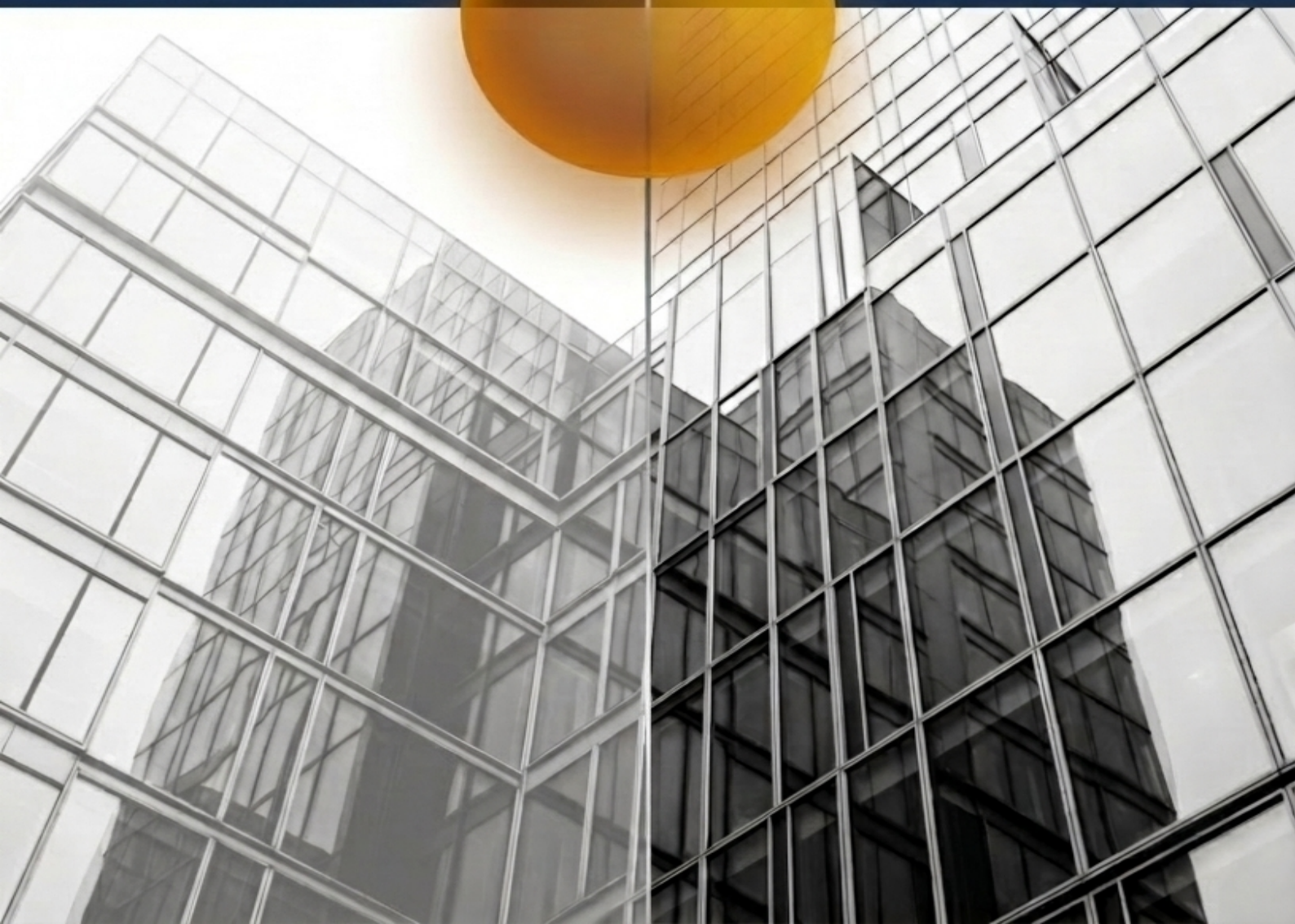


MARMARA UNIVERSITY - Faculty of Business Administration

Student Guide for the English-taught Undergraduate Program in Management Information Systems

2026-2027



Publisher

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Marmara University

Faculty of Business Administration

Department of Management Information Systems

Management Information Systems (English) Undergraduate Program

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**Module Handbook
with Integrated Student Guide
for the Undergraduate Program in
Management Information Systems (English)**



**MARMARA
UNIVERSITY**

MARMARA UNIVERSITY

Faculty of Business Administration

Department of Management Information Systems

Management Information Systems (English) Undergraduate Program

2026–2027

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(English)

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1 General Information About the Department

1.1 Establishment, Mission and Location

The Management Information Systems (English) Undergraduate Program is offered within the Faculty of Business Administration at Marmara University. The program is based on the official curricular framework of *Yönetim Bilişim Sistemleri* and is positioned as an interdisciplinary field corresponding to Management Information Systems in the international higher education context.

The program combines core business administration with modern information systems, software development, data analytics and digital technologies. Its main mission is to educate qualified graduates who can understand complex technological infrastructures and connect them with the strategic objectives of organizations.

Through an interdisciplinary learning environment, students acquire both managerial and technical competencies. The curriculum prepares them for professional roles at the intersection of business and information technology by combining theoretical courses with applied learning, compulsory internships and a practice-oriented graduation project. In this way, students gain experience in real business and technology environments and develop a strong understanding of the requirements of the digital economy.

1.2 Objectives and Scope of the Program

The Management Information Systems (English) Undergraduate Program aims to provide a comprehensive and interdisciplinary education. Students are trained to analyze organizational requirements, design appropriate information systems and develop IT-supported solutions for business decision-making processes.

In the contemporary digital economy, organizations use data, software, digital platforms and integrated information systems to improve business processes and support strategic decisions. Therefore, the curriculum develops competencies in key areas such as programming, database management, systems and data analysis, IT project management, enterprise information systems (ERP/CRM) and digital transformation.

A central objective of the department is to educate graduates who can act as competent bridges and communicators between technical development teams and managerial units. Through English-medium education, an interdisciplinary curriculum, compulsory internship experience and the graduation project, students are prepared for national and international career opportunities in the field of Management Information Systems.

1.3 Academic and Professional Relevance of the Program

The Management Information Systems (English) Undergraduate Program at Marmara University is structured to respond to the growing need for professionals who can integrate business knowledge with information technologies, data analytics and digital transformation processes. In this respect, the program provides an interdisciplinary academic framework that combines theoretical foundations with applied learning opportunities.

The curriculum supports the development of both managerial and technical competencies. Through courses in business administration, information systems, software development, databases, data analytics, project management and enterprise systems, students gain the ability to analyze organizational needs and contribute to technology-based solutions.

The compulsory internship, graduation project, applied courses, sectoral seminars and international mobility opportunities further strengthen the connection between academic education and professional practice. These components help students develop practical experience, professional awareness and the ability to work effectively in different organizational contexts.

Located in Istanbul, one of Türkiye's major centers of business, finance and technology, the program also offers students an environment in which they can follow current developments in the digital economy and the business world. Graduates of the program are expected to take active roles in areas such as business analysis, data analytics, software and application development, enterprise information systems, IT project management, digital transformation and technology consulting.

1.4 Program and Student Profile

The Management Information Systems (English) Undergraduate Program is designed as a four-year bachelor's degree program. It is intended for students who are interested in information technologies, agile business processes, big data, software engineering and innovative digital business models.

The competency profile of students is built on two main pillars:

- **Business administration pillar:** Fundamental knowledge in management, finance, marketing, accounting, human resources, microeconomics, macroeconomics and strategic management.
- **Technical pillar:** Core competencies in programming, algorithms and data structures, database systems, data security, systems analysis and decision support systems, including Business Intelligence.

Since the medium of instruction is English, students gain the ability to follow international academic and professional developments in Management Information Systems. Graduates are expected to work in areas such as business analysis, IT consulting, IT project management, data analytics, software development, enterprise systems consulting, digital transformation and IT governance.

1.5 Academic Calendar

The academic calendar of Marmara University defines the official schedule of the academic year, which consists of the fall semester and the spring semester. It includes course registration periods, add-drop periods, lecture weeks, public and university holidays, midterm examinations, final examinations and make-up examinations.

Students are required to follow these dates carefully. Missing registration periods or examination deadlines may lead to academic and administrative disadvantages. The current academic calendar is approved and announced by the university before the beginning of each academic year through official university and departmental channels.

Academic Calendar for the 2026–2027 Academic Year

Academic Activity	Start Date	End Date
Fall Semester Tuition Fee Payment Period	14.09.2026	27.09.2026
Fall Semester Course Registration	21.09.2026	27.09.2026
Fall Semester Courses	28.09.2026	10.01.2027
Fall Semester Add-Drop Period	12.10.2026	16.10.2026
Fall Semester Midterm Examinations	16.11.2026	22.11.2026
Fall Semester Final Examinations	11.01.2027	24.01.2027
Fall Semester Make-up Examinations	25.01.2027	07.02.2027
Spring Semester Tuition Fee Payment Period	01.02.2027	14.02.2027
Spring Semester Course Registration	08.02.2027	14.02.2027
Spring Semester Courses	15.02.2027	06.06.2027
Spring Semester Add-Drop Period	01.03.2027	05.03.2027
Spring Semester Midterm Examinations	05.04.2027	11.04.2027
Spring Semester Final Examinations	07.06.2027	20.06.2027
Spring Semester Make-up Examinations	21.06.2027	04.07.2027

The dates above are based on the official academic calendar of Marmara University for the 2026–2027 academic year. Since dates may be updated by the university, students should regularly check the official calendar and departmental announcements.

1.6 Facilities

The Department of Management Information Systems benefits from the academic, technological and social facilities of Marmara University and the Faculty of Business Administration. These facilities support students in lectures, laboratory sessions, research activities, project-based learning and individual study processes.

Students have access to university resources such as libraries, digital databases, study areas, computer laboratories and online learning platforms. These opportunities help them improve their academic research skills, technical competencies and professional preparation throughout their undergraduate education.

The Faculty of Business Administration provides a modern campus environment that supports both theoretical learning and practical experience. In addition to classrooms and study spaces, students benefit from international mobility opportunities, industry collaborations and applied learning activities.



Figure 1: Faculty of Business Administration and Management Information Systems (English) Promotional Brochure

1.6.1 Library

Marmara University Library provides students with a strong academic infrastructure for literature review, research and scientific writing. In addition to printed books, textbooks and academic publications in business administration, economics, information systems and technology-related fields, students can access a broad range of digital resources.

On campus and through remote access services, students may use international databases, e-books and academic journals relevant to their courses, projects and graduation studies. Individual study areas and group work spaces also support independent learning and collaborative project work.

1.6.2 Computer Laboratories

Computer laboratories provide students with practical learning environments for applied and laboratory-based courses. The laboratories support coursework in programming,

algorithms, database systems, data analytics, business intelligence, systems analysis and software development.

These facilities also support simulations of integrated business processes through enterprise information systems such as ERP and CRM applications. Students use laboratory environments to apply theoretical knowledge, complete assignments, develop projects and prepare for professional technology-oriented roles.

1.7 Industry Collaborations

The Department of Management Information Systems aims to maintain a broad and strategically oriented network of collaborations with national and international organizations, technology companies, consulting firms and actors in the digital economy.

These collaborations enable invited talks by professionals, workshops, case studies and applied learning activities to be integrated into the educational environment. They also support students in finding suitable internship placements and in developing graduation projects that address real problems related to digital transformation, information systems and business processes.

1.8 Graduates and Career Opportunities

Graduates of the Management Information Systems (English) Undergraduate Program have strong career opportunities in national and international companies, public institutions and technology-oriented start-ups thanks to their interdisciplinary education.

The balanced structure of the curriculum enables graduates to take on professional and managerial responsibilities that require both technical knowledge and business understanding. They are prepared to contribute to digital transformation processes, improve business processes, establish data-driven decision support mechanisms and act as a bridge between technical teams and management.

Main career areas include:

- **Business Analyst / System Analyst**
- **IT Project Manager**
- **Data Analyst / Data Scientist**
- **Software and Application Development Specialist**
- **Enterprise Information Systems Consultant** for ERP and CRM systems such as SAP and Salesforce

- **Digital Transformation Specialist**
- **IT Consultant**
- **Cybersecurity Analyst**
- **Database Administrator**

In addition to direct professional employment, graduates may continue their academic development in graduate programs related to Management Information Systems, Information Systems, Data Science, Information Management and Business Administration.

1.9 Contact

The Department of Management Information Systems is located within the Faculty of Business Administration at Marmara University. Students can contact the department for academic advising, administrative issues, internship procedures, Erasmus-related questions and general information about the program.

Institution	Marmara University
Faculty	Faculty of Business Administration
Department	Department of Management Information Systems
Program	Management Information Systems (English) Undergraduate Program
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Students are advised to follow the official website of the department and the announcements of the Faculty of Business Administration regularly. Updates regarding courses, academic calendar, internship procedures, Erasmus applications and other academic matters are announced through official university channels.

Transportation

The campus can be reached by public transportation and private vehicles. Students coming by metro may use the M4 Kadıköy–Sabiha Gökçen Airport Metro Line and get off at Küçükyalı Station. After leaving the station from the Aydınevler side, students can take

the buses serving the Marmara University campus route. The main bus lines connecting Küçükyalı Metro Station with Marmara University are KM41 and KM45. Students should get off at the Marmara University / Control Gate stop and follow the campus directions from there. Students are advised to check the current routes and timetables through the official IETT and Marmara University transportation pages before travelling, as routes and departure times may change.

2 Academic Staff

The teaching, research and academic advising staff of the Department of Management Information Systems consists of qualified faculty members and research assistants. Together, they contribute to high-quality education, research-oriented training, academic advising and innovative project-based learning activities.

The academic competencies and research interests of the department reflect the interdisciplinary nature of Management Information Systems. The staff members work in a broad range of areas including:

- Management Information Systems, IT infrastructures and IT governance
- Data analytics, Big Data, Data Science and Business Intelligence
- Artificial Intelligence, Machine Learning and Deep Learning
- Software engineering, application development and system architecture
- Quantitative methods, econometrics and business mathematics
- Business administration, finance, marketing and strategic management
- Digital transformation and enterprise information systems such as ERP and CRM

This academic diversity ensures a strong educational environment at the intersection of business administration, information technologies and data science. Beyond regular courses, the academic staff supports students in internships, graduation projects, international mobility opportunities and applied collaborations with the business world.

2.1 Academic Staff of the Program



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Photo

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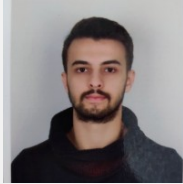


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- Mathematical Logic
- Management Information Systems

2.2 Academic Advising and Study-Related Responsibilities

In addition to teaching and research activities, the academic staff of the Department of Management Information Systems also contributes to academic advising and student support. These responsibilities include guidance on course selection, study planning, internship procedures, graduation projects, research-oriented studies and international mobility opportunities such as Erasmus+.

Students are encouraged to contact the relevant faculty members and research assistants when they need support regarding their academic progress, elective course choices, internship areas, project topics or participation in academic and international programs. Early and continuous communication with academic staff helps students plan their studies more effectively and make informed decisions throughout their undergraduate education.

