GAZİ UNIVERSITY ENGINEERING FACULTY
MECHANICAL ENGINEERING DEPARTMENT
2022-2023 ACADEMIC YEAR FALL (I. SEMESTER) SEMESTER
UNDERGRADUATE COURSE REGISTRATION RULES

1. **With the decision taken by the University Senate, the curriculum of our department has been changed. The renewed curriculum is given in Table 1. The renewed curriculum commenced with the start of 2021-2022 Spring semester and all student are responsible for it. The special conditions resulting from the curriculum change are given in Table 2. Students are required to complete course registration in the light of the information given in Table 1 and Table 2.**
2. Registrations will be made through http://ogrenci.gazi.edu.tr. It is **the responsibility of our students** to follow **new announcements** regarding the 2022-2023 FALL Semester Course Registration Procedures on **the university website** http://gazi.edu.tr/ and http://ogris.gazi.edu.tr.
3. Course registrations will be held between **15-18 September 2022**. Students who make their course registrations online must **APPROVE** their course registration status. **Course registrations of students who have not given course registration approval will not be approved by their advisors.**
4. **Gazi University Education and Exam Regulations** can be accessed from the "MEVZUAT" tab on the http://ogris.gazi.edu.tr/ page.
5. Students will register for the 1st, 2nd and 3rd year courses from the courses opened in their own program (100% English and 30% English Programs). Students will be allowed to register for a course from another program during the advisor approval stage only in case of course conflicts. In the 4th Year Technical Elective Courses, 30% English Program students may take courses offered in the 100% English Program.
6. The exams of the courses which conflict in the curriculum may also conflict, it is the responsibility of the students to take the exams of the aforementioned conflicting courses.
7. Students who approve their course registration must also **have their Advisor's Approval** between **19-21 September 2022**. A student who does not have their Advisor's Approval is not deemed to have registered for the course and is not included in the class lists. The student who has completed the course selection and finalization process must obtain the advisor's approval in order to be included in the class lists and to activate the semester registration.
8. On **10-11 October 2022**, excused registrations will be made for **students whose excuses are accepted by the relevant committees**. On **13-14 October 2022**, students who wish to **add-drop courses** can do so interactively with their advisors.
9. **Advisor lists have been updated**. You can check if there has been a change in your advisor at http://ogrenci.gazi.edu.tr.
10. **COURSE REGISTRATIONS WITHOUT THE ADVISOR'S APPROVAL WILL BE CANCELED.**
11. Your advisor can remove your course registration approval and add/delete courses within the allowed dates for course registration. In this case, your advisor must approve the course registration again. Please check whether the procedures have been completed until your advisor approve your registration status by selecting the 'Course Registration History' tab at the top right corner of 'Course Registration' screen. Contact your advisor if you detect any anomalies.
12. The course schedule and registration rules of our department can be found on our department's website: http://mf-mm.gazi.edu.tr/
13. **The student has to take all the courses in the first year (first two semesters). The priority in the course selection must be given to the course/courses failed (including the ones failed due to the attendance requirement) and never taken. Irregular students can take the courses of the semester they are in, provided that they start from the earliest semester courses. With the approval of the advisor, only one course from the earlier semesters can be postponed once for each academic semester.**
14. Total credits of the courses that a student with a **cumulative grade point average below 2.00** can take in a semester cannot exceed 36 ECTS. (**Table 1**)
15. Total credits of the courses that a student with a **cumulative grade point average greater than or equal to 2.00** can take in a semester cannot exceed 40 ECTS. (**Table 1**)
16. Students can only take courses from the later semesters with the approval of their advisors. For this, students must not have failed courses from the previous semesters and the cumulative grade point average must be greater than or equal to 3.00.

17. **It is compulsory to attend 70% of the theoretical courses and 80% of the applied courses.**

18. **Grades DC and DD satisfy the prerequisite.** Students who haven't taken the prerequisites and still registered to a course will automatically fail even if they pass the exams. (For prerequisites see: **Table 1**, **3** and **4**)

19. Students may withdraw from a course that has not been repeated and taken for the first time. Course withdrawal can be made on **28 November 2022** with the approval of the advisor. Students can withdraw only one course in a semester. And total six withdrawals can be made during the whole undergraduate study. It is not possible to withdraw from the courses in the first two semesters of the curriculum, that are repeated, previously withdrawn or which are non-credit. In addition, a student who takes courses equal to or below the minimum course credits required in a semester is not allowed to withdraw from a course.

