

Graduate School of Informatics
Information Systems Department

Student Guide

A Comprehensive Guide for New Students

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PART-1: Introduction

Information Systems Department Student Guide is a comprehensive resource for navigating students' academic journey at our esteemed institution. This guide is designed to provide students with essential information to ensure a smooth transition into their studies. In Part 1, the Informatics Institute, its facilities, contact information, and departmental structure are introduced. Specifically, the Information Systems Department is explored in depth, covering foundations, academic programs, specialization options, and more. Part 2 delves into the rules, regulations, and opportunities available to students, ranging from Middle East Technical University's rules to academic integrity and awards for exceptional students. Part 3 offers detailed insights into our programs, including deficiency programs, course exemptions, prerequisites, and elective courses. Part 4 walks you through the registration process, and Part 5 outlines crucial rules and regulations, including course substitutions, thesis guidelines, and doctoral comprehensive examinations.

Let this guide be your compass as you embark on your academic journey with us.

1.1 Informatics Institute

Established in 1996, the Informatics Institute is committed to fostering interdisciplinary studies. With a core team of 25 full-time academic staff members and support from 7 administrative personnel, it operates seamlessly with the assistance of 38 research assistants and collaborations with 70 affiliated staff members. Complementing this dedicated team are 13 adjunct staff members. In its pursuit of academic excellence, the institute serves a diverse community of over 600 students enrolled in various programs and degrees, making it a thriving hub of interdisciplinary education and research.

1.1.1 Facilities at the Informatics Institute:

The Informatics Institute is equipped with a diverse array of facilities that not only support but also foster a conducive environment for a wide range of academic and research activities. These facilities include the following:

Amphitheater (Ural Akbulut Auditorium): A designated space for lectures, presentations, and large gatherings.

Conference Rooms: Two rooms equipped for hosting conferences, seminars, and academic meetings.

Computer Labs: Two dedicated computer laboratories for practical coursework and research.

Classrooms: Five standard classrooms for lectures and academic instruction, plus one special classroom designed for specific educational needs.

Meeting Rooms: Three meeting rooms with designated identifiers (A212, B116, A108) for smaller group discussions and collaborations.

Social Room/Kitchen: A social room and kitchen area provide a communal space for students and faculty.

Dedicated Research Labs: Laboratories designed for specialized research projects and experiments. Here is a list of the research laboratories within the Informatics Institute:

- VR VISION LAB
- SOFTWARE MANAGEMENT RESEARCH GROUP LAB
- WIRELESS LAB
- VIRTUAL REALITY AND COMPUTER VISION RESEARCH LAB
- URAP CENTER
- COMODO CYBERSECURITY AND DEFENSE LAB
- AUDIO AND ACOUSTICS LAB (@ MODSIMMER Building)
- NEURO LAB
- COGS LAB
- BIOINFORMATICS LAB
- GENOM LAB
- KANSIL LAB (@ MODSIMMER Building)

1.1.2 Contact Information



The Informatics Institute's official website is accessible at http://ii.metu.edu.tr



Stay updated with the latest news and announcements by following us on Twitter: https://twitter.com/METUII



Explore our video content, including lectures and presentations, on our YouTube channel: https://www.youtube.com/channel/UCp4BQedwKNyr5CG6T0oUXMg



Connect with the Informatics Institute community on Facebook:

https://www.facebook.com/METUII

1.1.3 Internet access in the building

To establish Wi-Fi access using meturoam, follow these steps:

- 1. **Set Your meturoam Password:** Visit <u>netregister.metu.edu.tr</u> and log in using your METU credentials. This will allow you to set up your meturoam password.
- 2. **Alternative Connection Option Eduroam:** You can also connect to the eduroam network. For instructions on how to connect to eduroam, visit https://eduroam.metu.edu.tr/how to connect eduroam.html

If you encounter any technical issues during this process, please don't hesitate to contact our helpdesk at <u>ii-helpdesk@metu.edu.tr</u>. We are here to assist you with any connectivity-related concerns.

1.1.4 Departments within the Informatics Institute

The Informatics Institute is structured into six distinct departments:

- 1. <u>Information Systems</u>
- 2. Cognitive Science
- 3. Modelling and Simulation
- 4. Medical Informatics
- 5. Cyber Security
- 6. Data Informatics

The Informatics Institute fosters a culture of close ties and collaboration among all its departments. As a student, you have the opportunity to explore cross-disciplinary interests by taking courses from other departments within the institute. We encourage you to discuss your academic pursuits and course choices with your advisors, who can guide you in making the most of this interdepartmental collaboration.

1.2 Information Systems Department

The Information Systems Department aims to encourage the use and development of information systems to improve the conditions of society and to contribute to scientific and technological developments. To accomplish these goals, it welcomes graduates from different disciplines to meet the interdisciplinary graduate needs of the academia and public and private sectors; simultaneously pursues research and technology development among different disciplines.

1.2.1 Information Systems Foundations

Information systems foundations contain management, domains, and technology. So, they highlight the integration of management principles, the application of information systems in various sectors or domains, and the underlying technology infrastructure that supports these systems. It emphasizes the interdisciplinary nature of information systems, where technology is harnessed to manage and enhance operations in diverse fields.