The diverse academic expertise of the department supports both the scientific and practical development of students. Through academic advising, project supervision, internship guidance and research-related support, the department aims to provide a learning environment that prepares students for professional and academic opportunities in national and international contexts.

3 Department of Management Information Systems

The Department of Management Information Systems is located within the Faculty of Business Administration at Marmara University. The English undergraduate program combines business administration with information technologies, integrated information systems, data-driven analytical methods and the strategic challenges of digital transformation.

In order to reflect the interdisciplinary nature of Management Information Systems in teaching and research, the department is academically organized under three specialized divisions:

- **Information Management** with a focus on IT strategy, IT governance, business process management and digital business models.
- **Software Systems Development** with a focus on software engineering, application development, databases, algorithms and intelligent systems.
- **Data Communication and Computer Networks** with a focus on communication technologies, network structures, information security and digital infrastructures.

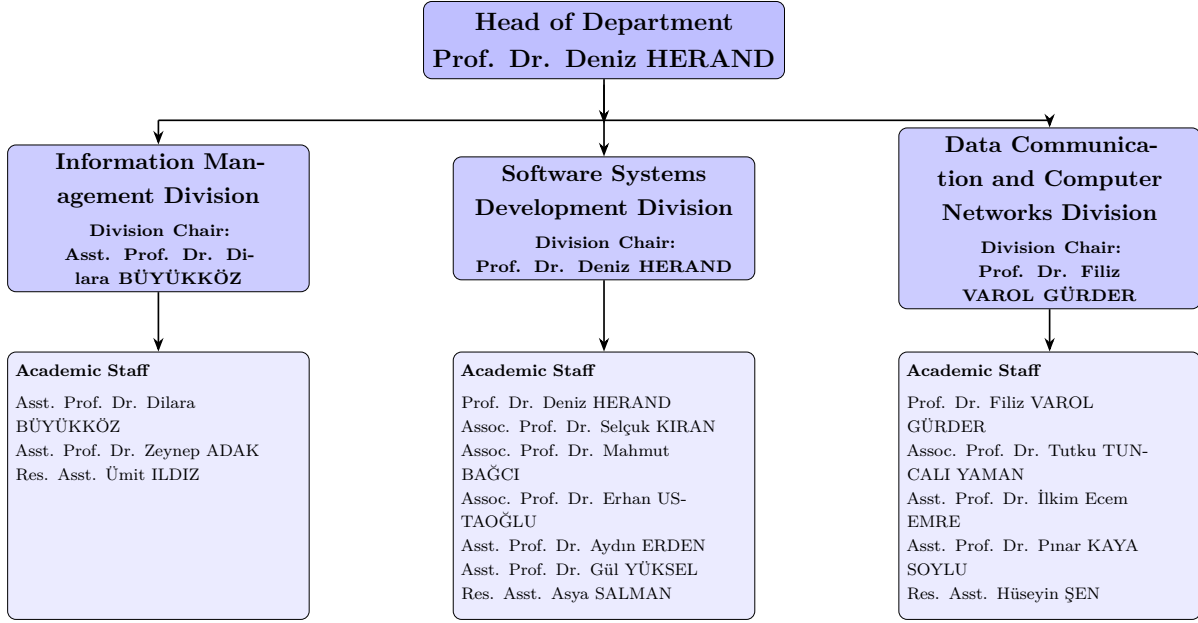


Figure 2: Organizational Structure of the Department of Management Information Systems

3.1 Position of the Program in the Field of Management Information Systems

Management Information Systems is a competitive interdisciplinary field that brings together information technologies and business administration. English-medium MIS programs in Türkiye are preferred by students who aim to develop both technical and managerial competencies and who seek career opportunities in national and international organizations.

The Management Information Systems (English) Undergraduate Program at Marmara University has a strong position among English-medium MIS programs. Placement data indicate that the program is among the highly preferred public university programs in this field.

Selected English-Medium Management Information Systems Programs According to 2025 Placement Data				
No.	University	Program	Quota	Base Score
1	Boğaziçi University	Management Information Systems (English)	52	488.77394
2	Özyeğin University	Management Information Systems (English)	9	485.71623
3	Yeditepe University	Management Information Systems (English)	16	461.93718
4	Marmara University	Management Information Systems (English)	52	445.99251
5	Istanbul University	Management Information Systems (English)	41	436.00652
6	Kadir Has University	Management Information Systems (English)	12	429.82067
7	Istanbul Bilgi University	Management Information Systems (English)	15	427.56075
8	MEF University	Management Information Systems (English)	6	423.16566

As shown in the table, Marmara University Management Information Systems (English) Undergraduate Program is positioned among the leading English-medium programs in Türkiye. The program's interdisciplinary curriculum, English-medium education, compulsory internship and graduation project support students in preparing for careers in business analysis, data analytics, software development, enterprise information systems and digital transformation.

Recent Placement Ranking Trend of the Management Information Systems (English) Program

Year	Last Admitted Student Ranking	Top Admitted Student Ranking
2025	3946	1308
2024	3942	1450
2023	3470	1353
2022	14799	1420
2021	15943	3279
2020	36779	2824

The recent placement data show that the Management Information Systems (English) Undergraduate Program has strengthened its position in recent years. The last admitted student ranking improved significantly after 2022 and remained around the top 4,000 in 2023, 2024 and 2025.

3.2 Research Activities in the Department

Research activities in the Department of Management Information Systems are carried out in a dynamic and interdisciplinary manner. The department brings together academic

expertise from information technologies, management, data analytics, quantitative methods and digital transformation. This interdisciplinary structure allows research activities to address both technological developments and managerial needs. The research profile of the department covers both theoretical and applied studies. Faculty members conduct research on topics such as software development, artificial intelligence, machine learning, data analytics, business intelligence, quantitative methods, financial economics, information systems, digital transformation and decision-making processes. In addition to individual academic studies, the department encourages application-oriented research, student projects and graduation projects that focus on real organizational and technological problems. These studies support the connection between theory and practice and help students understand how information systems can be used effectively in business environments. The research activities of the department also contribute to the educational structure of the Management Information Systems (English) Undergraduate Program. Students are encouraged to follow current developments in the field and to develop analytical thinking, problem-solving and project-based working skills throughout their education.

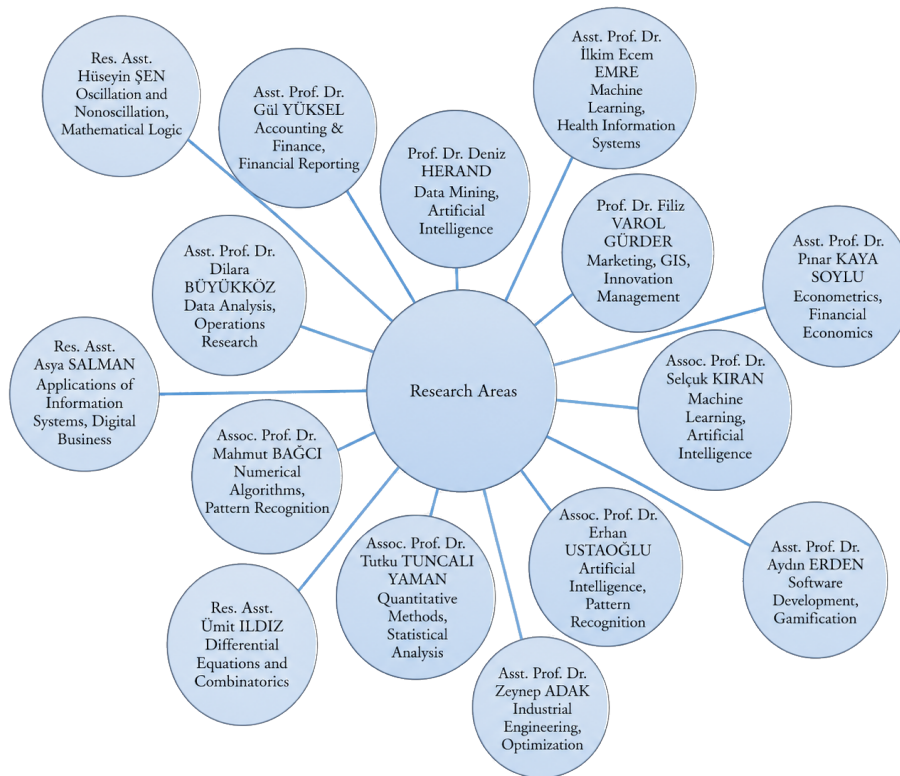


Figure 3: Main Research Areas in the Department of Management Information Systems

These research areas provide a framework for academic studies, applied projects and graduation projects carried out within the department. They also reflect the interdisciplinary nature of Management Information Systems by combining technological expertise with business-oriented analysis and decision-making.

3.3 Academic and International Collaborations

The Department of Management Information Systems attaches importance to academic and international collaborations that support students' educational, professional and intercultural development. International cooperation allows students to experience different academic environments, improve their foreign language skills and gain a broader perspective on business and technology. Students of the Management Information Systems (English) Undergraduate Program may benefit from Erasmus+ mobility opportunities, provided that they meet the relevant academic and administrative requirements. Erasmus+ mobility mainly includes study mobility and traineeship mobility.

- **Erasmus+ Student Mobility for Studies:** Students may study at a partner university abroad for a certain period and take courses related to their field of study.
- **Erasmus+ Student Mobility for Traineeships:** Students may complete an internship abroad in an institution, company or organization related to their academic and professional interests.

Through study mobility, students become familiar with different higher education systems and academic approaches. Through traineeship mobility, students gain practical experience in international working environments and strengthen their career readiness. In addition to Erasmus+ mobility opportunities, the program benefits from academic and professional collaborations in the field of enterprise information systems. Within the framework of SAP University Alliances, students may gain practical knowledge of enterprise resource planning and related business processes. The department is also a member of Oracle Academy, which supports students in developing skills related to database technologies, programming and enterprise information systems. These collaborations strengthen the connection between academic education and professional practice.

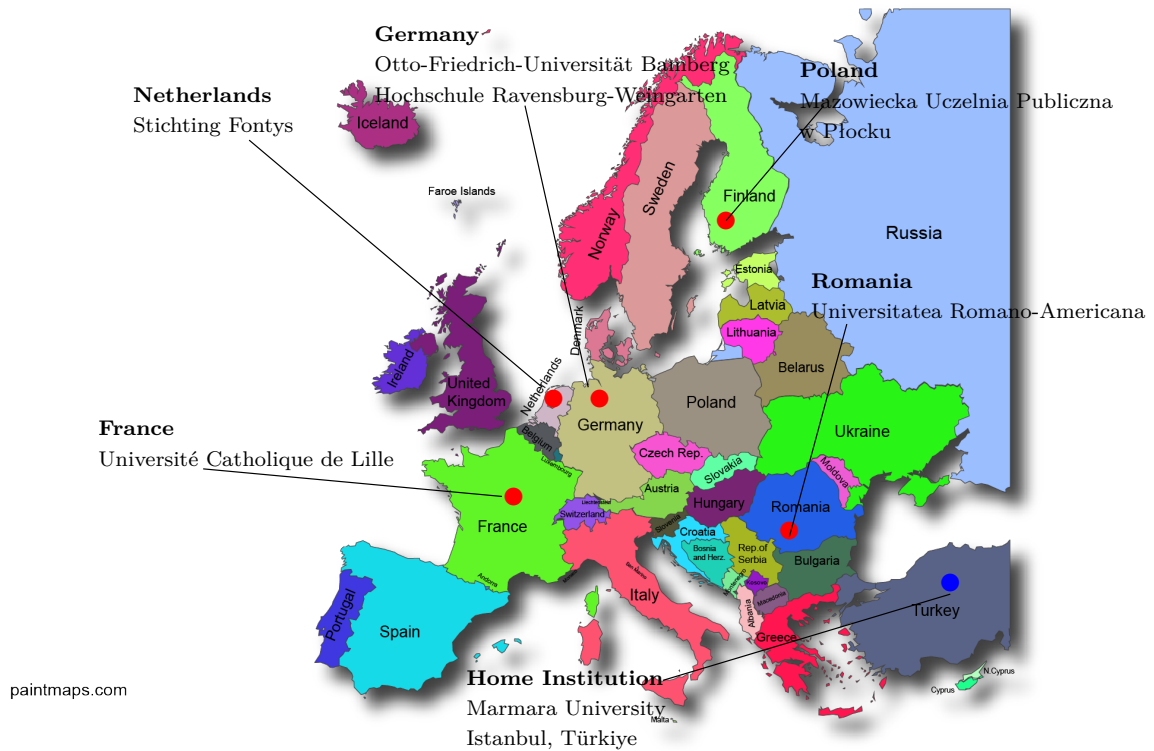
Selected Erasmus+ Partner Institutions / Mobility Destinations

Erasmus Code	Institution	Country
D BAMBERG01	Otto-Friedrich-Universität Bamberg	Germany
D RAVENSB01	Hochschule Ravensburg-Weingarten	Germany
F LILLE11	Université Catholique de Lille	France
NL EINDHOV03	Stichting Fontys	Netherlands
PL PLOCK02	Mazowiecka Uczelnia Publiczna w Plocku	Poland
RO BUCURES18	Universitatea Romano-Americana Asociatie	Romania

The current list of Erasmus+ agreements, partner institutions, application dates, quotas and eligibility conditions may change from year to year. Therefore, students are advised

to follow the official announcements of Marmara University, the Faculty of Business Administration, the Department of Management Information Systems and the Office for International Relations and Academic Cooperation.

Selected Erasmus+ Partner Institutions and Mobility Destinations



4 Seminars, Events and Sectoral Collaborations

Seminars, academic events and collaborations with the professional world are an important part of the learning environment of the Management Information Systems (English) Undergraduate Program. These activities bring together students, academic staff, invited speakers and sector representatives around current topics such as information systems, business intelligence, data analytics, artificial intelligence, cybersecurity, enterprise systems and digital transformation.

The department and the Faculty of Business Administration support activities that strengthen the connection between academic education and professional practice. Through seminars, invited talks, sector-oriented courses and external events, students follow current developments in both academic research and the business world.

Examples include seminars on data science, business intelligence and SAP project management, as well as events related to artificial intelligence and cybersecurity. Such activities

contribute to students' professional development, academic curiosity, career awareness and networking opportunities in the field of Management Information Systems.

4.1 Academic Seminars and Invited Talks

Academic seminars and invited talks are organized to support students' academic development and to introduce them to current topics in the field of Management Information Systems. These activities provide students with opportunities to learn from academic staff, invited speakers and professionals who work on contemporary issues related to information technologies, data analytics, artificial intelligence and digital transformation.

The department encourages seminars that connect theoretical knowledge with practical applications. Topics such as data science, data analysis, machine learning, artificial intelligence, cybersecurity, business intelligence and digital platforms are especially important for students of Management Information Systems.

One example of such activities is the "Introduction to Data Science Seminar", which brought together students interested in data science and introduced them to the foundations and applications of the field. The seminar aimed to create awareness about data analysis, data processing, innovative approaches and career opportunities in data-related fields.

Academic staff members also contribute to external seminars, conferences and professional meetings. Participation in events such as public informatics summits and artificial intelligence sessions enables the department to follow current academic and sectoral discussions and to share this knowledge with students.

Through these seminars and invited talks, students develop academic curiosity, professional awareness and a better understanding of how Management Information Systems is applied in real-world contexts.

