



UNIVERSITY OF  
THESSALY

**DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING**  
**SCHOOL OF ENGINEERING**

<b>SEMESTER</b>	<b>COURSE CODE</b>	<b>COURSE</b>	<b>ECTS</b>
<b>WS</b>	<b>ECE119</b>	Digital Design (Core)	<b>6</b>
<b>WS</b>	<b>ECE219</b>	Computer Organization and Design (Core)	<b>6</b>
<b>WS</b>	<b>ECE317</b>	Artificial Intelligence (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE319</b>	Compilers (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE321</b>	Concurrent Programming (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE323</b>	Circuit Analysis II (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE325</b>	Digital Signal Processing (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE327</b>	Digital Systems VLSI (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE329</b>	Education Technologies (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE331</b>	Electrical Machines (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE333</b>	Digital Systems Lab (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE411</b>	Power Systems II (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE415</b>	High Performance Computing Systems(Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE419</b>	Logical Functional Programming (OptionalModule)	<b>6</b>
<b>WS</b>	<b>ECE447</b>	Neuro-Fuzzy Computing (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE449</b>	Smart Grids (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE437</b>	Electrical Installation (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE431</b>	CAD Algorithms (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE439</b>	Special Topics/ Projects (Optional Module)	<b>6</b>

<b>WS</b>	<b>ECE445</b>	Parallel and Distributing Computing (OptionalModule)	<b>6</b>
<b>WS</b>	<b>ECE417</b>	WWW Technologies (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE435</b>	Linear Programming (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE413</b>	Computer Algebra I (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE519</b>	Analog Circuit Lab (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE511</b>	Advanced Telecommunications Systems(Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE513</b>	Circuit Simulation Algorithms (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE515</b>	Mobile and Pervasive Computing (OptionalModule)	<b>6</b>
<b>WS</b>	<b>ECE555</b>	Advanced Topics in Computer Networks (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE517</b>	Technical and Academic Writing (OptionalModule)	<b>6</b>
<b>WS</b>	<b>ECE541</b>	Database Management Systems II (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE523</b>	Statistics (Optional Module)	<b>6</b>
<b>WS</b>	<b>ECE525</b>	Problem Solving Environments and Applications in Data Science (OptionalModule)	<b>6</b>

<b>SS</b>	<b>ECE316</b>	Power Systems I (Core) (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE314</b>	Electromagnetic Fields I (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE318</b>	Operating Systems (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE322</b>	Thermodynamics (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE336</b>	System Modeling and Performance (OptionalModule)	<b>6</b>
<b>SS</b>	<b>ECE326</b>	Object Oriented Programming (OptionalModule)	<b>6</b>
<b>SS</b>	<b>ECE328</b>	Information Retrieval (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE330</b>	SoC CAD Lab (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE342</b>	Alternative Energy Sources (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE348</b>	Distributed Systems (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE334</b>	Pattern Recognition (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE338</b>	Parallel Computer Architecture (OptionalModule)	<b>6</b>
<b>SS</b>	<b>ECE340</b>	Embedded Systems (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE332</b>	Advanced Electronics (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE344</b>	Power Electronics (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE458</b>	Special Topics/ Projects (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE412</b>	Computer Algebra II (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE424</b>	Multiagent Systems (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE418</b>	Blockchain Technologies and DecentralizedApplications (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE420</b>	Game Architecture and Development(Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE422</b>	Data Mining (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE460</b>	Advanced Data Management (OptionalModule)	<b>6</b>
<b>SS</b>	<b>ECE434</b>	Complex Networks (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE470</b>	Software Engineering (Optional Module)	<b>6</b>

<b>SS</b>	<b>ECE438</b>	Design of Analog/Mixed Signal and RFCircuits (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE436</b>	Wireless Communications (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE450</b>	Computer Networks II (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE454</b>	Machine Learning for Data Science andAnalytics (Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE444</b>	Physical CAD Algorithms(Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE452</b>	Special Topics in Applied Mathematics(Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE456</b>	Control and Stability of Power Systems(Optional Module)	<b>6</b>
<b>SS</b>	<b>ECE464</b>	Introduction to Energy Economics (OptionalModule)	<b>6</b>