



UNIVERSITY OF
THESSALY

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
SCHOOL OF ENGINEERING
2025-2026

COURSE CODE	COURSE TITLE	SEMESTER	ECTS
1. ECE119	Digital Design (Core)	WS 1 st	6
2. ECE317	Artificial Intelligence (Elective)	WS 5 th	6
3. ECE321	Concurrent Programming (Elective)	WS 5 th	6
4. ECE325	Digital Signal Processing (Elective)	WS 5 th	6
5. ECE327	Digital Systems VLSI (Elective)	WS 5 th	6
6. ECE329	Education Technologies (Elective)	WS 5 th	6
7. ECE331	Electrical Machines (Elective)	WS 5 th	6
8. ECE333	Digital Systems Lab (Elective)	WS 5 th	6
9. ECE337	Linear Programming (Elective)	WS 5 th	6
10. ECE339	Applied Statistics (Elective)	WS 5 th	6
11. ECE341	Advanced Electronics (Elective)	WS 5 th	6
12. ECE411	Power Systems II (Elective)	WS 7 th	6
13. ECE419	Logical and Functional Programming (Elective)	WS 7 th	6
14. ECE425	Testing and Verification of Digital Circuits (Elective)	WS 7 th	6
15. ECE431	CAD Algorithms (Elective)	WS 7 th	6
16. ECE437	Electrical Installations (Elective)	WS 7 th	6
17. ECE439	Special Topics/ Projects (Elective)	WS 7 th	6
18. ECE445	Parallel and Distributing Computing (Elective)	WS 7 th	6
19. ECE447	Neuro-Fuzzy Computing (Elective)	WS 7 th	6
20. ECE461	Machine Learning for Data Science and Analytics (Elective)	WS 7 th	6
21. ECE463	Telecommunications Systems II (Elective)	WS 7 th	6
22. ECE513	Circuit Simulation Algorithms (Elective)	WS 9 th	6
23. ECE515	Mobile and Pervasive Computing (Elective)	WS 9 th	6
24. ECE541	Database Management Systems II (Elective) (Elective)	WS 9 th	6
25. ECE553	Design Thinking (Elective)	WS 9 th	6
26. ECE555	Advanced Topics in Computer Networks (Elective)	WS 9 th	6
27. ECE557	Manufacturing of Semiconductor Devices (Elective)	WS 9 th	6
28. ECE561	Formal Verification of Cryptosystems (Elective)	WS 9 th	6
29. ECE563	Radar Systems and Remote Sensing (Elective)	WS 9 th	6
30. ECE565	Special Topics/ Projects (Elective)	WS 9 th	6
31. ECE314	Electromagnetic Fields I (Elective)	SS 6 th	6
32. ECE316	Power Systems I (Core) (Elective)	SS 6 th	6
33. ECE318	Operating Systems (Elective)	SS 6 th	6
34. ECE320	Measurement Systems (Elective)	SS 6 th	6

35. ECE324	Introduction to the Theory of Computation (Elective)	SS 6 th	6
36. ECE326	Object Oriented Programming (Elective)	SS 6 th	6
37. ECE328	Information Retrieval (Elective)	SS 6 th	6
38. ECE334	Pattern Recognition (Elective)	SS 6 th	6
39. ECE338	Parallel Computer Architecture (Elective)	SS 6 th	6
40. ECE340	Embedded Systems (Elective)	SS 6 th	6
41. ECE348	Distributed Systems (Elective)	SS 6 th	6
42. ECE350	Electrotechnical Materials (Elective)	SS 6 th	6
43. ECE352	Image Processing (Elective)	SS 6 th	6
44. ECE354	Introduction to Nanoelectronics (Elective)	SS 6 th	6
45. ECE356	Special Topics/ Projects (Elective)	SS 6 th	6
46. ECE414	Applied Stochastic Processes (Elective)	SS 8 th	6
47. ECE416	Network Optimization (Elective)	SS 8 th	6
48. ECE418	Blockchain Technologies and Decentralized Applications (Elective)	SS 8 th	6
49. ECE420	Game Architecture and Development (Elective)	SS 8 th	6
50. ECE422	Data Mining (Elective)	SS 8 th	6
51. ECE424	Multiagent Systems (Elective)	SS 8 th	6
52. ECE434	Complex Networks (Elective)	SS 8 th	6
53. ECE436	Wireless Communications (Elective)	SS 8 th	6
54. ECE444	Physical CAD Algorithms (Elective)	SS 8 th	6
55. ECE450	Computer Networks II (Elective)	SS 8 th	6
56. ECE456	Control and Stability of Power Systems (Elective)	SS 8 th	6
57. ECE458	Special Topics/ Projects (Elective)	SS 8 th	6
58. ECE460	Advanced Data Management (Elective)	SS 8 th	6
59. ECE468	Network and Information System Security (Elective)	SS 8 th	6
60. ECE470	Software Engineering (Elective)	SS 8 th	6
61. ECE472	Industrial Automation and Control (Elective)	SS 8 th	6
62. ECE474	Special Topics of Electrical Installations (Elective)	SS 8 th	6
63. ECE484	Radhard Circuit Design (Elective)	SS 8 th	6
64. ECE486	Electroacoustics (Elective)	SS 8 th	6
65. ECE488	Design of Quantum Computers (Elective)	SS 8 th	6
66. ECE492	Introduction to Robotics (Elective)	SS 8 th	6
67. ECE494	Processor Design (Elective)	SS 8 th	6