20. With the curriculum change mentioned in Article 1, the design criteria courses were grouped separately and the **Thermal Design Elective courses were coded as MMTI** and the **Mechanical Design Group courses were coded as MMTM** (**Table 1**). Students must meet the design criteria for graduation. Courses from each group will be offered in both semesters. The Design criteria courses to be offered this semester are given in **Table 3**. The student will only take one of the Thermal Design Group and one of the Mechanical Design Group courses. Technical Elective courses will be chosen from Technical Elective courses other than Design Group courses (The Design group courses of the students who choose more than one Thermal and Mechanical Design Group course will be deleted).

21. Undergraduate courses and prerequisites are given in **Table 1**.

22. The list of Technical Elective Courses that will be offered this semester is given in **Table 4**.

23. Free Elective Courses (Free Elective Course 1 and Free Elective Course 2) that students must take **within the scope of the department curriculum are required to be taken in the 6th and 8th semesters.**

24. To be able to take MM423 Bitirme Tasarım Projesi I / ME423 Graduation Design Project I courses, students must have **80 ECTS** or less left to complete the program.

25. 2022-2023 Fall Term "MM423 Bitirme Tasarım Projesi I / ME423-Graduation Design Project I" Course Advisor Preference Forms should be sent to tamercalisir@gazi.edu.tr until **12 September 2022**. The Preference Form is available on our department's website under "Announcements".

26. Students must take the MM424 / ME424 Graduation Design Project II courses from the same section (from the same Advisor) where they have successfully completed the MM423 / ME423 Graduation Design Project I Course. (**Table 5**)

27. During course registration, students will take MM423 / ME423 Graduation Design Project I courses from the 33rd section. Upon the announcement of the advisor list, students will be able to re-register to their respective sections with the approval of their advisors. (In case the list of advisors is announced before 18 September 2022, students can register directly to the respective section of the advisor)

28. In line with the decision taken by our department board dated 07.08.2015, the Fundamental Engineering Exam (multiple choice) covering the Mechanical Engineering curriculum will be held in the MM423 Bitirme Tasarım Projesi I / ME423 Graduation Design Project I courses. The passing grade of the course will be calculated as 25% of the grade obtained from this exam, and 75% as a result of the work to be done within the scope of the project. The distribution of questions to be asked in the Fundamental Engineering Exam is given in **Table 6**.

29. Students who completed summer practice are required to register for the relevant internship course during course registration. The reports of students who do not register for the course will not be evaluated.

30. Students who have completed the compulsory courses in the new curriculum but do not meet the 240 ECTS requirement due to the changed ECTS credits will meet this requirement by taking additional **technical elective courses**.

31. In the New Information System, students should check their curriculum completion status, the course work they have completed and their total ECTS's in order to avoid any problems during graduation. All responsibility in this matter belongs to our students.