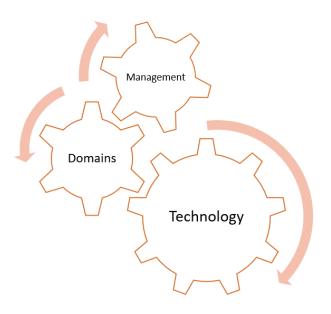


Figure 1: Foundations of Information Systems

Management: Information systems are crucial for effective management within organizations. They enable managers to gather, process, and analyze data to make informed decisions, optimize processes, and allocate resources efficiently.

Domains: Information systems can be applied across various domains or sectors. These domains may include business, healthcare, finance, education, and many others. Each domain has specific needs and challenges that information systems can address.

Technology: Information systems heavily rely on technology. This includes hardware, software, networks, databases, and other technological components that enable the collection, storage, processing, and dissemination of information within an organization.

1.2.2 Information Systems as an Enabler

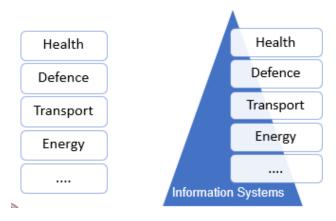


Figure 2: Information Systems as an Enabler

With the pervasiveness of information systems, the program serves all sectors, from business to defense, and students have a choice of conducting research in a multitude of areas. By serving different sectors, it acts as an enabler.

1.2.3 What is driving IT demand?



Figure 3: Driving IT Evolution: Navigating the Intersection of Business Optimization and Big Data

The growing demand for IT is intricately linked to the integration of Business Optimization and Big Data. The widespread use of mobile devices highlights the need for a robust infrastructure to manage the resulting data influx, while real-time sensor data necessitates sophisticated IT systems for prompt processing. The expanding influence of social media adds complexity, requiring scalable solutions for effective data management and analysis. Cloud computing

emerges as a pivotal player in infrastructure optimization, allowing dynamic scalability. Simultaneously, the heightened emphasis on cybersecurity addresses security concerns amidst the surge in data volumes. Lastly, the adoption of advanced predictive analytics signals a broader shift toward data-driven decision-making, collectively propelling the ongoing evolution and expansion of IT demand. Consequently, these advancements underscore the increasing value of Information Systems studies.

1.2.4 Academic and Research Programs

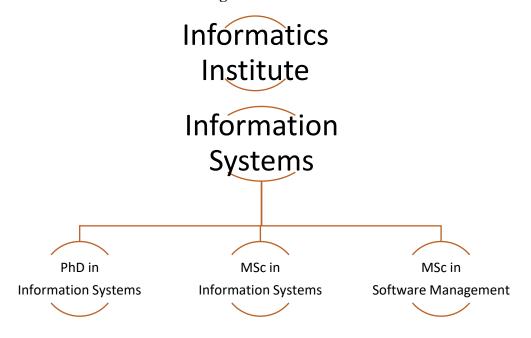


Figure 4: Academic and Research Programs in Information Systems Department

The Information Systems department is a prominent academic unit within the Graduate School of Informatics, dedicated to advancing knowledge and expertise in the field of Information Systems (IS). The department offers a comprehensive range of programs catering to students at various academic levels:

- 1. **PhD in Information Systems (IS):** The department offers a rigorous and research-oriented doctoral program for students aspiring to make significant contributions to the field of IS. Doctoral candidates engage in in-depth research projects, working closely with faculty members to push the boundaries of IS knowledge.
- 2. **Master of Science (MSc) in Information Systems:** This program is tailored to provide students with a solid foundation in Information Systems. It equips graduates with the skills and knowledge needed to excel in various roles within the IS domain, be it in industry or academia.

3. **Master of Science (MSc) in Software Management:** The department also offers an MSc program in Software Management, focusing on the strategic aspects of software development and management. Graduates from this program are well-prepared to lead software projects and teams effectively.

Academic Staff: The department is staffed by a dedicated team of 7 full-time faculty members who are experts in various aspects of Information Systems. These faculty members bring extensive research and industry experience to the classroom, ensuring that students receive toptier education. The full-time academic staff, including their contact information and fields of interest, are provided in the upcoming sections.

Student Body: The Information Systems department boasts a vibrant and diverse student body, comprising 178 MSc and PhD students. This community of scholars collaborates on research projects, shares knowledge, and contributes to academic and practical advancements in the field.

The department's commitment to academic excellence, research innovation, and student success makes it a hub for those passionate about Information Systems and Software Management.

1.2.5 IS Programs' Course Load

The course load for various **Information Systems (IS)** programs within the Informatics Institute is as follows:

Core courses:

- IS 501 Introduction to Information Systems
- IS 502 Information Systems Project / DI 502 Data Informatics Project
- IS 520 Research Methods and Ethics /COGS 536 (only thesis programs)

MSc with Thesis

- 3 Core
- IS 590 Graduate Seminar
- IS 599 MSc Thesis
- 4 Elective Courses

PhD

- 3 Core
- IS 690 Graduate Seminar
- IS 699 PhD Thesis
- 4 Elective Courses

MSc without Thesis

- 2 Core (IS 501 and IS 502/DI 502)
- IS 589 Term Project
- 8 Elective Courses

PhD on Bachelor

- 3 Core
- IS 690 Graduate Seminar
- IS 699 PhD Thesis
- 11 Elective Courses

1.2.6 Durations of Programs

Program durations excluding Academic Deficiency Program are provided below. These program durations provide a clear framework for students pursuing different academic levels at IS Department, ensuring that they have sufficient time to complete their studies while maintaining academic progress.

