

ENGINEERING FACULTY / INSTITUTE
DEPARTMENT OF INFORMATION SYSTEMS ENGINEERING
UNDERGRADUATE CURRICULUM - 1
(For students who started their first year before 2016-17 academic year)

FIRST YEAR						
1. Semester						
Code	Name of the Course	T	A	C	ECTS	
CMPE113	Computer Programming I	2	2	3	4	
MATH151	Calculus I	4	2	5	7	
PHYS101	General Physics I	3	2	4	6	
CEAC105	General Chemistry	3	2	4	5	
ENG101	English Communication Skills I	4	0	3	3,5	
CMPE109	Fundamentals of Computing	2	1	2	2,5	
HIST111	Principles of Atatürk and History of Turkish Revolution I	2	0	2	2	
				23	30	
2. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE102	Intro. To Management Information Systems	3	0	3	3,5	
CMPE114	Computer Programming II	3	2	4	5	
MATH152	Calculus II	4	2	5	7	
PHYS102	General Physics II	3	2	4	6	
ENG102	English Communication Skills II	4	0	3	3,5	
HIST112	Principles of Atatürk and History of Turkish Revolution II	2	0	2	2	
				21	27	
SECOND YEAR						
3. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE261	Business and e-Commerce	3	0	3	6	
CMPE225	Object-Oriented Programming	3	2	4	8	
CMPE251	Discrete Computational Structures	3	0	3	7	
EE231	Digital Circuits and Systems	3	2	4	6	
MATH275	Linear Algebra	4	0	4	6	
ENG201	Advanced Communication Skills	3	0	3	3	
				21	36	
4. Semester						
Code	Name of the Course	T	A	C	ECTS	
SE212	Human Computer Interaction	3	0	3	8	
CMPE226	Data Structures	3	0	3	8	
IE220	Probability and Statistics	3	0	3	5	
MATH276	Differential Equations	4	0	4	6	
ENG202	Presentation Skills	3	0	3	3	
GE-1	General Elective - 1	3	0	3	4	
				19	34	
THIRD YEAR						
5. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE301	Multimedia Systems	3	0	3	5	
ISE311	Internet Programming	3	2	4	5	
ISE353	Information Systems Development	3	0	3	10	
CMPE341	Database Design and Management	3	2	4	7	
AE-1 (A)	Area Elective (A)	3	0	3	5	
AE-2 (B)	Area Elective (B)	3	0	3	5	
ISE399	Summer Practice - I	3	0	0	6	
				20	43	

6. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE332	IT Infrastructure and Architecture	3	0	3	5	
ISE314	Data Warehousing and Mining	3	0	3	5	
SE346	Software Engineering	2	2	3	6	
CMPE334	Computer Networks	3	2	4	5	
AE-3 (C)	Area Elective (C)	3	0	3	5	
				19	26	
FOURTH YEAR						
7. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE493	Project Orientation	2	0	2	5	
AE-4	Area Elective (A)	3	0	3	5	
CMPE431	Operating Systems	3	2	4	4	
GE-2	General Elective - 2	3	0	3	4	
TURK 401	Turkish Language I	2	0	2	2	
ISE499	Summer Practice - II	0	0	0	10	
				19	30	
8. Semester						
Code	Name of the Course	T	A	C	ECTS	
ISE494	Senior Project	4	0	4	9	
ISE426	Computer Security	3	0	3	5	
AE-5	Area Elective (A)	3	0	3	5	
AE-6	Area Elective (B)	3	0	3	5	
ORY400	Social & Cultural Activities	0	0	0	1	
TURK 402	Turkish Language II	2	0	2	2	
				15	27	

149	253
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AREA ELECTIVE COURSES

Credit (3) ECTS (5)