Assist. Prof. Dr. Tamer ÇALIŞIR
Assistant Head of Department
05.09.2022

TABLE 1
UNDERGRADUATE CURRICULUM AND PREREQUISITES*

%30 ENGLISH PROGRAM					
Course Code	**Course Name**	**Language of Instruction**	**Local Credit**	**ECTS**	**PREREQUISITE**
1. Semester					
FİZ103	Fizik I	Turkish	4	6	
ENG103	English-I	English	3	3	
KIM103	Kimya	Turkish	4	6	
KIM151	Kimya Lab.	Turkish	1	2	
MATH101	Mathematics-I	English	4	6	
ME103	Computer Aided Technical Drawing-I	English	3	5	
TAR	Atatürk İlkeleri ve İnkılap Tarihi-I	Turkish	2	2	
2. Semester					
PHYS104	Physics-II	English	4	6	
FİZ156	Fizik Lab.	Turkish	1	2	
MM102	Mühendislikte Programlamaya Giriş	Turkish	3	4	
MM106	Bilgisayar Destekli Teknik Resim-II	Turkish	3	5	
MM108	Makine Mühendisliğine Giriş	Turkish	2	2	
MAT102	Matematik-II	Turkish	4	6	
ENG104	English-II	English	3	3	
TAR	Atatürk İlkeleri ve İnkılap Tarihi-II	Turkish	2	2	
3. Semester					
MM201	Statik	Turkish	4	6	
ME203	Thermodynamics-I	English	3	5	
ME207	Materials Science	English	4	6	
MATH201	Differential Equations	English	3	5	MATH101
EM295	Elektrik ve Elektronik Müh. Prensipleri	Turkish	3	3	
ENG203	Academic English-I	English	3	3	
TD	Türk Dili-I	Turkish	2	2	
4. Semester					
MM202	Dinamik	Turkish	4	5	FIZ103
ME204	Thermodynamics-II	English	3	5	ME203
ME206	Manufacturing Processes	English	4	5	
ME212	Strength of Materials	English	4	5	MM201
ME216	Applied Mathematics for ME	English	3	5	
ENG204	Academic English-II	English	3	3	
TD	Türk Dili-II	Turkish	2	2	
5. Semester					
ME301	Fluid Mechanics-I	English	3	5	
MM303	Makine Elemanları-I	Turkish	3	5	ME212
ME305	Mechanisms	English	3	5	
ME309	Heat Transfer	English	4	5	ME203
ME313	Introduction to Numerical Analysis	English	3	4	MM102
ME315	Engineering Economics	English	3	4	
MM399	Staj-I (ÖD)	Turkish	0	2	
6. Semester					
ME302	Fluid Mechanics-II	English	3	5	MM301
MM304	Makine Elemanları-II	Turkish	3	6	MM303
ME306	Dynamics of Machinery	English	3	6	MM202
ME308	Control Systems	English	3	6	
MM312	Isıl Çevre Mühendisliği	Turkish	3	5	ME203
ADS…	Alan Dışı Seçmeli Ders-I	Turkish	2	2	
7. Semester					
MM419	Ölçme ve Veri Değerlendirme	Turkish	3	5	
MM423	Bitirme Tasarım Projesi-I (ÖD)	Turkish	3	5	
MMTI	Tasarım Seçmeli I	Turkish / English	3	5	
TS	Teknik Seçmeli Ders-II	Turkish / English	3	5	
TS	Teknik Seçmeli Ders-III	Turkish / English	3	5	
MM499	Staj-II (ÖD)	Turkish	0	3	
ISG401	İş Sağlığı ve Güvenliği-I	Turkish	2	2	
8. Semester					
MM422	Makine Mühendisliği Laboratuvarı (ÖD)	Turkish	1	4	
MM424	Bitirme Tasarım Projesi-II (ÖD)	Turkish	4	7	MM423
MMTM	Tasarım Seçmeli II	Turkish / English	3	5	
TS	Teknik Seçmeli Ders-V	Turkish / English	3	5	
TS	Teknik Seçmeli Ders-VI	Turkish /English	3	5	
ADS…	Alan Dışı Seçmeli Ders-II	Turkish	2	2	
ISG402	İş Sağlığı ve Güvenliği-II	Turkish	2	2	
CATEGORY TOTAL IN THE PROGRAM			159	240	

***THIS CURRICULUM IS THE SAME FOR THE 100% ENGLISH PROGRAM, ONLY THE COURSE NAMES ARE IN ENGLISH ("MM…" CODES ARE "ME…".)**

