ANNEXURE-125-IUPC/120-IPPC/3

Grades for Jan-May 2022 semester (till 27.05.2022)

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	X	NP	PP
1	BT 202M	Molecular Biotechnology	1	1		1		1			1						
2	BT 206	Microbiology		1	5	37	12	7	1	1							
3	BT 207	Genetic Engineering	1	1	6	7	8	12	9	16			7				
4	BT 208	Transport Phenomenon in Bioprocesses	4	41	15	2		2									
5	BT 209	Bioreaction Engineering		2	4	12	9	26	8	3							
6	BT 211	Basic Biotechnology Lab	10	29	17	6	1										
7	BT 305	Computational Biology	1	2	10	5	10	10	21	2			1				
8	BT 306	Bioseparation Engineering		20	14	16	7	2	2	2							
9	BT 307	Biological Data Analysis		4	2	11	13	15	8	9							
10	BT 308	Bioengineering		9	17	13	19	7	2	1							
11	BT 402	BTech Project-II	1	16	13	5	3	2	2	2							
12	BT 403	Human Biology and Diseases		1	3												2
13	BT 411	Metagenomics		5	10	9	9	6		1							
14	BT 412	Enzymology		13	9	9	7	3									
15	BT 416	Bioenvironmental Engineering		6	8	10	8	6									1
16	BT 420	Drug Design and Discovery	1	3		1											
17	BT 502	Quantitative Biology		9	20	15	10						1				
18	BT 504	Biomolecular and Cellular Process Engineering	10	16	22	2	2							1			
19	BT 520	Applied Biology and Bioengineering Lab		17	16	15	1						1				1
20	BT 601	Analytical Biotechnology	3	30	17	23	7							4			
21	BT 605	Gene Therapy		3	5	6	9	1	1		1						
22	BT 608	Microbial Biotechnology		17	12	2	4	8	2	1							
23	BT 609	Bioprocess Engineering		6	7	4										1	
24	BT 619	Essentials of Genetics		14	13	5	1				1						
25	BT 621	Advances in Plant Genetic Engineering and Functional Genomics	3	13	7	6											
26	BT 622	Biofuels		8	4		1	1									
27	BT 630	Physical Cell Biology		2	3	8	5	3	4	3							
28	BT 634	Animal Models in Biomedical Research		21	6						1						
29	BT 639	NMR Spectroscopy: Principles and Applications			2						1						1

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
30	BT 640	Neural Imaging and Signal Systems			2	3	3										
31	BT 643	Biointerface Engineering	1	5	1												2
32	BT 651	Quantum Chemistry of atoms and molecules					1								1		
33	BT 699	M. Tech Project	1	17	5	3	2			1				13			
34	CE 201	Surveying		14	20	40	17	7	1	5	2						
35	CE 205	Structural Analysis I		2	6	6	13	19	29	25			4				
36	CE 206	Geotechnical Engineering		9	20	26	24	11	6	5	2		4				
37	CE 213	Surveying Laboratory		14	39	40	11				2						
38	CE 215	Geotechnical Engineering Laboratory		24	45	19	14	4			2						
39	CE 220	Hydraulics and Hydraulic Structures	5	16	10	20	36	15						1			
40	CE 221	Hydraulics and Hydraulic Structures Laboratory		43	36	26								1			
41	CE 222	Environmental Engineering I		4	17	35	26	13	3		1	3	1				
42	CE 223	Environmental Engineering I Lab		3	32	48	16	2		3							
43	CE 308	Construction Technology and Management		2	3	24	36	14	6								
44	CE 309	Design of Steel Structures	1	19	16	19	23	7									
45	CE 320	Engineering Hydrology	1	14	22	22	17	10	2								
46	CE 321	Hydrology Laboratory		13	26	30	11	6									
47	CE 322	Transportation Engineering II		3	6	14	19	19	19	6							
48	CE 323	Transportation Engineering II - Laboratory		2	25	32	20	4	3		1						
49	CE 324	Mathematical Concepts and Applications in Civil Engineering		17	49	15	4										
50	CE 499	BTP Phase II	2	18	28	9	9	3	8	2			2	4			
51	CE 504	Advanced Structural Design		10	8	1	2	1					3				
52	CE 510	Quality and Safety Management in Construction		1	2	3	1				1						
53	CE 511	Analysis and Design of Bridges	1	7	7	13	12	3	4	2			6				
54	CE 514	Plates, Shells and Elastic Stability		1	3	10	4	2	1				2				
55	CE 524	Biological Process in Environmental Engineering					5	3	7	3			2				

