

FIRST SEMESTER

UG-CRC	Course Code	Course Name	L-T-P			Credits
Courses run under 3-week Induction Programme common for all Sections						
IH.H101.14	H101	Universal Human Values - I: Self and Family	1	1	0	5
LM.HL101.14	HL101	Basic English (for those requiring English skill)	2	0	1	7
GY.PE101.14	PE101	Elementary Physical Education	0	1	3	5
	CP1XX	Creative Practices (Any one of the following)	0	1	3	5
GY.CP111.15	CP111	Music - Instrumental				
GY.CP112.15	CP112	Music - Vocal				
GY.CP113.15	CP113	Dance				
GY.CP121.15	CP121	Painting				
GY.CP122.15	CP122	Sculpture				
GY.CP123.15	CP123	Advertising				
	Total		3	3	7	22
Section-AA1 Biochemical Engineering: 5-Year IDD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AA2 Biomedical Engineering: 5-Year IDD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AA3 Pharmaceutics: 4-Year B.Pharm. I-Semester /5-Year IDD I-Semester						
IS.BL101.14	BL101	Biology	3	1	0	11
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AB1 Chemical Engineering: 4-Year B.Tech. I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AB2 Industrial Chemistry: 5-Year IMD I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AC1 Ceramic Engineering: 4-Year B.Tech. I-Semester /5-Year IDD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54
Section-AC2 Materials Science and Technology: 5-Year IDD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
	Total		12	4	10	54

UG-CRC	Course Code	Course Name	L-T-P			Credits
Section-AD Metallurgical Engineering: 4-Year B.Tech. I-Semester /5-Year IDD I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	10	54
Section-AE Mining Engineering: 4-Year B.Tech. I-Semester /5-Year IDD I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA102.14	MA102	Engineering Mathematics - II	3	1	0	11
IE.ME102.14	ME102	Engineering Mechanics	3	1	0	11
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	10	54
Section-BA1 Computer Science & Engineering: 4-Year B.Tech. I-Semester /5-Year IDD I-Semester						
IS.BL101.14	BL101	Biology	3	1	0	11
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			13	4	10	57
Section-BA2 Mathematics and Computing: 5-Year IMD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	12	56
Section-BB Civil Engineering: 4-Year B.Tech. I-Semester / 5-Year IDD I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.ME102.14	ME102	Engineering Mechanics	3	1	0	11
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	10	54
Section-BC Mechanical Engineering: 4-Year B.Tech. I-Semester /5-Year IDD I-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	10	54
Section-BD Electrical Engineering: 4-Year B.Tech. I-Semester / 5-Year IDD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	12	56
Section-BE1 Electronics Engineering: 4-Year B.Tech. I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	12	56
Section-BE2 Engineering Physics: 5-Year IMD I-Semester						
IS.PHY102.14	PHY102	Physics - II: Introduction to Engineering Electromagnetics	3	1	2	13
IS.CY101.14	CY101	Chemistry - I	2	1	2	10
IS.MA101.14	MA101	Engineering Mathematics - I	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
EP.ME106.14	ME106	Manufacturing Practice - II	0	0	3	3
EP.ME104.14	ME104	Engineering Drawing	1	0	3	6
Total			12	4	12	56

L: Lecture hours; T: Tutorial hours; P: Laboratory/ Practical hours; C: Credits

SECOND SEMESTER

UG-CRC	Course Code	Course Name	L-T-P			Credits
Section-AA1 Biochemical Engineering: 5-Year IDD II-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY103.14	CY103	Essentials of Biochemistry	3	0	2	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.BC101.14	BC101	Introduction to Biochemical Engineering	3	0	3	12
EP.ME106.14	ME106	Manufacturing Practice II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	3	12	60
Section-AA2 Biomedical Engineering: 5-Year IDD II-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.CY103.14	CY103	Essentials of Biochemistry	3	0	2	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.BM101.14	BM101	Introduction to Biomedical Engineering	3	0	3	12
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	3	12	60
Section-AA3 Pharmaceutics: 4-Year B.Pharm. II-Semester /5-Year IDD II-Semester						
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IS.CY103.14	CY103	Essentials of Biochemistry	3	0	2	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.PH101.14	PH101	Basics of Pharmaceutical Sciences	3	0	3	12
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	3	10	58
Section-AB1 Chemical Engineering: 4-Year B.Tech. II-Semester						
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IE.CHO102.14	CHO102	Fluid Mechanics	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.CHO103.14	CHO103	Process Calculation	2	1	0	8
DC.CHE101.14	CHE101	Chemical Engineering Practices	1	0	3	6
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	5	8	60
Section-AB2 Industrial Chemistry: 5-Year IMD II-Semester						
IS.CY102.14	CY102	Chemistry - II	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IE.CHO102.14	CHO102	Fluid Mechanics	3	1	0	11
DC.CHO103.14	CHO103	Process Calculation	2	1	0	8
DC.CHI101.14	CHI101	Industrial Chemistry Practices	1	0	2	5
EP.ME106.14	ME106	Manufacturing Practice II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	5	7	59
Section-AC1 Ceramic Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester						
IS.PHY101.14	PHY101	Physics - I: Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.MCR101.14	MCR101	Introduction to Ceramics	2	0	0	6
DC.MCR102.14	MCR102	Basic Ceramic Practices	1	0	3	6
EP.ME106.14	ME106	Manufacturing Practice II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	4	10	60
Section-AC2 Materials Science and Technology: 5-Year IDD II-Semester						
IS.CY102.14	CY102	Chemistry - II	3	1	2	13
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.MS101.14	MS101	Introduction to Engineering Materials	3	0	3	12
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	4	10	60

