

**GAZİ UNIVERSITY ENGINEERING FACULTY  
MECHANICAL ENGINEERING DEPARTMENT  
2023-2024 ACADEMIC YEAR SPRING 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 2023-2024 Spring Semester Course Registration Procedures on the university website [http://gazi.edu.tr/](http://gazi.edu.tr) and <http://ogris.gazi.edu.tr>.
3. Course registrations will be held between **21-26 February 2024**. 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/](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.
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 **27-28 February 2024**. **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 **14-15 March 2024**, excused registrations will be made for **students whose excuses are accepted by the relevant committees**. On **19-20 March 2024**, 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/](http://mf-mm.gazi.edu.tr) under announcements section.
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 **10 May 2024** 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 Group 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 take only one course **from each Design Group** throughout the undergraduate study. Technical Elective courses will be chosen from Technical Elective courses other than Design Group courses (students who choose more than one Thermal and Mechanical Design Group course will have their **extra** Design Group courses 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. 2023-2024 Spring Term "MM423 Bitirme Tasarım Projesi I / ME423-Graduation Design Project I" Course Advisor Preference Forms should be filed through <https://forms.gle/KSGhC51NDFgg6fC29> until the end of **3 March 2024**.
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.**
27. Students who will take MM423 / ME423 Graduation Design Project I courses **for the first time** must enroll to the **37th 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.
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 5](#).
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.**

**Assoc. Prof. Dr. Hacı Bekir ÖZERKAN**  
**Assistant Department Head**  
**20.02.2024**

**TABLE 1**  
**UNDERGRADUATE CURRICULUM AND PREREQUISITES\***

<b>%30 ENGLISH PROGRAM</b>					
<b>Course Code</b>	<b>Course Name</b>	<b>Language of Instruction</b>	<b>Local Credit</b>	<b>ECTS</b>	<b>PREREQUISITE</b>
<b>1. Semester</b>					
FİZ103	Fizik I	Turkish	4	6	
ENG103	English-I	English	3	3	
KİM103	Kimya	Turkish	4	6	
KİM151	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	
<b>2. Semester</b>					
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	
<b>3. Semester</b>					
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	
<b>4. Semester</b>					
MM202	Dinamik	Turkish	4	5	FİZ103
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	
<b>5. Semester</b>					
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	
<b>6. Semester</b>					
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	İstıl Çevre Mühendisliği	Turkish	3	5	ME203
ADS...	Alan Dışı Seçmeli Ders-I	Turkish	2	2	
<b>7. Semester</b>					
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	
<b>8. Semester</b>					
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	
<b>CATEGORY TOTAL IN THE PROGRAM</b>			<b>159</b>	<b>240</b>	

\*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**

<b>1</b>	<ul style="list-style-type: none"><li>- In order to meet the graduation requirement, students must take a total of <b>240 ECTS</b>.</li><li>- Students who have completed the compulsory courses in the new curriculum but do not meet the <b>240 ECTS</b> requirement due to the changed ECTS credits will meet this requirement by taking additional technical elective courses.</li></ul>
<b>2</b>	<ul style="list-style-type: none"><li>- The ECTS credits of the MM499 Staj II and ME499 Summer Practice II courses have been updated <b>as 3</b>, and the ECTS credits of the MM423 Bitirme Tasarım Projesi I and ME423 Graduation Design Project I courses have been updated <b>as 5</b>.</li><li>- 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 <b>required</b> to register for these courses.</li><li>- Announcements about internships should be followed through our departments website.</li></ul>
<b>3</b>	<ul style="list-style-type: none"><li>- 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.</li></ul>

**TABLE 3****2023 - 2024 SPRING SEMESTER COURSES MEETING THE DESIGN CRITERIA**

MMTM Courses		T	U	K	PREREQUISITE	MMTI Courses		T	U	K	PREREQUISITE
MM405	Transport Tekniđi	3	0	5	MM303	MM406	Hidrolik Makinalar	3	0	5	
ME412	Plant Layout	3	0	5		ME416	Energy Engineering	3	0	5	ME204
ME470	Die Design	3	0	5		MM491	Buhar Kazanları	3	0	5	
						ME498	Design of Thermal Systems	3	0	5	

**TABLE 4****2023 – 2024 ACADEMIC YEAR FALL SEMESTER OFFERED TECHNICAL ELECTIVES**

COURSE CODE AND NAMES		(T+U) ECTS	PREREQUISITE	GROUP
MM427	OTOMOTİV MÜHENDİSLİĐİ-1	(3+0) 5		MECHANICAL
ME426	SYSTEM DYNAMICS (100% ING)	(3+0) 5		MECHANICAL
ME456	ACOUSTICS AND NOISE CONTROL (100% ING)	(3+0) 5		MECHANICAL
MM464	KAYNAK YÖNTEMLERİ	(3+0) 5		MECHANICAL
ME466	NUMERICALLY CONTROLLED MACHINE TOOLS (100% ING)	(3+0) 5		MECHANICAL
MM477	DENEYSSEL GERİLME ANALİZİ	(3+0) 5		MECHANICAL
ME430	INTERNAL COMBUSTION ENGINES	(3+0) 5		THERMAL
ME430	INTERNAL COMBUSTION ENGINES (100% ING)	(3+0) 5		THERMAL
MM476	İKLİMLENDİRME ESASLARI	(3+0) 5		THERMAL
MM484	GÜNEŞ ENERJİSİ UYGULAMALARI	(3+0) 5		THERMAL
ME494	GAS TURBINES (100% ING)	(3+0) 5		THERMAL

**TABLE 5****COURSES, SUBJECTS AND NUMBER QUESTIONS TO BE ASKED IN THE FUNDAMENTAL ENGINEERING EXAM**

<b>COURSES AND SUBJECTS</b>	<b># OF QUEST.</b>	<b>COURSES AND SUBJECTS</b>	<b># OF QUEST.</b>
<b>Mathematics</b> A. Analytic geometry B. Linear algebra C. Vector analysis D. Differential equations E. Numerical methods F. Analytical methods	6	<b>Introduction to Mechanical Engineering</b> A. Ethics	2
<b>Principles of Electrics and Electronics Engineering and Magnetism</b> 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	<b>Statics</b> A. Force analysis B. Equivalent force systems C. Rigid body equilibrium D. Trusses E. Moment of inertia F. Static friction	10
<b>Dynamics</b> 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	<b>Strength of Materials</b> 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
<b>Material Science and Manufacturing Processes</b> 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	<b>Thermodynamics</b> A. Ideal 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
<b>Fluid Mechanics</b> 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	<b>Heat Transfer</b> A. Conduction B. Convection C. Radiation D. Thermal resistance E. Heat exchangers F. Boiling and condensation	10
<b>Measurement and Data Analysis</b> A. Analysis of experimental data B. Uncertainty of measurements  <b>Statistics</b> A. Probability distribution B. Regression and line fitting	5	<b>Machine Elements</b> 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
<b>System Dynamics and Control</b> A. Block diagrams B. System response C. Sensors	5		