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	X	NP	PP
56	CE 525	Solids and Hazardous Waste			11	10	2										
57	CE 533	Advance Foundation Engineering	2	5	5	8	2	1			1						
58	CE 534	Seminar Course		3	7	7	2	2			1						
59	CE 544	Project Management Laboratory		2		2					1						
60	CE 552	Water Resources Systems Analysis, planning & Management		3	8	3	5						1				
61	CE 555	Principles of Water Quality and EIA		6	10	2											
62	CE 556	Subsurface Hydrology		9	15	13	7	10	4								
63	CE 559	Watershed Management and Remote Sensing Applications		3	4	11	3	1					2				
64	CE 583	Pavement Analysis and Design		2	3	10	4				1						
65	CE 584	Traffic Engineering		1	3	6	5	4			1						
66	CE 585	Credit Seminar		1	6	7	3				1						
67	CE 594	Geohazards Science and Engineering		6	11	14	5	3	2	9	1						
68	CE 595	Advanced Techniques in Geosciences	1	1	6	4							2				
69	CE 606	Earthquake Engineering	2	7	5	4	4						1				
70	CE 607	Random Vibration		6							1						2
71	CE 608	Reliability based Structural Design		1		2	1	1	2	3			2				
72	CE 610	Computational Structural Mechanics		2		4											
73	CE 612	Advanced Concrete Technology			1	2	2	1			1						
74	CE 614	Financing Infrastructure Projects			2	4	1						1				
75	CE 615	Design of Masonry Structures		5		2					1						
76	CE 618	Mechanics of Unsaturated Soils	1	1	5	4	10	11	20	11			1				
77	CE 623	Pavement Evaluation, Rehabilitation and Maintenance	1	3	4	4	2	1			1						
78	CE 624	Highway construction practise		4	11	10	7	2	1	1	1						
79	CE 628	Traffic Flow Modelling and Simulation		1	4	6	4	1			1						

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	X	NP	PP
80	CE 642	Subsurface Invstigation and Instrumentation	1	9	9	15	8	2	6	7	1		1				
81	CE 646	Rock Mechanics		2	8	11	4	5	2					2			1
82	CE 664	Industrial Wastewater Pollution Control		2	6	11	4		4								
83	CE 665	Water Distribution and Wastewater Collection System Design	1	3	4	5	12	10									
84	CH 211	Industrial Chemistry		10	9	17	6	13	1								
85	CH 222	Applied Organic Chemistry		9	20	16	10	1									
86	CH 223	Chemical Technology Lab - I (Organic)		43	10	2											
87	CH 224	Group Theory		2	1	2	10	5	10	15			11				
88	CH 233	Spectroscopic Techniques in Chemistry		2	6	8	14	10	12	3							
89	CH 323	Polymer Chemistry		6	8	13	12	4	5	1							
90	CH 332	Computational Chemistry		1	13	11	5	3	8	6			2				
91	CH 334	Chemical Technology Lab - III (Physical)		19	24	5											
92	CH 335	Application of Nanomaterials		10	25	5	8	1	2								
93	CH 400	Computers and Chemistry		3	9	3	12	10	15	2	1						
94	CH 411	Inorganic Reaction Mechanism and Organometallics		6	22	7	8	7	4					1			
95	CH 418	Biological Chemistry of Metal Ions		6	9	9	5	7	7				1				
96	CH 419	Consumer Chemistry		80	163	55	3										
97	CH 421	Organic Reactions Mechanisms		11	17	14	11	1			1						
98	CH 425	Organic Chemistry Laboratory		13	24	15	2				1						
99	CH 428	Drug Design and Development		7	17	6	8	3			1						
100	CH 432	Chemical Dynamics and Electrochemistry	1	5	7	23	10	7		1	1						
101	CH 433	Applications of Spectroscopy		5	16	22	11							1			
102	CH 437	Chemical Approaches to Nanoscale Science and Technology		10	21	9	2			1							
103	CH 438	Application to Statistical Mechanics to Chemistry		1		1											
104	CH 499	Project - II		23	14	1	4							1			
105	CH 500	Graduate Seminar		16	19	24											