4.2 Sectoral Collaborations and Applied Courses

Sectoral collaborations and applied courses are important components of the Management Information Systems (English) Undergraduate Program. These collaborations allow students to see how theoretical knowledge is used in real business environments and help them understand the practical dimensions of enterprise information systems, business intelligence and digital transformation.

The department benefits from cooperation with companies and sector professionals in courses and academic activities related to information systems and business technologies. Through these collaborations, students are introduced to current business practices, enterprise software solutions, project management approaches and professional expectations

in the field of Management Information Systems.

One example of such cooperation is the involvement of sector representatives in SAP-related courses and seminars. The department has organized activities with companies such as Mercedes-Benz Türk and NTT DATA Business Solutions, where students were introduced to topics including SAP project management, enterprise systems and sectoral applications. These activities support students in understanding how information systems are implemented and managed in professional settings.

Applied courses and sector-oriented seminars also help students develop career awareness. By interacting with professionals from the business and technology sectors, students gain insight into consultancy, enterprise resource planning, data-driven decision-making, business intelligence and digital transformation projects.

In this respect, sectoral collaborations strengthen the connection between academic education and professional practice. They contribute to the program’s aim of educating graduates who can combine technical knowledge with managerial understanding and respond to the needs of contemporary organizations. As a recent example of sectoral interaction, Borsa İstanbul Deputy General Manager Erdinç Tutam was hosted by the Department of Management Information Systems within the scope of the “Special Topics in MIS” course. During the event, students discussed the integration of artificial intelligence into stock exchange systems, current applications in the finance sector and emerging career opportunities.

This event illustrates the department’s effort to connect course content with real sectoral practices in finance, artificial intelligence and digital transformation.



Borsa İstanbul Guest Speaker Event within the Special Topics in MIS Course

4.3 Participation in External Events

Participation in external academic and professional events is encouraged as part of the Management Information Systems (English) Undergraduate Program. Such events help students and academic staff follow current developments in information technologies, artificial intelligence, cybersecurity, digital transformation and business applications.

Academic staff members contribute to conferences, summits and professional meetings by presenting their research, sharing their expertise and participating in discussions related to current technological and managerial issues. These activities strengthen the visibility of the department and support the exchange of knowledge between academia, public institutions and the private sector.

One example of this participation is the department's involvement in public informatics and artificial intelligence-related events. Topics such as generative artificial intelligence, cybersecurity and the future of digital technologies are closely related to the interdisciplinary nature of Management Information Systems.

Students are also encouraged to participate in academic meetings, career days, congresses, workshops and technology-oriented events. These activities provide opportunities for students to meet professionals, observe current sectoral trends and improve their career awareness.

Through external events, the department aims to support a learning environment that goes beyond classroom education. Participation in such activities contributes to students' academic curiosity, professional development and understanding of real-world applications in the field of Management Information Systems.

5 Internship

Internship is a compulsory curricular component of the Management Information Systems (English) Undergraduate Program. It enables students to apply the theoretical and practical knowledge gained during their education in real business environments and to develop professional experience before graduation.

The internship process is carried out through the online BYS system. Students enter their student, workplace, internship, contract and health insurance information into the system and follow the application and approval status through the relevant BYS information screens.

At the departmental level, the internship process is coordinated by the Internship Coordinator, Assoc. Prof. Dr. Tutku TUNCALI YAMAN. Student questions, application procedures, report processes and compliance with internship guidelines are primarily followed by the Internship Responsible, Res. Asst. Ümit ILDIZ.

5.1 Internship Duration and Academic Requirements

The internship requirement consists of a total of 60 working days, completed in two separate periods. Students complete 30 working days after the second year and another 30 working days after the third year. Each 30-day internship must be completed as a whole and cannot be divided between different workplaces or separate periods.

Sundays and official holidays are not counted as internship days. Internship days that overlap with summer school course days are also not counted. Students are expected to follow the application dates announced on the department web page.

Students must meet the relevant ECTS requirements at the beginning of the internship. For the first internship, students must have completed 90 ECTS credits by the internship start date. For the second internship, students must have completed 150 ECTS credits by the internship start date.

5.2 Internship Areas

Students may complete internships in different areas related to Management Information Systems. The main internship areas are:

- **Software / Hardware:** software development, hardware, operating systems, system installation, network setup and maintenance.
- **Business:** business administration, marketing, finance and related business processes.
- **Information Systems:** systems analysis and design, ERP, software systems and enterprise information systems.

The two internships must be completed in different areas. Students may complete both internships in the same company; however, the internship areas must be different. The selected workplace must be meaningfully related to the chosen internship area.

5.3 Internship Application and Approval Process

Before starting the internship, students are responsible for determining the workplace, completing the required documents and submitting the application through BYS. If the institution requests an internship obligation letter, students may use the relevant document announced by the department. The signed and stamped internship application form must be uploaded to the system within the announced period before the internship start date.

After the application is submitted, the approval process proceeds digitally. The application is first sent to the workplace for approval. After workplace approval, it is evaluated by the department or internship coordination. If the application is found appropriate, it proceeds to SGK procedures. Students may start their internship only when the BYS system shows the status indicating that the internship can be carried out at the workplace.

If there is missing or incorrect information, the workplace or the department may request corrections. In such cases, students must revise the application and submit it again through the system. The student is responsible for following all status updates through the BYS information screen.

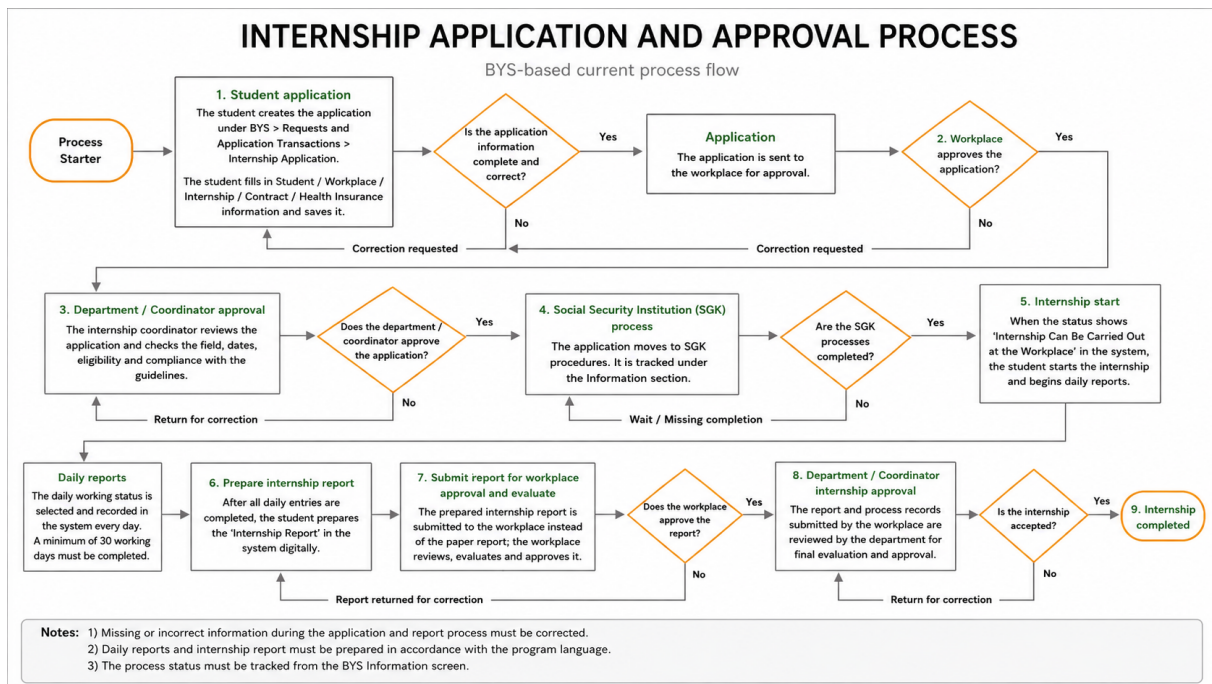


Figure 4: Internship Application and Approval Process

5.4 Daily Reports and Internship Report

During the internship, students enter daily reports through BYS. For each day, the working status is selected and a daily explanation is written. The reports must be prepared in the language of the program and should describe concrete, measurable and field-related tasks.

After all daily entries are completed, the internship report is prepared digitally through the system. The report generally includes sections such as cover page, table of contents, summary, workplace introduction, work carried out during the internship and conclusion. The report can be viewed, edited and downloaded as a PDF through the system.

When the internship report is completed, it is sent to the workplace for approval. After the workplace evaluates and approves the report, it is forwarded to the department for

final evaluation. If the report and process are found appropriate, the internship is accepted as completed.

5.5 Special Cases and Student Responsibilities

Students who plan to complete an internship abroad or through Erasmus+ traineeship mobility should inform the department in advance and follow the relevant instructions for completing the application through the system.

If a student changes the internship institution, the application process must be restarted. Previously completed but unfinished internship days cannot be transferred to the new internship. Students must complete at least 30 full working days at the approved workplace.

Students are responsible for following the internship guidelines, department web page announcements and BYS information screen. Incomplete applications, missing reports, unapproved workplace evaluations, failure to meet the ECTS requirement or failure to complete the minimum working day requirement may affect the validity of the internship.

6 Graduation Project

The graduation project is a compulsory academic component of the Management Information Systems (English) Undergraduate Program. It enables senior students to conduct an independent scientific and applied study under the supervision of an academic advisor.

For the English program, the graduation project course is offered as **MIS4992 Project**. The course is generally taken in the second semester of the fourth year, namely the eighth semester. Since **MIS3001 Summer Training I** is a prerequisite for **MIS4992 Project**, students must complete the relevant internship requirement before taking the graduation project course.

The graduation project is worth **10 ECTS**. Within the scope of this course, students are expected to prepare a scientific project rather than attend regular weekly classroom lectures, unless otherwise required by the advisor or the department.

6.1 Purpose and Scope of the Project

The main purpose of the graduation project is to enable students to apply the knowledge and skills they have gained throughout their undergraduate education to a concrete academic or practical problem. Students are expected to demonstrate their ability to conduct scientific research, analyze problems, use appropriate methods and present their

findings in a structured manner.

The project supports the interdisciplinary nature of Management Information Systems by combining information technologies, business processes, data analytics, software development and managerial decision-making. In this respect, it helps students produce qualified academic and applied work before graduation.

6.2 Project Process

The graduation project process consists of three main stages:

- **Before the project:** Students determine the field in which they would like to work, participate in the advisor preference process and are matched with an academic advisor.
- **During the project:** Students carry out the project together with their advisor. They are expected to work regularly, follow academic writing principles and develop the project according to the advisor's guidance.
- **At the end of the project:** The project is checked for similarity, presented before a jury and submitted with the required documents.

Advisor assignments are made according to the academic staff members' fields of study and students' preferences. Students are asked to rank academic staff members during the preference period. If a student does not make a selection, an advisor may be assigned by the department.

6.3 Project Areas

Graduation projects may be prepared in one of the following areas:

- **Software Development:** web, desktop or mobile software development projects.
- **Data Analytics:** quantitative business analyses, survey studies, simulation, data mining, machine learning, artificial intelligence and related analytical studies.
- **Enterprise Software:** systems analysis and design projects, enterprise resource planning and SAP-related applications.
- **General Business:** marketing, finance, logistics and other business-related topics.

Students are encouraged to choose project topics that are related to their academic interests, career goals and the research areas of their advisors.

6.4 Language, Format and Academic Expectations

The graduation project must be written in the language of the program. Therefore, students in the Management Information Systems (English) Undergraduate Program are expected to prepare their projects in English.

The project should follow academic writing principles and include standard sections such as title page, table of contents, lists of figures and tables if necessary, main text, appendices if any and references. The project should be prepared according to the format announced by the department.

Students are expected to produce an applied and original study. Examples of expected project outputs may include machine learning analysis, development of a web application, creation of a database, survey-based analysis, software prototype, decision-support application or a data analytics project.

If the advisor finds it appropriate, the graduation project may also be developed into an academic output such as a conference paper, article or project proposal.

6.5 Similarity Check, Presentation and Submission

After the project is completed, it is checked by the advisor using similarity detection software such as Turnitin. The similarity limit is determined as **20%** for the whole project and **3%** for a single source. The allowed artificial intelligence usage limit is **30%**.

After completing the written project, students are required to present and defend their work. The project presentation lasts approximately **10 minutes** and is delivered face-to-face before a jury of two members, one of whom is the student's advisor.

The submission and presentation dates are announced by the department each semester. Students are responsible for following the official announcements and submitting the required documents on time.

7 Student Clubs and Student Activities

Student clubs and student activities are an important part of university life at Marmara University. The Faculty of Business Administration hosts student communities operating in areas such as business, information technologies, career development, entrepreneurship, social responsibility, culture, arts and sports.

Students of the Management Information Systems (English) Undergraduate Program are encouraged to participate in activities that support their academic, social and professional

development. These activities help students improve communication, teamwork, leadership and organizational skills outside the classroom.

Participation in student clubs and activities also supports students in developing soft skills such as communication, teamwork, leadership, problem-solving and professional networking. For students of Management Information Systems, these skills are especially important because the field requires effective collaboration between technical teams, business units and external stakeholders.

Student activities may include seminars, workshops, company meetings, career events, technical trainings, project-based activities and social events. For MIS students, such activities are especially valuable because the program combines business administration, information technologies, data analytics and digital transformation.

In addition to faculty-wide student clubs, department-related seminars and events also contribute to student development. Activities on topics such as data science, artificial intelligence, business intelligence and digital transformation help students follow current developments and connect theoretical knowledge with professional practice.

Students are advised to follow announcements published by Marmara University, the Faculty of Business Administration and the Department of Management Information Systems for up-to-date information about student clubs and events.

7.1 Orientation and Introductory Activities

Orientation and introductory activities support prospective and newly admitted students in becoming familiar with the Management Information Systems (English) Undergraduate Program, the Faculty of Business Administration and Marmara University.

The department participates in introductory activities organized for prospective university students. During these activities, students receive information about the university, faculty, program structure, academic opportunities and career prospects.

At the beginning of the academic year, orientation activities are organized for newly admitted students. Students are introduced to the department, academic structure, curriculum, student responsibilities, university systems and opportunities available throughout their education.

These activities help students adapt to university life, understand the expectations of the program and establish early communication with academic staff and fellow students.



Orientation Program for Newly Admitted MIS Students

8 Undergraduate Curriculum

The Management Information Systems (English) Undergraduate Program is a four-year bachelor's degree program consisting of eight semesters. The curriculum includes compulsory courses, elective courses, internship courses and the graduation project. Students are expected to complete the required course load and fulfill all graduation requirements of the program.

The standard undergraduate workload is structured according to the European Credit Transfer and Accumulation System (ECTS). Approximately 30 ECTS credits are planned for each semester, and students must complete a total of 240 ECTS credits for graduation.

The curriculum is designed to reflect the interdisciplinary nature of Management Information Systems by combining business administration, information technologies, data analytics, software development and digital transformation. Through compulsory courses, elective courses, internship courses and the graduation project, students gradually develop both theoretical knowledge and practical skills required for professional roles at the intersection of business and technology.