*Group (A/B/C)	Course Code	Course Name	T	A	C	ECTS
A	CMPE 326	Formal Languages and Automata	3	0	3	5
A	CMPE 343	Database Systems and Programming	3	0	3	5
A	CMPE 423	Logic Programming	3	0	3	5
A	CMPE 424	Language Processors	3	0	3	5
A	CMPE 434	Embedded System Design	3	0	3	5
A	CMPE 435	Special Topics In Computer Networks	3	0	3	5
A	CMPE 437	VLSI Design	3	0	3	5
A	CMPE 462	Introduction to Artificial Intelligence	3	0	3	5
A	CMPE 463	Digital Signal Processing	3	0	3	5
A	CMPE 464	Digital Image Processing	3	0	3	5
A	CMPE 467	Pattern Recognition	3	0	3	5
A	CMPE 474	Soft Computing	3	0	3	5
A	CMPE 350	Numerical Methods	3	0	3	5
A	CMPE 376	Computer Games and Simulation	3	0	3	5
A	CMPE 422	Visual Programming	3	0	3	5
A	CMPE 432	Virtualization	3	0	3	5
A	CMPE 438	Java Programming	3	0	3	5
A	CMPE 461	Applied Neural Computing	3	0	3	5
A	CMPE 465	Knowledge Engineering	3	0	3	5
A	CMPE 473	Computer Graphics	3	0	3	5
A	SE 340	Rapid Application Development	3	0	3	5
A	SE 360	System Modeling and Simulation	3	0	3	5
A	SE 426	Emerging Technologies	3	0	3	5
A	SE 440	Analysis and Design of User Interfaces	3	0	3	5
A	SE 446	Introduction to Bioinformatics	3	0	3	5
A	SE 453	Large Scale Software Development	3	0	3	5
A	SE 450	Software Engineering Ethics	3	0	3	5
A	SE 460	Software Construction	3	0	3	5
A	SE 461	Software Patterns	3	0	3	5
A	SE 462	Formal Methods in Software Engineering	3	0	3	5
A	SE 470	Agile Methods in Software Development	3	0	3	5
A	ISE 405	Foundations in Information Technology Services	3	0	3	5
A	ISE 308	Introduction to Mobile Application Development	3	0	3	5
A	ISE 301	Multimedia Systems	3	0	3	5
A	ISE 414	Investigation of Computer Crime	3	0	3	5
A	ISE 422	e-Government	3	0	3	5
A	ISE 423	Technology Trends in e-Government	3	0	3	5
A	ISE 424	Distance Education and E-Learning	3	0	3	5
A	ISE 432	Innovation and Entrepreneurship in IT	3	0	3	5
A	ISE 301	Multimedia Systems	3	0	3	5
B	ECON 101	Introduction to Economics I	3	0	3	5
B	MGMT 111	Introduction to Business I	3	0	3	5
B	MGMT 112	Introduction to Business II	3	0	3	5
B	MGMT 206	Organizational Behaviour	3	0	3	6
B	MGMT 213	Organization Theory	3	0	3	6
B	MGMT 306	Marketing Research	3	0	3	6
B	MGMT 319	Financial Management I	3	0	3	6
B	MGMT 317	Human Resources Management	3	0	3	6
B	MGMT 401	Managerial Accounting	3	0	3	6

*Group (A/B/C)	Course Code	Course Name	T	A	C	ECTS
B	MGMT 424	Financial Statement Analysis	3	0	3	6
B	MGMT 440	E-Business E-Commerce	3	0	3	6
B	MGMT 444	Project Management	3	0	3	6
C	IE 305	Engineering Economic Analysis	3	0	3	5
C	IE 314	Project Management	3	0	3	5
C	IE 320	Business Process Reengineering	3	0	3	5
C	IE 411	Work study and Design	3	0	3	5
C	IE 415	Industrial Economics	3	0	3	5
C	IE 416	Expert Systems	3	0	3	5
C	IE 418	Decision Analysis	3	0	3	5
C	IE 419	Service Systems	3	0	3	5
C	IE 421	E-Commerce and ERP	3	0	3	5
C	IE 422	Customer Relationship Management	3	0	3	5
C	IE 423	Management and Organizations	3	0	3	5
C	IE 425	Analysis of Investment Projects	3	0	3	5
C	IE 427	Strategic Management	3	0	3	5
C	IE 428	Introduction to Systems Engineering	3	0	3	5
C	IE 429	Reliability	3	0	3	5
C	IE 444	Decision Support Systems	3	0	3	5

PREREQUISITE CHAIN

Course Code	Prerequisite Course Codes
ISE311	CMPE114
ISE332	ISE311
ISE314	CMPE341
ISE493	CMPE226 ve CMPE341
ISE494	ISE493
ISE399	CMPE225
ISE499	CMPE226

COURSE SUBSTITUTION

Closed	Substitution
ISE111 Intro. to Information Systems and Technologies	CMPE113 Computer Programming I
ISE100 Fundamentals of Information Systems Engineering	CMPE109 Fundamentals of Computing
ISE109 Fundamentals of Information Systems Engineering	CMPE109 Fundamentals of Computing
ISE201 Business and Ethics	ISE261 Business and e-Commerce
ISE202 Human Computer Interaction	SE212 Human Computer Interaction
ISE403 Information Systems Development	ISE353 Information Systems Development
ISE315 E-Commerce	ISE332 IT Infrastructure and Architecture
ISE316 E-Commerce	ISE332 IT Infrastructure and Architecture
ISE350 Data Warehousing and Mining	ISE314 Data Warehousing and Mining
ISE352 Data Warehousing and Mining	ISE314 Data Warehousing and Mining
ISE340 Software Engineering	SE346 Software Engineering
ISE407 Intro. To Mobile App. Development	ISE308 Intro. To Mobile App. Development
ISE412 Computer Security	ISE426 Computer Security
ISE436 Computer Networks	CMPE334 Computer Networks
ISE431 Operating Systems	CMPE431 Operating Systems
ISE491 Senior Project -I	ISE493 Project Orientation
ISE492 Senior Project - II	ISE494 Senior Project
E101 Fundamentals of Engineering	CMPE109 Fundamentals of Computing