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
106	CH 600	Project		31	26	2											
107	CH 613	Applied Inorganic Chemistry		13	5	13	4	3					1				
108	CH 617	Organometallics		2	2	1	1										
109	CH 618	Bio-inorganic Chemistry		5							2						
110	CH 621	Modern Reagents in Organic Synthesis		25	11	5	1	1									
111	CH 623	Supramolecular Chemistry		2	11	1										1	1
112	CH 627	New Reagents for Organic Synthesis		5	4	2	1						1				
113	CH 629	Advances in Bio- organic Chemistry	1	3	2	2											
114	CH 636	A Fundamental Approach to Physical Chemistry	0	2	40						1						
115	CH 639	Principles and Applications of Molecular Fluorescence	2	9	10	5								4			
116	CH 644	Applied Quantum Chemistry		2	3	2	1				1						
117	CL 205	Mass Transfer Operations I		1	4	43	36	1		1							
118	CL 206	Solid Fluid Operations		16	49	15	5			1							
119	CL 207	Computer Aided Numerical Methods		8	42	20	13	2	1	1							
120	CL 208	Chemical Reaction Engineering I		3	23	35	15	2	8								
121	CL 209	Process Equipment Design I		21	32	16	16										
122	CL 210H	Laboratory 1: Fluid Mechanics		6	27	37	15										
123	CL 211H	Laboratory 2: Heat Transfer		4	20	37	17	5	1	2							
124	CL 304	Chemical Process Technology		9	26	28	3	3		7							
125	CL 305	Transport Phenomena		4	10	25	15	16	5	1							
126	CL 306	Process Engineering & Economics	5	5	10	10	28	7	5	6							
127	CL 312	Computer Aided Process Equipmen Design		12	46	17	2										
128	CL 313	Laboratory 4: Mass Transfer		23	31	18	3	1									
129	CL 314H	Laboratory 5: Reaction Engineering		2	40	26	8	1									
130	CL 315H	Laboratory 6: Process Control		29	32	15											
131	CL 399	General Learning of Chemical Engineering Research Project				1					4						

SI. No.	Course No	Course Name	AS	AA	AB	ВВ	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
132	CL 499	Project II		12	5	1	3	2	1					1			
133	CL 503	Advanced Thermodynamics		11	23	24	1	1			3						
134	CL 504	Advanced reaction Engineering		13	16	19	8	4			1			2			1
135	CL 505	Petroleum Production Engineering		2	4	14	10	2						1			
136	CL 506	Smart Materials		4	9	7	7	1	1								
137	CL 514	Fundamentals of Material Science & Engineering		3	9	8	5	8	2	2							
138	CL 598	Petroleum Laboratory		27	5								1				
139	CL 599	Scientific Communications		3	6	10	23	19						1			
140	CL 612	Colloid and Interface Science		4	20	39	17	3	1				1				1
141	CL 613	Computational Fluid Dynamics		2	1			1			1						1
142	CL 615	Optimization Techniques			1		2			1							
143	CL 619	Refinery process design			2												
144	CL 622	Molecular simulations: Principles and Applications		4	3	1	2							1			
145	CL 625	Fundamentals of micro-nanofluidics & microfabrication	1	7	7	5	2	1									
146	CL 626	Energy Resources		4	18	28	24	7	2								
147	CL 627	Multiphase flow			1	2	2	1									
148	CL 628	Catalysis and adsorbents	1	4	7	13	17	18	3								
149	CL 634	Applied Rheology		3	3	22	11	1								1	2
150	CL 636	Microelectronic fabrication		3	1	3	1										2
151	CL 640	Research Methodology and Scientific Writing		10	9	10	3				2						
152	CL 643	Computer aided applied optimization	3	3		1	1									1	
153	CL 651	Foundations of Data Science for Engineers	2	6	11	63	17	22	3	1			1			1	10
154	CS 205	Formal Languages, Automata Theory, and Computation		5	10	18	15	39	27	9			5				
155	CS 206M	Datastructures and Algorithms	2		2	9	7	11	6	10			3				
156	CS 207	Design and Analysis of Algorithms		16	19	33	37	13	8				3				
157	CS 223	Computer Architecture and Organization		3	28	42	59	19	17	18			18				
158	CS 224	Hardware Lab		14	23	39	22	14	7	5	1						
159	CS 245	Database Management Systems		4	17	68	65	29	14	4			1			1	

