

Time Table**Session – IJE Ist Session**

Batch – IJE- D 10 & IJE/25-26 /01
 Session Date – 28.07.25 to 25.10.2025
 Examination dates* – 11.10.2025 to 18.10.2025
 (*Subject to change)

Course Coordinators		IJE- D/10 (Trainees-18)		IJE/25-26 /01 (Trainees-06)				- Sh. Adarsh Soni		- Sh. Anurag Singh	
Days/Period	I (09:40-10:40)	II (10:40-11:40)		III (11:55-12:45)	IV (12:45-13:30)		V (14:30-15:45)		VI (16:00-17:00)		
Monday	ADS	ANS		RCS	AK		MK		AM		
Tuesday	AY	NCJ	Tea Break 11:40 to 11:55	ADS	ANS	Lunch 13:30 to 14:30	RCS	Tea Break 15:45 to 16:00	ALS	Lab/Library	
Wednesday	MK	AM		AH	ALS		AY		AH		
Thursday	ANS	RCS		AK	MK		AM				
Friday	AK	AY		AM	AH		ALS		श्रमदान		
Saturday	NCJ	ANS		ADS	MK						

(N.C.Jaiswal)**Sr.Lecturer & Course Director/STC/CB**

Faculty & Subjects/Topics details

S.No	Code/Name	Subject code & topics
1	NCJ - Naveen Chandra Jaiswal	(MRT-01, S.No-17,18,19,22-26 & 36) (MET-01, S.No- 1 to 6)
2	ADS - Sri Adarsh Soni	(MRT-01, S.No-1 to 16) (MET-04, S.No 1 to 7)
3	RCS -Sri Ratnesh Srivastava	(MET-08)
4	MK - Sri Manish Kumar	(MRT-01, S.No-20,21 & 27-35) (MET-05 S.No 1 to 7)
5	AH - Sri Adnan Husain	(MRT-02, S.No-6 & 8 to 10) (MET-03 S.No 1 to 6)
6	AY - Sri Anuj Yadav	(MET-03 S.No 7 to 11) (MET-04 S.No 8 to 12)
7	ALS - Sri Alok Kumar Srivastava	(MRT-02, S.No-1 to 4) (MET-02 S.No 1 to 8)
8	ANS - Sri Anurag Singh	(MRT-02, S.No-5 & 7) (MET-05 S.No 8 to 14)
9	AK - Sri Anurag Kushwaha	(MET-02 S.No 9 to 17)
10	AM - Sri Arvind Mauraya	(MET-01 S.No- 7 to 15)

ABSTRACT OF MODULES

SL. NO.	Name of Post	Stream	Module No.	Duration in Weeks	Page No
1	Sr. Section Engineer	C&W	MSE-C	52	3 - 4
2	Sr. Section Engineer	Diesel	MSE-D	52	5 - 6
3	Sr. Section Engineer	Workshop	MSE-W	52	7 - 8
4	Junior Engineer (RRB)	C&W	MJR-C	52	9 - 10
5	Junior Engineer (RRB)	Diesel	MJR-D	52	11 - 12
6	Junior Engineer (RRB)	Workshop	MJR-W	52	13 - 14
7	Junior Engineer	C&W	MJI-C	52	15 - 16
8	Junior Engineer	Diesel	MJI-D	52	17 - 18
9	Junior Engineer	Workshop	MJ1-W	52	19 - 20
10	Junior Engineer	C&W	MJP-C	13	21
11	Junior Engineer	Diesel	MJP-D	13	22
12	Junior Engineer	Workshop	MJP-W	13	23

Module Code

1. M Mechanical
2. SE Section Engineer
3. JR JE- RRB
4. JI JE- Intermediate
5. JP JE-Promotional
6. C C&W
7. D Diesel
8. W Workshop

Subject Code

1. M Module
2. R Railway
3. E Engineering
4. T Theory
5. C C&W
6. D Diesel
7. W Workshop

MODULE - MJI C

Name of the Post/Category	Junior Engineer
Stream	C&W
Mode of appointment	Promotion through LDCE
Min. Qualification	XII Std/ ITI
Total Duration of Training Period	52 Weeks

Session	Type	Subjects	Subject code	Duration in weeks	Activity Centre
I	THEO	Railway Organization & Management	MRT-01	03	STC
		Role of Mechanical Dept.	MRT-02	01	
		Applied Mechanics	MET-01	09	
		Hydraulics	MET-02		
		Manufacturing Processes	MET-03		
		Engineering Drawing	MET-04		
		Electrical Engineering	MET-05		
		Theory of Machines	MET-08		

