

APPENDIX K

Time Table

Department of Material Science and Engineering

for

B.Tech (2nd Year Onwards)

M.Tech

Ph.D

MSE Department
3rd / 5th / 7th and PG (odd) Semester Time Table
Section for 3rd Semester Courses MSE: D5(30), D6(30), D7(25),

Day	Semester	8:00-8:50	9:00-9:50	10:00-10:50	11:00-11:50	12:00-12:50	14:00-14:50	15:00 – 15:50	16:00 – 16:50	17:10-18:00
M	3 rd	EME		ESO202(L)	ESO225 (L)	MSE201(L)	TA211 LAB. (D5, D6)			MSE204(L)
	5 th	MSE303			MSE304	MSE305	MSE351 LAB. (G1) [14:00 – 16:50] MSE352 LAB. (G3) [14:00 – 16:50]			MSE301
	7 th	OE-7 DE-7 MSE638	DE-1 [9:00 – 10:15] MSE658	DE-2 [10:35 – 11:50]		DE-3 [12:00 – 13:15] MSE628 MSE611	OE-4 DE-4 [14:00 – 15:15] MSE693	OE-5 DE-5 [14:00 – 15:15] MSE659	OE-1	
	9 th / PG	PG-1	PG-2 MSE615	PG-3 MSE626		PG-4 MSE694	PG-13	PG-14	PG-11 MSE629	
PG LAB.										
T	3 rd									
	5 th	MSE302	MSE303				MSE351 LAB. (G2) [14:00 – 16:50] MSE352 LAB. (G1) [14:00 – 16:50]			
	7 th		OE-7 DE-7 MSE638				OE-5 DE-5 [14:00 – 15:15] MSE659	OE-6 DE-6 [14:00 – 15:15] MSE670	OE (T) DE (T)	
	9 th / PG	PG-10 MSE642	PG-1	PG-11 MSE629	PG-12 MSE671	PG-8	PG-14	PG-15	PG-7 PG (T)	
PG LAB.										
W	3 rd	EME		ESO202(T)	ESO225 (L)	MSE201(L)	TA211 LAB. (D7)			MSE204(L)
	5 th	MSE302			MSE304	MSE305				MSE301
	7 th		OE-2 DE [9:00 – 10:15]		OE-3 DE [10:35 – 11:50]	HSS-II (2) DE-8 OE-8 [12:00 – 13:15]	OE (T) DE (T)			OE-1
	9 th / PG	PG-10 MSE642	PG-5 MSE662	PG-6 MSE651	PG-7 PG (T)		PG-8 PG (T)	PG-11 MSE629	PG-12 MSE671	PG-9 [17:10 – 18:25] MSE801
PG LAB.										
TH	3 rd	EME		ESO202(L)	ESO225 (T)	MSE201(T)				
	5 th	MSE302			MSE304		MSE351 LAB. (G3) [14:00 – 16:50] MSE352 LAB. (G2) [14:00 – 16:50]			
	7 th		DE-1 [9:00 – 10:15] MSE658		DE-2 [10:35 – 11:50]	DE-3 [12:00 – 13:15] MSE628 MSE611	OE-4 DE-4 [14:00 – 15:15] MSE693	OE-6 DE-6 [14:00 – 15:15] MSE670	OE (T) DE (T)	
	9 th / PG	PG-10 MSE642	PG-2 MSE615	PG-3 MSE626		PG-4 MSE694	PG-13 MSE615	PG-15	PG-12 PG (T) MSE671	
PG LAB.										
F	3 rd	EME (T)		ESO202(L)		MSE201(L)	TA212 LAB. (D5, D6, D7)			MSE204(L)
	5 th	MSE303				MSE305				MSE301
	7 th	OE-7 DE-7 MSE638	OE-2 DE [9:00 – 10:15] MSE693		OE-3 DE [10:35 – 11:50]	HSS-II (2) DE-8 OE-8 [12:00 – 13:15]	OE (T) DE (T)			OE-1
	9 th / PG	PG-1	PG-5 MSE662	PG-6 MSE651	PG-8 PG (T)		PG-7 PG (T)	PG-11	PG-12	PG-9 [17:10 – 18:25] MSE801
PG LAB.										

