

*T.C. NECMETTIN ERBAKAN UNIVERSITY ENGINEERING AND ARCHITECTURE FACULTY,
METALLURGY AND MATERIAL ENGINEERING DEPARTMENT (ENGLISH), 2022-2023 ACADEMIC YEAR CURRICULUM PLAN*

SEMESTER 1							
CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE	Explanation
MME101	Physics-1	2	2	3	4	C	
MME102	Mathematics-1	2	2	3	4	C	
MME103	General Chemistry-1	2	2	3	5	C	
MME104	Advanced English-1	2	0	2	2	C	
TDL101	Turkish Literature-1	2	0	2	2	C	
YBD101	Foreign Language-1	2	0	2	2	C	
AİT101	Atatürk's Principles & Revolution History-1	2	0	2	2	C	
MME107	Technical English	2	0	2	4	C	
MME108	Introduction to Computer & Information Systems	1	2	2	3	C	
AYD101	Academic Writing	2	0	2	2	C	
Total		15	8	19	30		

NOT: Programımız %100 İngilizce olduğu için AKT 101(Advanced Turkish-1) ve AKT 102 (Advanced Turkish-2) derslerine ihtiyaç görülmemektedir.

SEMESTER 2							
CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE	Expalanation
MME121	Physics-2	2	2	3	5	C	
MME122	Mathematics-2	2	2	3	5	C	
MME123	General Chemistry-2/	2	2	3	5	C	
MME124	Advanced English-2	2	0	2	2	C	
TDL 102	Turkish Literature-2	2	0	2	2	C	
YBD102	Foreign Language - 2	2	0	2	2	C	
AİT102	Atatürk's Principles & Revolution History -2	2	0	2	2	C	
MME127	Technical Drawing	1	2	2	2	C	
MME128	Introduction to Metallurgical and Materials Engineering	2	0	2	3	C	
KRP102	Career Planning	1	0	1	2	C	
Total		18	8	22	30		

NOT: Programımız %100 İngilizce olduğu için AKT 101(Advanced Turkish-1) ve AKT 102 (Advanced Turkish-2) derslerine ihtiyaç görülmemektedir.

SEMESTER 3

CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME201	Materials Science-1	3	0	3	4	C
MME202	Extractive Metallurgy	3	0	3	4	C
MME203	Statics and Strength of Materials	3	0	3	4	C
MME204	Thermodynamics of Materials-1	2	2	3	5	C
MME205	Differential Equations	3	0	3	4	C
MME206	Academic Oral Presentation Skills	1	0	1	3	C
BTF201	Scientific History and Philosophy	2	0	2	2	C
Technical Elective (1 Course)						
MME207	Failure Analysis	3	0	3	4	E
MME208	Mineral Processing	3	0	3	4	E
Total		20	2	21	30	

SEMESTER 4						
CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME221	Thermodynamics of Materials-2	2	2	3	5	C
MME222	Computer Modelling and Design	2	0	2	3	C
MME223	Mechanical Metallurgy	3	0	3	4	C
MME224	Materials Science-2	3	0	3	5	C
MME225	Fundamentals of Manufacturing Technologies	3	0	3	5	C
MME226	Phase Equilibria	3	0	3	4	C
Technical Elective (1 Course)						
MME227	X-Ray Diffraction Technique	3	0	3	4	S
MME228	Metallurgical Pretreatments	3	0	3	4	S
Total		19	2	20	30	

SEMESTER 5

CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME301	Transport Phenomena	2	0	2	4	C
MME302	Materials Characterization	2	2	3	4	C
MME303	Chemical Metallurgy	3	0	3	4	C
MME304	Metallic Materials and Metallography	2	2	3	3	C
MME305	Materials Processing Lab	0	4	2	3	C
MME306	Polymer Materials	3	0	3	4	C
MME307	Summer Practice-1	0	2	1	5	C
Technical Elective (1 Course)						
MME308	Electrical, Optical, and Magnetic Properties of Materials	3	0	3	3	S
MME309	Hydrometallurgy	3	0	3	3	S
Total		15	10	20	30	

SEMESTER 6

CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME321	Iron and Steelmaking	3	0	3	4	C
MME322	Ceramic Materials	3	0	3	4	C
MME323	Metallurgical Processing Lab	0	4	2	3	C
MME324	Kinetics	3	0	3	4	C
MME325	Casting and Solidification	3	0	3	4	C
MME326	Physical Metallurgy	3	0	3	5	C
ELD302	Critical Thinking	2	0	2	2	C
Technical Elective (1 Course)						
MME327	Energy Materials	3	0	3	4	E
MME328	Powder Metallurgy	3	0	3	4	E
MME329	Corrosion	3	0	3	4	E
Total		20	4	22	30	

SEMESTER 7						
CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME401	Principles of Corrosion and Corrosion Protection	2	0	2	4	C
MME402	Non-ferrous Metal Metallurgy	3	0	3	4	C
İSGGÜV1	Occupational Health and Safety-1	1	0	1	1	C
MME404	Materials Engineering Design-1	2	0	2	4	C
MME405	Summer Practice-2	0	2	1	5	C
Technical Elective (2 Courses)						
MME406	Electrometallurgy	3	0	3	5	E
MME407	Non-Destructive Testing of Materials	3	0	3	5	E
MME408	Metal Casting Techniques	3	0	3	5	E
MME409	Composite Materials	3	0	3	5	E
MME410	Computational Materials Science	3	0	3	5	E
MME411	Refractories	3	0	3	5	E
Non-Technical (1 Course)						
MME411	Philosophy of Science	1	2	2	2	E
MME412	Business Law	1	2	2	2	E
GNLÇLŞ	Volunteer Studies	1	2	2	2	E
BİL101	Informatics Technologics	1	2	2	2	E
Total		15	4	17	30	

SEMESTER 8						
CODE	COURSE NAME	T	A	Credit	ECTS	COMPULSORY ELECTIVE
MME421	Enterpreneurship	2	0	2	3	C
İSGGÜV2	Occupational Health and Safety-2	1	0	1	1	C
MME423	Materials Engineering Design-2	2	0	2	4	C
Technical Elective (4 Courses)						
MME424	Surface Treatments	3	0	3	5	E
MME425	Welding Metallurgy	3	0	3	5	E
MME426	Nanomaterials	3	0	3	5	E
MME427	Advanced Ceramics	3	0	3	5	E
MME428	Biomaterials	3	0	3	5	E
MME429	Thin Films Fabrication and Characterization	3	0	3	5	E
Non-Technical (1 Course)						
MME430	Business Life and Quality Control	2	0	2	2	E
MME431	Introduction to Research	2	0	2	2	E
TKNBAG	Technology Addiction	2	0	2	2	E
Total		19	0	19	30	

Toplam Kredi: 160 Toplam Teorik Kredi: 141 Toplam Uygulama Kredisi: 38
 Toplam Seçmeli Kredi: 34(%21) Toplam Temel Bilim Kredi: 32 (%20)
 Toplam AKTS: 240 Toplam Seçmeli AKTS: 50(%21) Toplam Temel Bilim AKTS: 50 (%21)