MODULE - MJI D

Name of the Post/Category	Junior Engineer
Stream	Diesel
Mode of appointment	Promotion through LDCE
Min. Qualification	XII Std/ ITI
Total Duration of Training Period	52 Weeks

Session	Type	Subjects	Subject code	Duration in weeks	Activity Centre
I	THEO	Railway Organization & Management	MRT-01	03	STC
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		Applied Mechanics	MET-01	09	
		Hydraulics	MET-02		
		Manufacturing Processes	MET-03		
		Engineering Drawing	MET-04		
		Electrical Engineering	MET-05		
		Theory of Machines	MET-08		

Subject & Faculty

NCJ (MRT-01 S.No-17,18,19,22-26 & 36)

ADS (MRT-01 S.No-1 to 16)

MK (MRT-01 S.No-20,21 & 27-35)

SUBJECT NAME	RAILWAY ORGANISATION & MANAGEMENT
SUBJECT CODE	MRT - 01
MODULE	MSE, MJR & MJJ

SL NO.	TOPIC	TIME IN HRS
1	Organization of Indian Railways	03
2	Recruitment and training	03
3	General Conditions of service, APAR	03
4	Medical Attendance Rules	02
5	Leave Rules	03
6	Pass Rules	03
7	Conduct Rules	02
8	DAR	06
9	Payment of Wages Act	02
10	Minimum Wages Act	01
11	Workmen's Compensation Act	02
12	Hours of Employment Regulations	03
13	Factories Act	02
14	Industrial Disputes Act	03
15	NPS, RESS, PF, Pension & Other Retirement benefits	04
16	Welfare Measures, Privilege for differently abled person	03
17	Organization and objectives of Stores branch	02
18	Classification and Codification of Stores	03
19	RTI, CPGRAMS	03
20	Purchase Agencies: IREPS, Use of DSC, GeM,	03
21	Procurement of stores - Non-Stock	04
22	Recoupment of stores - Stock item	04
23	Drawal of Stores	03
24	Scrap disposal	03
25	Disposal of surplus stores	01
26	Inventory Control, IMMIS	03
27	Organization and objectives of Accounts branch	02
28	Budgeting	03
29	Parliamentary control of Railways	02
30	Classification of Expenditure	03
31	Stock Verification	02
32	Delegation of Powers, MSOP	01
33	M&P, Rolling stock and Works Programme: IRPSM, IRMNP and RSP portals	06
34	Audit Paras	03
35	Yoga & meditation	06
36	Rajbhasha	03
37	REVIEW	03
	Total	108

Subject & Faculty

ALS ---- (MRT-02, S.No-1 to 4)

ANS --- (MRT-02, S.No-5 & 7)

AH ----- (MRT-02, S.No-6 & 8 to 10)

SUBJECT NAME	ROLE OF MECHANICAL DEPARTMENT
SUBJECT CODE	MRT-02
MODULE	MSE, MJR & MJI

SL NO.	TOPIC	TIME IN HRS
1	Organization and objectives of Mechanical Dept.	03
2	Types of Rolling stock- Production/Repair/Maintenance practices of same	02
3	Production units: Brief History, Activities	03
4	Workshops: Role of C&W Workshop, Objectives, Organization, Layout, Activities of different shops	06
5	Workshops: Role of Diesel POH Workshop, Objectives, Organization, Layout, Activities of different shops	05
6	C&W Depot: Role of C&W Depot, Objectives, Organization, Layout, Activities of different sections	04
7	Diesel Sheds and EMU/MEMU/DEMU Shed: Role of Sheds, Objectives, Organization, Layout, Activities of different sections	06
8	Latest Development in Mechanical Dept. /Other Organizations- RDSO, IRIMEE, RITES, CONCOR, CAMTECH	02
9	EnHM: Role of EnHM, Organization, objectives, funds for EnHM works	02
10	Review	03
	Total	36

Subject & Faculty

1. NCJ ----- (MET-01, S.No- 1 to 6)

2. AM----- (MET-01 S.No- 7 to 15)

SUBJECT NAME	APPLIED MECHANICS
SUBJECT CODE	MET-01
MODULE	MJI

SL NO.	TOPIC	TIME IN HRS
1	Scalars and Vectors	01
2	Composition & resolution of forces	05
3	Equilibrium	03
4	Parallel forces & Couples	03
5	Plane motion	03
6	Newton's laws of motion	06
7	Collision of Elastic bodies	04
8	Motion of connected bodies	04
9	Work, power and Energy	03
10	Friction	06
11	Motion of Rotation	03
12	Motion along circular path	03
13	Simple Harmonic Motion	03
14	Simple lifting machines	03
15	Review	04
	Total	54