- 3rd Semester UG Courses
- 5th Semester UG Courses
- 7th Semester UG Courses
- 5th and 7th Semester UG Courses

1st and 3rd Semester M. Tech. and Ph.D Courses (PG-1 to PG-12)

3rd Semester M. Tech and Ph.D Courses only (PG-13 to PG-15)

DE, OE and PG courses to be scheduled by the Department in the respective slots provided and strictly as per given instructions

Odd Semester: Slot Assignments

OE-1: SE-1	Lec. MWF17:00;
OE-2 / DE:	Lec. WF9:00 – 10:15;
OE-3 / DE:	Lec. WF10:35 – 11:50;
OE-4:	Lec. MTh14:00 – 15:15;
OE-5:	Lec. M15:35 – 16:50, T14:00 – 15:15;
OE-6:	Lec. WF15:35 – 16:50;
OE-7: SE-2	Lec. MF8:00, T9:00;
OE-8*:	Lec. WF12:00 – 13:15;
OE (T):	Tut. WF12:00; WF14:00; TTh17:10 (use only for Tutorial not for Lecture)
DE-1:	Lec. MTh9:00 – 10:15;
DE-2:	Lec. MTh10:35 – 11:50
DE-3:	Lec. MTh12:00 – 13:15
DE-4:	Lec. MTh14:00 – 15:15;
DE-5:	Lec. M15:35 – 16:50, T14:00 – 15:15;
DE-6:	Lec. WF15:35 – 16:50;
DE-7:	Lec. MF8:00, T9:00;
DE-8*:	Lec. WF12:00 – 13:15;
DE (T):	Tut. WF12:00; WF14:00; TTh17:10 (use only for Tutorial not for Lecture)

*OE-8 and DE-8 Clashes with HSS-II (1) and OE (T) / DE (T) Slots

PG-1:	Lec. MF8:00, T9:00;
PG-2:	Lec. MTh9:00 – 10:15;
PG-3:	Lec. MTh10:35 – 11:50
PG-4:	Lec. MTh12:00 – 13:15
PG-5:	Lec. WF9:00 – 10:15;
PG-6:	Lec. WF10:35 – 11:50;
PG-7*:	Lec. T17:10, W12:00, F14:00
PG-8*:	Lec. TF12:00, W14:00
PG-9:	Lec. WF17:10 – 18:25
PG-10:	Lec. TWTh8:00
PG-11 (4-hr Slot):	Lec. M17:10, T10:00, WF15:00
PG-12 (4-hr Slot):	Lec. T11:00, WF16:00, Th17:10
PG-13:	Lec. MTh14:00 – 15:15
PG-14:	Lec. M15:35 – 16:50, T14:00 – 15:15;
PG-15:	Lec. TTh15:35 – 16:50;
PG (T):	Tut. WF12:00; WF14:00; TTh17:10 (use only for Tutorial not for Lecture)
PG LAB.:	MTWThF14:00 – 17:50;

*PG-7 and PG-8 Clashes with PG(T) slots

OE: Open Elective/Minor Course Slots;
 OE (T): Open Elective Tutorial Slots;
 DE: UG Departmental Elective Slots;
 DE (T): Departmental Elective Tutorial Slots;
 PG: PG Slots;
 PG(T): PG Slots that can be used for PG tutorials
 HSS-II: Humanities Courses;
 PG LAB.: PG Laboratory Slots;