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	ı	Х	NP	PP
160	CS 246	Database		48	79	28	17	12	7	12							
		Management															
161	CS 331	Systems Lab Programming		34	67	4	1	1	2	1			1				
		Languages Lab															
162	CS 345	Software Engineering		11	21	19	15	23	14	10	1						
163	CS 346	Software		27	52	29	5				1						
404	CS 348	Engineering Lab	40	13	35	13	1	2		1							
164	CS 348	Implementation of Programming	42	13	35	13	1	3	6	4							
		Languages Lab															
165	CS 350M	Computer Systems		3	7	16	16	8	4								2
166	CS 361	Machine		15	34	43	19			1						1	2
407	00.400	Learning	2	4.4	40	44	-	ļ	1	-							
167	CS 499	Project II	3	14	18	14	5	5	4	5							
168	CS 506	Hierarchical Memory Algorithms	5	10	6	7	11	8	18	5			3				
169	CS 508	Optimization		4	10	19	16	11	6	5			2			1	1
170	CS 528	Methods High		26	58	58	79	32	3	3			1	2			
		Performance Computing															
171	CS 529	Topics and Tools in Social Media Data Mining		5	11	23	37	11						5			
172	CS 534	Approximation Algorithms		1	1	2											
173	CS 544	Topics in Networks		1	9	24	37	8	2	3			1				
174	CS 549	Computer and Network Security		7	6	7	4	2		2			1	1			
175	CS 558	Computer Systems Lab		2	10	36	16		2		1			1			1
176	CS 577	C Based VLSI Design	2	22	20	12	15	4	1		1			1			1
177	CS 595	Data Visualization Lab		3	4	4	6	3	2	3				1			
178	DA 526	Image Processing with Machine Learning		4	4	3	4										2
179	DA 546	Introduction to Statistical Learning		2	7	21	9	2					1			2	
180	DA 671	Introduction to Reinforcement Learning		3	6	5	3									2	1
181	DD 212	Visual Narratives	3	8	11	12	9	8		2			1				
182	DD 214	Design Workshop		9		44					1		1				
183	DD 215	Cognitive Ergonomics		15	21	8	4	4			1						
184	DD 216	BDes Project I	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
185	DD 220M	Introduction to Ergonomics			3	4	7	8	5	1	3		1				
186	DD 303	Typography and Grid Systems		6	11	20	7	5	2		1						
187	DD 311	Systems approach to Design		1		15	21	13	3	3			3				
188	DD 312	Design Evaluation Methods		1	7	14	11	12	8	5							
189	DD 320M	Product Planning and Strategy		4	9	15					3						

SI. No.	Course No	Course Name	AS	AA	AB	BB	BC	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
190	DD 322	Animation Fundamentals				1									2		
191	DD 324	(PD) Plastics & Composites		1				2		1			1				
192	DD 325	(VC) Graphic Communication	6	4	1	1									35		
193	DD 326	(TD) Introduction to Automobile Design		9													
194	DD 398	BDes Project II		13	7	7	5	2	2					29			
195	DD 411	Design and Entrepreneurship		21	20												
196	DD 499	BDes Project IV	3	8	9	15	1		2				3	1	1		
197	DD 505	Form Studies		7	10	13					1						
198	DD 507	Design Project		8	16	6	1							1			
199	DD 509	Interaction Design		8	12	10					1						
200	DD 514	Collaborative Design Methods in New Product Development	6	16	10	12	8	3		4	1						
201		Digital Human Modelling and Simulation in Product Design		0	5	3	1				2						
202	DD 517	Automobile Design				4											
203	DD 524	Graphic Design Studio		1	4	6	4										1
204	DD 532	Motion Graphics	9	18	16	4	1								1		
205	DD 605	Thesis Project (Phase II)	3	10	10	5	1	1						1			
206	DD 606	Product Detailing		1													
207	DD 709	Design-based Project			3	2											
208	DD 710	Research-based Project	1	1	3	4	1										
209	DM 503	Hazards monitoring and prediction	1		7	4											
210	DM 504	Research methodology and field visit		1	1	2	6	2									
211	DM 514	Financing for Disaster Risk Reduction (DRR)		3	3	2											
212	DM 515	Rehabilitation and Retrofitting of RC Structures			2	1	2										
213	DM 697	Project Phase 1			3									6			
214	EE 206	Analog Circuits	1	7	20	36	75	34	6	1			4				
215	EE 207	Analog Circuits Laboratory		37	35	53	33	17	5		1		3				
216	EE 213M	Digital Circuits	3	3	4	11	15	6	4	2							
217	EE 230	Probability and Random Processes	3	1	11	6	13	35	50	59			5				
218	EE 250	Control Systems		7	18	37	79	35	5				4				
219	EE 252	Measurement and Instrumentation		5	27	87	51	9	2		1			1			
220	EE 304	Design Lab						1	2								
221	EE 313	Microelectronics Laboratory		1	1	6	15	43	23	10	2		3				