For MSc without thesis:

• Normal duration: 2 semesters

• Maximum duration: 3 semesters

For PhD:

• Normal duration: 8 semesters

• Maximum duration: 12 semesters

courses and the seminar course: 4 semesters

For MSc with thesis:

• Normal duration: 4 semesters

• Maximum duration: 6 semesters

• Maximum duration for completing credit courses and seminar courses: 4 semesters

For PhD on Bachelor:

• Normal duration: 10 semesters

• Maximum duration: 14 semesters

• Maximum duration for completing credit • Maximum duration for completing credit courses and the seminar course: 6 semesters

1.2.7 IS Specialization Options

Specialization options provided in the IS Department are provided below. Please note that there is no formal requirement to pick courses under any track. These are just for guidance.

- Data Science
- Digital Transformation
- Software Technologies and Management
- Management Information Systems
- Information and Communication Technologies

In the upcoming sections, elective courses for different specialization options are given. You should get the consent of your advisor and the course lecturer before enrolling in any of them.

1.2.7.1 Elective Courses for Data Science Specialization Track

The recommended courses for students who want to specialize in Data Science are as follows:

- DI 504 Foundations of Deep Learning
- DI 514 / IS 580 Data Mining and Knowledge Discovery
- DI 520 / IS 786 Data Driven Organizations

- DI 521 / IS 788 Digital Transformation: Management, Technology and Organization
- DI 515 / IS 787 Big Data
- DI 544 / IS 782 Spatial Data Analysis
- DI 722 Spatio-Temporal Data Mining
- DI 725 Transformers and Attention-Based Deep Networks
- MMI 701 Multimedia Signal Processing
- MMI 702 Machine Learning for Multimedia Informatics
- MMI 706 Reinforcement Learning
- MMI 712 Machine Learning Systems Design and Deployment
- MMI 711 Sequence Models in Multimedia
- MMI 726 Multimedia Standards
- MMI 727 Deep Learning /DI 504
- IS 533 Decision Support Systems
- IS 535 Regulatory and Legal Aspects of Information Systems
- IS 543 Information Retrieval
- IS 547 Cloud Computing: Technology and Business
- IS 566 Image Processing Algorithms
- IS 585 Social Network Analysis
- IS 710 Energy Informatics
- IS 748 Mobile and Pervasive Computing
- IS 768 Applications of Audio Information Systems
- IS 777 Technology Entrepreneurship and Lean Startups
- IS 783 Social Media Analytics
- IS 784 Deep Learning for Text Analytics
- COGS 515 Artificial Intelligence for Cognitive Science

- COGS 516 Introduction to Probabilistic Programming
- COGS 566 Probabilistic Models of Cognition
- MI 535 Biological Signal Analysis

1.2.7.2 Elective Courses for Digital Transformation Specialization Track

The recommended courses for the students who wants to specialize in Digital Transformation are as follows:

- IS 788 Digital Transformation: Management, Technology and Organization
- IS 531 Innovation Management
- IS 533 Decision Support Systems
- IS 710 Energy Informatics
- IS 510 E-Transformation and Management
- IS 538 Contemporary Socio-Technical Perspectives in Information Systems
- IS 535 Regulatory and Legal Aspects of Information Systems
- IS 587 Big Data
- IS 547 Cloud Computing: Technology and Business
- IS 585 Social Network Analysis
- IS 583 Social Media Analytics
- IS 748 Mobile and Pervasive Computing
- IS 752 Information Security Management
- IS 577 Technology Entrepreneurship and Lean Startups
- IS 746 Mobile Business
- IS 529 Software Project Management

1.2.7.3 Elective Courses for Software Technologies and Management Specialization Track

The recommended courses for the students who wants to specialize in Software Technologies and Management are as follows:

- IS 528 Software Architecture
- IS 529 Software Project Management
- IS 524 Software Design Patterns
- IS 518 Agile Software Development
- IS 754 Software Metrics
- IS 724 Introduction To Software Testing
- IS 526 Software Quality Management
- IS 527 Software Verification
- IS 523 Object-Oriented Analysis and Design
- IS 550 Web Services and Service-Oriented Architecture
- IS 707 Formal Verification-Theory and Practice
- IS 721 Business Process Management
- IS 722 Systems Engineering
- IS 749 DevOps Essentials

1.2.7.4 Elective Courses for Management Information Systems Specialization Track

The recommended courses for the students who wants to specialize in Management Information Systems are as follows:

- IS 539 Information Systems in Organizational Design and Applied Systems Thinking
- IS 540 Information Technology Acceptance in Organizations
- IS 538 Contemporary Socio-Technical Perspectives in Information Systems
- IS 788 Digital Transformation: Management, Technology and Organization
- IS 752 Information Security Management
- IS 530 E-Transformation and Management
- IS 531 Innovation Management
- IS 533 Decision Support Systems