Department of Material Science and Engineering: Schedule of Odd Semester Courses

UG Compulsory Courses (D)								
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot & Room	Schedule		
						Lecture	Tutorial	Laboratory
1.	MSE201*	3-1-0-0 (11)	Thermodynamics and Phase Equilibrium	Kaustubh Kulkarni kkaustub@iitk.ac.in	3-1	MWF12:00	Th12:00	--
2.	MSE204*	3-0-0-0 (09)	Numerical Methods in Materials Science and Engineering	Shivam Tripathi shivamt@iitk.ac.in		MWF17:00		
3.	MSE301*	3-0-0-0 (09)	Phase Transformations	Rajdip Mukherjee rajdipm@iitk.ac.in	OE-1	MWF17:10	--	--
4.	MSE302*	3-0-0-0 (09)	Mechanical Properties of Materials	Srinu Gangolu srinu@iitk.ac.in	SLOT-1	TWTh8:00	--	--
5.	MSE303*	3-0-0-0 (09)	Electronic and Magnetic Properties of Materials	Anshu Gaur agaur@iitk.ac.in	SLOT-2	MF8:00, T9:00	--	--
6.	MSE304*	3-0-0-0 (09)	Principles Of Metal Extraction & Refining	Amarendra K. Singh @amarendra	ESO-2	MWTh11:00		
7.	MSE305*	3-0-0-0 (09)	Materials Processing	Anish Upadhyaya anishu@iitk.ac.in	3-1	MWF12:00		
8.	MSE351*	0-0-3-0 (03)	Mechanical And Electronic Properties of Materials Laboratory	Sarang Ingole sarang@iitk.ac.in Nilesh Badwe nbadwe@iitk.ac.in	--	--	--	M/T/Th14:00
9.	MSE352*	0-0-3-0 (03)	Process Metallurgy and Manufacturing Laboratory	Shobit Omar somar@iitk.ac.in Rahul Sarkar rsarkar@iitk.ac.in	--	--	--	M/T/Th14:00
10.	ESO225	2-1-0-0 (8)	Nature and Properties of Materials	Shikhar Mishra shikharm@iitk.ac.in		M/W 11:00	Th 11:00	
11.	ETH111	1-0-0-2 (3)	Practical Ethics	Shashank Shekhar shashank@iitk.ac.in				

*These courses will be offered for B.Tech and BS Y22 Batch and onwards.

UG Departmental Electives (DE)					
[List all Courses (including OE and PG courses) declared as Departmental Electives]					
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot
Functional Materials Stream					
1	MSE628	3-0-0-0 (09)	Electronic Devices & Characterization	Deepak Gupta @saboo	DE-3
2	MSE693	3-0-0-0 (09)	Materials Science Applications in Life Sciences	Vivek Verma @vverma	OE-4/DE
Structure-Characterization-Property Stream					
3	MSE642	3-0-0-0 (09)	Microscopy and Microanalysis of Materials	Nilesh P. Gurao @npgurao	PG-10
4	MSE658	3-0-0-0 (09)	Dislocations and Plasticity	Sudhanshu S. Singh @sudhanss	DE-1
5	MSE694	3-0-0-0 (09)	Nanostructures and Nanomaterials: Characterization and Properties	Monica Katiyar @mk	PG-4
Metals Processing Stream					
6	MSE670	3-0-0-0 (09)	Solidification Processing and Joining	Krishanu Biswas @kbiswas	OE-6/DE-6
7	MSE671	3-0-0-0 (09)	Heat Treatment and Surface Hardening	Raghupathy Yuvaraj	PG-12 T 11:00; W 16:00; Th

				@raghu	17:10
8	MSE659	3-0-0-0 (09)	Powder Metallurgy	Shobit Omar @somar	OE-5/DE-5
All other PG Courses open to UG					
9	MSE629	3-0-0-0 (09)	Modelling of steel making process	Dipak Mazumdar @dipak	PG-11 M 17:10; T 10:10; W 15:00
10	MSE611	3-0-0-0 (09)	Corrosion and Oxidation of Metals and Alloys	Kallol Mondal @kallol	DE-3
11	MSE650	3-0-0-0 (09)	Fundamentals of Stereology and Applications to Microstrutural Analysis	Sandeep Sangal @sangals	OE-7/DE-7
12	MSE662	3-0-0-0 (09)	Electronic and Metallurgical Waste Recycling	Arunabh Meshram @arunabhm	PG-5
13	MSE651	3-0-0-0 (09)	Advanced Concepts in Ironmaking	Rahul Sarkar @rsarkar	PG-6

