

Courses to be offered in the Summer Term 2021

See instructions [here](#).

SN.	Dept	Course No	Units (Credits)	Course Type	Course Title	Name of the Instructor In-charge	Remarks, if any	Lecture Schedule	Tutorial/Lab Schedule
1	AE	AE311A	3-0-0-0(9)		Compressible Aerodynamics	Prof. Arunkumar P	Only for graduating students	MWF 8:00-10:00	
2	AE	AE341A	3-0-0-2(11)		Gas Turbine Propulsion	Prof. A. Kushari	Only for graduating students	MWF 16:00-18:00	
3	AE	AE421A	1-0-2-0(3)		Experiments in Flight Mechanics	Prof. A. K. Ghosh	Only for graduating students	M 12:00-13:00	Th14:00-16:00
4	AE	AE471A	0-0-0-0(9)		B. Tech project	PROF. VAIBHAV K ARGHODE	Only for graduating students		
5	AE	AE621A	3-0-0-0(09)		Turbulence	Prof. A. C. Mondal	Only for graduating students	MTTh 10:00-12:00	
6	BSBE	ESO206A	3-0-0-0(9)		Principles of Biotechnology	Prof. Ashwani Kumar Thakur	NA	MTTh 10:00-12:00	
7	CE	CE361A	2-0-0-0(6)		Engg Hydrology	Prof. G. Pahar	Course will be offered in the online mode only if any of the three graduating students opt for it (instead of electing for a course waiver). Otherwise, it is being offered in 2021-22-I.	WF 10:00-12:00	
8	CE	CE441B {Modular(Entire duration of summer)}	3-0-0-0(5)	OE	Construction Management	Prof. Sudhir Misra	<ol style="list-style-type: none"> 1. Offered as an open elective. 2. There will be no prerequisites for the course except that the student should have spent at least two years at IIT Kanpur. 3. Available to CE students (17*** and earlier ONLY) also as a Department compulsory course. [Other CE students (18***, etc) will be permitted to register only upon specific permission of the DUGC, CE] 4. The course will be offered in asynchronous mode on the hellow.iitk.ac.in portal. 5. Recorded material available on the NPTEL site will be used as the basic lecture materials and two discussion hours every week will be scheduled as follows: <ol style="list-style-type: none"> a) discussion with the instructor b) discussion in smaller groups with graduate students who will act as Tutors/TAs for the co TAs will be needed at approximately one per 20 registered students	MWF 12:00-13:00	

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9	CE	CE641A (Modular)	3-0-0-0(05)	DE, OE	PROJECT MANAGEMENT	Prof. K.V.HARISH	<ul style="list-style-type: none"> • This course does not have any prerequisite and is offered for UG and PG students • Course is offered for students in Civil Engg. and other departments • Course is offered as a DE as well as OE • The course will be offered in asynchronous mode in hello.iitk.ac.in portal. The institute should confirm the availability of this portal. • The number of TAs provided is based on the minimum limit of 60 students in class. • Two discussion hours every week will be scheduled as follows: <ul style="list-style-type: none"> a) discussion with the instructor b) discussion in smaller groups with graduate students who will act as Tutors/TAs for the course • TAs will be needed at approximately one per 20 registered students • Additional TAs may be required if the strength exceeds 60 	T, Th 12:00-13:30	
10	CE	CE643B (Modular)	3-0-0-0(05)	DE, OE	INFRASTRUCTURE FINANCING	Prof. K.V.HARISH	<ul style="list-style-type: none"> • This course does not have any prerequisite and is offered for UG and PG students • Course is offered for students in Civil Engg. and other departments • Course is offered as a DE as well as OE • The course will be offered in asynchronous mode in hello.iitk.ac.in portal. The institute should confirm the availability of this portal. The number of TAs provided is based on the minimum limit of 60 students in class. • Two discussion hours every week will be scheduled as follows: <ul style="list-style-type: none"> c) discussion with the instructor d) discussion in smaller groups with graduate students who will act as Tutors/TAs for the course • TAs will be needed at approximately one per 20 registered students. • Additional TAs may be required if the strength exceeds 60 	MWF 17:00-18:00	
11	CE	CE663A	3-0-0-0(9)	OE	Humans, Environment, and Sustainable Development	Prof. Abhishek	The course is open to all students (UG or PG) of all branches. It is a nine-credit course with three lectures per week and no tutorial or lab.	MTTh 14:00-16:00	
12	CE	CE697A	0-0-0-0(0)		M.Tech - Seminar I	DPGC Convener (Prof. K.V.Harish)			
13	CE	CE698A	0-0-0-0(0)		M.Tech - Seminar II	DPGC Convener (Prof. K.V.Harish)			
14	CE	CE797A	0-0-0-0(0)		Ph.D - Seminar I	DPGC Convener (Prof. K.V.Harish)			