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
222	EE 314	Flexible and Printable Electronics	1	32	48	29	29	25		1							
223	EE 322M	Signal Processing		5	14	6	8	5	5	4							
224	EE 332	Digital Communication		2	4	18	16	39	20	4							
225	EE 333	Communication and DSP Laboratory		10	29	44	17	3		1							
226	EE 334	Computer networks		2	4	17	34	18	17	3			7				
227	EE 335	Information Theory & Coding	2	4	10	16	31	17	11	12							
228	EE 352	Advanced Control System	2	1	5	9	10	10	9	14			2				
229	EE 360	Power Electronics		8	11	12	16	9	6	1							
230	EE 370	Electrical Power Systems		2	6	14	16	8	11	4			1				
231	EE 371	Advanced Electrical Engg Lab		31	27	3	1										
232	EE 381	Electrical Machines Lab		3	17	24	19										
233	EE 390	Data structure and algorithms		32	95	23	8	5	1								1
234	EE 399	BTP II (New Curriculum)		4	7	1											
235	EE 499	B. Tech Project-	1	7	5	1	1	1						1			
236	EE 512	Analog IC Design	1	2	10	9	2				3						2
237	EE 515	VLSI System Design	1	1	9	7					3		2				
238	EE 516	VLSI DSP		3	4	7	6	2	1				4				
239	EE 517	VLSI Lab-II		4	13	4					2						
240	EE 518	VLSI Lab-III		10	6	1					2						
241	EE 521	Digital Signal Processing Lab		2	7	7			1		2						
242	EE 522	Statistical Signal Processing		1	8	7	5			2	2						
243	EE 525	Advanced Topics in Machine Learning		1	5	6	5				2						
244	EE 526	Machine Learning		1	7	9	5	4	2	1			1				2
245	EE 527	Machine Learning Laboratory		5	10	9					2						1
246	EE 533	Wireless Communications		1	8	11	4	1			2						
247	EE 534	Communication System Design Lab		2	7	10		1									
248	EE 535	Data Communication Network		3	4	7	3	2	1								
249	EE 541	Antennas, RF and Microwave Laboratory			3	2	5										
250	EE 543	Computational Electromagnetics		1	2	3	2	2			1						
251	EE 544	Photonics Devices and Circuits		2	4	2	1	2									1
252	EE 553	Optimal Control			4	1	1	1	1	1	2						

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	X	NP	PP
253	EE 554	Nonlinear Systems and Control		3		3	2				1		2				
254	EE 555	Automation Laboratory	1	1	3	1					1		2				
255	EE 562	Power Electronics Applications in Power Systems		2	3	4	5	2	1		3						
256	EE 572	Power Engineering Laboratory		2	2	4	2				3						
257	EE 580	Electrical Machines and Drive Systems		4	5	2	2	2			1						
258	EE 592	Detection and Estimation Theory		2	4	7	6		4	1	2						
259	EE 595H	Stochastic Models		4	5	8	6						1				1
260	EE 596H	Optimization Techniques		5	7	8	2							1			1
261	EE 613	Radio Frequency Integrated Circuits		6	5	12	4	4	1		2						
262	EE 621	Computer Vision		19	27	71	51	8		2							
263	EE 622	Biomedical Signal Processing	1	2		3	3		2	1							
264	EE 627	Biometrics		9	6	24	17	9									
265	EE 633	Error Control Codes		1		4	3		1	1							
266	EE 634	MIMO Wireless Communications: Fundamentals and Advances			2	4	2	1									4
267	EE 643	Silicon Photonics		3	3	4											
268	EE 655	Mathematical Techniques for Control and Signal Processing		10	14	9			2	1	2						
269	EE 656	Robust Control		1	3	8	5	2		2	3						
270	EE 661	Power Electronics for Renewable Energy Systems				6	4	1			3						
271	EE 665	Power Electronic Systems for Electric Vehicles	2	5	8	26	25	12	20	7	2						
272	EE 674	Synchrophasor Technology		4	3	7	2						7				
273	EE 694	Introduction to Parallel Computing		17	34	36	29	6	3								
274	EN 671	Solar Energy Conversion Technology		11	38	81	69	83	40	5	1						
275	EN 674	Energy Economics, Planning and Management			4	7	6	1			2		1				
276	EN 697	Project 1		4	8	3											
277	HS 107	Problems of Philosophy		4	3	2	9	11	10	4							
278	HS 113	Cognitive Psychology		5	39	28	22	8	2	2							