Department of Material Science and Engineering: Schedule of Odd Semester Courses

UG Open Electives (OE)					
[List All Courses (Including D, DE and PG Courses) Declared as Open Elective]					
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot
1	MSE628	3-0-0-0 (09)	Electronic Devices & Characterization	DG @saboo	DE-3
2	MSE693	3-0-0-0 (09)	Materials Science Applications in Life Sciences	VV @vverma	OE-4/DE
3	MSE642	3-0-0-0 (09)	Microscopy and Microanalysis of Materials	NPG @npgurao	PG-10
4	MSE658	3-0-0-0 (09)	Dislocations and Plasticity	SSS @sudhanss	DE-1
5	MSE694	3-0-0-0 (09)	Nanostructures and Nanomaterials: Characterization and Properties	MK @mk	PG-4
6	MSE670	3-0-0-0 (09)	Solidification Processing and Joining	KrB @ kbiswas	OE-6/DE-6
7	MSE671	3-0-0-0 (09)	Heat Treatment and Surface Hardening	RY @raghu	PG-12 T 11:00; W 16:00; Th 17:10
8	MSE659	3-0-0-0 (09)	Powder Metallurgy	SO @somar	OE-5/DE-5
9	MSE629	3-0-0-0 (09)	Modelling of steel making process	DM @dipak	PG-11 M 17:10; T 10:10; W 15:00
10	MSE611	3-0-0-0 (09)	Corrosion and Oxidation of Metals and Alloys	KM @kallol	DE-3
11	MSE638	3-0-0-0 (09)	Symmetry and Properties of Crystals	SS @sangals	OE-7/DE-7
12	MSE662	3-0-0-0 (09)	Electronic and Metallurgical Waste Recycling	AM @arunabhm	PG-5
13	MSE651	3-0-0-0 (09)	Advanced Concepts in Ironmaking	RaS @rsarkar	PG-6

UG Minors [List All Courses (including D, DE, OE and PG courses) Declared as Minor]					
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot
Functional Materials Stream					
1	MSE628	3-0-0-0 (09)	Electronic Devices & Characterization	DG @saboo	DE-3
2	MSE693	3-0-0-0 (09)	Materials Science Applications in Life Sciences	VV @vverma	OE-4/DE
Structure-Characterization-Property Stream					
3	MSE642	3-0-0-0 (09)	Microscopy and Microanalysis of Materials	NPG @npgurao	PG-10
4	MSE658	3-0-0-0 (09)	Dislocations and Plasticity	SSS @sudhanss	DE-1
5	MSE694	3-0-0-0 (09)	Nanostructures and Nanomaterials: Characterization and Properties	MK @mk	PG-4
Metals Processing Stream					
6	MSE670	3-0-0-0 (09)	Solidification Processing and Joining	KrB @ kbiswas	OE-6/DE-6
7	MSE671	3-0-0-0 (09)	Heat Treatment and Surface Hardening	RY @raghu	PG-12 T 11:00; W 16:00; Th 17:10
8	MSE659	3-0-0-0 (09)	Powder Metallurgy	SO @somar	OE-5/DE-5

Department of Material Science and Engineering: Schedule of Odd Semester Courses

PG Courses [List all PG courses, including those declared DE, OE or part of minor]					
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot
<u>Following two courses are NOT open to UG</u>					
1	MSE615	3-0-0-0 (09)	Structure and Characterization of Materials	Tanmoy Maiti @tmaiti	PG-2
2	MSE626	3-0-0-0 (09)	Transport Phenomena	Rajiv Shekhar vidtan@iitk.ac.in	PG-3
3	MSE801	0-0-0-0	Seminar Participation	Somnath Bhowmick @bsomnath Niraj M. Chawake @nchawake	PG-9
<u>Following courses are open to UG</u>					
4	MSE628	3-0-0-0 (09)	Electronic Devices & Characterization	DG @saboo	DE-3
5	MSE693	3-0-0-0 (09)	Materials Science Applications in Life Sciences	VV @vverma	OE-4/DE
6	MSE642	3-0-0-0 (09)	Microscopy and Microanalysis of Materials	NPG @npgurao	PG-10
7	MSE658	3-0-0-0 (09)	Dislocations and Plasticity	SSS @sudhanss	DE-1
8	MSE694	3-0-0-0 (09)	Nanostructures and Nanomaterials: Characterization and Properties	MK @mk	PG-4
9	MSE670	3-0-0-0 (09)	Solidification Processing and Joining	KrB @kbiswas	OE-6/DE-6
10	MSE671	3-0-0-0 (09)	Heat Treatment and Surface Hardening	RY @raghu	PG-12 T 11:00; W 16:00; Th 17:10
11	MSE659	3-0-0-0 (09)	Powder Metallurgy	SO @somar	OE-5/DE-5
12	MSE629	3-0-0-0 (09)	Modelling of steel making process	DM @dipak	PG-11 M 17:10; T 10:10; W 15:00
13	MSE611	3-0-0-0 (09)	Corrosion and Oxidation of Metals and Alloys	KM @kallol	DE-3
14	MSE638	3-0-0-0 (09)	Symmetry and Properties of Crystals	SS @sangals	OE-7/DE-7
15	MSE662	3-0-0-0 (09)	Electronic and Metallurgical Waste Recycling	AM @arunabhm	PG-5
16	MSE651	3-0-0-0 (09)	Advanced Concepts in Ironmaking	RaS @rsarkar	PG-6