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15	CE	CE798A	0-0-0-0(0)		Ph.D - Seminar II	DPGC Convener (Prof. K.V.Harish)			
16	CE	CE897A	0-0-0-0(0)		MSR - Seminar I	DPGC Convener (Prof. K.V.Harish)			
17	CE	CE898A	0-0-0-0(0)		MSR - Seminar II	DPGC Convener Prof. K.V.Harish)			
18	CE	CE491A	0-0-0-0(9)	DE-B	Undergraduate Research II	DUGC Convener (Prof. Abhas Singh)			
19	CE	CE492A	0-0-0-0(9)	DE-B	Undergraduate Research III	DUGC Convener (Prof. Abhas Singh)			
20	CE	CE493A	0-0-0-0(9)	Extra credit; does not count towards DE/OE	Undergraduate Research IV	DUGC Convener (Prof. Abhas Singh)			
21	CE	ESO202A	3-1-0-0(11)	ESO	Mechanics of Solids	Prof. Suparno Mukhopadhyay	Only for students with backlog in this course during 2020-21 Sem I or Sem II.	MTTh 10:00-12:00	T: W 10:00- 12:00
22	CGS	CGS601A	3-0-0-0(9)	DE(for cgs student s), OE(for others)	Foundations of Cognitive Psychology	Prof. Ark Verma	To be Offered as OE for Non-CGS students.	MTTh 10:00-12:00	
23	CGS	CGS698A	3-0-0-0(9)	DE(for cgs student s), OE(for others)	Topics in Psychology of Language	Prof. Ark Verma	To be Offered as OE for Non-CGS students. And DE for CGS Students.	MTTh 14:00-16:00	
24	CHE	CHE312A	3-0-0-0(9)		Heat Transfer and its Application	Prof. Harshwardhan Katkar		MTTh 10:00-12:00	

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25	CHE	CHE453T	3-0-0-0(9)		Chemical Engineering Design	Prof. Rahul Mangal		MWF 16:00-18:00	
26	CHE	CHE492A	1-0-3-2(08)		Unit Operations and Process Control Laboratory	Prof. Sri SivaKumar & Prof. Harshwardhan Katkar			
27	CHE	CHE635A	3-0-0-0(09)		Introduction to electrochemical engineering	Prof. Raj Pala		MTTh 14:00-16:00	
28	CHE	CHE398A	0-0-9-0(9)	UGP		DUGC (Prof. Rahul Mangal)			
29	CHE	CHE497A	0-0-9-0(9)	UGP		DUGC (Prof. Rahul Mangal)			
30	CHM	CHM242A/ CHM341A	3-0-0-0(9)	OE	Basic Inorganic Chemistry	Prof. Raja Angamuthu	OE	MTTh 10:00-12:00	
31	CHM	CHM344A/ CHM343A	0-0-6-0(06)	DC	Inorganic Chemistry Laboratory Experiments	Prof. Ritika Gautam	Float only as DC course{This course is mandatory for all Y18 CHM BS students and the entire batch should be registered (as per modified, Senate approved template)} This course is compulsory for BS students of Y18 Batch who normally do the course in the third year.		MTWTHF 14:00-17:00
32	CHM	CHM402A	3-0-0-0(09)	OE	Organic Chemistry II	Prof. Anand Singh	OE	MTTh 14:00-16:00	
33	CHM	CHM626A	3-0-0-0(9)		Solid State Chemistry	Dasari L. V. K. Prasad		MTTh 14:00-16:00	
34	CHM	CHM636A	3-0-0-0(09)	OE	Physical Photochemistry	Prof. Pratik Sen	OE	MWF 16:00-18:00	
35	CSE	CS202A	3-0-0-0(5)			Prof. Anil Seth		MWF 08:00-10:00	
36	ECO	ECO101A	3-1-0-0(11)	HSS-I, OE	Introduction to Economics	Prof. Debayan Pakrashi	To be offered as HSS-I, OE. pre-recorded lectures with discussion hours & tutorials.	MWF 08:00-10:00,	T 08:00-10:00
37	ECO	ECO201A	3-0-0-0(9)		Microeconomics I	Prof. Deep Mukherjee	pre-recorded lectures with discussion hours	MTTh 10:00-12:00	
38	ECO	ECO261A	3-0-0-0(9)		Introduction to Mathematical Economics	Prof. Vimal Kumar		MWF 17:00-19:00	

