



EXERGIC

India's leading institute for
online GATE prep

**GATE 2024
Test Series**

Tests Overview

Topicwise Tests

27 Tests | 15 questions per test | 60 minutes

Subject Tests

26 Tests | 23 questions per test | 90 minutes

Full Length Tests

15 Tests | 65 questions per test | 180 minutes

**“Either you bear
the pain of
discipline or you
bear the pain of
consequences”**





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GATE 2024 Test Series

Tests Topics

Topicwise Tests

Strength of Materials

SOM 1

Simple stress strain, Transformation of stress and strain, Shear force and bending moment diagrams, Bending of beams, Shear stresses in beams,

SOM 2

Thin pressure vessels, Deflection of beams; torsion of circular shafts; Euler's theory of columns; Material testing,

Thermodynamics

ET 1

Heat and work, I law for closed and open system, Thermodynamic relations,

ET 2

Second law, Entropy, Availability, Behavior of ideal and real gases, Properties of Pure Substances,

Fluid mechanics

FM 1

Fluid properties, fluid statics, forces on submerged bodies, stability of floating bodies, fluid kinematics, momentum analysis, Bernoulli's equation

FM 2

Dimensional analysis, viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings, basics of compressible fluid flow, Impact of jets, Turbines and pumps



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Theory of machines

TOM 1

Mobility, Displacement analysis, Velocity and acceleration analysis, Dynamic analysis of SSCM, Cam, Gyroscope,

TOM 2

Gears, Gear trains, Flywheels/TMD, Governors, Balancing of reciprocating and rotating masses, Vibrations

Heat Transfer

HT 1

Heat conduction, resistance concept and electrical analogy, heat transfer through fins, unsteady heat conduction, lumped parameter system, Heisler's charts

HT 2

Convective heat transfer, radiative heat transfer and Heat exchangers

Applied Thermo

ETA 1

Gas compressors, power cycles, I.C.engines, Turbomachinery

ETA 2

Vapour and gas refrigeration, absorption refrigeration, properties of moist air, psychrometric chart, basic psychrometric processes

Machine Design

MD 1

Design for Static & Fluctuating loads, failure theories, Sliding contact and Rolling contact bearings

MD 2

Welded, riveted and threaded joints, Friction clutches, Brakes, springs

Engg Mechanics

EM 1

Vector basics, FBD and Equilibrium of forces, Centroid, COG, COM and MOI, Truss Analysis, Friction

EM 2

kinematics and dynamics of rigid bodies in plane motion, impulse and momentum (linear and angular) and energy formulations, Lagrange's equation



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Manufacturing & Production

MP 1

Metal Casting, Metal Forming, powder, metallurgy. Principles of welding, brazing, soldering and adhesive bonding.

MP 2

Metal cutting, Non Traditional Machining, Computer Integrated Manufacturing, Jigs & fixtures

MP 3

Metrology and Material science

Industrial Engg and OR

IEOR 1

Linear Programming, Transportation and Assignment, CPM, PERT, Queuing theory

IEOR 2

Sequencing and scheduling, aggregate production planning, Inventory Control, Forecasting, lean manufacturing, MRP

General Aptitude

GA 1

Quantitative Aptitude

GA 2

Verbal Aptitude

GA 3

Reasoning

Engg Mathematics

MA 1

Linear Algebra & Calculus

MA 2

Probability, Differential equations & Transform theory

MA 3

Vector calculus, Complex Analysis, Numerical methods



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Full Subject Tests

Strength of Materials	Engg Thermodynamics	Fluid Mechanics	Theory of Machines
SOM F1	ET F1	FM F1	TOM F1
SOM F2	ET F2	FM F2	TOM F2
Heat Transfer	Applied Thermodynamics	Machine Design	Engg Mechanics
HT F1	ETA F1	MD F1	EM F1
HT F2	ETA F2	MD F2	EM F2
Manufacturing & Production	Industrial Engg & Op. Reseach	Engg Mathematics	General Aptitude
MP F1	IEOR F1	MA F1	GA F1
MP F2	IEOR F2	MA F2	GA F2
		MA F3	GA F3

Full Length Tests

FLT -1 to FLT -15



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GATE 2024 Test Series Tests Timeline

*April
2023*

EM 1
EM 2
ET 1
ET 2
ETA 1
ETA 2

Jun

MP 1
MP 2
IEOR 1
IEOR 2
GA 1
GA 2
GA 3
MA 1
MA 2

Aug

HT F1
ETA F1
MA F3
MD F1
GA F3
FM F1
MP F1
TOM F1

May

SOM 1
SOM 2
TOM 1
TOM 2
FM 1
FM 2
HT 1
HT 2
MD 1
MD 2

Jul

EM F1
SOM F1
ET F1
MA F1
GA F1
GA F2
MA F2

Sep

IEOR F1
MP F2
HT F2
ET F2
ETA F2
FM F2
IEOR F2
TOM F2
SOM F2



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GATE 2024 Test Series Tests Timeline

Oct

EM F2
MD F2

FLT 1

FLT 2

FLT 3

Dec

FLT 8
FLT 9
FLT 10
FLT 11
FLT 12

Nov

FLT 4
FLT 5
FLT 6
FLT 7

*Jan
2024*

FLT 13
FLT 14
FLT 15