TABLE 2 SPECIAL CONDITIONS DUE TO CURRICULUM CHANGE	
1	- In order to meet the graduation requirement, students must take a total of **240 ECTS**. - Students who have completed the compulsory courses in the new curriculum but do not meet the **240 ECTS** requirement due to the changed ECTS credits will meet this requirement by taking additional technical elective courses.
2	- The ECTS credits of the MM499 Staj II and ME499 Summer Practice II courses have been updated **as 3**, and the ECTS credits of the MM423 Bitirme Tasarım Projesi I and ME423 Graduation Design Project I courses have been updated **as 5**. - As of the fall semester of the 2021/2022 Academic Year, internships can be done during the semesters, provided that it is at least 3 working days a week and does not conflict with your course schedule. For this, internship courses are offered every semester. Students who will do their internships are **required** to register for these courses. - Announcements about internships should be followed at https://w3.gazi.edu.tr/~pirasaci/staj/.
3	- Mechanical Design and Thermal Design criteria courses are grouped separately. The Mechanical Design criteria courses are coded as MMTM, and the Thermal Design criteria courses are coded as MMTI. Courses in both groups will be offered every semester.

TABLE 3

2022 - 2023 FALL SEMESTER COURSES MEETING THE DESIGN CRITERIA

MMTM Courses		T	U	K	PREREQUISITE
MM405	Transport Tekniği	3	0	5	MM303
ME433	Mechanical System Design	3	0	5	MM303/ME303
MM433	Mekanik Sistem Tasarımı	3	0	5	MM303
ME453	Computer Aided Design	3	0	5	
MM470	Pres Kalıpları Tasarımı	3	0	5	

MMTI Courses		T	U	K	PREREQUISITE
ME416	Energy Engineering	3	0	5	ME204
MM497	Elektronik Cihazların Isıl	3	0	5	ME309

TABLE 4

2022 – 2023 ACADEMIC YEAR FALL SEMESTER
OFFERED TECHNICAL ELECTIVES

COURSE CODE AND NAMES		(T+U) ECTS	PREREQUISITE
ME426	SYSTEM DYNAMICS	(3+0) 5	
ME427	AUTOMOTIVE ENGINEERING I	(3+0) 5	
ME451	MECHANICAL VIBRATIONS	(3+0) 5	
MM462	KALİTE KONTROL	(3+0) 5	
ME475	COMPUTATIONAL FLUID DYNAMICS	(3+0) 5	
ME479	PROCESS HEAT TRANSFER	(3+0) 5	ME309
MM478	ENDÜSTRİYEL HİDROLİK	(3+0) 5	
MM489	SOĞUTMA TEKNİĞİ	(3+0) 5	

TABLE 5

2022-2023 FALL SEMESTER					
MM424/ME424 GRADUATION DESIGN PROJECT II ADVISOR LIST					
SECTION	ADVISOR	ÖĞRENCİ			
		%30 English		%100 English	
		Student No.	Name-Surname	Student No.	Name-Surname
1	PROF.DR. NURİ YÜCEL			171152021	Osman KAZI
2	PROF.DR. MEHMET EROĞLU	161150011	Aykut AYHAN		
3	PROF.DR. ŞENOL BAŞKAYA	161150024	Eftal DEMİRTAŞ		
4	PROF.DR. NİZAMİ AKTÜRK				
5	PROF.DR. MEHMET ARİF ADLI				
6	PROF.DR. MUSTAFA YURDAKUL	171150051	Ömer KOÇAK		
7	PROF.DR. İLHAMİ HORUZ			161152003	Muhammed AYGÜN
8	PROF.DR. ATİLLA BIYIKOĞLU	161150031	Oğuz ERBAŞ		
9	PROF.DR. ÖMER KELEŞ				
10	PROF.DR. METİN U.SALAMCI				
11	PROF.DR. RAHMİ ÜNAL			171152029	Muhammed ÖZTÜRK
12	PROF.DR. OĞUZHAN YILMAZ	181150750	Kaan KAMBUR		
13	PROF.DR. ABUZER ÖZSUNAR	171150073	Mehmet SERT		
14	PROF.DR. HÜSEYİN TOPAL			171152002	Cabbar ARSLAN
				161152014	Ahmet Can KABAK
15	PROF.DR. YUSUF USTA				
16	PROF.DR. OLCAY ERSEL CANYURT			151152012	Enes GÜLBEYAZ
				171152501	Cemal KORKMAZ
17	PROF.DR. OĞUZ TURGUT	171150501	Seyithan HEREK		
18	DOÇ.DR. SİNAN KILIÇASLAN				
19	DOÇ.DR. TUNCAY KARAÇAY			171152035	Gökhan YAVUZ
20	DOÇ.DR. GÖKHAN KÜÇÜKTÜRK	181150013	Tuğrul ÇEBİŞLİ		
21	DOÇ.DR. M.ZEKİ YILMAZOĞLU	161150087	Yakup Batuhan YENER	171152005	Ahmet İlke BAKIRTAŞ
22	DOÇ.DR. ELMAS SALAMCI	161150504	Alperen USUFLU		
23	DOÇ.DR. TUNÇ APATAY	161150018	Mustafa Furkan BULUT		
24	DOÇ.DR. NİMETİ DÖNER				
25	DOÇ.DR. BÜLENT ÖZKAN	171150067	Burhanettin PARLAK		
26	DOÇ. DR. HACI BEKİR ÖZERKAN	171150081	Lokman UÇAK		
27	DOÇ.DR. NUREDDİN DİNLER	171150045	Metin KARACÜR		
28	DR.ÖĞR.ÜYESİ MUHİTTİN BİLGİLİ	161150001	Anıl ALMAZ		
29	DR.ÖĞR.ÜYESİ TAMER ÇALIŞIR			171152400	Ayoub CHIKH
30	ÖĞR.GÖR.DR YAVUZ ZÜMRÜT	161150008	Tamer AVAN		
31	ARŞ.GÖR.DR. SALİH KARAASLAN				
32	ARŞ.GÖR.DR. MEHMET AKİF AKDOĞAN			171152030	Bilal PEKDEMİR

