

First Year																	
I. Semester						II. Semester											
Code	Course Name	L	P	C	ECTS	Code	Course Name	L	P	C	ECTS						
TRD109	Turkish Language I	2	0	2	2	TRD110	Turkish Language II	2	0	2	2						
YD107	English I	2	0	2	2	YD108	English II	2	0	2	2						
FIZ111	Physics I	4	0	4	6	FIZ112	Physics II	3	0	3	5						
FIZ105	Physics Lab-I	0	2	2	2	FIZ106	Physics Lab-II	0	2	2	2						
MAT161	Mathematics I	4	0	4	6	MAT162	Mathematics II	4	0	4	6						
YMU111	Algorithm and Programming I	3	2	4	7	YMU116	Algorithm and Programming II	3	2	4	7						
YMU115	Software Engineering Orientation	1	0	1	1	YMU120	Discrete Structures	3	0	3	3						
YMU113	Introduction to Computer Science	3	0	3	4	YMU118	Fundamentals of Software Engineering	3	0	3	3						
Total					19	4	24	30	Total					20	4	22	30
Second Year																	
III. Semester						IV. Semester											
Code	Course Name	L	P	C	ECTS	Code	Course Name	L	P	C	ECTS						
AIT209	Ataturk's Principles and History I	2	0	2	2	AIT210	Ataturk's Principles and History II	2	0	2	2						
YMU227	Object-Oriented Programming	3	2	4	7	YMU218	Data Structures	3	2	4	6						
YMU213	Professional English I	2	0	2	3	YMU214	Professional English II	2	0	2	3						
YMU229	Formal Languages and Automata	3	0	3	5	YMU230	Web Design and Programming	3	2	4	6						
YMU225	Software Requirements and Analysis	3	0	3	4	YMU232	Database Management Systems	3	0	3	6						
MAT271	Differential Equations	4	0	4	6	IST234	Statistics and Probability	3	0	3	4						
	SOCIAL ELECTIVE	2	0	2	3	MAT204	Linear Algebra	2	0	2	3						
	Social Elective Course List																
YMU231	Software Economics	2	0	2	3												
YMU235	Theater	2	0	2	3												
YMU237	Photography	2	0	2	3												
YMU239	Diction	2	0	2	3												
YMU241	Body Language and Communication	2	0	2	3												
Total					19	2	20	30	Total					18	4	20	30
Third Year																	
V. Semester						VI. Semester											
Code	Course Name	L	P	C	ECTS	Code	Course Name	L	P	C	ECTS						
YMU301	Mobile Software Development	3	2	4	6	YMU340	Data Mining	3	2	4	6						
YMU315	Operating Systems	3	0	3	4	YMU314	Information Systems and Security	3	0	3	4						
YMU303	Numerical Methods	3	0	3	4	YMU316	Algorithm Analysis	3	0	3	5						
YMU319	Programming Languages	3	0	3	4	YMU318	Business Law	2	0	2	3						
YMU323	Professional Practice I	0	2	1	2		TECHNICAL ELECTIVE I	3	2	4	6						
YMU325	Logic Circuits	3	2	4	6		TECHNICAL ELECTIVE II	3	2	4	6						
YMU327	Software Design and Architecture	3	0	3	4		Technical Elective Course List										
						YMU320	Optimization Techniques	3	0	3	6						
						YMU322	Computer Graphics and Animation	3	0	3	6						
						YMU326	Multi-Agent Systems Development	3	0	3	6						
						YMU328	Bioinformatics	3	0	3	6						
						YMU330	Database Design and Management	3	0	3	6						
						YMU332	Advanced Visual Programming	3	0	3	6						
						YMU334	Service-Oriented Computing	3	0	3	6						
						YMU336	Natural Language Processing	3	0	3	6						
						YMU338	Microservices and Programming	3	0	3	6						
Total					18	6	21	30	Total					17	6	20	30
Fourth Year																	
VII. Semester						VIII. Semester (Option 1)											
Code	Course Name	L	P	C	ECTS	Code	Course Name	L	P	C	ECTS						
YMU401	Graduation Project I	0	2	4	4	YMU414	Graduation Project II	0	2	4	4						
YMU415	Software Verification and Validation	3	2	4	6		TECHNICAL ELECTIVE I	3	0	3	6						
YMU417	Professional Practice II	0	2	2	2		TECHNICAL ELECTIVE II	3	0	3	6						
YMU403	Software Project Management	2	0	2	3		TECHNICAL ELECTIVE III	3	0	3	6						
	SOCIAL ELECTIVE	3	0	3	3		TECHNICAL ELECTIVE IV	3	0	3	6						
	TECHNICAL ELECTIVE I	3	0	3	6		SOCIAL ELECTIVE	2	0	2	2						
	TECHNICAL ELECTIVE II	3	0	3	6												
	Social Elective Course List						Social Elective Course List										
YMU443	Occupational Health and Safety	3	0	3	3	YMU450	Public Relations	2	0	2	2						
YMU445	Ethics and Social Responsibility	3	0	3	3	YMU452	Marketing	2	0	2	2						
YMU447	Entrepreneurship	3	0	3	3	YMU454	Career Planning	2	0	2	2						
YMU449	Intellectual Property Rights	3	0	3	3	YMU456	Management Sociology	2	0	2	2						
YMU451	Total Quality Management	3	0	3	3	YMU458	Software Ethics	2	0	2	2						

Technical Elective Course List					Technical Elective Course List						
YMU419	Agile Methods in Software Development	3	0	3	6	YMU410	Artificial Intelligence	3	0	3	6
YMU423	System Modeling and Simulation	3	0	3	6	YMU426	Robot Programming	3	0	3	6
YMU425	Applied Neural Networks	3	0	3	6	YMU428	E-Commerce	3	0	3	6
YMU427	Soft Computing	3	0	3	6	YMU430	Human-Computer Interaction	3	0	3	6
YMU429	Distributed Software Engineering	3	0	3	6	YMU436	Advanced Web Programming	3	0	3	6
YMU431	Grid Programming	3	0	3	6	YMU438	Big Data	3	0	3	6
YMU433	Biomedical Engineering	3	0	3	6	YMU440	Cloud Computing and Virtualization	3	0	3	6
YMU435	Software Quality Assurance	3	0	3	6	YMU442	Compiler Design	3	0	3	6
YMU439	Image Processing Methods	3	0	3	6	YMU444	Logical Programming	3	0	3	6
YMU441	Game Design and Programming	3	0	3	6	YMU446	Unix Programming	3	0	3	6
YMU413	Data Communication and Computer Networks	3	0	3	6	YMU432	Machine Learning	3	0	3	6
Total		14	6	17	30	Total		14	6	17	30
VIII. Semester (Option 2)											
YMU414	Graduation Project II		0	2	4	4					
YMU460	Practical Engineering Education		8	14	15	26					
Total			8	16	16	30					