- IS 535 Regulatory and Legal Aspects of Information Systems
- IS 577 Technology Entrepreneurship and Lean Startups
- IS 746 Mobile Business
- IS 529 Software Project Management

1.2.7.5 Elective Courses for Information & Communication Technologies Specialization Track

The recommended courses for the students who wants to specialize in Information & Communication Technologies are as follows:

- IS 541 Computer Networking Applications
- IS 571 Security Engineering
- IS 573 Human Computer Interaction
- IS 755 Introduction to Modeling & Simulation (M&S) Concept
- IS 566 Image Processing Algorithms
- IS 768 Applications of Audio Information Systems
- IS 587 Big Data
- IS 547 Cloud Computing: Technology and Business
- IS 583 Social Media Analytics
- IS 748 Mobile and Pervasive Computing
- IS 528 Software Architecture
- IS 523 Object-Oriented Analysis and Design
- IS 752 Information Security Management
- IS 746 Mobile Business

1.2.8 Full-Time Academic Staff

Altan Koçyiğit, Prof. Dr. (Head of Information Systems Department)

Room: A-204, Phone: 3788, Email: kocyigit[at]metu.edu.tr

Fields of Interest: Computer Networks, Software Engineering, Big Data, Machine Learning,

Internet of Things

Banu Günel Kılıç, Prof. Dr. (Director of Graduate School of Informatics)

Room: B-220, Phone: 7866, Email: bgunel[at]metu.edu.tr

Fields of Interest: Signal processing based audio and acoustic applications (separation, denoising and localization), defense and security systems, secure software development and requirements engineering, social network analysis and applications

Erhan Eren, Assoc. Prof. Dr. (Head of Data Informatics Department)

Room: A-205, Phone: 7757, Email: ereren[at]metu.edu.tr

Fields of Interest: Digital transformation, data-oriented organizations, big data, cloud

computing, management information systems

Nazife Baykal, Prof. Dr.

Room: A-206, Email: baykal[at]metu.edu.tr

Fields of Interest: Cyber security, data mining, big data

Özden Özcan Top, Asst. Prof. Dr.

Room: A-209, Phone: 3752, Email: ozdenoz[at]metu.edu.tr

Fields of Interest: Agile software development, medical device software development processes, safety critical systems development, software project management, software process improvement and software measurement.

Sevgi Özkan Yıldırım, Prof. Dr.

Room: A-222, Phone: 7711, Email: sevgiozk[at]metu.edu.tr

Fields of Interest: Information systems evaluation, assessment and performance measurement,

information systems effectiveness, information technology acceptance, social commerc, e-

learning systems evaluation, e-government systems evaluation, transformational government,

electronic quality evaluation, electronic-effectiveness measures, Internet related information

communication technologies (ICTs), Internet related ICTs in developing countries

Tuğba Taşkaya Temizel, Prof. Dr.

Room: A-211, Phone: 7782, Email: ttemizel[at]metu.edu.tr

Fields of Interest: data mining, text mining, information extraction, grid computing, cloud

computing, persuasive technologies, social media analytics and temporal data mining

1.2.9 **Student Affairs**

For any inquiries or concerns **related** to student-regarding matters, please feel free to reach out

to Ayşe Nur Özdere Yüksel. Her contact information is provided below:

Room: A Blok, Z-16

Phone: +90 (312) 210 3740

Fax: +90 (312) 210 3745

E-mail: aozdere@metu.edu.tr

1.2.10 Join us –New Assistantship Positions

New assistantship positions are announced through the following channels:

• T.C. Resmi Gazete: https://www.resmigazete.gov.tr/

Email notifications

Application Process: Interested individuals can apply for assistantship positions through YOK

(Higher Education Council).

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Requirements:

Eligibility for assistantship positions may involve criteria such as:

- ALES (Academic Personnel and Graduate Education Entrance Exam) scores
- YDS (Foreign Language Proficiency) scores
- GPA (Grade Point Average) requirements

Note for International Students:

It's important to note that international students are typically not eligible for graduate assistantships.

These details provide guidance on how to stay informed about new assistantship opportunities and the general eligibility criteria for these positions. Be sure to visit the provided websites for specific announcements and requirements.

PART-2: Rules, Regulations and Opportunities

2.1 Middle East Technical University Rules and Regulations Governing Graduate Studies

You should print, read and highlight the following: http://oidb.metu.edu.tr/orta-dogu-teknik-universitesi-lisansustu-egitim-ogretim-yonetmeligi. Please note that it is your responsibility to know these regulations.

2.2 METU Code of Conduct

All members and students at our university adopt the following METU Code of Honor:

"As reliable, responsible and honorable individuals, all members of Middle East Technical University embrace only the success and recognition they deserve, and act with integrity in the use, evaluation and presentation of facts, data and documents."

2.3 Academic Integrity

Academic Integrity entails carrying out original work and sharing ideas and findings of others provided that the source is cited.