TABLE 6

COURSES, SUBJECTS AND NUMBER QUESTIONS TO BE ASKED IN THE FUNDAMENTAL ENGINEERING EXAM

COURSES AND SUBJECTS	# OF QUEST.	COURSES AND SUBJECTS	# OF QUEST.
Mathematics A. Analytic geometry B. Linear algebra C. Vector analysis D. Differential equations E. Numerical methods F. Analytical methods	6	**Introduction to Mechanical Engineering** A. Ethics	2
Principles of Electrics and Electronics Engineering and Magnetism A. Load, current, voltage, power and energy B. Current and voltage las (Kirchhoff, Ohm) C. Series and parallel circuits D. AC circuits E. Motors and generators	4	**Statics** A. Force analysis B. Equivalent force systems C. Rigid body equilibrium D. Trusses E. Moment of inertia F. Static friction	10
Dynamics A. Particle and rigid body kinematics B. Dynamic friction C. Newton's second law of motion D. Work-energy principles for particles and rigid bodies E. Equation of motion F. Impulse-momentum principles	10	**Strength of Materials** A. Force and moment diagrams B. Stress (normal, shear, torsion, bending) C. Mohr circle D. Stress and deflection (normal, shear, torsion, bending) E. Combined loading	10
Material Science and Manufacturing Processes A. Fundamental material properties B. Stress-strain diagrams C. Ferrous alloys D. Non-ferrous alloys E. Manufacturing processes F. Phase diagrams G. Heat treatment H. Ductile and brittle behaviors I. Fatigue	10	**Thermodynamics** A. İdeal gas and pure substances B. Laws of thermodynamics C. Energy transfer via heat, work and mass D. Entropy E. Thermal efficiency F. Combustion and combustion products	10
Fluid Mechanics A. Properties of fluids B. Fluid statics C. Energy and momentum D. Internal flow E. External flow F. Incompressible fluids G. Power and efficiency	10	**Heat Transfer** A. Conduction B. Convection C. Radiation D. Thermal resistance E. Heat exchangers F. Boiling and condensation	10
Measurement and Data Analysis A. Analysis of experimental data B. Uncertainty of measurements **Statistics** A. Probability distribution B. Regression and line fitting	5	**Machine Elements** A. Stress analysis in machine elements B. Failure criteria C. Deformation and rigidity D. Springs, tubes E. Pressure vessels F. Shafts G. Bearings H. Power transmission systems I. Couplings J. Gears	8
System Dynamics and Control A. Block diagrams B. System response C. Sensors	5		