



UNIVERSITY OF  
THESSALY

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

SEMESTER	COURSE CODE	COURSE	ECTS
WS	ECE119	Digital Design (Core)	6
WS	ECE219	Computer Organization and Design (Core)	6
WS	ECE317	Artificial Intelligence (Elective Course)	6
WS	ECE319	Compilers (Elective Course)	6
WS	ECE321	Concurrent Programming (Elective Course)	6
WS	ECE323	Circuit Analysis II (Elective Course)	6
WS	ECE325	Digital Signal Processing (Elective Course)	6
WS	ECE327	Digital Systems VLSI (Elective Course)	6
WS	ECE329	Education Technologies (Elective Course)	6
WS	ECE331	Electrical Machines (Elective Course)	6
WS	ECE333	Digital Systems Lab (Elective Course)	6
WS	ECE435	Linear Programming (Elective Course)	6
WS	ECE411	Power Systems II (Elective Course)	6
WS	ECE415	High Performance Computing Systems (Elective Course)	6
WS	ECE419	Logical Functional Programming (Elective Course)	6
WS	ECE447	Neuro-Fuzzy Computing (Elective Course)	6
WS	ECE449	Smart Grids (Elective Course)	6
WS	ECE437	Electrical Installation (Elective Course)	6
WS	ECE431	CAD Algorithms (Elective Course)	6

<b>WS</b>	ECE439	<b>Special Topics/Projects (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE445	<b>Parallel and Distributing Computing (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE417	<b>WWW Technologies (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE519	<b>Analog Circuit Lab (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE511	<b>Advanced Telecommunications Systems (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE513	<b>Circuit Simulation Algorithms (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE515	<b>Mobile and Pervasive Computing (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE555	<b>Advanced Topics in Computer Networks (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE517	<b>Technical and Academic Writing (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE541	<b>Database Management Systems II (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE523	<b>Statistics (Elective Course)</b>	<b>6</b>
<b>WS</b>	ECE525	<b>Problem Solving Environments and Applications in Data Science (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE316	<b>Power Systems I (Core) (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE314	<b>Electromagnetic Fields I (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE318	<b>Operating Systems (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE322	<b>Thermodynamics (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE336	<b>System Modeling and Performance (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE326	<b>Object Oriented Programming (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE328	<b>Information Retrieval (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE330	<b>SoC CAD Lab (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE342	<b>Alternative Energy Sources (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE348	<b>Distributed Systems (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE334	<b>Pattern Recognition (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE338	<b>Parallel Computer Architecture (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE340	<b>Embedded Systems (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE332	<b>Advanced Electronics (Elective Course)</b>	<b>6</b>

<b>SS</b>	ECE344	<b>Power Electronics (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE458	<b>Special Topics/Projects (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE424	<b>Multiagent Systems (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE418	<b>Blockchain Technologies and Decentralized Applications (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE420	<b>Game Architecture and Development (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE422	<b>Data Mining (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE460	<b>Advanced Data Management (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE434	<b>Complex Networks (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE470	<b>Software Engineering (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE438	<b>Design of Analog/Mixed Signal and RF Circuits (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE436	<b>Wireless Communications (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE450	<b>Computer Networks II (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE454	<b>Machine Learning for Data Science and Analytics (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE444	<b>Physical CAD Algorithms (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE452	<b>Special Topics in Applied Mathematics (Elective Course)</b>	<b>6</b>
<b>SS</b>	ECE456	<b>Control and Stability of Power Systems (Elective Course)</b>	<b>6</b>
			<b>6</b>