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39	ECO	ECO311A	3-0-0-0(9)	HSS II, OE, DC	Development Economics	Prof. Debayan Pakrashi	To be offered as DC, OE, HSS II. pre-recorded lectures with discussion hours	MWF 16:00-18:00	
40	ECO	ECO412A	3-0-0-0(9)		International Economics and Finance	Prof. S.K. Mathur		MTTh 10:00-12:00	
41	ECO	ECO413A	3-0-0-0(9)	DC, OE	Indian Economic Problems	Prof. Wasim Ahmad	DC, OE Morning (after 9 am)	MTTh 10:00-12:00	
42	ECO	ECO423A	3-0-0-0(9)	DE, OE	Financial Economics	Prof. Wasim Ahmad	DE, OE Evening (after 4 pm)	MWF 16:00-18:00	
43	ECO	ECO506A	3-0-0-0(9)	DE, OE, HSS-II	Behavioural & Experimental Economics	Prof. Debayan Pakrashi	To be offered as DE, OE, HSS II. Lectures in both synchronous and asynchronous mode.	MTTh 14:00-16:00	
44	ECO	ECO507A	3-0-0-0(9)		Topics in Managerial Economics	Prof. Deep Mukherjee	pre-recorded lectures with discussion hours	MWF 16:00-18:00	
45	ECO	ECO521A	3-0-0-0(9)	DE, OE	Money and Banking	Prof. Sukumar Vellakkal	The course will be offered as both DE and Open Elective course. Preq: ECO101 or ECO201.	MTTh 10:00-12:00	
46	ECO	ECO524A	3-0-0-0(9)		Heterogeneous Firms and International Trade	Prof. S.K. Mathur		MWF 16:00-18:00	
47	EE	EE301A	3-0-0-0(9)		Digital Signal Processing	Prof. Vipul Arora		MWF 08:00-10:00	
48	EE	EE321A	3-0-0-0(9)		Communication Systems	Prof. Govind Sharma		MWF 16:00-18:00	
49	EE	EE330A	3-1-0-0(11)		Power Systems	Prof. Abheejeet Mohapatra		MTTh 10:00-12:00	W 10:00- 12:00
50	EE	EE360A	3-0-0-0(9)		Power Electronics	Prof. Santanu Kumar Mishra & Prof. Suvendu Samanta		MTTh 14:00-16:00	
51	EE	EE621A	3-0-0-0(9)		Representation and Analysis of Random Signals	Prof. Abhishek K Gupta		MTTh 10:00-12:00	
52	EE	EE650A	3-0-0-0(9)		Basics of Modern Control Systems	Prof. Twinkle Tripathy		MTTh 14:00-16:00	