8.1 Program Outcomes and Educational Objectives

The Management Information Systems (English) Undergraduate Program is structured around program outcomes and educational objectives that reflect the interdisciplinary nature of the field. These outcomes guide the curriculum, course design, internship process and graduation project.

Program Outcomes

No.	Program Outcome
1	Having theoretical and practical knowledge related to the field of business, particularly in areas such as finance, human resources, business analytics, accounting, marketing and management.
2	Having theoretical and practical knowledge related to information systems, particularly in software, hardware and data security.
3	Proficient in effectively using information technologies to support business processes and decision-making.
4	Possesses skills in critical thinking, data analysis and interpretation, problem identification and generating evidence-based solutions.
5	Possesses the ability to effectively express knowledge, ideas and recommendations, and deliver written and oral presentations in the program's language.
6	Has a clear understanding of ethical values, social responsibility and sustainability.

Program Educational Objectives

No.	Program Educational Objective
1	Graduates bridge the gap between business and technology units in national and international organizations by designing, developing and managing information technology solutions that align with organizational goals.
2	Graduates use analytical and critical thinking skills to analyze complex business problems and actively contribute to data-driven, innovative and strategic decision-making processes.
3	Graduates act with ethical and social responsibility in their professional careers and are recognized as reliable professionals who adhere to sustainability principles and data security standards.
4	Graduates demonstrate effective communication skills in individual and team settings and take leadership roles by clearly presenting technical and strategic matters to different stakeholders.
5	Graduates adopt lifelong learning as a principle and continuously update their expertise through professional development activities or graduate studies.

Undergraduate Curriculum

Bachelor's Degree Program

* Four-year undergraduate program

Semester I

Course Code	Course Title	Type	T	U	ECTS
ACC1005	Introduction to Accounting	Compulsory	3	0	5
ATA121	Atatürk's Principles and History of Turkish Revolution I	Compulsory	2	0	2
BUS1002	Introduction to Business	Compulsory	3	0	5
ECON1011	Microeconomics	Compulsory	3	0	6
MATH1047	Business Mathematics I	Compulsory	3	0	5
MIS1301	Introduction to Information Systems and Technology	Compulsory	3	0	5
TRD121	Turkish Language I	Compulsory	2	0	2
Total			19	0	30

The first semester provides students with a foundation in accounting, business administration, economics, mathematics and information systems. In addition to field-related compulsory courses, students also take university-wide compulsory courses such as Turkish Language and Atatürk's Principles and History of Turkish Revolution.

ACC1005 Introduction to Accounting

Course Information	Details
Course Code	ACC1005
Course Title	Introduction to Accounting
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Financial Accounting, Jerry J. Weygandt, Donald E. Kieso, Paul D. Kimmel, Wiley

Course Aim

This course is designed for prospective accounting students, potential managers and students who need to understand the role of accounting in providing useful information for economic decision-making. The main aim of the course is to help students understand how relevant financial information is recorded, processed and communicated.

Course Content

The course covers accounting as an information system, users and uses of financial statements, processing of economic data, income measurement, completion of the accounting cycle and accounting for merchandising operations.

Learning Outcomes

No.	Learning Outcome
1	Journalize accounting transactions and post journal entries to the ledger.
2	Prepare a trial balance.
3	Prepare an income statement.
4	Prepare a balance sheet.
5	Record basic adjusting and closing entries.

Weekly Course Content

Week	Topics
1	Definition of accounting, users of accounting information, types of business, transactions and financial statements
2	Balance sheet, income statement and accounting equation
3	Transaction analysis and accounts
4	Debit-credit recording system, revenue and expense accounts, examples
5	Recording process, account balances and trial balances
6	Examples and applications
7	Examples and applications
8	Midterm examination week
9	Accounting books, ledger and journal
10	Merchandise transactions and periodic inventory system
11	Perpetual inventory system and examples
12	Completion of the accounting cycle, year-end adjustments, depreciation and examples
13	Expense allocations and revenue allocations
14	Expense accruals, revenue accruals and cost terms
15	Closing entries
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

ATA121 Atatürk's Principles and History of Turkish Revolution I

Course Information	Details
Course Code	ATA121
Course Title	Atatürk's Principles and History of Turkish Revolution I
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	2 / 0
ECTS	2
Language of Instruction	Turkish
Recommended Source	Kemal Atatürk, <i>Nutuk</i> ; Atatürk's Principles and History of Turkish Revolution course materials announced by the instructor

Course Aim

This course aims to explain the historical development of modern Türkiye through the framework of Atatürk's principles and the Turkish Revolution. It introduces students to the political, social and intellectual background of the Republic of Türkiye and helps them understand the value of the achievements of the Republic.

Course Content

The course examines the historical events, intellectual movements and fundamental principles that shaped the birth and development of modern Türkiye. It covers the late Ottoman period, modernization movements, the causes and consequences of the Turkish War of Independence, the establishment of the Turkish Grand National Assembly, the foundation of the Republic and the basic principles of Atatürk's thought.

Learning Outcomes

No.	Learning Outcome
1	Recognize the main sources related to Atatürk's principles and the history of the Turkish Revolution.
2	Explain the modernization movements in the Ottoman Empire.
3	Explain the historical foundations of Atatürk's principles.
4	Understand the state structure and founding process of the Republic of Türkiye.
5	Interpret the historical development of Türkiye in the twentieth and twenty-first centuries.

Weekly Course Content

Week	Topics
1	Turkish Revolution and basic concepts of revolution history
2	The rise of Western civilization and its effects
3	Establishment, rise and decline of the Ottoman Empire; nineteenth-century modernization movements
4	Tanzimat period and the declaration of the First Constitutional Era
5	Second Constitutional Era, the Committee of Union and Progress, Tripolitanian War and Balkan Wars
6	The First World War and the Ottoman Empire
7	The Armenian Question and related historical developments
8	Midterm examination week
9	Armistice of Mudros and developments after the armistice
10	Beginning of the National Struggle and the congresses period
11	The First Turkish Grand National Assembly period
12	Treaty of Sèvres and the fronts of the War of Independence
13	Western Front battles and the Armistice of Mudanya
14	Lausanne Peace Conference and the international recognition of the Republic
15	Financial resources of the War of Independence and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	40%
Final Examination	60%

BUS1002 Introduction to Business

Course Information	Details
Course Code	BUS1002
Course Title	Introduction to Business
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Course materials announced by the instructor

Course Aim

The main aim of this course is to introduce the importance of organizations in society and to help students understand what businesses are. The course provides students with a general perspective on business organizations, business functions and the role of businesses in economic and social life.

Course Content

The course covers business systems, workforce demographics, social responsibility, business ethics, forms of business organizations, entrepreneurship, small businesses, franchising systems, management processes, human resources management, marketing management, business finance and business decision-making.

Learning Outcomes

No.	Learning Outcome
1	Analyze and solve basic problems that may arise in the business management process.
2	Explain the processes involved in the functioning of business functions and evaluate their effectiveness.
3	Demonstrate a strong understanding of the main functions of business organizations.
4	Define business concepts clearly and explain the dynamism of business organizations with real-life examples.
5	Develop a broad perspective on business life, including strengths, weaknesses, success, failure, problems and challenges.

Weekly Course Content

Week	Topics
1	Introduction to business and business organizations
2	Business systems and the role of organizations in society
3	Business environment and workforce demographics
4	Social responsibility and business ethics
5	Forms of business organizations
6	Entrepreneurship, small businesses and franchising systems
7	Management processes and managerial decision-making
8	Midterm examination week
9	Human resources management
10	Marketing management
11	Business finance
12	Business decision-making processes
13	Contemporary issues in business organizations
14	Business functions and organizational effectiveness
15	General review and case-based discussion
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

ECON1011 Microeconomics

Course Information	Details
Course Code	ECON1011
Course Title	Microeconomics
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	3 / 0
ECTS	6
Language of Instruction	English
Recommended Source	N. Gregory Mankiw, <i>Principles of Economics</i> ; Robert S. Pindyck and Daniel L. Rubinfeld, <i>Microeconomics</i> ; additional course materials announced by the instructor

Course Aim

The main aim of this course is to teach students the fundamental concepts and principles of microeconomics, such as supply and demand, elasticity, marginal cost and marginal benefit. The course helps students understand how consumers, firms and markets make decisions under scarcity.

Course Content

The course covers supply and demand, elasticity, marginal cost, marginal benefit, consumer behavior, producer behavior, production functions, cost analysis, market structures and market failures.

Learning Outcomes

No.	Learning Outcome
1	Develop a solid understanding of basic microeconomic concepts such as supply and demand, elasticity, cost structures, utility maximization, market power and competition.
2	Apply economic models and tools to analyze market equilibrium, equilibrium price and quantity, and consumer and firm behavior.
3	Define indifference curves and explain the properties of budget constraints.
4	Define the production function and the law of diminishing marginal productivity, and calculate short-run and long-run production costs.
5	Analyze government policies used to reduce market failures such as monopoly power, externalities and public goods.

Weekly Course Content

Week	Topics
1	Fundamentals of microeconomics
2	Introduction to basic concepts and principles of microeconomics
3	Basics of supply and demand
4	Consumer behavior
5	Individual demand and market demand
6	Indifference curves
7	Budget constraints
8	Midterm examination week
9	Utility maximization
10	Producer behavior
11	Production functions
12	Cost analysis and profit maximization
13	Market structures: perfect competition, monopoly and oligopolistic competition
14	Market structures: further analysis and applications
15	Market failures and cases where free markets do not operate efficiently
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MATH1047 Business Mathematics I

Course Information	Details
Course Code	MATH1047
Course Title	Business Mathematics I
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Ernest F. Haeussler and Richard S. Paul, <i>Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences</i> , Global Edition, 2021

Course Aim

This course is designed to provide students with the tools and techniques required to understand and apply basic mathematical topics such as functions, limits, derivatives and financial mathematics. It also aims to improve students' mathematical reasoning and problem-solving skills.

Course Content

The course covers functions, limits and continuity, derivatives, Newton's method and financial mathematics. It introduces mathematical concepts that are frequently used in business, economics and decision-making problems.

Learning Outcomes

No.	Learning Outcome
1	Explain the concepts of limits and continuity, calculate limits and use theorems related to limits.
2	Explain the concept of derivative, calculate derivatives, use theorems related to derivatives and solve business or economics problems by using derivatives.
3	Apply problem-solving techniques to solve complex mathematical problems related to business by developing analytical and logical reasoning skills.
4	Apply mathematical concepts to solve practical problems in business scenarios such as profit and loss calculations, pricing strategies, inventory management, break-even analysis and budgeting.
5	Use mathematical techniques and formulas in financial calculations, including simple and compound interest, annuities, present value, future value and the time value of money.

Weekly Course Content

Week	Topics
1	Applications of equations, linear inequalities, applications of inequalities and sequences
2	Functions, special functions and combinations of functions
3	Graphs, symmetry and multivariable functions
4	Lines, parabolas and systems
5	Lines, parabolas and systems: applications
6	Nonlinear systems and applications of systems of equations
7	Exponential functions and logarithmic functions
8	Midterm examination week
9	Limits and continuity
10	Applications of derivatives
11	Higher-order derivatives
12	Demand elasticity, implicit differentiation, logarithmic differentiation and Newton's method
13	Financial mathematics: compound interest, present value and continuous compounding
14	Annuity calculations
15	Amortization of debt
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS1301 Introduction to Information Systems and Technology

Course Information	Details
Course Code	MIS1301
Course Title	Introduction to Information Systems and Technology
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Kenneth C. Laudon and Jane P. Laudon, <i>Management Information Systems: Managing the Digital Firm</i> , 15th Edition

Course Aim

The aim of this course is to teach the design of information systems, ethical principles, collaboration and organizational strategies, and the use of accurate information management and business intelligence for reliable decision-making systems.

Course Content

The course covers information systems used in businesses, collaboration and e-commerce, ethical rules in information systems design, system design appropriate to infrastructure, next-generation technologies, business intelligence, information management, decision-making systems and project management.

Learning Outcomes

No.	Learning Outcome
1	Analyze information systems.
2	Design an information system suitable for business needs.
3	Understand the ethical and legal rules of information systems.
4	Operate decision-making processes that increase business efficiency.
5	Take part in system design suitable for the infrastructure of a business or organization.

Weekly Course Content

Week	Topics
1	Information systems in global businesses
2	E-commerce and collaboration in global businesses
3	Information systems, organizations and strategy
4	Ethical and social issues in information systems
5	Information technology infrastructure and next-generation technology
6	Business intelligence: databases and information management
7	Telecommunications, internet and wireless technologies
8	Midterm examination week
9	Security in information systems
10	Achieving operational excellence and customer intimacy
11	E-commerce: digital marketing and digital products
12	Knowledge management
13	Advanced decision-making systems
14	Design of information systems
15	Project management
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

TRD121 Turkish Language I

Course Information	Details
Course Code	TRD121
Course Title	Turkish Language I
Course Type	Compulsory
Semester	1
Theoretical / Practical Hours	2 / 0
ECTS	2
Language of Instruction	Turkish
Recommended Source	<i>Türk Dili Kitabı</i> , ed. Gülden Sağol Yüksekaya; Nurettin Demir and Emine Yılmaz, <i>Türk Dili El Kitabı</i> ; additional course materials announced by the instructor

Course Aim

The aim of this course is to teach the historical development of the Turkish language and the linguistic features of Türkiye Turkish. The course supports students' awareness of language, culture and communication.

Course Content

The course covers the historical development of the Turkish language, the linguistic features of Türkiye Turkish, language families, historical periods of Turkish, phonetics, morphology, semantics, word groups and sentence analysis.

Learning Outcomes

No.	Learning Outcome
1	Know the historical development of the Turkish language.
2	Know the linguistic features of Türkiye Turkish.
3	Distinguish between different types of expression.
4	Develop the ability to express critical thinking constructively and take initiative.
5	Gain oral and written communication skills.

Weekly Course Content

Week	Topics
1	Language; language-nation relationship and language-culture relationship
2	Languages of the world
3	Language families according to their origins and language groups according to their structures
4	Historical periods of the Turkish language and historical development of Turkish written language
5	Old Turkish, Middle Turkish, New Turkish and Modern Turkish
6	Current status and geographical spread of the Turkish language
7	Phonetics
8	Study week
9	Phonetics: continuation and exercises
10	Morphology: roots and affixes; derivational and inflectional suffixes
11	Words according to meaning and function
12	Semantics, meaning in words and semantic relations between words
13	Syntax and properties of word groups
14	Types of word groups
15	Elements of the sentence
16	Sentence types and sentence analysis
17	Study week and final preparation

Assessment

Assessment Component	Weight
Semester Activities	40%
Final Examination	60%

Semester II

Course Code	Course Title	Type	T	U	ECTS
ACC1006	Financial Accounting	Compulsory	3	0	5
ATA122	Atatürk's Principles and History of Turkish Revolution II	Compulsory	2	0	2
ECON1012	Macroeconomics	Compulsory	3	0	6
MATH1046	Business Mathematics II	Compulsory	3	0	5
MGT1014	Business Management	Compulsory	3	0	5
MIS1042	Introduction to Algorithms and Data Structures	Compulsory	2	2	5
TRD122	Turkish Language II	Compulsory	2	0	2
Total			18	2	30

The second semester strengthens students' foundations in accounting, economics, mathematics, management and programming. Students also continue university-wide compulsory courses such as Turkish Language and Atatürk's Principles and History of Turkish Revolution.

