TOBB ETÜ Management Information Systems (MIS) Department

Frequently Asked Questions

1. What is MIS?

Management Information Systems (MIS) trains professionals with an interdisciplinary approach who understand technology, interpret data, and contribute to strategic decision-making processes. Students gain competence in today's most important areas such as data analytics, artificial intelligence, business intelligence, software development, digital transformation, project management, cyber security, and corporate information systems. Thanks to an application-oriented education approach, they get the opportunity to use their theoretical knowledge on real business problems.

2. What should we understand when we say "Digital Transformation" in today's business world, and where does MIS stand in this transformation?

Digital transformation is not just transferring data on paper to a computer or buying new software. It is the recreation of the ways institutions do business, their cultures, and customer experiences from scratch with technology. MIS stands right at the center of this process, acting as the locomotive of digital transformation. Companies do not only need technology; they need visionaries who will flawlessly integrate that technology into business processes and turn data into strategy. We raise architects who do not just watch this transformation but personally design and manage it.

3. Why TOBB ETÜ?

The TOBB ETÜ MIS department brings information technologies and business knowledge together under a single roof, offering its students technical knowledge and a managerial perspective together, which provides a strong career start. Thanks to TOBB's strong ties with the business world and TOBB ETÜ's pioneering Cooperative Education model, students gain long-term work experience in leading institutions of the sector during their education, getting to know professional working life before graduation. Thus, they develop both their technical and managerial skills while building a strong professional network.

TOBB ETÜ MIS aims to train the digital leaders of the future by combining the technology and management competencies needed by the business world.

4. How does Management Information Systems Differ from Computer Engineering, Business Administration, Industrial Engineering, and Artificial Intelligence Engineering Departments?

Management Information Systems (MIS) is an interdisciplinary department that brings business and information technologies together. Computer Engineering mainly focuses on software, hardware, and technology development; Business Administration focuses on management, organization, and business processes. Industrial Engineering focuses on production, operation, and process optimization; Artificial Intelligence Engineering focuses on developing artificial intelligence algorithms and smart systems.

MIS, unlike these fields, combines technology, data, and business processes with a holistic perspective. While gaining the skills to analyze, design, and manage information systems, students also learn business processes, data-driven decision making, and digital transformation applications. In this way, they are trained as professionals who can establish effective communication between technical teams and business units and align technology with business goals.

If you are interested in technology but do not want to limit your career only to software development, only to business management, or only to operation optimization; if you want to understand data, technology, and the business world together and take an active role in digital transformation processes, MIS will be a strong choice.

5. Who Will Make Technology Decisions in the Companies of the Future: Software Developers, Managers, or Those Who Can Think of Both Together?

The most valuable profiles in the companies of the future will not be just developers or just managers. The real difference will be created by people who can think about technology and management together, because technology decisions are no longer just about "which software should we use?". If a company is going to use artificial intelligence, it has to consider its data quality, ethical dimension, cost, impact on employees, customer experience, and competitive advantage together. This is exactly where the MIS student steps in. They can understand what the technical team is saying; they can grasp what business outcome the manager expects. Then they can build a healthy bridge between these two sides.

6. Is the Importance of MIS Increasing in the Age of Artificial Intelligence?

Yes, absolutely, and increasingly so. Because AI is not a solution on its own; it is a powerful tool that must be used in the right way for the right problem. MIS graduates will be the ones deciding in which processes AI will be used, how the obtained data will be interpreted, and how the resulting outcomes will add value to businesses. In the future, the institutions providing competitive advantage will not only be those using AI, but those managing it correctly. We are preparing our

students for this future. Our students will graduate not just as users of technology, but as active designers and managers of digital transformation who manage technology and integrate it into business processes.

7. What Competencies Will I Gain?

Our students are equipped with the most sought-after competencies in today's business world, such as analytical thinking, problem-solving, teamwork, and digital transformation management. The Management Information Systems program is structured on four main axes:

- **Software and Technology:** Through courses like Programming, Database Management, Systems Analysis and Design, Information Security, and Web Design, students learn the foundation of modern information technologies and gain application development skills.
- **Business and Management:** Through courses in Business Administration, Marketing, Production and Innovation Management, Entrepreneurship, Leadership, and Project Management, students comprehend the functioning of institutions and strategic decision-making processes.
- **Data and Analytics:** With courses such as Statistics, Artificial Intelligence and Data Analytics, and Decision Support Systems, students learn to produce meaningful information from data and manage data-driven decision-making processes.
- **Competencies of the Future:** Courses such as Information Law and Ethics, Green Transformation, Human-Computer Interaction, and Digital Transformation ensure that students are trained as professionals who can evaluate technological developments through social, legal, and sustainability dimensions.