UG-CRC	Course Code	Course Name	L-T-P			Credits
Section-AD		Metallurgical Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester				
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.MT101.14	MT101	Introduction to Metallurgical and Materials Engineering	3	0	0	9
DC.MT102.14	MT102	Metallurgical Thermodynamics and Kinetics	3	1	0	11
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	4	5	55
Section-AE		Mining Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester				
IS.MA101.14	MA101	Engineering Mathematics – I	3	1	0	11
IE.EO102.14	EO102	Fundamentals of Electronics and Instrumentation Engineering	3	1	2	13
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
DC.MN101.14	MN101	Mine Development	2	0	0	6
DC.MN102.14	MN102	Mine Practices	1	1	3	8
EP.ME106.14	ME106	Manufacturing Practice – II	0	0	3	3
IH.H103.14	H103	Development of Societies	2	1	0	8
IH.H104.14	H104	History and Civilization				
Total			14	5	10	62
Section-BA1		Computer Science & Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester				
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.EO101.14	EO101	Fundamentals of Electrical Engineering	3	1	2	13
IE.CSO102.15	CSO102	Data Structure	3	0	2	11
DC.CS101.14	CS101	Information Technology Workshop-I	2	0	3	9
EP.ME105.14	ME105	Manufacturing Practice – I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			13	3	10	55
Section-BA2		Mathematics and Computing: 5-Year IMD II-Semester				
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.CSO102.15	CSO102	Data Structure	3	0	2	11
IE.EO102.14	EO102	Fundamentals of Electronics and Instrumentation Engineering	3	1	2	13
DC.MA103.14	MA103	Algebra	3	1	0	11
DC.MA104.14	MA104	Information Technology and Computing Workshop	0	0	3	3
EP.ME105.14	ME105	Manufacturing Practice – I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			14	4	10	60
Section-BB		Civil Engineering: 4-Year B.Tech. II-Semester / 5-Year IDD II-Semester				
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.CSO101.14	CSO101	Computer Programming	3	1	2	13
IE.CHO102.14	CHO102	Fluid Mechanics	3	1	0	11
DC.CE101.14	CE101	Basic Surveying	3	1	4	15
EP.ME105.14	ME105	Manufacturing Practice – I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			14	5	9	61
Section-BC		Mechanical Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester				
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.MO201.14	MO201	Materials Science	3	1	0	11
IE.EO101.14	EO101	Fundamentals of Electrical Engineering	3	1	2	13
DC.ME221.14	ME221	Measurements and Controls	3	0	2	11
DC.ME222.14	ME222	Machine Drawing	1	0	3	6
EP.ME105.14	ME105	Manufacturing Practice – I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			15	4	10	63
Section-BD		Electrical Engineering: 4-Year B.Tech. II-Semester /5-Year IDD II-Semester				
IS.MA203.14	MA203	Mathematical Methods	3	1	0	11
IE.ME103.14	ME103	Engineering Thermodynamics	3	1	0	11
IE.EO102.14	EO102	Fundamentals of Electronics and Instrumentation Engineering	3	1	2	13
DC.EE101.14	EE101	Electrical Circuits and Measurement	3	1	2	13
EP.ME105.14	ME105	Manufacturing Practice – I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			14	5	7	59

UG-CRC	Course Code	Course Name	L-T-P			Credits
Section-BE1	Electronics Engineering: 4-Year B.Tech. II-Semester					
IS.PHY101.14	PHY101	Physics - I : Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.EO101.14	EO101	Fundamentals of Electrical Engineering	3	1	2	13
DC.EC201.15	EC201	Electromagnetic Fields and Transmission Line	3	0	0	9
EP.ME105.14	ME105	Manufacturing Practice - I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			14	4	7	57
Section-BE2	Engineering Physics: 5-Year IMD II-Semester					
IS.PHY101.14	PHY101	Physics - I : Classical, Quantum & Relativistic Mechanics	3	1	2	13
IS.MA102.14	MA102	Engineering Mathematics – II	3	1	0	11
IE.ME102.14	ME102	Engineering Mechanics	3	1	0	11
DC.EP101.14	EP101	Modern Physics	2	1	0	8
DC.EP102.14	EP102	Practices of Engineering Physics	1	0	3	6
EP.ME105.14	ME105	Manufacturing Practice I	0	0	3	3
IH.H105.14	H105	Philosophy	2	1	0	8
IH.H106.14	H106	Education and Self				
Total			14	5	8	60

L: Lecture hours; T: Tutorial hours; P: Laboratory/ Practical hours; C: Credits