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53	EE	EE698P	3-0-0-0(9)		Memory Technology and Neuromorphic computing	Prof. Shubham Sahay		MTTh 14:00-16:00	
54	HSS	ENG452A	3-0-0-0(9)		Linguistic Typology	Prof Chaithra Puttaswamy		MTTh 10:00-12:00	
55	HSS	PHI455A	3-0-0-0(9)		Philosophical Logic	Prof AV Ravishankar Sarma		MWF 16:00-18:00	
56	HSS	SOC171A	3-1-0-0(11)		Introductory Sociology	Prof B K Pattnaik		MWF 16:00-18:00	Th 16:00-18:00
57	IME	IME634A	3-0-0-0(9)		Management Decision Analysis	Prof. RN Sengupta		MTTh 10:00-12:00	
58	IME	IME672A	3-0-0-0(9)		Data Mining & Knowledge Discovery	Prof. Faiz Hamid		MTTh 14:00-16:00	
59	IME	IME697A	0-0-0-0(0)		Industrial Project	Prof. Avijit Khanra	DPGC course		
60	IME	IME797A	3-0-0-0(9)		Independent Study	Prof. Avijit Khanra	For PhD students of IME, with permission		
61	IME	MBA664A	3-0-0-0(10)		Supply Chain Management	Prof. RRR Sharma		MTTh 14:00-16:00	
62	IME	MBA666A	3-0-0-1(10)		Project Management	Prof. RN Sengupta		MWF 16:00-18:00	
63	IME	MBA697A	3-0-0-1(10)		Summer Project	Prof. Avijit Khanra	DPGC course		
64	ME	ESO209A	2-1-0-0(8)	UGC	Dynamics	Prof. Akhilesh Mimani & Prof. Ishan Sharma	UG Core	MW 16:00-18:00	Th 16:00-18:00
65	ME	ME222P	0-0-1-0(1)		Nature and Properties of Materials(Online Laboratory)	Prof. Bishakh Bhattacharya & Prof. Chandraprakash. C.	Laboratory component of course deferred for summer (1 credit) This course is compulsory for all those students who have already credited ME222T, which is also a pre-requisite for this course.		W 12:00-13:00 (LAB)

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66	ME	ME231P	0-0-1-0(1)		Fluid Mechanics and Rate Processes	Prof. Pranav Joshi & Prof. K. Muralidhar	Laboratory component of course deferred for summer (1 credit) This course is compulsory for all those students who have already credited ME231T, which is also a pre-requisite for this course.		Th 12:00-13:00 (LAB)
67	ME	ME340A	3-0-0-0(9)	DE	Introduction to Refrigeration and Air Conditioning	Prof. P. K. Panigrahi & Prof. Sameer Khandekar	UG (Departmental Elective)	MTTh 14:00-16:00	
68	ME	ME630A	3-0-0-0(9)	OE	Computational Fluid Dynamics and Heat Transfer	Prof. Malay Das	PG/Open Elective	MTTh 10:00-12:00	
69	ME	ME761A	3-0-0-0(9)	OE	Computer Aided Manufacturing	Prof. J. Ramkumar	PG/Open Elective	MWF 16:00-18:00	
70	MSE	ESO205P	0-0-3-0(3)		Nature of Properties of Materials	Prof. Nilesh P. Gurao	Courses will be conducted online. This course is compulsory for Y19 students who have already credited ESO205T, which is also a pre-requisite for this course.		MTWTHF 14:00-17:00
71	MSE	MSE646A	3-0-0-0(09)		X ray crystallography	Prof. Sandeep Sangal	Through Mookit and online	MTTh 14:00-16:00	
72	MSE	MSE648A	3-0-0-0(9)		Diffusion in Solid	Prof. Kaustubh Kulkarni	Mostly asynchronous lectures	MTTh 14:00-16:00	
73	MSE	MSE664A	3-0-0-0(09)		Solid State Ionics	Prof. Shobit Omar	Mostly asynchronous lectures	MTTh 14:00-16:00	
74	MSE	MSE670A	3-0-0-0(9)		Solidification Processing and Joining	Prof. Amarendra K. Singh	Online	MWF 16:00-18:00	
75	MSE	MSE671A	3-0-0-0(9)		Heat Treatment and Surface Hardening	Prof. Sudhanshu Shekhar Singh	Prerequisite: Phase Transformation for UG and None for PG. The lectures will be asynchronous. Institute should provide support of Hello IITK platform.	MWF 16:00-18:00	
76	MSE	MSE681A	3-0-0-0(9)		Solar Energy Technologies and Materials	Prof. Kanwar S. Nalwa	Through Mookit and online	MTTh 10:00-12:00	
77	MSE	MSE693A	3-0-0-0(9)		Materials Science Technologies for	Prof. Vivek Verma	Online	MTTh 10:00-12:00	