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	X	NP	PP
279	HS 114	Cultural Theory and Practice		1	1	2	1				2						
280	HS 119	Sociology of Science		10	22	21	13	9					1				
281	HS 123	Game Theory and Economics		15	16	6	16	8	9	8			3			2	
282	HS 125	Introductory Macroeconomics		10	18	25	5	1	5		2						
283	HS 134	Introduction to Archaeology		4	10	40	57	50	10		1						
284	HS 135	Topics in Bilingualism		26	24	45	42	11	1								
285	HS 136	Introduction to Indian Constitution and Political Processes		3	14	42	17	2									
286	HS 138	Psychology of Well Being		6	10	5	18	8	12	2			2				
287	HS 139	The Short Story: Theory and Perspectives			1	4	3	4	5	9			10				
288	HS 148	Development and its Discontents			8	13	12	11	6	6							
289	HS 217	Social History of Technology in Modern India		8	13	14				1							
290	HS 218	Ecology and Society		8	25	17	17	19	19	15							
291	HS 221	Management of Organization Behaviour		3	7	13	17	14	14	6							
292	HS 222	Philosophy of Science		1	3	2	1	2	1	1				1			
293	HS 229	Environmental Economics		1	5	2	4	8	3				1			1	
294	HS 232M	Linguistic Analysis			1	1	1	2		1	5						
295	HS 233	History of Contemporary India		6	18	22	21	11	9	1			1				4
296	HS 235	Writing Systems of the World		1	4	3	6	3	1								
297	HS 239	Economics of Uncertainty and Information		7	4	3	2	3	4								
298	HS 240	Literature and Science Writing		2	1			2	1	1							
299	HS 244	Indian Business History		3	23	41	35	9	2								
300	HS 251	Social Choice and Welfare		19	46	63	48	25	5	3							
301	HS 320M	Literature and Film: The Word and the Image	1	5	2	1											
302	HS 503	Sociology of Development		2	10	10	11	8	3		2						
303	HS 517	Comparative Politics of Developing Countries		1	13	7	15	7		1	2						
304	HS 523	Economic Development: Theory and Practice		3	12	11	16	2			2						
305	HS 524	Qualitative Research Methods in Social Sciences		21	14	11	9	7	3		2						1

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	СС	CD	DD	FA	FD	FP	I	Х	NP	PP
306	HS 525	India's Development:		1	9	19	7	7					2				
		Issues and Debates															
307	HS 604	Development and Finance		1	5	5	2	1					1			2	
308	HS 606	Sociology of Gender		2	13	3	3										1
309	HS 699	Dissertation		8	10	10	2	1					1				
310	HS 706	Issues in Indian Economy		1													
311	HS 707	Invisible Exchanges		3	3	3	3										
312	HS 712	Introduction to Western Philosophy			2		1										
313	HS 714	Understanding Organizational Behaviour: Theory and Research				5											
314	HS 716	Research				2	1										
		Methodology in Psychology															
315	HS 719	Philosophy of Religion		1		1	1										
316	HS 724	History in Indian Vernaculars			5												
317	HS 727	Issues in Historical Research		3	4												
318	HS 731	Heritage, Identity and Archaeology		4													
319	HS 732	Issues in Cultural Studies		3	2												
320	HS 733	Issues in Phonological Theory			1												
321	HS 734	Perspectives in Linguistics			1												
322	HS 735	Experimental Phonology			1												
323	HS 740	Issues in Applied Ethics: a multicultural approach		2		1											
324	HS 744	Labour Markets in Developing			1												
325	HS 753	Countries Topics in			1												
		International Relations															
326	HS 763	Research Methods in Political Science				3											
327	HS 768	Bilingualism: language and cognition			1	1											
328	HS 771	Key Texts in Modern Political Thought			2	1											
329	HS 780	Understanding Social Movements			1	1											
330	HS 781	Approaches to Diplomatic and Military History			1												
331	HS 784	Acoustic Analyses of Tone Languages				1											
							19										