Subject & Faculty

1. **ALS -----(MET-02 S.No 1 to 8)**
2. **AK ----- (MET-02 S.No 9 to 17)**

SUBJECT NAME	HYDRAULICS
SUBJECT CODE	MET-02
MODULE	MJI

SL NO.	TOPIC	TIME IN HRS
1	Introduction to Basic concepts	02
2	Fluid Pressure	02
3	Hydrostatics	02
4	Buoyancy & Floatation	02
5	Hydro Kinematics	02
6	Bernoulli's Theorem	02
7	Flow through Orifices & mouth pieces	02
8	Impact of jets	02
9	Water wheels	02
10	Impulse Turbines	02
11	Reaction Turbines	02
12	Performance of turbines	02
13	Reciprocating Pumps	02
14	Centrifugal Pumps	02
15	Performance of pumps	02
16	Pumping Devices	02
17	Review	04
	Total	36

Subject & Faculty

1. **AH ----- (MET-03 S.No 1 to 6)**
2. **AY -----(MET-03 S.No 7 to 11)**

SUBJECT NAME	MANUFACTURING PROCESSES
SUBJECT CODE	MET-03
MODULE	MJI

SL NO.	TOPIC	TIME IN HRS
1	Production of metals	06
2	Hot and cold working	06
3	Smithy and forging	03
4	Foundry	03
5	Metal Joining	12
6	Metal Cutting Operations using different machines: Lathe, Drilling machine, Shaper and Planner, Grinding, Milling (CNC & non-CNC) etc.	12
7	Machining Operations in Wheel Shop	09
8	Basics of Metrology and Calibration	06
9	Physical Testing of materials (DT & NDT)	06
10	Un-conventional machines (Laser, Electron Beam etc)	06
11	Review	03
	Total	72

Subject & Faculty

1. ADS-----(**MET-04**, S.No 1 to 7)
2. AY ----- (**MET-04** S.No 8 to 12)

SUBJECT NAME	ENGINEERING DRAWING	
SUBJECT CODE	MET-04	
MODULE	MJI	
SL NO.	TOPIC	TIME IN HRS
1	Introduction about Engg. Drg.	01
2	Drawing Board, Instruments & its use	01
3	Lettering & Types of Lines	03
4	Dimensioning systems	03
5	Geometrical Constructions	03
6	Scales	06
7	Engineering curves	06
8	Principle of Projection - Projection of Points, Lines, Planes & Solids	18
9	Section of Solids	09
10	Isometric Projections of solids & M/C Components	08
11	Orthographic views of Solids & M/C Components	08
12	Review	06
	Total	72

Subject & Faculty

1. MK -----(**MET-05** S.No 1 to 7)
2. ANS --- (**MET-05** S.No 8 to 14)

SUBJECT NAME	ELECTRICAL ENGINEERING	
SUBJECT CODE	MET-05	
MODULE	MJI	
SL NO.	TOPIC	TIME IN HRS
1	Current & Ohms Law	02
2	Simple DC Circuits & Network Analysis	04
3	Magnetism & Electromagnetism	03
4	Electromagnetic Induction	03
5	D.C. Generator & D.C Motor	04
6	Fundamentals of A.C	03
7	Single Phase A.C. Circuit & Three Phase A.C. Circuit	06
8	Alternators	02
9	Induction motors - Single phase & three phase	06
10	Transformer	03
11	Batteries, electrical instruments & measurements	04
12	Introduction to electrical energy generation, electrical safety, energy conservation	04
13	Basic Electronics	06
14	Review	04
	Total	54

Subject & Faculty

1. RCS ----- (MET-08)

SUBJECT NAME	THEORY OF MACHINES	
SUBJECT CODE	MET-08	
MODULE	MJI	
SL NO.	TOPIC	TIME in HRS.
1	Mechanisms	04
2	Brakes and dynamometers	04
3	Belt, rope and chain drive	04
4	Gears	06
5	Clutches	02
6	Governor	04
7	Flywheel and turning moment diagram	04
8	Balancing of masses	04
9	Review	04
	Total	36

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