2.3.1 Infringements of Academic Integrity

Academic integrity is of paramount importance within the Informatics Institute, and any violations are taken seriously. The following actions are considered infringements of academic integrity:

- **A.** Plagiarism: Presenting someone else's work, ideas, or words as one's own without proper attribution.
- **B.** Cheating: Engaging in dishonest practices during exams, assignments, or assessments to gain an unfair advantage.
- **C. Reusing Work:** Submitting previously completed work, such as personal studies, homework, or projects, for a different course without proper citation.
- **D.** Falsifying References: Citing non-existent sources or fabricating data in references.
- E. Academic Work on Behalf of Others: Completing academic work for other students.
- **F. Unfair Advantage:** Engaging in actions to gain an unfair advantage, such as falsifying medical reports, providing false excuses for extensions, or participating in enrollment fraud.
- **G. Fraudulent Documents:** Producing or using fraudulent documents, including reference letters, medical reports, proficiency documents/scores, transcripts, and more.

H. Impersonation: Impersonating someone else during an exam or having someone else impersonate oneself in an academic setting.

These actions undermine the principles of academic honesty and are subject to strict disciplinary measures to maintain the integrity and fairness of the educational process within the institute.

2.3.1.1 Plagiarism

"Plagiarism is intentionally or <u>unintentionally</u> acquiring and using someone else's ideas and opinions and presenting them as if one's own without making a reference to or citing the source." (ODTÜ UEAM)

Detailed information on the types of plagiarism can be found at the address: http://ueam.metu.edu.tr/intihal. Please note that plagiarism is easy to check with Turnitin and similar tools..

2.4 Attending Classes

Although recorded materials may be available, it's important to remember that there is no substitute for learning in the classroom. Therefore, you should attend all classes and stay fully engaged. You should avoid letting the course material accumulate and stay proactive in your studies.

2.5 Following the classes, courses and announcements

<u>ODTUClass</u> is your go-to platform for lecture notes, assignments, announcements, marks, and online exams. You should bookmark it and check regularly. Moreover, important dates, including final exam weeks, registration periods, holidays, and more, are available in our academic calendar at https://oidb.metu.edu.tr/en/academic-calendar

2.6 METU E-mail addresses

Moving forward, we will be using your METU E-mail addresses as the official communication method. Please note that the email addresses you provided during the application process will **no longer** be used. It is crucial that you regularly check your METU email inbox for important announcements regarding deadlines, procedures, regulations, and more. Additionally, you will be automatically registered for ODTUClass using your **METU Email addresses**.

2.7 Interacting with Advisors

Advisors play a vital role in your academic journey. They assist you in:

• Choosing the right courses

- Selecting a thesis topic
- Providing guidance throughout your research
- Monitoring your academic progress
- Holding regular meetings
- Maintaining open communication
- Offering support, especially during challenging times that may impact your studies.

Zoom has streamlined our meetings—no more waiting at the door! Office hours and Zoom links for our Academic Staff will be provided at the start of the semester. For other inquiries or appointments, you can reach us by phone or email as usual.

2.8 Awards for successful students

These categories given below provide a clear distinction for different types of recognition and awards within your institution.

- 1. Course performance award
- 2. Publication awards
- 3. Thesis award

2.8.1 Course Performance Award

The aim of the Course Performance Award is to motivate students to complete their courses promptly and achieve high marks.

Criteria for Eligibility:

- The student must have successfully completed 7 courses (equivalent to 21 credits).
- There should be no unsuccessful courses in the student's academic record.
- The Cumulative Grade Point Average (CumGPA) should be at least 3.50 (3.75 for non-thesis students).
- The student should not be unregistered or on leave, except for Erasmus or health-related reasons.
- In cases where multiple students have the same highest GPA in a program, all of them will receive the award.

Application Process: No application is required; awardees are determined automatically based on the provided criteria.

2.8.2 Publication Awards

2.8.2.1 Publication Awards-1

This initiative aims to promote impactful thesis topics in the global scientific community and encourages graduate students to publish their research in prestigious international journals.

• Support¹ for attending to an international congress for a report/poster presentation is given to graduate students (being admitted is sufficient) who publish an article in a foreign journal² from their theses during MSc/PhD.

2.8.2.2 Publication Awards-2

You can receive an article incentive award if you publish in a respective peer-reviewed journal during/at the end of your studies:

Üniversite Yönetim Kurulu'nun 14 Aralık 2021 tarih ve 2021/41-9 sayılı kararının ekidir.

2022 YILI ODTÜ GELİŞTİRME VAKFI BİLİMSEL MAKALE ÖDÜLÜ ESASLARI

- 1. ODTÜ Geliştirme Vakfı bilimsel makale ödülüne aday gösterilecek yayınların, Web of Science (WoS) veri tabanında **Q1** veya **Q2** kategorisinde sınıflandırılan hakemli bilimsel dergilerde tam metin olarak yayımlanmış olması gerekir.³
- 2. ...
- 3. ..

4. Ödüle aday kişinin kurum adresinin ODTÜ Senatosu'nun belirlediği "Yayınlarda Kurum Adresi Belirtilmesine İlişkin Esaslar"a uygun şekilde verilmiş olması ve bu adresin tek başına ya da başka bir kurum ile birlikte ODTÜ olması gerekir.