ACC1006 Financial Accounting

Course Information	Details
Course Code	ACC1006
Course Title	Financial Accounting
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Financial Accounting, Jerry J. Weygandt, Donald E. Kieso, Paul D. Kimmel, Wiley

Course Aim

This course is designed for prospective accounting students, potential managers and students who need to understand the role of accounting in providing useful information for economic decision-making. The main aim of the course is to help students understand how financial information is recorded, adjusted and reported.

Course Content

The course covers accounting for cash, foreign currency, checks, securities, doubtful receivables, notes, inventory transactions, depreciation, fixed assets and year-end adjustment procedures.

Learning Outcomes

No.	Learning Outcome
1	Record period-end adjusting entries related to liquid assets.
2	Record period-end adjusting entries related to securities.
3	Record period-end adjusting entries related to receivables.
4	Record period-end adjusting entries related to inventory.
5	Record period-end adjusting entries related to fixed assets.

Weekly Course Content

Week	Topics
1	Cash shortage, cash surplus and petty cash
2	Foreign currency accounting and check accounting
3	Accounting for securities: stock investment, dividend accrual and stock sale
4	Accounting for securities: bond investment, bond interest accrual and bond sale
5	Accounting for doubtful receivables and uncollectible accounts
6	Accounting for notes receivable and notes payable
7	Review
8	Midterm examination week
9	Inventory transactions: damaged goods, weighted average, FIFO and LIFO
10	Inventory transactions: weighted average, FIFO and LIFO continuation
11	Accounting for returns, allowances and discounts
12	Accounting for fixed assets: depreciation and sale of fixed assets
13	Accounting for fixed assets: renewal and capitalized expenditures
14	Accounting for leasehold improvements
15	Review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

ATA122 Atatürk's Principles and History of Turkish Revolution II

Course Information	Details
Course Code	ATA122
Course Title	Atatürk's Principles and History of Turkish Revolution II
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	2 / 0
ECTS	2
Language of Instruction	Turkish
Recommended Source	Kemal Atatürk, <i>Nutuk</i> ; Atatürk's Principles and History of Turkish Revolution course materials announced by the instructor

Course Aim

This course aims to explain the fundamental characteristics of the Republic of Türkiye and the achievements of the Turkish Revolution in line with Atatürk's works and principles. It helps students understand the historical and ideological value of Atatürk's principles.

Course Content

The course examines the political developments experienced during the completion phase of the Turkish Revolution and the foundation process of the Republic of Türkiye. It covers the proclamation of the Republic, Atatürk's reforms, domestic and foreign policy developments and Türkiye's modernization process.

Learning Outcomes

No.	Learning Outcome
1	Explain the main characteristics of the Turkish Revolution.
2	Interpret the ultimate aims of the Turkish Revolution.
3	Explain Atatürk's principles and their historical significance.
4	Explain the principle of republicanism and its role in the foundation of modern Türkiye.
5	Explain nationalism, statism, populism, secularism and revolutionism within the framework of Atatürk's thought.

Weekly Course Content

Week	Topics
1	Political revolutions
2	Reactions against the revolutions and attempts to transition to a multi-party system
3	Education and legal reforms
4	Cultural and social reforms
5	Economic developments in the early Republic
6	Turkish foreign policy during Atatürk's period I
7	Turkish foreign policy during Atatürk's period II
8	Midterm examination week
9	Definition of Kemalism and Atatürk's principles I
10	Atatürk's principles II
11	Analysis of <i>Nutuk</i>
12	Domestic and foreign policy developments after Atatürk
13	The Cold War period I
14	The Cold War period II
15	The Cyprus issue
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	40%
Final Examination	60%

ECON1012 Macroeconomics

Course Information	Details
Course Code	ECON1012
Course Title	Macroeconomics
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	3 / 0
ECTS	6
Language of Instruction	English
Recommended Source	Olivier Blanchard and Gerhard Illing, <i>Macroeconomics</i> ; additional course materials announced by the instructor

Course Aim

This course aims to teach macroeconomic relationships such as labor markets, goods markets, money markets and foreign exchange markets. It also introduces macroeconomic indicators, measurement methods, determinants of economic growth and the causes and effects of business cycles.

Course Content

The course covers goods markets, money and financial markets, the IS-LM model, labor markets, the AS-AD model, the Phillips curve, money supply growth, inflation and output.

Learning Outcomes

No.	Learning Outcome
1	Explain the concept of gross domestic product, its components and calculation methods.
2	Explain unemployment and labor market dynamics.
3	Explain the relationship between the money system and inflation.
4	Understand the effects of fiscal and monetary policies on the economy.
5	Develop critical thinking and problem-solving skills related to macroeconomic issues.

Weekly Course Content

Week	Topics
1	Definition and scope of macroeconomics; overview of national economies
2	Goods market and components of GDP: consumption, investment, government spending, exports and imports
3	Determination of equilibrium output
4	Money markets: money supply and demand, interest rates and central bank policies
5	Money demand and the relationship between money supply and money demand
6	IS-LM model
7	Goods market and IS equation; money market and LM equation
8	Midterm examination week
9	Monetary and fiscal policy
10	Overview of the labor market
11	Natural rate of unemployment
12	Aggregate demand and aggregate supply model
13	Expansionary monetary policy
14	Contractionary fiscal policy
15	Phillips curve, inflation, expected inflation and unemployment
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MATH1046 Business Mathematics II

Course Information	Details
Course Code	MATH1046
Course Title	Business Mathematics II
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Ernest F. Haeussler and Richard S. Paul, <i>Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences</i> , Global Edition, 2021

Course Aim

This course is designed to provide students with the tools and techniques required to understand and apply mathematical topics such as extrema, integrals and matrix algebra. It also aims to improve mathematical reasoning, logical thinking and problem-solving skills.

Course Content

The course covers relative extrema, absolute extrema on closed intervals, concavity, differentials, integrals and matrix algebra. It introduces mathematical methods used in business, economics and computer science-related contexts.

Learning Outcomes

No.	Learning Outcome
1	Apply mathematical techniques to draw and interpret curves.
2	Define differentials, interpret them geometrically and use them to estimate variables in economic applications.
3	Recognize mathematical methods used in computer science.
4	Calculate definite and indefinite integrals of functions and solve economic or business problems by using integrals.
5	Examine the solution of a system of linear equations by using the Gaussian elimination method.

Weekly Course Content

Week	Topics
1	Relative maximum and minimum values; absolute extrema on closed intervals
2	Concavity
3	Second derivative test
4	Asymptotes
5	Maximum and minimum values
6	Differentials, indefinite integrals, integration with initial conditions and integration techniques
7	Curves and the area between consumer and producer surplus
8	Midterm examination week
9	Vectors
10	Matrices
11	Matrix addition, scalar multiplication and matrix multiplication
12	Solving systems by matrix reduction
13	Inverse matrix
14	Leontief input-output analysis
15	Determinants and Cramer's rule
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MGT1014 Business Management

Course Information	Details
Course Code	MGT1014
Course Title	Business Management
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Richard L. Daft, <i>Management</i> , 12th Edition, Cengage Learning; <i>How Business Works: A Graphic Guide to Business Success</i> , Dorling Kindersley, 2015; PowerPoint presentations

Course Aim

This course aims to provide students with knowledge about the classical functions of management, emerging trends in management and the basic principles and theories of management.

Course Content

The course examines the main functions of management, including planning, organizing, leading and controlling. It also covers organizational structure, technology, innovation, ethics, corporate responsibility, organizational culture, competitive environment, entrepreneurship and human resources management.

Learning Outcomes

No.	Learning Outcome
1	Understand different management functions and their applications in organizations.
2	Critically examine managerial decision-making processes in relation to their causes and contexts in order to make informed decisions.
3	Analyze various management-related topics such as social responsibility, ethics, global management, leadership, organizational change, entrepreneurship and human resources management.
4	Evaluate contemporary management issues in relation to organizational effectiveness and innovation.
5	Explain the relationship between management practices, organizational culture and business performance.

Weekly Course Content

Week	Topics
1	Introduction and entrepreneurship
2	Innovative management for changing times
3	Evolution of management thought
4	Corporate culture and global environment
5	Planning and goal setting
6	Strategy formulation and implementation I
7	Strategy formulation and implementation II
8	Midterm examination week
9	Adaptive organizational design
10	Behavioral dynamics and leadership in organizations
11	Employee motivation, teams and communication
12	Human resources management
13	Quality and performance management
14	Information technologies, e-commerce and innovation
15	Ethics and social responsibility
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS1042 Introduction to Algorithms and Data Structures

Course Information	Details
Course Code	MIS1042
Course Title	Introduction to Algorithms and Data Structures
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	2 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Joseph Albahari, <i>C# 10 in a Nutshell: The Definitive Reference</i> ; John Sharp, <i>Microsoft Visual C# Step by Step</i>

Course Aim

This course provides a comprehensive introduction to programming concepts using the C# language, with a focus on procedural programming. It covers the fundamentals of computer programming and C# syntax without focusing on object-oriented programming concepts.

Course Content

The course starts with an overview of programming and computer science, followed by an introduction to C# and the .NET framework. It focuses on C# syntax, variables, operators, expressions, methods, arrays, decision statements, iteration statements, error handling and exceptions.

Learning Outcomes

No.	Learning Outcome
1	Understand fundamental programming concepts.
2	Gain proficiency in C# syntax.
3	Write basic console programs.
4	Manage control flow in a program.
5	Handle errors and exceptions.

Weekly Course Content

Week	Topics
1	Overview of programming and computer science
2	Introduction to C# and the .NET framework
3	C# syntax
4	Variables, operators and expressions I
5	Variables, operators and expressions II
6	Methods and scope
7	Midterm examination
8	Midterm examination week
9	Arrays
10	Decision statements
11	Multidimensional arrays and jagged arrays
12	Iteration statements I
13	Iteration statements II
14	Managing errors and exceptions
15	Final review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

TRD122 Turkish Language II

Course Information	Details
Course Code	TRD122
Course Title	Turkish Language II
Course Type	Compulsory
Semester	2
Theoretical / Practical Hours	2 / 0
ECTS	2
Language of Instruction	Turkish
Recommended Source	<i>Türk Dili Kitabı</i> , ed. Gülden Sağol Yüksekaya; Nurettin Demir and Emine Yılmaz, <i>Türk Dili El Kitabı</i> ; additional course materials announced by the instructor

Course Aim

The aim of this course is to teach oral and written expression types, to develop students' ability to express critical thinking constructively and to provide students with oral and written communication competence.

Course Content

The course examines written literary genres such as story, novel, poetry and theater, as well as memoirs, biographies, essays, articles, travel writing, interviews and other journalistic or intellectual writing types.

Learning Outcomes

No.	Learning Outcome
1	Know written literary expression types.
2	Know oral expression types.
3	Carry out studies in which acquired knowledge can be used.
4	Develop the ability to express critical thinking constructively and take initiative.
5	Gain oral and written communication skills.

Weekly Course Content

Week	Topics
1	Written expression and literary genres: story and novel
2	Literary genres: poetry
3	Literary genres: theater
4	Literary genres: memoir and biography
5	Literary genres: essay, criticism and column writing
6	Literary genres: travel writing and conversation
7	Literary genres: speech, interview and scenario
8	Midterm examination week
9	Written expression types: article and book review
10	Scientific research methods
11	Applied written genres: report, official report and curriculum vitae
12	Oral expression types and presentation techniques
13	Discussion, debate and prepared speech
14	Academic writing and source use
15	General review and applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	40%
Final Examination	60%

Semester III

Course Code	Course Title	Type	T	U	ECTS
FNCE2003	Fundamentals of Finance	Compulsory	3	0	5
MIS2103	Computer Hardware and System Software	Compulsory	3	1	5
MIS2111	Object Oriented Programming	Compulsory	2	2	5
MIS2113	Introduction to Databases	Compulsory	2	2	5
MRK2023	Principles of Marketing	Compulsory	3	0	5
STAT2011	Business Statistics I	Compulsory	3	0	5
Total			16	5	30

The third semester develops students' core competencies in finance, computer systems, programming, databases, marketing and statistics. These courses strengthen both the technical and managerial foundations required in the field of Management Information Systems.

FNCE2003 Fundamentals of Finance

Course Information	Details
Course Code	FNCE2003
Course Title	Fundamentals of Finance
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Fundamentals of Corporate Finance course materials announced by the instructor

Course Aim

This course aims to introduce students to the basic principles and concepts of finance. It provides a foundation for understanding financial decision-making, time value of money, risk and return, financial markets and the role of finance in business organizations.

Course Content

The course covers financial management, financial statements, time value of money, valuation of bonds and stocks, risk and return, capital budgeting, cost of capital and basic financial decision-making processes.

Learning Outcomes

No.	Learning Outcome
1	Explain the basic concepts and functions of finance.
2	Interpret financial statements and basic financial indicators.
3	Apply time value of money concepts to financial problems.
4	Explain risk, return and valuation concepts.
5	Evaluate basic investment and financing decisions.

Weekly Course Content

Week	Topics
1	Introduction to finance and financial management
2	Financial statements and financial analysis
3	Time value of money
4	Discounted cash flow valuation
5	Bond valuation
6	Stock valuation
7	Risk and return
8	Midterm examination week
9	Capital budgeting principles
10	Net present value and investment decision rules
11	Cost of capital
12	Capital structure and financing decisions
13	Working capital management
14	Financial planning and forecasting
15	General review and applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2103 Computer Hardware and System Software

Course Information	Details
Course Code	MIS2103
Course Title	Computer Hardware and System Software
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	3 / 1
ECTS	5
Language of Instruction	English
Recommended Source	Computer organization, operating systems and system software course materials announced by the instructor

Course Aim

This course aims to introduce students to the basic components of computer hardware and system software. It provides students with an understanding of how computer systems operate and how hardware and software components interact.

Course Content

The course covers computer architecture, processors, memory systems, input-output units, storage technologies, operating systems, file systems, process management, memory management, system utilities and basic system administration concepts.

Learning Outcomes

No.	Learning Outcome
1	Identify the main components of computer hardware.
2	Explain the relationship between hardware and system software.
3	Describe the basic functions of operating systems.
4	Explain memory, storage and input-output management.
5	Apply basic system configuration and troubleshooting concepts.

Weekly Course Content

Week	Topics
1	Introduction to computer systems
2	Computer architecture and system components
3	Processors and instruction cycles
4	Memory systems and storage hierarchy
5	Input-output units and peripheral devices
6	Storage technologies and file systems
7	Introduction to operating systems
8	Midterm examination week
9	Process management
10	Memory management
11	File management and disk management
12	System software and utilities
13	Computer networks and system communication basics
14	System security and basic protection mechanisms
15	System configuration, maintenance and troubleshooting
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2111 Object Oriented Programming

Course Information	Details
Course Code	MIS2111
Course Title	Object Oriented Programming
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	2 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Object-oriented programming and C# course materials announced by the instructor

Course Aim

This course aims to teach students the principles of object-oriented programming and to develop their ability to design and implement software by using classes, objects, inheritance, encapsulation, polymorphism and related programming concepts.