Department of Material Science and Engineering: Schedule of Odd Semester Courses

PG Courses [List all PG courses, including those declared DE, OE or part of minor]					
S. No.	Course No.	L-T-P-A (Units)	Course Title	Instructor	Slot

No course shall be scheduled except in the slots provided. A course for which no slot is specified or a course which is not scheduled appropriately in a slot will not be listed in OARS. **This is absolutely essential to ensure that mid semester and end semester examination time tables can be generated based on the time table.**

Instructions for Scheduling DE Courses

1. All declared DE (departmental elective) courses (including PG courses declared as DE) must be scheduled preferably in DE-1, DE-2 and DE-3 slots.
2. If indicated in the departmental time table, slots DE-4 to DE-11 may also be used for scheduling DE courses.
3. DE courses may also be scheduled in OE-2 and OE-3 slots. However, this must be avoided as far as possible.
4. If required, a department may schedule more than one DE course in each of the assigned DE slots.
5. All declared DE courses must be scheduled as above, **unless it has also been declared an OE* or part of a minor.**
6. If allowed by the department, students may also take departmental courses not declared as DE to fulfill the departmental elective requirements. Such courses need not necessarily be scheduled in the DE slots.

Instructions for Scheduling OE or Minor Courses

All UG or PG courses (other than UG core and ESO/SO courses) **which have been declared an OE or part of a minor.** by the department must be scheduled preferably in the OE-1 – OE-3 slots of the time table. OE-4 to OE-11 may be used as a second preference if so indicated in the time table. OE/Minor courses include the following type of courses,

- **Departmental UG Compulsory Course (D)** which has also been declared an OE or part of a minor.
- **Departmental PG Course (PG)** which has also been declared an OE or part of a minor.
- **Departmental UG Elective course (DE)** which has also been declared an OE or part of a minor.
- **Departmental UG Course which is not a D or DE** but which has been declared an OE or part of a minor.

***OE or Minor:** These are courses for which it has been declared that students from other departments can register.

*(Students from other departments can also register in courses which have **not** been declared as OE with the consent of the instructor. Such courses (which have not been declared as OE) need not be scheduled in the OE slot).*

Instructions for Scheduling PG Courses

1. PG courses declared as OE or part of a minor to be scheduled in OE slot.
2. PG courses declared as DE must be scheduled in DE slot unless also declared OE or part of a minor.

Other PG courses must be scheduled as follows,

- For the benefit of dual degree students, 1st year M. Tech./M.Sc/MS courses must be scheduled only in the specific PG slots indicated for this purpose in the time table.
- Other PG courses can be scheduled in all indicated PG slots in the time table.
- PG laboratories must be scheduled only in the slots indicated in the time table.
- If required, more than 1 PG course/lab may be scheduled in each PG slot.

AY 2024-25 Sem-I

Tutors/Instructors for IC from MSE Dept.

	Course	Tutors		
		Tutors	Instructor	
1	ESO 225 Solid Mechanics	Prof. Niraj M. Chawake		nchawake@iitk.ac.in
		Prof. Vivek Verma		vverma@iitk.ac.in
		Prof. Shashank Shekhar		shashank@iitk.ac.in
2	TA 111 Engineering Graphics	Prof. Nilesh Badwe (Names of 4 student tutors will be provide later)		nbadwe@iitk.ac.in
3	TA211 Introduction to Manufacturing (Lab course)	Prof. Kantesh Balani	Prof. Kantesh Balani	kbalani@iitk.ac.in
		Prof. Kallol Mondal		kallol@iitk.ac.in
		Prof. Sarang Ingole		sarang@iitk.ac.in
4	ETH111 Practical Ethics		Prof. Shashank Shekhar	shashank@iitk.ac.in