8. 2024 yılında yapılacak başvurular için belirlenen ödül miktarı **WoS Q1** dergi listesinde yer alan makaleler için **6.000 TL**; **WoS Q2** dergi listesinde yer alan makaleler için ise **3.000 TL**'dir.

- 9. Yayınların uluslararası ortak yazarlı (yurtdışı adresli) olması durumunda ilgili ödül miktarı 1.25 katsayısı ile çarpılarak belirlenir.
- 10. Ödül tutarı ODTÜ adresli yazarlar arasında eşit olarak dağıtılacaktır.

¹ Those who get support for travel abroad from one of ODTÜ-ÖYP, ODTÜ-BAP, ODTÜ-YUUP, DPT during graduate education cannot apply. Nature of the awards is determined by Council of Institute Heads each year.

² For international publications of "full paper published in a peer reviewed journal covered by SCI, SSCI, AHCI core list" type defined by the codes 1.1.1.0.1 and 1.1.1.0.2 found in the activities list entitled "Annual Performance Assessment Scheme and Minimum University requirements for an Academic Position" (ÜYK 29.02.2000 date and 2000/5-10 attachment decree)

³ The details of WoS and impact factos Q1 and Q2 can be found here: https://clarivate.com/webofsciencegroup/essays/impact-factor/

You can find the details here: https://pdb.metu.edu.tr/tr/odtu-gelistirme-vakfi-makale-odulu-esaslari

2.8.2.3 Publication Awards-3

Ulakbim Yayın Teşvik (UBYT): You receive an award from your article published in a respected journal. The details are provided the following link: https://cabim.ulakbim.gov.tr/ubyt/ubyt-s-s-s-s/

2023 UBYT dergi lis	stesinde teşvik miktarları aşağı	daki şekilde belirlenmiştir.			
MEPa:0.1	Teşvika: 1.500 TL				
MEPb:1.5	Teşvikb: 22.500 TL				
MEPc:2.0	Teşvikc: 25.000 TL				
MEPd:3.0	Teşvikd: 30.000 TL				
Yayın için teşvik miktarı asgari 1500 TL, azami 30.000 TL olarak belirlenmiştir.					
Bir yazara verilebilecek teşvik miktarının alt sınırı 750 TL'dir.					

Figure 5: UBYT incentives in 2023

2.8.3 Thesis Award

The aim is to contribute to the world of culture and thought in our country and to increase the research power of our country as METU. Thesis award is given to those 16 theses (8 MSc and 8 PhD),

- a) Which contribute to the economic, social and spatial development of the country (3 theses)
- b) Which develop a new product or method that will contribute to human health, safety and prosperity experimentally or theoretically (4 theses)
- c) Which contribute to the world of culture and thought in our country (3 theses)
- d) Which integrates theory with practice (2 theses)
- e) Which have the potential of international scientific publication (4 theses)

Categories through (a)-(e), and the number of MSc and PhD theses stated for each category are recommendatory.

Articles published in international journals or patents or reports presented at International Congresses/printed at Congress booklets or articles published in national refereed journals, or reports presented at National Congresses/printed at National Congress booklets can give theses priority.

2.8.4 Conference Support

Conference support opportunities are as follows:

- Get involved in a funded project, such as Tübitak, H2020, COST, Marie Curie, and more.
- Apply for the Tübitak 2224-A Yurt Dışı Bilimsel Etkinliklere Katılımı Detekleme Programı (participation support for international scientific events) at Tübitak's official website.
 - This support covers registration fees, travel expenses, and accommodation expenses.
 - It's available exclusively for oral presentations (posters are not supported) at regularly held international, refereed conferences (typically for the 3rd occurrence of the conference).
 - o Be sure to visit the provided link for application deadlines and further details.

2.8.5 Tübitak Research Support

2.8.5.1 Yurt İçi Öncelikli Alanlar Yüksek Lisans/Doktora Burs Programı 2210-C & 2211-C

Candidates whose thesis proposals are in the following priority areas are supported:

- A. Information Security
- B. Biotechnological Pharmaceutical Technologies
- C. Big Data and Data Analytics
- D. Energy Storage Technologies
- E. Broadband Technologies (within Wired/Wireless IT and IP technologies)
- F. Advanced Functional Material and Energetic Material Technologies
- G. Micro/Nano/Opto-Electromechanical Systems
- H. Engine Technologies
- I. Internet of Things
- J. Robotics, Mechatronics and Automation
- K. Artificial Intelligence and Machine Learning

Support duration is 12 months for MSc and 36 months for PhD.

For Turkish citizens or holders of Blue Card in accordance with the law no. 5901

Applications are open twice a year.

Check the link below for details and application dates:

https://www.tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2210-yurt-ici-yuksek-lisans-burs-programlari

https://www.tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2211-yurt-ici-doktora-burs-programlari

2.8.5.2 Yurt İçi Sanayiye Yönelik Yüksek Lisans Burs Programı 2210-D

- The aim of the program is to strengthen the university-industry collaboration by supporting successful students and contributing to the generation of knowledge and human resources needed by our country and the industry.
- You should specify the private sector establishment where you will do your thesis study (Approval of the establishment is needed)
- 1. The duration of the scholarship is 12 months.
- 2. For Turkish citizens or holders of Blue Card in accordance with the law no. 5901
- 3. Those working in the state or private sector can also apply.

https://www.tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2210-yurt-ici-yuksek-lisans-burs-programlari

2.8.6 International Students

Scholarships for foreign students at METU are limited. Information can be found here: https://iso.metu.edu.tr/en/scholarship-opportunities

Foreign students in Turkey can also work, but they need to apply for a work permit. Check the student residence permit here: https://en.goc.gov.tr/residence-permit-types

2.8.7 Exchange Programs

The list of the overseas programs is provided below.

