

COURSE OF STUDY

B.Tech. Second Year-2019 batch



National Institute of Technology Srinagar

DEPARTMENT OF CHEMICAL ENGINEERING

3rd Semester

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	CET201	Introduction to Chemical Engineering	4	3	1	0	4
2	CET202	Material and Energy Balance	4	3	1	0	4
3	CET203	Process Fluid Mechanics	4	3	1	0	4
4	CET204	Thermodynamics and Chemical Kinetics	4	3	1	0	4
5	ECT205	Basic Electronics Engineering	3	2	1	0	3
6	HST201	Ethics & Self Awareness	2	2	0	0	2
7	MAT201	Chemical Engineering Mathematics-I	4	3	1	0	4
Total			25	19	6	0	25

4th Semester

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	CET250	Chemical Engineering Thermodynamics	3	2	1	0	3
2	CET251	Heat Transfer	4	3	1	0	4
3	CET252	Mechanical Operations	4	3	1	0	4
4	CET253	Material Science & Technology	4	3	1	0	4
5	CET254	Process Instrumentation	3	3	0	0	3
6	MAT250	Chemical Engineering Mathematics –II	4	3	1	0	4
7	CEL255	Fluid Mechanics & Mechanical Operations Lab.	2	0	0	4	4
8	ECL256	Basic Electronics Engineering Lab.	1	0	0	2	2
Total			25	17	5	6	28

DEPARTMENT OF CIVIL ENGINEERING

3rd Semester Civil

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	CVT201	Structural Analysis- I	4	2	2	0	4
2	CVT202	Fluid Mechanics	3	2	1	0	3
3	CVT203	Surveying-I	3	2	1	0	3
4	CVT204	Building Materials and Construction	4	3	1	0	4
5	MAT202	Mathematics-I	4	3	1	0	4
6	HST202	Industrial Organization & Management	3	2	1	0	3
7	CVL205	Fluid Mechanics Lab-I	1	0	0	2	2
8	CVL206	Surveying Lab-I	2	0	0	4	4
9	CVL207	Structural Engineering Lab- I	1	0	0	2	2
Total			25	14	7	8	29

4th Semester Civil

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	CVT250	Structural Analysis- II	3	2	1	0	3
2	CVT251	Fluid Flow in Pipes and Channels	3	2	1	0	3
3	CVT252	Surveying-II	3	2	1	0	3
4	CVT253	Surveying Camp	2	0	0	4	4
5	CVT254	Engineering Geology	3	2	1	0	3
6	CVT255	Civil Engineering Drawing	4	3	1	0	4
7	MAT251	Mathematics-II	4	3	1	0	4
8	CVL256	Fluid Mechanics Lab-II	1	0	0	2	2
9	CVL257	Surveying Lab-II	1	0	0	2	2
10	CVL258	Geology Lab.	1	0	0	2	2
Total			25	14	6	10	30

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Semester: 3rd

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	CST201	Object Oriented Programming	4	3	1	0	4
2	CST202	Database Management Systems	4	3	1	0	4
3	MAT203	Discrete Mathematics	4	3	1	0	4
4	ECT203	Signals & Systems	4	3	1	0	4
5	ECT207	Electronics	4	3	1	0	4
6	ECL208	Electronics Lab	1	0	0	2	2
7	CSL203	Object Oriented Programming -Lab	1	0	0	2	2
8	CSL204	Database Management Systems - Lab	1	0	0	2	2
9	ITL206	Internet & Web Technologies	2	0	0	4	4
Total			25	15	5	10	30

Semester: 4th

S.No.	Course Code	Course Title	Credits	Contact Hours			
				L	T	P	Total
1	CST250	Data Structures	4	3	1	0	4
2	MAT252	Introduction to Probability Theory & Statistics	3	3	0	0	3
3	ECT251	Digital Electronics & Logic Design	4	3	1	0	4
4	ITT255	Software Engineering	4	3	1	0	4