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					Applications in Life Sciences				
78	MSE	TA201P	0-0-3-0(3)		Introduction to Manufacturing Processes	Prof. Anish Upadhyaya	Course will be conducted using Mookit. This course is compulsory for all those students who have already credited TA201T, which is also a pre-requisite for this course.	M 13:00-14:00	MTWTHF 15:00-17:00
79	MTH	MSO202A	3-1-0-0(6)		Complex Analysis (Modular Course)	Prof. Sudhanshu Sekhar & Prof. Saurabh Kumar Singh		MWF 08:00-10:00,	T 08:00-10:00
80	MTH	MTH201A	3-1-0-0(11)		Linear Algebra	Prof. Santosh Nadimpalli		MWF 08:00-10:00,	T 08:00-10:00
81	MTH	MTH204A	3-1-0-0(11)		Abstract Algebra	Prof. Santosha Pattanayak		TWTh 12:00-14:00	F 12:00-14:00
82	MTH	MTH215A	3-1-0-0(11)		An Introduction to Number Theory	Prof. Saurabh Kumar Singh		MTTh 10:00-12:00	W 10:00-12:00
83	MTH	MTH305A	3-1-0-0(11)		Several Variable Calculus and Differential Geometry	Prof. Bidyut Sanki		MTTh 10:00-12:00	W 10:00-12:00
84	MTH	MTH403A	3-1-0-0(11)		Complex Analysis	Prof. Satyajit Guin		MTTh 10:00-12:00	W 10:00-12:00
85	MTH	MTH404A	3-1-0-0(11)		Analysis II	Prof. Rama Rawat		MTTh 14:00-16:00	F 14:00-16:00
86	MTH	MTH405A	3-1-0-0(11)		Functional Analysis	Prof. Kaushik Bal		MWF 16:00-18:00	Th 16:00-18:00
87	MTH	MTH421A	3-1-0-0(11)		Ordinary Differential Equations	Prof. Kaushik Bal		MTTh 14:00-16:00	F 14:00-16:00
88	MTH	MTH424A	3-1-0-0(11)		Partial Differential Equations	Prof. Prosenjit Roy		MWF 16:00-18:00	Th 16:00-18:00
89	MTH	MTH430A	3-0-1-0(10)		Numerical Analysis &	Prof. Akash Anand		MWF 08:00-10:00,	T 08:00-10:00

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					Scientific Computing II				
90	MTH	MTH431A	3-1-0-0(11)		Basic Probability & Distribution Theory	Prof. Prosenjit Roy		MTTh 10:00-12:00	W 10:00-12:00
91	MTH	MTH514A	3-1-0-0(11)		Multivariate Analysis	Prof. Amit Mitra		MTTh 14:00-16:00	F 14:00-16:00
92	MTH	MTH676A	3-0-0-0(09)		Econometrics	Prof. Sharmishtha Mitra		MTTh 14:00-16:00	
93	PHY	PHY102A	3-1-0-0(11)		Physics I	Prof. Tapobrata Sarkar		MTTh 10:00-12:00	W 10:00-12:00
94	PHY	PHY103A	3-1-0-0(11)		Physics II	Prof. Saurabh Mani Tripathi		MWF 16:00-18:00	T 08:00-10:00
95	PHY	PHY306A	3-0-0-0(09)	OE	Order and Chaos	Prof. Sagar Chakraborty		MTTh 14:00-16:00	
96	PHY	PHY441A	2-1-3-0(11)		Electronics	Prof. Aditya Kelkar Prof. Krishnacharya			