- 1. **Erasmus+ European Mobility:** This program provides opportunities for European mobility, allowing you to study abroad, conduct thesis-related projects, and pursue internships in European countries.
- 2. **Erasmus+ Non-European Mobility:** Like the European Mobility program, this option extends the opportunities to non-European countries.
- 3. **Mevlana:** The Mevlana program offers various possibilities, including taking courses abroad as part of your studies, engaging in thesis-related projects, and pursuing internships. It's important to note that you should apply for internships while you are still a student.

In these exchange programs, you can:

- Enroll in courses abroad as part of your academic studies.
- Conduct projects related to your thesis research.
- Pursue internships, especially after you graduate (with the application process initiated while you are still a student).

For more detailed information and application procedures, please visit the <u>International</u> <u>Cooperations Office (ICO) website.</u>

These exchange programs offer valuable international experiences and opportunities for academic and professional growth. Be sure to explore the ICO website for comprehensive program details and application guidelines.

2.8.8 Jean-Monnet Scholarship Programme

This scholarship program provides valuable opportunities for individuals pursuing research or postgraduate studies in EU member countries and aims to support academic and cultural exchange. Scholarship recipients are eligible for a period of study abroad ranging from a minimum of 3 months to a maximum of 12 months. The program announcement is typically made once a year.

Selection Process: Applicants who submit valid and compliant application documents have the opportunity to take a written exam. The list of scholarship recipients is determined based on their written exam scores and sectoral quotas to ensure a fair and competitive selection process.

Scholarship Benefits: The JMSP covers various aspects of your study abroad, including:

Tuition fees.

- Living expenses, which encompass accommodation, meals, communication, local transportation, cultural activities, and more.
- A fixed amount to assist with various expenses such as passport, visa, travel, registration with local authorities, books/thesis, study visits, health and insurance, and any tax liabilities.

For more information and to stay updated on the JMSP, please visit their official website.

PART-3: Program Details

3.1 Deficiency Program

Deficiency courses for both MSc and PhD students are listed below. Please not that these courses are essential components of the deficiency program, ensuring that students acquire a strong foundation in key subjects relevant to their academic pursuits.

- IS 503 Database Concepts and Applications / CENG 302
- IS 504 Comp. Networking for Information Systems / CENG 435 / EE 444 /CENG530
- IS 507 Introduction to Software Engineering / CENG 350
- IS 545 Object Oriented Programming and Data Structures / MIN 545/
 - OOP (Ex. BIN 500 or CENG 305) + (EE 441 or CENG 301)

3.1.1 Exemption from Deficiency Courses

You may qualify for an exemption from a deficiency course if you have previously completed an equivalent undergraduate or graduate course meeting the following criteria. Your grade in the equivalent course should be equal to or greater than

- CC if the course was at the undergraduate level or
- **CB** if the course was at the graduate level.

The term in which you completed the equivalent course should not be more than 10 years ago.

3.1.2 Completion of Deficiency Program

The maximum duration for completing the deficiency program is as follows:

- If you have more than 2 courses to take, you have 2 terms (1 year).
- Otherwise, if you have 2 or fewer courses to take, you have 1 term.

To successfully complete the program, you must meet the following criteria:

- Achieve at least a CC grade in all undergraduate deficiency courses.⁴
- Attain at least a CB grade in all graduate-level courses.
- Maintain a cumulative GPA of at least 2.50.

These completion requirements ensure that students in the deficiency program acquire the necessary knowledge and maintain satisfactory academic progress to successfully transition into their chosen academic programs.

⁴ Note that all IS 5xx deficiency courses are considered graduate-level courses, and you are required to achieve at least a CB grade in these courses to pass.

3.1.3 Taking program courses during the Deficiency Program

During the deficiency program, you have the option to enroll in core and/or elective courses. These courses should initially be added as "Not Included (NI)" during the registration process. After successfully completing a course, you can apply for a course substitution to include that course and its grade in your transcript. For important details and guidelines regarding course substitution, please refer to the section dedicated to course substitution.

This process allows you to address deficiency program requirements while also earning credit for program courses upon successful completion. Be sure to review the course substitution information for further guidance.

3.1.3.1 Registration of Deficiency Program Students

All deficiency courses should be added as MUST or ELECTIVE. All other courses should be added as Not Included (NI).

3.2 Core Course Exemption Policy:

You may qualify for an exemption from a core course if you have previously completed an equivalent undergraduate or graduate course meeting the following criteria:

- Your grade in the equivalent course should be equal to or greater than BB.
- The term in which you completed the equivalent course should not be more than 10 years ago.

Please note that exemption from the IS502 IS Project course is **only** possible if you have previously taken this specific course within our institute.