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
332	IFST 017	Joint Degree Dissertation I		3	1	1											
333	LS 521	Phonetics and Speech												1			
334	LS 551	Introduction to Language Science			2												
335	MA 212M	Mathematical Statistics					2	11	18	17						1	1
336	MA 224	Real Analysis		2	7	8	11	15	24	12			1				
337	MA 252	Design and Analysis of Algorithms		2	5	7	9	36	7	13							5
338	MA 271	Financial Engineering I	2	11	20	10	15	16	4	1							
339	MA 312M	Modern Algebra		2	5	12	10	8		8		1					
340	MA 322	Scientific Computing		15	12	19	13	9	1	1							
341	MA 324	Statistical Inference and Multivariate Analysis		1	3	7	22	21	14	2							
342	MA 351	Theory of Computation		3	3	2	11	19	14	18							
343	MA 373	Financial Engineering II		9	11	14	19	13	2	3							
344	MA 374	Financial Engineering Laboratory		16	19	16	14	3	1	2							
345	MA 477	Financial Risk Management and Modelling		1	3	8	12	10	7	7							
346	MA 499	Project II	1	33	14	10	3	1									
347	MA 510	Combinatorics		1	2			1					1				
348	MA 512	Data Structures and Algorithms		2	9	13	15	14	3	2			6				
349	MA 542	Differential Equations		2	9	17	11	13	4	3							
350	MA 547	Complex Analysis	1	10	8	12	14	9	3	3							
351	MA 562	Mathematical Modelling and Numerical Simulation		14	11	15	16	14	6		1						
352	MA 571	Numerical Linear Algebra		1	4	6	11	13	9	10	2						1
353	MA 573	Numerics of Partial Differential Equations	1	1	4	5	15	15	2	6	1		1				
354	MA 588	R Programming Lab		3	14	4	1				1						
355	MA 590	Probability Theory		10	10	10	12	13	1	2							
356	MA 591	Optimization Techniques	3	2	5	9	10	16	8	2							
357	MA 597	Queueing Theory and Applications	1	2	4	14	22	8		1							
358	MA 601	Graphs and Matrices	3	8	9	21	16	9	2	1							
359	MA 617	Design and Analysis of Algorithms				1											
360	MA 618	Mathematics for Computer Science				1											
361	MA 619	Data Structures Lab		1													

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
362	MA 621	Rings and Modules	2	1	2		5	2		5			2				1
363	MA 623	Introduction to Algebraic Geometry		1													
364	MA 625	Linear Algebra-I				1	2	1			1						
365	MA 642	Real Analysis A			4						2						
366	MA 645	Introduction to C* Algebras			1		1										
367	MA 650	Advanced Course on Hardy Spaces		2	2												
368	MA 651	Distributed Algorithms		2	8	7	5	4	3								
369	MA 652	Approximation Algorithms		4	4	7	7	4	5	3							
370	MA 662	Differential Equations			1		2				1						
371	MA 699	Project		19	20	6	5				2						
372	MA 746	Fourier Analysis		1		3	1	1			2						
373	ME 202M	Mechatronics		5	8	5											3
374	ME 221	Fluid Mechanics II		1	4	5	15	32	49	19			1				
375	ME 222	Manufacturing Technology I	1	1	15	16	60	26	3	3			3				
376	ME 223	Solid Mechanics	1	3	23	40	33	14	5	2	3		2				
377	ME 224	Kinematics of Machinery	2	14	28	38	23	15	2	1			2				
378	ME 225	Mechanical Workshop II		58	45	15	4				2						
379	ME 226	Mechanical Engineering Lab		12	39	49	22						3				
380	ME 302M	Fundamentals of Artificial Intelligence		2	1	2											
381	ME 321	Applied Thermodynamics	3	11	35	20	27	11		1							
382	ME 322	Machine Design		14	47	44	2		2								
383	ME 323	Mechanical Measurements		13	24	32	22	13	2	2							
384	ME 324	Industrial Engineering and Operations Reseach.		8	19	17	26	21	8	7			2	1			
385	ME 325	Control Systems		6	16	40	34	9	3				1				
386	ME 326	Mechanical Engineering Lab IV		15	55	33	7						1				
387	ME 399	BTech Project-II		28	39	34	4	1	1					2			
388	ME 499	Project-II		23	29	23	8		2	1				8			
389	ME 511	Engineering Materials and Characterization		2	7	17	17	1			7						
390	ME 513	Physics of Deformation Processes		5	7	12	10	9	4	3			5				
391	ME 515	Manufacturing Laboratory		12	10								3				
392	ME 522	Convective Heat Transfer		6	8	9	9	3					3				
393	ME 541	Continuum Mechanics			4	5	3	1	1	2							1
394	ME 542	Numerical Analysis		4	5	8	10	5	2				1				
	•				•	•	21	•	•	•				•	•		