8. How Does the Cooperative Education Model Work?

With TOBB ETÜ's pioneering Cooperative Education (CO-OP) model in Turkey, students take part in business life full-time in three different terms (2nd year summer, 3rd year spring, 4th year fall) during their 4-year undergraduate education. In this way, students gain approximately one year of professional work experience before graduation and find the opportunity to apply their theoretical knowledge in a real business environment. Typical task areas include business process analysis, data reporting, support for enterprise software projects, identification of user needs, and digital transformation studies. Our department is in cooperation with technology firms, consultancy companies, public institutions, and sector organizations within TOBB. The cooperative education model is one of the most important advantages that ensures MIS students graduate equipped not only with academic knowledge but also with real work experience and professional competencies.

9. Is there an opportunity for MIS students to do a Double Major or Minor?

Yes, TOBB ETÜ MIS Department students have the opportunity to do a Double Major Program or a Minor with different departments in our university (for example, Business Administration, Economics, Computer Engineering, Industrial Engineering, etc.) provided they meet the necessary academic success requirements. This opportunity increases their interdisciplinary competencies by enabling our students to specialize further in a second field of interest, offering them a versatile advantage in their careers.

10. What are the Language of Instruction and Foreign Language Education Opportunities?

The Management Information Systems Program is conducted 30% in English; in addition to the compulsory preparatory program and four terms of English courses, the Second Foreign Language education starting in the 5th term contributes to students' ability to compete in the international business world.

11. What are the Study Abroad Exchange (Erasmus) Opportunities?

Within the scope of TOBB ETÜ's Erasmus+ agreements, students have the opportunity to study and/or do internships at European universities. This experience allows students to get to know different education systems, experience international business environments, and develop intercultural communication skills.

12. What Career Paths Do Graduates Follow?

Management Information Systems graduates have the opportunity to work in many sectors, primarily banking and finance, production, consultancy, defense industry, e-commerce, technology companies, telecommunications, logistics, health, public institutions, and international companies, thanks to their interdisciplinary education that brings business knowledge and technology competencies together. Graduates can pursue careers in positions such as Business Analyst, Systems Analyst, Data Analyst, Business Intelligence Specialist, ERP Consultant, IT Project Manager, Digital Transformation Specialist, Technology Consultant, E-Commerce Manager, Product Manager, and similar roles. They also have the opportunity to establish their own technology startups in the entrepreneurship ecosystem or lead digital transformation projects.

13. Do We Learn Programming in MIS? Is Advanced Mathematics or Prior Programming Knowledge Required?

Yes. Management Information Systems students learn coding by taking courses such as programming, database, web, and application development. However, the aim of the department is to train IT professionals who understand and manage technology and business processes together, rather than training professional software engineers. You do not need to have prior programming or coding experience to start the department. Programming courses start from the basic level in the first year and progress step-by-step, structured to bring students to the necessary technical competencies. Mathematics courses, compared to engineering programs, focus more on applications used in the business world, such as data analysis, modeling, statistics, and problem-solving. Therefore, the most important characteristic for success in the department is analytical thinking, openness to learning, and problem-solving skills, rather than a strong coding background or advanced mathematics knowledge.

14. What opportunities will an MIS student have to bring their technical projects to life on the TOBB ETÜ campus?

One of the biggest advantages of receiving a Management Information Systems education at TOBB ETÜ is that students take part in a comprehensive ecosystem where they can transform the theoretical knowledge they acquired in the classroom into real-world projects. Our students are not limited only to graduation projects; they have the opportunity to participate in national and international research projects and develop innovative ideas together with our expert academic staff. In addition, the modern application laboratories, whose installation preparations are ongoing within our department, offer a strong infrastructure where our students can put the technical knowledge they have acquired into practice and bring their first innovative trials to life.

15. Are There Opportunities in the Field of Entrepreneurship and Start-ups?

Yes. The Management Information Systems Department prepares its students not only for corporate careers but also for the entrepreneurship ecosystem. Courses included in the program such as entrepreneurship, innovation management, data analytics, web design, systems analysis, and decision support systems provide a suitable infrastructure for students who want to develop technology-based business ideas. Furthermore, thanks to their cooperative education (CO-OP) experiences, students find the opportunity to get to know different sectors closely, observe the needs of the business world, and develop their professional networks. Students who want to start their own business or develop innovative projects are supported with the Garage located on our campus and other opportunities in the TOBB ecosystem (Garage X, the soon-to-open Teknokent, etc.).

16. Can MIS Graduates Pursue Master's Degrees or Academic Careers?

Yes. MIS graduates have a very wide range of postgraduate education opportunities thanks to their interdisciplinary education infrastructure. They can apply to master's and doctoral programs in Management Information Systems, Business Administration, Data Analytics, Information Systems, Technology Management, Innovation Management, Digital Transformation, and related social science or engineering-based fields. The structure of MIS that brings technology and management together gives its graduates the flexibility to branch out into different disciplines in both the academic world and professional life.

17. With which YKS score type can one enter the MIS department?

Due to its interdisciplinary structure combining business, management, and information technologies, the TOBB ETÜ Management Information Systems Department accepts students with the Equal Weight (EA) score type.