5	ECT253	Communication Systems	4	3	1	0	4
6	EET254	Control Systems	3	3	0	0	3
7	ECL254	Digital Electronics & Logic Design Lab	1	0	0	2	2
8	ECL255	Communication Systems –Lab	1	0	0	2	2
9	CSL251	Data Structures –Lab	1	0	0	2	2
Total			25	18	4	6	28

DEPARTMENT OF ELECTRICAL ENGINEERING

3rdSemester Electrical

S. No.	Course Code	Course Title	Credits	Contact Hours			
				L	T	P	Total
1	EET201	Electrical Measurement & Instrumentation.	4	3	1	0	4
2	ECT201	Electronics-I	4	3	1	0	4
3	ECT202	Network Analysis	4	3	1	0	4
4	PHT201	EMF & Waves	4	3	1	0	4
5	MMT209	Electrical Engg. Materials	4	3	1	0	4
6	MAT204	Mathematics-III	4	3	1	0	4
7	ECL204	Electronics – I Lab	1	0	0	2	2
Total			25	18	6	2	26

4th Semester Electrical

S. No	Course Code	Course Title	Credits	Contact Hours			
				L	T	P	Total
1.	EET250	Electrical Machines-I	4	3	1	0	4
2.	EET251	Control Systems-I	4	3	1	0	4
3.	MET257	Thermal Engineering	4	3	1	0	4
4.	ECT250	Electronics-II	4	3	1	0	4

5.	CVT259	Hydraulics & Hydraulic Machines	3	2	1	0	3
6.	MAT253	Mathematics-IV	3	2	1	0	3
7.	EEL252	Electrical Machines – I Lab.	1	0	0	2	2
8.	EEL253	Electrical Measurement & Instrumentation-Lab	1	0	0	2	1
9.	ECL253	Electronics-II Lab	1	0	0	2	3
		Total	25	16	6	6	28

DEPARTMENT OF ELECTRONICS & COMMUNICATION

3rd Semester

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	ECT201	Electronics I	4	3	1	0	4
2	ECT202	Network Analysis	4	3	1	0	4
3	ECT203	Signals and Systems	4	3	1	0	4
4	CST205	Data Structures	3	2	1	0	3
5	MAT204	Mathematics-III	4	3	1	0	4
6	MMT210	Electronics Engineering Materials	4	3	1	0	4
7	CSL206	Data Structures Laboratory	1	0	0	2	2
8	ECL204	Electronics-II Laboratory	1	0	0	2	2
		Total	25	17	6	4	27

4th Semester Scheme

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	ECT250	Electronics II	4	3	1	0	4
2	ECT251	Digital Electronics and Logic Design	3	2	1	0	3
3	ECT252	Communications Systems-I	3	2	1	0	3

4	EET255	Electrical Machines	3	2	1	0	3
5	EET256	Control System I	4	3	1	0	4
6	MAT253	Mathematics-IV	4	3	1	0	4
7	ECL253	Electronic IILaboratory	1	0	0	2	2
8	ECL254	Digital Electronics andLogic DesignLab	1	0	0	2	2
9	ECL255	Communications Systems-ILaboratory	1	0	0	2	2
10	EEL257	Electrical Machines Laboratory	1	0	0	2	2
Total			25	15	6	8	29

DEPARTMENT OF INFORMATION TECHNOLOGY

3rd Semester Scheme

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	ITT201	Data Structures	4	3	1	0	4
2	ITT202	Signal and Systems	3	3	1	0	4
3	ITT203	Software Engineering	3	2	1	0	3
4	ITT204	Discrete Mathematics and Graph Theory	4	3	1	0	4
5	CST201	Object Oriented Programming I	4	3	1	0	4
6	ECT207	Electronics	4	3	1	0	4
7	CSL203	Object Oriented Programming Lab I	1	0	0	2	2
8	ECL208	Electronics Lab	1	0	0	2	2
9	ITL205	Data Structures Lab	1	0	0	2	2
Total			25	17	6	6	29

