacturability Analysis Practice	ME206P
8.	Product Realization Practice	ME207P
CSE/III		
1.	Linear Algebra	DS201
2.	Sociology of Design	DS202
3.	Python Programming	CS201
4.	Data Structures and Algorithms	CS202
5.	Discrete Mathematics	CS203
6.	Digital and Analog Circuits Design	EC209
7.	Data Structures and Algorithms Practice	CS204
8.	Digital and Analog Circuits Design Practice	EC210
AI and DS/III		
1.	Probability and Statistics	DS251
2.	Data Structures and Algorithms	AD201
3.	Discrete Mathematics	AD202
4.	Object Oriented Programming	AD203

5.	Digital Logic Circuits	EC203
6.	Data Structures and Algorithms Practice	AD204
7.	Object Oriented Programming Practice	AD205
8.	Digital Logic Circuits Practice	EC204
ECE/V		
1.	Micro Processors and Microcontrollers	EC301T
2.	Analog and Digital Communication Techniques	EC302T
3.	Control Systems	EC303T
4.	Electronic Manufacturing and Prototyping	EC303I
5.	Entrepreneurship and Management Functions	MAN30IT
6.	Micro Processors and Microcontrollers Practice	EC301P
7.	Analog and Digital Communication Techniques Practice	EC302P
8.	Sensing and Instrumentation Practice	EC304I
ME/V		
1.	Entrepreneurship and Management Functions	MAN30IT
2.	Heat Transfer	ME301T
3.	Automation in Manufacturing	ME302T
4.	Machine Tool Technology	ME303T
5.	Design of Machine Elements	ME304T
6.	Microprocessors and Controllers	ME305I
7.	Manufacturing Automation Practice	ME302P
8.	Fluid Mechanics and Heat Transfer Practice	ME306P
CSE/V		
1.	Entrepreneurship and Management Functions	DS301
2.	Operating Systems	CS301
3.	Data Communication and Computer Networks	CS302
4.	Theory of Computation	CS303
5.	Data Warehousing and Data Mining	CS304
6.	Operating Systems Practice	CS305
7.	Data Communication and Networking Practice	CS306
8.	Knowledge Engineering Practice	CS307
AI and DS/V		
1.	Operating Systems	AD301
2.	Data Communication and Computer Networks	AD302
3.	Soft Computing	AD303
4.	Machine Learning	AD304
5.	Software Engineering	AD305
6.	Hadoop and Map Reduce Programming Practice	AD306

7.	Operating Systems Practice	AD307
8.	Data Communication and Networks Practice	AD308

B. Courses Offered under Minor Programme:

Note: 1. Before registering/adding any course from this list, students are hereby instructed to check the rules and regulations mentioned in the next page. **Minor courses are optional**.

Department Name (Course offered by)	Course Title	Course Code	Offered To
Dept. of ECE	Internet of Things (IoT)	ECMI201	III Sem, B. Tech Students (**All Branches**)
Dept. of ME	Introduction to Robotics and Automation	MEM101	III Sem, B. Tech Students (**All Branches**)
Dept. of CSE	Advanced Programming in Python	CSM101	III Sem, B. Tech. Students (**ECE and ME**)
Dept. of SCIENCES	Quantum Computing	DSM100	III Sem, B. Tech Students (**All Branches**)
Dept. of SCIENCES	Entrepreneurship for Innovators	DSM200	III Sem, B. Tech Students (**All Branches**)
Dept. of ECE	Internet of Things (IoT)	ECMI301	V Sem, B. Tech Students (All Branches) (**Only for previously registered students**) New registration is not permitted
Dept. of CSE	Machine Learning	CS103	V Sem, B. Tech Students (ECE and ME) (**Only for previously registered students**) New registration is not permitted

Rules and Regulations for Minor

MS 1. Minor Specialization will be offered from 2021-22 academic session onwards.

MS 2. Eligibility Criteria:

All interested and eligible third semester students having CGPA greater than or equal to 6.5 with no back logs.

MS 3. Number of credits for each minor program:

15 credits (4 Courses out of which one course from NPTEL as decided by the department in 6th or 7th semester).

MS 4. Number of students to be enrolled

a) Minimum number of students required to offer a minor specialization by the department is 20.

b) Maximum number of students that can be enrolled in a particular minor specialization by the department is 30.

MS 5. Allotment of Minor Specialization:

Minor specializations are allotted to students based on their choices. Further, the department committee may allot the students for each specialization taking CGPA into consideration.

MS 6. Pre-requisites and Eligibility of Awarding Minor:

a. Offering of minor specialization is on the discretion of the department based on the strength, demand and other constraints.

b. Pre-requisites if any, are to be stated for each course offered by the department.

c. After successful completion, academic section will give consolidated certificate along with the B.Tech. degree.

d. Minimum CPGA required for the successful completion of all the minor courses is 5.

e. Changing the minor specialization by a student in between duration of the programme is not allowed, once it is taken.

f. A student can opt for only one minor specialization.

g. Credit transfer is not allowed from the minor programme curses to the academic degree.

h. Each department can offer 2 minor specializations.

i. Other academic rules and regulations applicable are as per the rules and regulations of the regular B.Tech programme.

j. For the laboratory sessions incorporated to each of the courses, separate end semester exams will not be conducted.

k. Suitable weightage for practical experiments needs to be given and assessment has to be made as per the academic norms and regulations.

l. Department should approve one NPTEL 3 credit course which is relevant to the minor.