Course Content

The course covers object-oriented programming concepts, classes, objects, methods, constructors, encapsulation, inheritance, polymorphism, interfaces, exception handling, file operations and basic application development.

Learning Outcomes

No.	Learning Outcome
1	Explain the basic principles of object-oriented programming.
2	Design classes and create objects in a programming language.
3	Apply encapsulation, inheritance and polymorphism in software development.
4	Develop basic object-oriented applications.
5	Use debugging, exception handling and basic file operations.

Weekly Course Content

Week	Topics
1	Introduction to object-oriented programming
2	Classes, objects and methods
3	Constructors and object initialization
4	Encapsulation and access modifiers
5	Properties and class members
6	Inheritance
7	Polymorphism and method overriding
8	Midterm examination week
9	Abstract classes and interfaces
10	Collections and object-based data structures
11	Exception handling
12	File operations
13	Basic graphical user interface or application development concepts
14	Object-oriented design examples
15	Project applications and review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2113 Introduction to Databases

Course Information	Details
Course Code	MIS2113
Course Title	Introduction to Databases
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	2 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Database systems and SQL course materials announced by the instructor

Course Aim

This course aims to introduce students to the fundamentals of database systems and database design. It helps students understand how data is organized, stored, queried and managed in relational database environments.

Course Content

The course covers database concepts, relational database models, entity-relationship modeling, normalization, SQL, data definition, data manipulation, queries, joins, database integrity and basic database application development.

Learning Outcomes

No.	Learning Outcome
1	Explain basic database concepts and relational database principles.
2	Design entity-relationship models for database problems.
3	Apply normalization principles to database design.
4	Write SQL statements for data definition, data manipulation and querying.
5	Develop basic database solutions for organizational data needs.

Weekly Course Content

Week	Topics
1	Introduction to database systems
2	Data models and relational database concepts
3	Entity-relationship modeling
4	Relational model and relational algebra basics
5	Normalization principles
6	Introduction to SQL
7	SQL data definition and data manipulation commands
8	Midterm examination week
9	SQL queries and filtering
10	Joins and subqueries
11	Aggregate functions and grouping
12	Database constraints and integrity
13	Views, indexes and basic database administration concepts
14	Database application examples
15	General review and project applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MRK2023 Principles of Marketing

Course Information	Details
Course Code	MRK2023
Course Title	Principles of Marketing
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Philip Kotler and Gary Armstrong, <i>Principles of Marketing</i> ; additional course materials announced by the instructor

Course Aim

This course aims to introduce students to the fundamental concepts and principles of marketing. It helps students understand marketing processes, consumer behavior, market segmentation, targeting, positioning and marketing mix decisions.

Course Content

The course covers marketing concepts, marketing environment, consumer behavior, market research, segmentation, targeting, positioning, product decisions, pricing, distribution, promotion and contemporary marketing applications.

Learning Outcomes

No.	Learning Outcome
1	Explain basic marketing concepts and the role of marketing in business.
2	Analyze consumer behavior and marketing environment.
3	Explain segmentation, targeting and positioning strategies.
4	Evaluate product, price, place and promotion decisions.
5	Apply marketing principles to real business situations.

Weekly Course Content

Week	Topics
1	Introduction to marketing and marketing concepts
2	Marketing environment
3	Consumer behavior
4	Business markets and buyer behavior
5	Marketing research and information systems
6	Market segmentation, targeting and positioning
7	Product and service decisions
8	Midterm examination week
9	Branding and new product development
10	Pricing decisions
11	Distribution channels and logistics
12	Promotion and integrated marketing communications
13	Digital marketing and social media marketing
14	Customer relationship management
15	General review and case applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

STAT2011 Business Statistics I

Course Information	Details
Course Code	STAT2011
Course Title	Business Statistics I
Course Type	Compulsory
Semester	3
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Statistics for Business and Economics course materials announced by the instructor

Course Aim

This course aims to introduce students to the basic concepts and methods of statistics used in business and management. It helps students collect, summarize, interpret and analyze data for decision-making.

Course Content

The course covers descriptive statistics, data types, frequency distributions, graphical representation of data, measures of central tendency, measures of dispersion, probability concepts, probability distributions and basic statistical applications.

Learning Outcomes

No.	Learning Outcome
1	Explain basic statistical concepts and data types.
2	Organize and summarize data using tables and graphical methods.
3	Calculate and interpret measures of central tendency and dispersion.
4	Explain basic probability concepts and probability distributions.
5	Apply statistical methods to business-related problems.

Weekly Course Content

Week	Topics
1	Introduction to statistics and data types
2	Data collection and data organization
3	Frequency distributions and graphical representation
4	Measures of central tendency
5	Measures of dispersion
6	Skewness, kurtosis and descriptive analysis
7	Introduction to probability
8	Midterm examination week
9	Conditional probability and Bayes' theorem
10	Discrete probability distributions
11	Binomial distribution
12	Poisson distribution
13	Continuous probability distributions
14	Normal distribution
15	General review and business applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

Semester IV

Course Code	Course Title	Type	T	U	ECTS
BUS3002	Innovation Management	Compulsory	3	0	5
FNCE2004	Financial Management	Compulsory	3	0	5
MIS2026	Web Based Application Programming	Compulsory	2	2	5
MIS2040	Advanced Databases	Compulsory	2	2	5
MIS2042	Business Data Communications	Compulsory	3	0	5
STAT2012	Business Statistics II	Compulsory	3	0	5
Total			16	4	30

The fourth semester focuses on innovation, financial management, web application development, advanced database systems, business data communications and inferential statistics. These courses strengthen students' applied technical skills and analytical decision-making abilities.

BUS3002 Innovation Management

Course Information	Details
Course Code	BUS3002
Course Title	Innovation Management
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Goffin, K. and Mitchell, R., <i>Innovation Management: Strategy and Implementation Using the Pentathlon Method</i> ; Yilmaz, H., <i>Strategic Innovation Management</i> ; course materials announced by the instructor

Course Aim

This course aims to equip students with the skills, tools and techniques required to manage innovation at strategic and operational levels. It helps students understand how innovative ideas can be developed, evaluated and implemented in organizations.

Course Content

The course covers innovation management, creativity, knowledge, innovation strategy, risk management, disruptive innovation, commercialization of technology, new product development, organizational issues in innovation, innovation performance and case analyses.

Learning Outcomes

No.	Learning Outcome
1	Understand the nature of innovation and identify innovation potential within an organization or network.
2	Use basic tools and techniques for managing innovation in real business situations.
3	Understand political, cognitive and human issues that must be managed in innovation processes.
4	Analyze the steps and stages of innovation management.
5	Evaluate innovation cases and relate them to strategic and operational management decisions.

Weekly Course Content

Week	Topics
1	Introduction to innovation management
2	Key issues in innovation management
3	Innovation and economy
4	Ideas, creativity and knowledge
5	Risk management in innovation
6	Developing innovation strategy
7	Disruptive innovation and commercialization of technology
8	Midterm examination week
9	Implementation and new product development
10	People, organization and innovation
11	Improving innovation performance and the future of innovation management
12	Case analyses
13	Case analyses
14	Case analyses
15	Case analyses and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

FNCE2004 Financial Management

Course Information	Details
Course Code	FNCE2004
Course Title	Financial Management
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Gitman and Zutter, <i>Principles of Managerial Finance</i> , Pearson; course materials announced by the instructor

Course Aim

This course aims to teach the techniques and tools required by modern corporate financial management. It helps students understand how financial managers make investment, financing and working capital decisions.

Course Content

The course covers capital budgeting, cash flow estimation, project risk evaluation, weighted average cost of capital, capital structure, dividend policy and working capital management.

Learning Outcomes

No.	Learning Outcome
1	Understand and estimate project cash flows.
2	Evaluate project risk and incorporate risk into financial decisions.
3	Understand capital structure decisions and their importance for profitability and sustainability.
4	Calculate the weighted average cost of capital and use discount rates in project evaluation.
5	Calculate working capital needs and understand the management of short-term assets and liabilities.

Weekly Course Content

Week	Topics
1	Introduction to corporate financial management
2	Project idea and project evaluation stages
3	Project cash flow estimation: criteria, initial investment and operating cash flow estimation
4	Project cash flows: replacement and expansion projects
5	Project risk evaluation
6	Cost of capital, component costs and breakpoints
7	Problem solving and applications
8	Midterm examination week
9	WACC, IOS graph and calculation of optimum capital budget
10	Capital structure theories and optimal capital structure
11	Capital structure policies, risk, return and shareholder value
12	Dividend policy and firm value
13	Working capital policy
14	Short-term asset management
15	Short-term liability management
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2026 Web Based Application Programming

Course Information	Details
Course Code	MIS2026
Course Title	Web Based Application Programming
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	2 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Web application development course materials announced by the instructor

Course Aim

This course aims to teach students the fundamentals of web-based application development. It helps students design, develop and test interactive web applications by using client-side and server-side technologies.

Course Content

The course covers HTML, CSS, JavaScript, web forms, server-side programming, database connectivity, application architecture, user interface design, validation, session management and deployment of web applications.

Learning Outcomes

No.	Learning Outcome
1	Explain the basic architecture and components of web-based applications.
2	Develop web pages using HTML, CSS and JavaScript.
3	Design and implement server-side web application components.
4	Connect web applications to databases and manage data operations.
5	Develop a functional web-based application by integrating client-side and server-side technologies.

Weekly Course Content

Week	Topics
1	Introduction to web-based applications and web architecture
2	HTML fundamentals and page structure
3	CSS and responsive design basics
4	JavaScript fundamentals
5	Forms, validation and user interaction
6	Server-side programming fundamentals
7	Web application structure and routing
8	Midterm examination week
9	Database connectivity in web applications
10	Data retrieval, insertion, update and deletion operations
11	Session management and authentication basics
12	Error handling and application security basics
13	User interface design and usability
14	Web application testing and debugging
15	Project applications and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2040 Advanced Databases

Course Information	Details
Course Code	MIS2040
Course Title	Advanced Databases
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	2 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Coronel, C., Morris, S., Rob, P. and Crockett, K., <i>Database Principles</i> ; Kiran, S., <i>Relational Database Design and Development with SQL</i> ; course materials announced by the instructor

Course Aim

This course is designed to teach advanced database concepts and methods used in designing and developing database systems. It also introduces how data can be used by businesses for analytical and operational purposes.

Course Content

The course covers database concepts, database management systems, relational database systems, advanced SQL, transactions, stored procedures, triggers, NoSQL, business intelligence and laboratory applications.

Learning Outcomes

No.	Learning Outcome
1	Understand database concepts and database management systems.
2	Gain knowledge of advanced SQL.
3	Understand the structure and use of transactions.
4	Gain introductory knowledge of SQL Server programmability.
5	Gain knowledge of business intelligence and NoSQL concepts.

Weekly Course Content

Week	Topics
1	Introduction
2	Procedural SQL and advanced SQL
3	Procedural SQL and advanced SQL
4	Database development process
5	Conceptual, logical and physical database design
6	Conceptual, logical and physical database design
7	Managing transactions and concurrency
8	Midterm examination week
9	Managing database and SQL performance
10	Distributed databases
11	Business intelligence database
12	Business intelligence database
13	Business intelligence database
14	Big data and NoSQL
15	Database connectivity and web technologies
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS2042 Business Data Communications

Course Information	Details
Course Code	MIS2042
Course Title	Business Data Communications
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Andrew S. Tanenbaum and David J. Wetherall, <i>Computer Networks</i> ; James F. Kurose and Keith W. Ross, <i>Computer Networking: A Top-Down Approach</i> ; course materials announced by the instructor

Course Aim

This course aims to teach the functions of network layers, network protocols, operating principles of network devices and network configuration. It also aims to support practical understanding through CISCO-based network simulations.

Course Content

The course covers the concept of the internet, OSI and TCP/IP network layers, network protocols, network topologies, network cables, network devices, routing algorithms and CISCO Packet Tracer applications.

Learning Outcomes

No.	Learning Outcome
1	Recognize network and internet concepts.
2	Understand network layers.
3	Explain the operating principles of network devices.
4	Explain the functions of network protocols.
5	Perform simulations of various network architectures.

Weekly Course Content

Week	Topics
1	Introduction to computer networks
2	Network types and topologies
3	OSI and TCP/IP network models; application layer
4	Transport layer
5	Network layer and IP addresses
6	Network layer and IP addresses
7	Data link layer
8	Midterm examination week
9	Physical layer
10	Ethernet
11	Routing algorithms
12	CISCO application: local area network design with hub and switch
13	CISCO application: network design with router and server
14	CISCO application: DHCP, DNS and mail server configuration
15	Advanced network application with CISCO
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

STAT2012 Business Statistics II

Course Information	Details
Course Code	STAT2012
Course Title	Business Statistics II
Course Type	Compulsory
Semester	4
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	McClave, J. T., Benson, P. G. and Sincich, T., <i>Statistics for Business and Economics</i> , Pearson Education; course materials announced by the instructor

Course Aim

This course aims to help students understand the theoretical properties of inferential statistical methods and develop practical knowledge and skills for analyzing business data and making inferences about populations based on sample data.

Course Content

The course covers inferential statistics, sampling theory, confidence intervals for population parameters, parametric and non-parametric hypothesis tests, regression analysis and correlation analysis.

Learning Outcomes

No.	Learning Outcome
1	Make statistical inferences based on sample data.
2	Understand sampling and estimation theory.
3	Develop the ability to formulate and test hypotheses.
4	Apply non-parametric statistical tests.
5	Apply regression and correlation analyses.

Weekly Course Content

Week	Topics
1	Sampling theory and central limit theorem
2	Discrete and continuous distributions; sampling distribution
3	Inferences based on a single sample: confidence interval estimation
4	Inferences based on a single sample: hypothesis testing
5	Inferences based on a single sample: hypothesis testing
6	Inferences based on two samples: confidence intervals and hypothesis testing
7	Inferences based on two samples: confidence intervals and hypothesis testing
8	Midterm examination week
9	Experimental design and analysis of variance
10	Experimental design and analysis of variance
11	Non-parametric tests
12	Correlation analysis
13	Simple linear regression
14	Multiple regression and model building
15	Applied problems
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

Semester V

Course Code	Course Title	Type	T	U	ECTS
BUS2004	Research Methods	Compulsory	3	0	5
MIS3001	Summer Training I	Compulsory	0	2	5
MIS3121	Data Mining	Compulsory	3	0	5
MIS3301	System Analysis and Design	Compulsory	3	0	5
MIS-CE1	Complementary Elective - 1	Elective	3	0	5
MIS-DE1	Departmental Elective - 1	Elective	3	0	5
Total			15	2	30

The fifth semester introduces students to research methods, data mining, system analysis and design, and the first summer training course. Students also begin to shape their academic and professional interests through complementary and departmental elective courses.

BUS2004 Research Methods

Course Information	Details
Course Code	BUS2004
Course Title	Research Methods
Course Type	Compulsory
Semester	5
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Research methods and academic writing course materials announced by the instructor

Course Aim

This course aims to introduce students to the basic principles, methods and stages of scientific research. It helps students understand how to define a research problem, review literature, design a research process, collect data, analyze findings and present research results in an academic format.

