

Metalurji ve Malzeme Mühendisliği Böl. Makine Mühendisliği Bölümü için Çift Anadal Programı Müfredatı

	Prerequisite	COURSE C.	COURSE NAME	Taken from	Compulsory or elective	T	A	L	ECTS
1. YEAR FALL SEMESTER		CHE101	Chemistry for Engineers	Major	Compulsory	3	0	2	5
		MAT101	Calculus I	Major	Compulsory	3	2		7
		ME101	Introduction to Mechanical Engineering	Major	Compulsory	2	0		4
		PHY101	Physics I	Major	Compulsory	3	0	2	7
		ENG110	English I	Major	Compulsory	2	0		3
		ATA101	Principles of Atatürk and Hist. of the Turkish Rev. I	Major	Compulsory	2	0		2
		TDE101	Turkish Language I	Major	Compulsory	2	0		2
			TOTAL SEMESTER ECTS						30
1. YEAR SPRING SEMESTER	MAT101	MAT102	Calculus II	Major	Compulsory	3	2		7
		ME112	Computer Aided Engineering Drawing I	Major	Compulsory	2	2		5
		ME122	Statics	Major	Compulsory	3	0		4
		PHY102	Physics II	Major	Compulsory	3	0	2	7
		ENG111	English II	Major	Compulsory	2	0		3
		ATA102	Principles of Atatürk and Hist. of the Turkish Rev. II	Major	Compulsory	2	0		2
		TDE102	Turkish Language II	Major	Compulsory	2	0		2
			TOTAL SEMESTER ECTS						30
2. YEAR FALL SEMESTER		COE201	Computer Programming and Applications	Major	Compulsory	2	2		4
		MAT205	Differential Equations	Major	Compulsory	3	0		6
		ME211	Computer Aided Engineering Drawing II	Major	Compulsory	2	2		5
		MSE215	Materials Science I	Double Major	Compulsory	3	0		6
		MSE213	Thermodynamics of Materials I	Double Major	Compulsory	3	0		5
		ME261	Strength of Materials I	Major	Compulsory	3	0		4
			Non-Technical Elective I	Major	Elective	2	0		3
			TOTAL SEMESTER ECTS						33
		COURSE C.	COURSE NAME			T	A	L	ECTS
2. YEAR SPRING SEMESTER	MSE215	MSE216	Materials Science II	Double Major	Compulsory	3	0		6
		ME232	Applied Mathematics for Engineers	Major	Compulsory	3	0		4
		MSE214	Thermodynamics of Materials II	Double Major	Compulsory	3	0		5
		MSE228	Solid State Physics for Materials Science and Engineering	Double Major	Compulsory	3	0		5
		ME262	Strength of Materials II	Major	Compulsory	3	0		5
		ME206	Economy for Engineers	Major	Compulsory	2	0		2
			Non-Technical Elective II	Major	Elective	2	0		3
			TOTAL SEMESTER ECTS						30

		COURSE C.	COURSE NAME			T	A	L	ECTS
3. YEAR FALL SEMESTER		MSE313	Phase Diagrams	Double Major	Compulsory	3	0		5
		ME321	Fluid Mechanics	Major	Compulsory	4	0		5
		MSE315	Materials Characterization Techniques I	Double Major	Compulsory	1	0	3	6
		MSE-TE	Technical Elective	Double Major	Compulsory	3	0		6
		MSE300	Summer Practice	Double Major	Compulsory	0	2		5
		ME361	Manufacturing Processes	Major	Compulsory	3	0		4
			Non-Technical Elective III	Major	Elective	2	0		3
			TOTAL SEMESTER ECTS						
3. YEAR SPRING SEMESTER		MSE316	Materials Characterization Techniques II	Double Major	Compulsory	2	0	4	6
		ME312	Machine Elements II	Major	Compulsory	2	2		4
		ME322	Thermal&Fluid Engineering	Major	Compulsory	2	2		3
		MSE-TE	Technical Elective	Double Major	Elective	3	0		6
		ME362	Manufacturing Engineering	Major	Compulsory	3	0		4
		MSE314	Phase Transformations	Double Major	Compulsory	3	0		5
	MSE215	MSE312	Materials Laboratory	Double Major	Compulsory	2	0	4	5
			TOTAL SEMESTER ECTS						
4. YEAR FALL SEMESTER		ES411	Occupational Health and Safety I	Major	Compulsory	2	0		3
		ME400	Summer Practice II	Major	Compulsory	0	2		5
		ENG4xx	Interdisciplinary Technical Elective Courses	Major or Double Major	Elective	0	2		6
		MSE411	Materials Science And Engineering Design	Double Major	Compulsory	3	1		7
		ME4xx	Departmental Elective	Major	Elective				6
		ME4xx	Departmental Elective	Major	Elective				6
			TOTAL SEMESTER ECTS						
4. YEAR SPRING SEMESTER		ES412	Occupational Health and Safety II	Major	Compulsory	2	0		3
		MSE444	Graduation Project	Double Major	Compulsory	2	1	1	9
		ME4xx	Departmental Elective	Major	Elective	3	0		6
		ME4xx	Departmental Elective	Major	Elective	3	0		6
		ME4xx	Departmental Elective	Major	Elective	3	0		6
			TOTAL SEMESTER ECTS						
CUMULATIVE ECTS									253