

GATE ECE 2027 4 Months Preparation Strategy

Weightage-Based Schedule: 7 October 2026 to 31 January 2027 | about 45 hours a week | 10 full mocks

Month-Wise Targets

Month	Focus	Marks Covered by Month End (Approx.)
October	Engineering Mathematics, first half of Networks, Signals and Systems	About 35
November	Rest of Signals, Communications, Electronic Devices	About 64
December	Analog Circuits, Control Systems, Digital Circuits, first half of Electromagnetics	About 92
January	Rest of Electromagnetics, 10 full mocks, revision	100

Week-by-Week Schedule

Week	Dates	Topics (weightage order)	Done
1	7 to 11 Oct	Linear algebra, calculus and differential equations, including the Euler-Cauchy equation and nonhomogeneous equations, which are newly worded in 2027.	☐
2	12 to 18 Oct	Vector analysis, complex analysis (residue theorem), and probability and statistics, including correlation and regression analysis (new in 2027).	☐
3	19 to 25 Oct	Circuit analysis: node and mesh methods, Thevenin, Norton and superposition, phasor analysis, transients of first and second order circuits using Laplace transform, and 2-port parameters.	☐
4	26 Oct to 1 Nov	LTI systems, convolution, Fourier series and transform, and Nyquist sampling and reconstruction (reworded in 2027).	☐
5	2 to 8 Nov	DTFT, DFT, z-transform and FIR and IIR filter design, the largest new topic in the 2027 syllabus. Learn the window method and the bilinear transformation.	☐
6	9 to 15 Nov	Communications part 1: random processes, power spectral density, white noise through LTI systems, AM, FM and superheterodyne receivers.	☐
7	16 to 22 Nov	Communications part 2: entropy, source coding (new in 2027), channel capacity, PCM, digital modulation, matched filter, BER and error-correcting codes.	☐
8	23 to 29 Nov	Electronic Devices: formation of energy bands (new), carrier transport, pn junction, BJT, MOS capacitor, MOSFET with scaling (new), LED, photodiode and solar cell.	☐
9	30 Nov to 6 Dec	Analog Circuits part 1: diode circuits, BJT and MOSFET biasing, small signal analysis, frequency response, current mirrors and differential amplifiers.	☐
10	7 to 13 Dec	Analog Circuits part 2: op-amp circuits, active filters, Schmitt trigger, oscillators, and Miller compensation with phase margin (new in 2027).	☐
11	14 to 20 Dec	Control Systems: block diagram reduction and signal flow graphs, transient and steady-state response, stability by Routh-Hurwitz and Nyquist, Bode and root-locus plots, the PID controller (new) and state-space models.	☐
12	21 to 27 Dec	Digital Circuits: number systems, K-maps, static CMOS logic, combinational and sequential circuits, timing, ADC, DAC, memories and computer organisation. Take your 1st full mock on Sunday 27 December.	☐
13	28 Dec to 3 Jan	Electromagnetics part 1: Maxwell's equations, boundary conditions, plane waves, Poynting vector and skin depth, plus 1 mock.	☐
14	4 to 10 Jan	Electromagnetics part 2: transmission lines, Smith chart, S-parameters, waveguides, optical fibres and antennas, plus 1 mock.	☐
15	11 to 17 Jan	2 mocks; revise Engineering Mathematics and Networks, Signals and Systems.	☐
16	18 to 24 Jan	3 mocks; revise Communications, Analog Circuits and Electronic Devices.	☐
17	25 to 31 Jan	2 mocks; revise Control Systems, Digital Circuits, Electromagnetics and your error notebook.	☐

Daily: 30 minutes General Aptitude + error notebook. Sundays: short mixed test. No new subject after 10 January. 1 to 5 February: short notes and error notebook only. Full guide: gatenotes.org