Course Content

The course covers scientific research principles, research design, literature review, research questions and hypotheses, qualitative and quantitative research methods, sampling, data collection, survey design, data analysis, academic writing, citation rules and ethical principles in research.

Learning Outcomes

No.	Learning Outcome
1	Explain the basic concepts and stages of scientific research.
2	Define a research problem and formulate appropriate research questions.
3	Conduct a literature review and use academic sources effectively.
4	Select suitable qualitative or quantitative research methods.
5	Prepare and present a research report according to academic writing principles.

Weekly Course Content

Week	Topics
1	Introduction to scientific research and research ethics
2	Research problems, research questions and hypotheses
3	Literature review and use of academic databases
4	Research design and research models
5	Quantitative research methods
6	Qualitative research methods
7	Sampling methods and data collection techniques
8	Midterm examination week
9	Survey design and measurement scales
10	Data preparation and basic data analysis
11	Reliability, validity and research quality
12	Academic writing and structure of a research report
13	Citation rules, plagiarism and ethical writing
14	Presentation of research findings
15	General review and project discussion
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS3001 Summer Training I

Course Information	Details
Course Code	MIS3001
Course Title	Summer Training I
Course Type	Compulsory
Semester	5
Theoretical / Practical Hours	0 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Internship guidelines, BYS internship system instructions and department announcements

Course Aim

This course aims to enable students to gain practical experience in a real business environment and to apply the theoretical and practical knowledge acquired during their undergraduate education. It also helps students become familiar with professional work processes in fields related to Management Information Systems.

Course Content

The course consists of the first compulsory internship period. Students complete their internship in an approved workplace and prepare internship records and reports according to the department's internship procedures. The internship may be related to software/hardware, business processes or information systems, depending on the approved internship area.

Learning Outcomes

No.	Learning Outcome
1	Observe organizational structures, work processes and professional responsibilities in a real workplace.
2	Apply knowledge from Management Information Systems courses to practical tasks.
3	Develop communication, teamwork and professional behavior skills.
4	Prepare daily internship records and an internship report in accordance with department requirements.
5	Evaluate the relationship between academic knowledge and professional practice.

Weekly Course Content

Stage	Content
1	Internship application and workplace approval process
2	Departmental approval and SGK procedures
3	Beginning of internship at the approved workplace
4	Observation of workplace structure and business processes
5	Execution of assigned internship tasks
6	Daily reporting through the internship system
7	Preparation of internship report
8	Workplace approval of internship report
9	Departmental evaluation and final approval

Assessment

Assessment Component	Weight
Internship Application and Approval	20%
Daily Internship Records	30%
Internship Report and Workplace Evaluation	50%

MIS3121 Data Mining

Course Information	Details
Course Code	MIS3121
Course Title	Data Mining
Course Type	Compulsory
Semester	5
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Data mining and machine learning course materials announced by the instructor

Course Aim

This course aims to introduce students to data mining concepts, techniques, tools and applications. Students are expected to understand how data mining methods can be used to discover meaningful patterns and support decision-making.

Course Content

The course covers data mining techniques and related algorithms in databases. Main topics include data preprocessing, classification, clustering, association rule mining, model evaluation and practical data mining applications.

Learning Outcomes

No.	Learning Outcome
1	Explain fundamental data mining concepts and processes.
2	Prepare and preprocess data for data mining applications.
3	Apply classification and prediction methods.
4	Apply clustering and association rule mining techniques.
5	Evaluate data mining models and interpret results for decision-making.

Weekly Course Content

Week	Topics
1	Introduction to data mining and knowledge discovery
2	Data mining process and application areas
3	Data preprocessing and data cleaning
4	Data transformation and feature selection
5	Classification methods
6	Decision trees
7	Model evaluation and performance measures
8	Midterm examination week
9	Clustering methods
10	Association rule mining
11	Regression and prediction methods
12	Text mining and web mining basics
13	Data mining tools and applications
14	Case studies in business data mining
15	General review and project applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS3301 System Analysis and Design

Course Information	Details
Course Code	MIS3301
Course Title	System Analysis and Design
Course Type	Compulsory
Semester	5
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Shelly, Cashman and Rosenblatt, <i>Systems Analysis and Design</i> ; Kendall and Kendall, <i>Systems Analysis and Design</i>

Course Aim

This course aims to equip students with the essential skills required to conceptualize, develop and manage high-quality information systems in dynamic business environments. It introduces contemporary methodologies and tools used in system analysis and design.

Course Content

The course covers system analysis and design concepts, analysis of business situations, system project management, requirements modeling, data and process modeling, object modeling, development strategies, user interface design, data design, system architecture, system implementation and support.

Learning Outcomes

No.	Learning Outcome
1	Apply methodologies and tools for system analysis and design in business environments.
2	Structure and interpret business information to support operational efficiency and competitive advantage.
3	Demonstrate critical thinking, problem-solving and collaboration skills for complex business problems.
4	Design user-friendly interfaces, effective data designs and system architectures aligned with business requirements.
5	Understand system implementation and support with attention to secure and reliable information systems.

Weekly Course Content

Week	Topics
1	Introduction to system analysis and design
2	Analyzing the business case
3	Managing system projects
4	Quiz and project first-stage evaluation and discussion
5	Requirements modeling
6	Requirements modeling; data and process modeling
7	Data and process modeling
8	Midterm examination week
9	Object modeling
10	Development strategies
11	User interface design
12	Data design
13	Quiz and project second-stage evaluation and discussion
14	System architecture
15	System implementation and support
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

Semester VI

Course Code	Course Title	Type	T	U	ECTS
LAW4021	IT Law	Compulsory	3	0	5
MIS3024	Quantitative Analysis for Decision Making	Compulsory	3	0	5
MIS3302	Information Systems Project Management	Compulsory	3	0	5
MIS3322	Enterprise Information Systems	Compulsory	3	0	5
MIS-CE2	Complementary Elective - 2	Elective	3	0	5
MIS-DE2	Departmental Elective - 2	Elective	3	0	5
Total			18	0	30

The sixth semester focuses on legal, analytical, managerial and enterprise-level aspects of information systems. Students take courses in IT law, quantitative decision-making, information systems project management and enterprise information systems, while also continuing their specialization through elective courses.

LAW4021 IT Law

Course Information	Details
Course Code	LAW4021
Course Title	IT Law
Course Type	Compulsory
Semester	6
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	IT law, data protection and cyber law course materials announced by the instructor

Course Aim

This course aims to introduce students to the legal issues related to information technologies, digital systems and online environments. It helps students understand the legal responsibilities of individuals, organizations and professionals working with information systems.

Course Content

The course covers basic concepts of law and information technologies, legal aspects of electronic communication, personal data protection, privacy, intellectual property rights, cybercrimes, electronic contracts, digital evidence, internet regulations and legal responsibilities in information systems.

Learning Outcomes

No.	Learning Outcome
1	Explain basic legal concepts related to information technologies.
2	Understand legal responsibilities in digital and online environments.
3	Explain the importance of privacy, personal data protection and information security from a legal perspective.
4	Identify legal issues related to intellectual property, electronic contracts and cybercrimes.
5	Evaluate legal and ethical risks in information systems practices.

Weekly Course Content

Week	Topics
1	Introduction to law and information technology law
2	Legal aspects of information technologies and digital environments
3	Internet regulations and responsibilities of service providers
4	Personal data protection and privacy
5	Information security and legal responsibilities
6	Intellectual property rights in digital environments
7	Software licenses, copyrights and digital content
8	Midterm examination week
9	Electronic contracts and electronic signatures
10	E-commerce regulations and consumer protection
11	Cybercrimes and criminal liability
12	Digital evidence and forensic informatics
13	Social media, online platforms and legal issues
14	Ethical issues in information technology law
15	Case studies and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS3024 Quantitative Analysis for Decision Making

Course Information	Details
Course Code	MIS3024
Course Title	Quantitative Analysis for Decision Making
Course Type	Compulsory
Semester	6
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Quantitative methods, operations research and decision analysis course materials announced by the instructor

Course Aim

This course aims to introduce quantitative methods used in managerial decision-making. It helps students formulate decision problems, apply analytical techniques and interpret results in business and information systems contexts.

Course Content

The course covers decision analysis, linear programming, sensitivity analysis, transportation and assignment problems, network models, forecasting, inventory models, queuing theory and simulation-based decision-making approaches.

Learning Outcomes

No.	Learning Outcome
1	Formulate business decision problems using quantitative models.
2	Apply linear programming and related optimization techniques.
3	Analyze transportation, assignment and network problems.
4	Use forecasting, inventory and queuing models for decision-making.
5	Interpret quantitative results and support evidence-based managerial decisions.

Weekly Course Content

Week	Topics
1	Introduction to quantitative decision-making
2	Decision analysis and decision trees
3	Linear programming: formulation of models
4	Linear programming: graphical solution and simplex method
5	Sensitivity analysis
6	Transportation problems
7	Assignment problems
8	Midterm examination week
9	Network models
10	Project scheduling and critical path method
11	Forecasting methods
12	Inventory models
13	Queuing models
14	Simulation for decision-making
15	Case studies and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS3302 Information Systems Project Management

Course Information	Details
Course Code	MIS3302
Course Title	Information Systems Project Management
Course Type	Compulsory
Semester	6
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Information systems project management and software project management course materials announced by the instructor

Course Aim

This course aims to teach the principles and practices of managing information systems projects. It helps students understand project planning, scheduling, budgeting, risk management, stakeholder communication and project control in technology-oriented projects.

Course Content

The course covers project life cycle, project selection, scope management, time management, cost management, quality management, risk management, human resources, communication, procurement, agile approaches and information systems project implementation.

Learning Outcomes

No.	Learning Outcome
1	Explain the basic concepts and life cycle of information systems projects.
2	Prepare project scope, schedule, cost and resource plans.
3	Analyze risks and develop risk management strategies for information systems projects.
4	Apply project monitoring, control and communication techniques.
5	Evaluate traditional and agile approaches in information systems project management.

Weekly Course Content

Week	Topics
1	Introduction to information systems project management
2	Project life cycle and project selection
3	Project scope management
4	Work breakdown structure and project scheduling
5	Time management and network diagrams
6	Cost estimation and budgeting
7	Quality management in information systems projects
8	Midterm examination week
9	Risk management
10	Human resource and team management
11	Communication and stakeholder management
12	Procurement and contract management
13	Agile project management approaches
14	Project monitoring, control and reporting
15	Case studies and project presentations
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS3322 Enterprise Information Systems

Course Information	Details
Course Code	MIS3322
Course Title	Enterprise Information Systems
Course Type	Compulsory
Semester	6
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Enterprise systems, ERP and SAP course materials announced by the instructor

Course Aim

This course aims to introduce students to enterprise information systems and their role in integrating business processes. It helps students understand how ERP and related systems support organizational coordination, data integration and managerial decision-making.

Course Content

The course covers enterprise systems, ERP concepts, business process integration, SAP and similar enterprise software, supply chain management, customer relationship management, financial and human resources modules, implementation issues and organizational change in enterprise systems projects.

Learning Outcomes

No.	Learning Outcome
1	Explain the role and importance of enterprise information systems in organizations.
2	Describe how ERP systems integrate business processes and organizational data.
3	Analyze major functional modules of enterprise systems.
4	Understand implementation, customization and change management issues in enterprise systems projects.
5	Evaluate the contribution of enterprise systems to decision-making and organizational performance.

Weekly Course Content

Week	Topics
1	Introduction to enterprise information systems
2	Business process integration and enterprise data
3	ERP systems and organizational integration
4	Financial accounting and controlling modules
5	Materials management and procurement processes
6	Sales and distribution processes
7	Production planning and logistics processes
8	Midterm examination week
9	Human resources and organizational management modules
10	Customer relationship management systems
11	Supply chain management systems
12	Enterprise system implementation methodology
13	Customization, configuration and change management
14	Risks and critical success factors in ERP projects
15	Case studies and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

Semester VII

Course Code	Course Title	Type	T	U	ECTS
MIS4001	Summer Training II	Compulsory	0	2	5
MIS4011	Simulation Modeling and Analysis	Compulsory	3	0	5
MIS4311	Machine Learning Applications	Compulsory	3	0	5
MIS4313	Decision Support Systems for Business	Compulsory	3	0	5
MIS-DE3,4	Departmental Elective - 3,4	Elective	3	0	10
Total			12	2	30

The seventh semester focuses on advanced analytical and applied topics in Management Information Systems. Students complete the second summer training course and take courses in simulation, machine learning and decision support systems, while continuing their specialization through departmental electives.

MIS4001 Summer Training II

Course Information	Details
Course Code	MIS4001
Course Title	Summer Training II
Course Type	Compulsory
Semester	7
Theoretical / Practical Hours	0 / 2
ECTS	5
Language of Instruction	English
Recommended Source	Internship guidelines, BYS internship system instructions and department announcements

Course Aim

This course aims to enable students to complete the second compulsory internship period and gain further professional experience in a field related to Management Information Systems. It supports students in applying their academic knowledge to real organizational, technological and business problems.

Course Content

The course consists of the second compulsory internship period. Students complete their internship in an approved workplace and prepare internship records and reports according to the department's internship procedures. The second internship should be completed in a different internship area from the first internship.

Learning Outcomes

No.	Learning Outcome
1	Apply advanced knowledge from Management Information Systems courses in a professional environment.
2	Observe and evaluate organizational processes, information systems and business practices.
3	Develop professional communication, teamwork and problem-solving skills.
4	Prepare daily internship records and an internship report in accordance with department requirements.
5	Evaluate personal career interests and professional competencies through workplace experience.

Weekly Course Content

Stage	Content
1	Internship application and workplace approval process
2	Departmental approval and SGK procedures
3	Beginning of internship at the approved workplace
4	Observation of workplace structure, business processes and information systems
5	Execution of assigned internship tasks in the approved internship area
6	Daily reporting through the internship system
7	Preparation of internship report
8	Workplace approval of internship report
9	Departmental evaluation and final approval

Assessment

Assessment Component	Weight
Internship Application and Approval	20%
Daily Internship Records	30%
Internship Report and Workplace Evaluation	50%

MIS4011 Simulation Modeling and Analysis

Course Information	Details
Course Code	MIS4011
Course Title	Simulation Modeling and Analysis
Course Type	Compulsory
Semester	7
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Simulation modeling, operations research and decision analysis course materials announced by the instructor

Course Aim

This course aims to introduce simulation as a decision-support and analysis tool for complex business and information systems problems. It helps students model real systems, analyze uncertainty and evaluate alternative scenarios.

Course Content

The course covers simulation concepts, system modeling, random variables, probability distributions, input data analysis, discrete-event simulation, model verification and validation, output analysis, scenario comparison and simulation applications in business and operations.

Learning Outcomes

No.	Learning Outcome
1	Explain fundamental concepts of simulation modeling and analysis.
2	Develop simulation models for business and operational systems.
3	Use probability distributions and random variables in simulation models.
4	Verify, validate and analyze simulation model outputs.
5	Compare alternative scenarios and support decision-making through simulation results.