4th Semester Scheme

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	ITT250	Operating Systems	4	3	1	0	4
2	ITT251	Database Management System	4	3	1	0	4
3	ECT251	Digital Electronics & Logic Design	4	3	1	0	4
4	ECT253	Communication System	4	3	1	0	4
5	EET258	Control System	3	3	0	0	3
6	ECL254	Digital Electronics & Logic Design Lab	1	0	0	2	2
7	ECL255	Communication System Lab	1	0	0	2	2
8	ITL252	Operating Systems Lab	1	0	0	2	2
9	ITL253	Database Management System Lab	1	0	0	2	2
10	ITL254	Web Programming	2	0	0	4	4
Total			25	15	4	12	31

DEPARTMENT OF MECHANICAL ENGINEERING

3rd Semester Scheme

S. No	Course Code	Course Title	Credits	Contact Hours			
				L	T	P	Total
1.	MET201	Manufacturing Processes	4	3	1	0	4
2.	MET202	Mechanics of Solids	3	3	0	0	3
3.	MET203	Fundamentals of Dynamics	3	3	0	0	3
4.	MET204	Engineering Thermodynamics	4	3	1	0	4
5.	MET205	Fluid Mechanics - I	4	3	1	0	4
6.	MET206	Machine Drawing & Solid Modeling	2	0	0	4	4
7.	MAT205	Applied Mathematics for Engineers	3	3	0	0	3
8.	MEL207	Mechanics of Solids Lab	1	0	0	2	2
9.	MEL208	Manufacturing Processes Lab	1	0	0	2	2

Total	25	18	3	8	29
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4th Semester Scheme

S. No	Course Code	Course Title	Credits	Contact Hours			
				L	T	P	Total
1.	MET250	Applied Thermodynamics	4	3	1	0	4
2.	MET251	Mechanics of Materials	4	3	1	0	4
3.	MET252	Theory of Mechanisms and Machines	4	3	1	0	4
4.	MET253	Materials Science and Engineering	4	3	1	0	4
5.	MET254	Non-Traditional Machining and Automation	4	3	1	0	4
6.	ECT266	Basic Electronics	3	3	0	0	3
7.	MEL255	Thermo-Fluids Lab	1	0	0	2	2
8.	MEL256	Non-Traditional Machining and Automation Lab	1	0	0	2	2
Total			25	18	5	4	27

DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

3rd Semester

S. No.	Course Code	Course Title	Credit	Contact Hours			
				L	T	P	Total
1	MMT201	Electronic, Magnetic and Di-Electric Materials	4	3	1	0	4
2	MMT202	Thermodynamics of Materials	4	3	1	0	4
3	MMT203	Physical Metallurgy	4	3	1	0	4
4	MMT204	Principles of Process Metallurgy	4	3	1	0	4
5	MMT205	Metallurgical and Instrumental Analysis	3	2	1	0	3
6	MAT206	Numerical Methods and Computing Programming	3	2	1	0	3
7	MML206	Laboratory Practice in Physical Metallurgy	1	0	0	2	2
8	MML207	Laboratory Practice in Thermodynamics	1	0	0	2	2
9	MML208	Laboratory Practice in Metallurgical and Instrumental Analysis-Lab	1	0	0	2	2

Total	25	16	6	6	28
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4th Semester

S. No.	Course Code	CourseTitle	Credit	Contact Hours			
				L	T	P	Total
1	MMT250	Phase Transformation and Heat Treatment	4	3	1	0	4
2	MMT251	Kinetics of Metallurgical Processes	4	3	1	0	4
3	MMT252	Mechanical Behaviour of Materials	4	3	1	0	4
4	MMT253	Non-Ferrous Metal Extraction	3	3	0	0	3
5	MMT254	Powder Metallurgy	3	2	1	0	3
6	MMT255	Mineral Dressing	3	2	1	0	3
7	MML256	Laboratory Practice in Heat Treatment	1	0	0	2	2
8	MML257	Laboratory Practice in Mechanical Behaviour of Materials	1	0	0	2	2
9	MML258	Laboratory Practice in Powder Metallurgy	1	0	0	2	2
10	MML259	Laboratory Practice in Mineral Dressing	1	0	0	2	2
11	HSA250	Vocabulary and Group Discussion (Compulsory Audit)	0	0	0	2	2
Total			25	16	5	10	31