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
395	ME 544	Computational Mechanics Laboratory		3	3	2											
396	ME 552	Aircraft Propulsion		2	7	5		1			2						
397	ME 553	Gas Dynamics		5	4	4					2						
398	ME 554	Rocket Propulsion		1	5	4					2						
399	ME 605	Fracture Fatigue and Failure Analysis		5	15	21	12	1					7				
400	ME 607	Introduction to Composite Materials		2	8	12	4	3	1				6				
401	ME 612	Nuclear Energy: Concepts and Applications		2	4	9	10	8	5	2	1						
402	ME 615	Rotor Dynamics		7	10	5	1						6			1	2
403	ME 619	Fundamentals of Microfluidics	1	2	2	3	5										
404	ME 621	Refrigeration and Air conditioning		2	2	7	3	1	1				1				
405	ME 628	Additive Manufacturing		3	13	13	19	4	2				5				
406	ME 648	Viscous Fluid Flow		3	4	11	9	2					3				
407	ME 657	Two Phase Flow and Heat Transfer		2	1	4	5	3		1							
408	ME 668	Sports Biomechanics		1	2	1	2	1					1				
409	ME 670	Advanced Computational Fluid Dynamics		2	1	1											
410	ME 674	Soft Computing in Engineering	3	9	35	21	7	6		1			4			2	
411	ME 683	Computational Gas Dynamics		3	4	2											1
412	ME 688	Advanced machining processes		18	23	34	20	15	7	7	1						
413	NT 705	Recent Advances in Nanotechnology		6	2												
414	PH 202	Electromagnetics		2	4	11	12	17	8	2	1		1				
415	PH 204	Quantum Mechanics-I	2	4	1	3	7	14	11	15							
416	PH 206	Computational Physics	1	8	20	25	2	1									
417	PH 208	Digital electronics & microprocessors		4	6	3	15	13	14	4							
418	PH 210	General Physics Laboratory-I	1	9	27	16	4	1	1								
419	PH 282M	Engineering optics		1		3				1	6						
420	PH 302	Solid state physics		3	12	15	18	4		1							
421	PH 304	Measurement techniques		7	4	10	11	14	4	2			1				
422	PH 306	Lasers and Ultra Fast Optics		4	4	16	15	5	8								
423	PH 308	Nuclear science & technology		2	3	10	5	8	12	10	5						
424	PH 310	Advance Physics Laboratory		6	31	11	2	1		1							
425	PH 312	Mini Project	4	14	18	8	3	1	1	2			1	1			

SI. No.	Course No	Course Name	AS	AA	AB	BB	ВС	CC	CD	DD	FA	FD	FP	I	Х	NP	PP
426	PH 402	Mathematical Physics-II	1	2	7	15	17	5	4	1	1						
427	PH 404	Statistical Mechanics		2	4	13	11	13	6	6			1				
428	PH 406	Quantum Mechanics-II			3	6	9	17	8	7			3				
429	PH 408	Measurement techniques		7	6	12	14	7	2	2			3				
430	PH 410	Electrodynamics-				2	11	13	10	15	3						
431	PH 412	General Physics Laboratory-I		5	21	18	1	3	3	2							
432	PH 422	Project-II				1											
433	PH 442	Theory and Simulation of Nanostructures	1	2	4												
434	PH 451	Plasma Physics		1	3	12	5	6	7	2							
435	PH 452	Magnetic Recording	7	16	6	1	1			3							
436	PH 458	Applied superconductivity	2	5	7	9	8	8	4								
437	PH 464	Fundamentals of cosmology	2	4	3	9	9	3	5	7							
438	PH 466	Advanced Statistical Mechanics	1	1	2		1										
439	PH 499	Project II		8	9	2								2			
440	PH 516	Advance Physics Laboratory	4	12	21	8		1									
441	PH 518	Project-II	1	10	15	14	4										
442	PH 524	Thin Film Phenomena		3	5	5	10	5	1	2	1						
443	PH 527	Nanostructured Materials		13	8	6	7	1									
444	PH 541	Quantum computation & Quantum information	1	7	9	10	5	8	2							1	
445	PH 544	High Energy Physics		3	3	6	4		1	1			1			1	
446	PH 551	Nonlinear Dynamics and Chaos	1	2	1	5	1		1								1
447	PH 702	Electrodynamics		3	4	15	1										
448	PH 704	Fourier and waveguide optics			2	2	2										
449	PH 706	Experimental and Numerical Techniques		3	3	4	4	6	6	6			3				
450	PH 708	Mini project	1	23	11	2					2						
451	RA 505	Robot Sensing and Vision		31	190	163	36	3	1				2	1			2
452	RA 506	Machine Learning		2	6	10	10	5			2						1
453	RT 514	Water Resources Management		3	5	3	1				2						
454	RT 515	Natural Resources Management	0	4	3	2	2	1	0	0	0	0	0	0	0	0	0
455	SA 315	Yoga-4															924
		Total	233	3092	5156	5397	3883	2242	1199	759	196	4	272	108	40	23	1001