Weekly Course Content

Week	Topics
1	Introduction to simulation modeling
2	Systems, models and simulation logic
3	Discrete-event simulation concepts
4	Random variables and probability distributions
5	Input data analysis
6	Simulation model development
7	Model verification and validation
8	Midterm examination week
9	Output analysis
10	Scenario comparison and experimental design
11	Simulation of queuing systems
12	Simulation of inventory and service systems
13	Business process simulation applications
14	Simulation software and practical applications
15	Case studies and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS4311 Machine Learning Applications

Course Information	Details
Course Code	MIS4311
Course Title	Machine Learning Applications
Course Type	Compulsory
Semester	7
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Machine learning and data analytics course materials announced by the instructor

Course Aim

This course aims to introduce students to the basic principles and applications of machine learning. It helps students understand how machine learning models are developed, trained, evaluated and applied to business and information systems problems.

Course Content

The course covers supervised and unsupervised learning, data preprocessing, regression, classification, clustering, model evaluation, decision trees, support vector machines, ensemble methods, neural networks and practical machine learning applications.

Learning Outcomes

No.	Learning Outcome
1	Explain fundamental machine learning concepts and workflows.
2	Prepare data for machine learning applications.
3	Apply supervised learning methods for regression and classification problems.
4	Apply unsupervised learning methods such as clustering.
5	Evaluate machine learning models and interpret results for business decision-making.

Weekly Course Content

Week	Topics
1	Introduction to machine learning
2	Machine learning workflow and data preprocessing
3	Feature engineering and model preparation
4	Regression models
5	Classification models
6	Decision trees
7	Model evaluation and validation
8	Midterm examination week
9	Support vector machines
10	Ensemble learning methods
11	Clustering methods
12	Dimensionality reduction
13	Introduction to neural networks
14	Machine learning applications in business and information systems
15	Project applications and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS4313 Decision Support Systems for Business

Course Information	Details
Course Code	MIS4313
Course Title	Decision Support Systems for Business
Course Type	Compulsory
Semester	7
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Decision support systems, business intelligence and analytics course materials announced by the instructor

Course Aim

This course aims to introduce decision support systems and their role in business decision-making. It helps students understand how data, models and information technologies can be combined to support managerial decisions.

Course Content

The course covers decision-making processes, decision support systems, data-driven and model-driven decision support, business intelligence, data visualization, dashboards, analytics, group decision support systems, expert systems and contemporary decision support applications.

Learning Outcomes

No.	Learning Outcome
1	Explain decision-making processes and the role of decision support systems in organizations.
2	Analyze data-driven and model-driven decision support approaches.
3	Use business intelligence and analytics concepts to support managerial decisions.
4	Interpret dashboards, reports and visualization outputs for decision-making.
5	Evaluate decision support system applications in real business contexts.

Weekly Course Content

Week	Topics
1	Introduction to decision support systems
2	Decision-making processes in organizations
3	Data-driven decision support systems
4	Model-driven decision support systems
5	Business intelligence and analytics
6	Data visualization and dashboards
7	Reporting systems and performance indicators
8	Midterm examination week
9	Group decision support systems
10	Knowledge-based and expert systems
11	Decision support in enterprise systems
12	Decision support in customer relationship management
13	Decision support in finance, marketing and operations
14	Contemporary applications and case studies
15	Project applications and general review
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

Semester VIII

Course Code	Course Title	Type	T	U	ECTS
MIS4020	Customer Relationship Management	Compulsory	3	0	5
MIS4022	E-Business Management	Compulsory	3	0	5
MIS4992	Project	Compulsory	4	0	10
MIS-DE5,6	Departmental Elective - 5,6	Elective	3	0	10
Total			13	0	30

The eighth semester completes the undergraduate curriculum with advanced courses in customer relationship management, e-business management and the graduation project. Students also continue their specialization through departmental elective courses.

MIS4020 Customer Relationship Management

Course Information	Details
Course Code	MIS4020
Course Title	Customer Relationship Management
Course Type	Compulsory
Semester	8
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	Customer relationship management, digital marketing and analytics course materials announced by the instructor

Course Aim

This course aims to introduce students to the principles, strategies and technologies of customer relationship management. It helps students understand how organizations manage customer data, customer interactions and long-term customer relationships.

Course Content

The course covers customer relationship management concepts, customer lifecycle, customer segmentation, customer satisfaction, loyalty, CRM systems, customer data management, analytical CRM, operational CRM, digital CRM, campaign management and CRM implementation issues.

Learning Outcomes

No.	Learning Outcome
1	Explain the main concepts and strategic importance of customer relationship management.
2	Analyze customer lifecycle, customer segmentation and customer loyalty processes.
3	Explain the role of CRM systems in managing customer data and interactions.
4	Evaluate analytical, operational and digital CRM applications.
5	Develop CRM-oriented solutions to support customer satisfaction and business performance.

Weekly Course Content

Week	Topics
1	Introduction to customer relationship management
2	CRM strategy and customer-centric organizations
3	Customer lifecycle and customer value
4	Customer segmentation and targeting
5	Customer satisfaction, loyalty and retention
6	CRM systems and customer data management
7	Operational CRM
8	Midterm examination week
9	Analytical CRM and customer analytics
10	Campaign management and personalization
11	Digital CRM and social CRM
12	CRM implementation and organizational change
13	CRM performance measurement
14	CRM case studies
15	General review and applications
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS4022 E-Business Management

Course Information	Details
Course Code	MIS4022
Course Title	E-Business Management
Course Type	Compulsory
Semester	8
Theoretical / Practical Hours	3 / 0
ECTS	5
Language of Instruction	English
Recommended Source	E-business, digital business models and e-commerce course materials announced by the instructor

Course Aim

This course aims to introduce students to the management of electronic business and digital business models. It helps students understand how organizations use digital platforms, internet technologies and information systems to create value.

Course Content

The course covers e-business concepts, digital business models, e-commerce, digital platforms, online marketing, electronic payment systems, supply chain integration, customer relationship management in digital environments, legal and ethical issues, security and digital transformation strategies.

Learning Outcomes

No.	Learning Outcome
1	Explain the main concepts of e-business and digital business models.
2	Analyze how digital platforms and internet technologies transform business processes.
3	Evaluate e-commerce models, online marketing and electronic payment systems.
4	Identify legal, ethical and security issues in e-business environments.
5	Develop strategic recommendations for digital business and e-business management.

Weekly Course Content

Week	Topics
1	Introduction to e-business management
2	Digital transformation and digital business models
3	E-commerce models and online marketplaces
4	Digital platforms and platform-based competition
5	Online marketing and digital customer experience
6	Electronic payment systems and financial technologies
7	E-business infrastructure and information systems
8	Midterm examination week
9	Supply chain integration in e-business
10	CRM and analytics in digital environments
11	Security and privacy in e-business
12	Legal and ethical issues in electronic business
13	E-business strategy and performance measurement
14	Case studies in e-business management
15	General review and project discussions
16	Study week
17	Final examination

Assessment

Assessment Component	Weight
Semester Activities	50%
Final Examination	50%

MIS4992 Project

Course Information	Details
Course Code	MIS4992
Course Title	Project
Course Type	Compulsory
Semester	8
Theoretical / Practical Hours	4 / 0
ECTS	10
Language of Instruction	English
Recommended Source	Project guidelines, academic writing rules, advisor recommendations and department announcements

Course Aim

This course aims to enable students to conduct an independent academic and applied project under the supervision of an academic advisor. It allows students to synthesize the knowledge and skills gained throughout the undergraduate program and apply them to a concrete problem in Management Information Systems.

Course Content

The course includes project topic selection, advisor-student matching, research design, literature review, methodology development, data collection or software/application development, analysis, academic writing, similarity check, project presentation and final project submission.

Learning Outcomes

No.	Learning Outcome
1	Define a project topic related to Management Information Systems and formulate a clear research or application problem.
2	Conduct a literature review and select appropriate research or development methods.
3	Develop an applied project, analysis, system, software prototype or research study under advisor supervision.
4	Prepare a written project report according to academic writing and ethical principles.
5	Present and defend the project before an academic jury.

Project Process

Stage	Content
Before the project	Students determine the field in which they would like to work, participate in the advisor preference process and are matched with an academic advisor.
During the project	Students carry out the project together with their advisor. They are expected to work regularly, follow academic writing principles and develop the project according to the advisor's guidance.
At the end of the project	The project is checked for similarity, presented before a jury and submitted with the required documents.

Project Areas

Area	Examples
Software Development	Web, desktop or mobile software development projects.
Data Analytics	Quantitative business analyses, survey studies, simulation, data mining, machine learning and artificial intelligence applications.
Enterprise Software	Systems analysis and design projects, enterprise resource planning and SAP-related applications.
General Business	Marketing, finance, logistics and other business-related topics.

Assessment

Assessment Component	Weight
Written Project Report	50%
Similarity Check and Academic Compliance	20%
Project Presentation and Jury Evaluation	30%

Elective Courses

The Management Information Systems (English) Undergraduate Program includes complementary and departmental elective courses starting from the fifth semester. The elective pools are organized according to the semester and elective course group shown below. Students select their elective courses from the relevant course pool announced in the curriculum system.

5th Semester MIS-CE1 Complementary Elective - 1 6th Semester MIS-CE2 Complementary Elective - 2		
Course Code	Course Title	ECTS
FNCE3034	Investment Analysis and Portfolio Management	5
FNCE3037	Financial Markets and Institutions	5
FNCE4043	Turkish Financial Institutions and Markets	5
FNCE4047	International Finance	5
FNCE4061	Financial Technology and Changing Financial Architecture	5
MGT3019	Small Business Management	5
MGT4007	Entrepreneurship	5
MGT4056	Strategic Management	5
MRK3051	Consumer Behavior	5
MRK3059	Services Marketing	5
MRK3063	Sustainability	5
MRK4055	Marketing Communications	5
MRK4057	Digital Marketing	5
MRK4060	Selected Topics in Marketing	5
MRK4062	Brand Management	5
MRK4064	Marketing for International Markets	5
OB3075	Gender Equality	5
OB3084	Social Responsibilities and Business Ethics	5
OB4027	Green Organizational Behavior	5
PROD3002	Supply Chain Management	5

5th Semester MIS-DE1 Departmental Elective - 1 6th Semester MIS-DE2 Departmental Elective - 2		
Course Code	Course Title	ECTS
MIS3015	Multi-criteria Decision Techniques	5
MIS3022	Network Analysis	5
MIS3111	Visual Programming I	5
MIS3112	Visual Programming II	5
MIS3113	Design Patterns	5
MIS3305	Programming for Data Science	5
MIS3306	Business Application Development	5
MIS3312	Artificial Intelligence	5
MIS3313	Business Intelligence	5
MIS3314	Human Factors in Computing	5
MIS3315	Digital Transformation & Industry 4.0	5
MIS3901	Selected Topics of MIS I	5
MIS3902	Selected Topics of MIS II	5

7th Semester MIS-DE3,4 Departmental Elective - 3,4 8th Semester MIS-DE5,6 Departmental Elective - 5,6		
Course Code	Course Title	ECTS
MIS3312	Artificial Intelligence	5
MIS4030	Game Theory in IT	5
MIS4111	Mobile Programming	5
MIS4112	Game Programming	5
MIS4315	Social Media and Web Analytics	5
MIS4321	Computational Finance and Algorithmic Trading	5
MIS4323	Entrepreneurship in IT	5
MIS4341	Internet of Things	5
MIS4342	Cloud Computing	5
MIS4344	DevOps Foundations: Practices and Tools	5
MIS4351	Cybersecurity	5
MIS4352	Blockchain Basics	5
MIS4362	Geographic Information Systems	5
MIS4382	Ethical Issues in Computing	5
MIS4802	Applied Research in MIS II	5
MIS4803	Applied Research in MIS I	5
MIS4902	Special Topics in MIS II	5
MIS4903	Special Topics in MIS I	5

Elective course offerings may vary depending on the academic year, department planning and instructor availability. Students should follow the official curriculum system and department announcements when selecting elective courses. Elective courses allow students to strengthen their academic and professional profiles by focusing on areas such as software development, data analytics, artificial intelligence, cybersecurity, enterprise systems, digital transformation and business-oriented information systems.

8.2 Prerequisite Courses

Some courses in the program have prerequisite requirements. In order to take certain courses, students must successfully complete the corresponding prerequisite course. The prerequisite course list is presented below.

Course Code	Course Title (Prerequisite)	Course Code	Course Title
MATH1047	Business Mathematics I	MATH1046	Business Mathematics II
MATH1047	Business Mathematics I	MIS3024	Quantitative Analysis for Decision Making
MATH1047	Business Mathematics I	MIS4011	Simulation Modeling and Analysis
ECON1011	Microeconomics	ECON1012	Macroeconomics
ACC1005	Introduction to Accounting	ACC1006	Financial Accounting
ACC1005	Introduction to Accounting	FNCE2003	Fundamentals of Finance
FNCE2003	Fundamentals of Finance	FNCE2004	Financial Management
MIS1042	Introduction to Algorithms and Data Structures	MIS2111	Object Oriented Programming
MIS1042	Introduction to Algorithms and Data Structures	MIS2026	Web Based Application Programming
MIS1042	Introduction to Algorithms and Data Structures	MIS3301	System Analysis and Design
STAT2011	Business Statistics I	STAT2012	Business Statistics II
STAT2011	Business Statistics I	MIS3121	Data Mining
MIS2103	Computer Hardware and System Software	MIS2042	Business Data Communications
MIS2113	Introduction to Databases	MIS2040	Advanced Databases
MIS2113	Introduction to Databases	MIS3301	System Analysis and Design
MIS2113	Introduction to Databases	MIS3121	Data Mining
MIS3001	Summer Training I	MIS4001	Summer Training II
MIS3301	System Analysis and Design	MIS3322	Enterprise Information Systems
MIS3301	System Analysis and Design	MIS4311	Machine Learning Applications
MIS3001	Summer Training I	MIS4992	Project

Note: The Project course can be taken in the fourth year.

9 List of Abbreviations

MIS	Management Information Systems
IT	Information Technology
IS	Information Systems
AI	Artificial Intelligence
ML	Machine Learning
ERP	Enterprise Resource Planning
CRM	Customer Relationship Management
SAP	Systems, Applications and Products in Data Processing
BYS	Student Information System
SGK	Social Security Institution
ECTS	European Credit Transfer and Accumulation System
GPA	Grade Point Average
CV	Curriculum Vitae
SEO	Search Engine Optimization
IoT	Internet of Things

10 References and Sources

- Marmara University, Department of Management Information Systems. Official Department Website. <https://mis-isletme.marmara.edu.tr>
- Marmara University, Management Information Systems (English) Undergraduate Program. Program and Curriculum Information. <https://meobs.marmara.edu.tr>
- Marmara University. Academic Calendar for the 2026–2027 Academic Year.
- Marmara University, Faculty of Business Administration. Internship Guidelines and BYS-based Internship Application and Approval Process Documents.
- Marmara University, Department of Management Information Systems. Graduation Project Guidelines and Department Announcements.
- Marmara University, Office for International Relations and Academic Cooperation. Erasmus+ Mobility and Partner Institution Information.
- Marmara University AVESIS. Academic Staff Profiles and Research Areas. <https://avesis.marmara.edu.tr>

ABOUT THE PROGRAM

The program is designed to prepare students for professional career by combining theoretical knowledge with practical skills.

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