If you are granted an exemption for a core course, you will need to replace it with an elective course. This ensures a well-rounded academic experience while recognizing your prior coursework.

3.3 Course Prerequisites and Recommendations:

There are no formally defined prerequisites for courses within the Informatics Institute. However, we recommend the following course sequence for optimal understanding and success:

- IS 507 is recommended to be taken after completing IS 545 or its equivalent.
- IS 502 is recommended to be taken after completing IS 501 (or its equivalent) and IS 507 (or its equivalent).

If you have any uncertainties or questions regarding course prerequisites, please feel free to reach out to the course lecturer or consult with your academic advisor for guidance.

3.4 Elective courses

The Information Systems department offers a variety of elective courses. With your advisor's consent, you have the opportunity to take elective courses from other programs within METU.

Credit Limitations:

- For students pursuing MSc with thesis and Ph.D. programs, you can take a maximum of 6 credits of courses outside the Informatics Institute.
- For those in non-thesis programs, you have the flexibility to take up to 9 credits of courses outside the institute.

External Course Options:

- In addition, you may explore up to 2 courses from other universities, subject to approval by your advisor and the Informatics Institute.
- This flexibility allows you to customize your academic journey and enrich your learning experience by diversifying your course selection. Be sure to consult with your advisor for guidance on the best elective options for your academic goals.

PART-4: Registration Process

4.1 Forms to Be Filled Before Registration Process

There are **three crucial** forms to be filled in before the registration period. Those forms are explained in detail in the following parts. Please note that it is important to fill in those forms and provide them to the advisors before the registration period. The forms can be found here: http://ii.metu.edu.tr/student-forms

4.1.1 Student Form 1:

The first form to be filled before the registration period is **IS Öğrenci Bilgi Formu**. In that from you should provide your personal and contact information.

4.1.2 Student Form 2:

The second form the be filled before the registration period is <u>IS Yüksek Lisans Ders</u> <u>Muafiyeti Formu</u> (for MSc students) <u>or IS Doktora Ders Muafiyeti Formu</u> (for PhD students).

This form serves as a critical tool for assessing the courses from which you may be exempted and the reasons behind these exemptions. Please ensure that you enter all equivalent courses you have previously completed, with the following considerations:

- Courses taken more than 10 years ago may not be considered for exemption.
- For deficiency course equivalents, a minimum grade of CC is required if the course was at the undergraduate level, or CB if the course was at the graduate level.
- When claiming exemption for core courses, a minimum grade of BB is expected.

We recommend reviewing the relevant footnotes provided in the form for further guidance on the exemption process to ensure accurate and successful course exemption assessments. Your academic advisor will also be available to provide assistance and answer any questions you may have regarding this process.

4.1.3 Student From 3:

The third form is **IS Bilimsel Hazırlık Formu**.

This form provides information about the specific courses you'll need to complete as part of your Deficiency Program, as determined by the course exemption form you submitted.

Please note that once the add/drop period concludes, you will not be able to make any changes to the information provided in this form.

At the conclusion of the specified duration, your transcript must reflect the successful completion of the exact course codes listed on the left-hand side. Failure to do so may result in academic consequences.

Equivalent courses offer you some flexibility in meeting these requirements. Ensure that you do not alter any information in the gray area of the form, as it may impact your program eligibility.

The provided figure below summarizes the essential information.

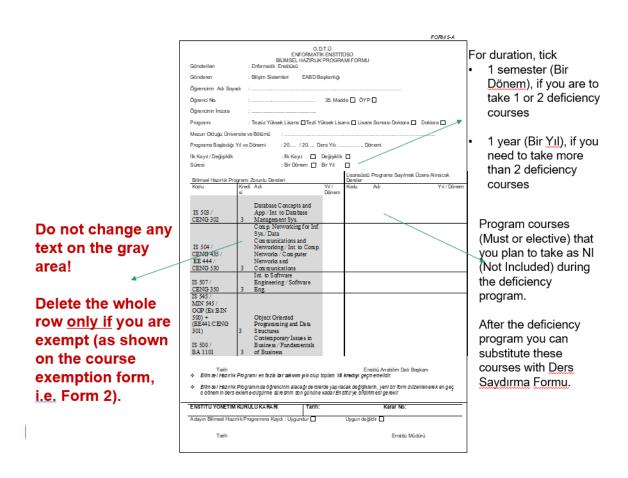


Figure 6: Deficiency Program Exemption Form

4.2 Registrations:

Please follow these instructions diligently to set yourself up for a successful registration experience.

4.2.1 First step

Before enrolling in any course, please follow these steps:

- 1. Download and complete the following three forms digitally, then print and sign them.
- 2. Obtain digital copies of all your transcripts, even for programs from which you did not graduate.
- 3. If you believe you've taken courses equivalent to our Deficiency and core courses at a university other than METU, secure digital copies of the syllabus for these courses.
- 4. Email all of the above documents to your academic advisor as soon as possible.

These actions are essential to ensure a smooth registration process and to help your advisor assist you effectively.

4.2.2 Second Step

The information you have provided on these forms will be checked by your advisor. When your advisor agrees and signs, you will know which courses you need to take and which courses you are exempt from.

4.2.3 Third step

Course Registration Instructions:

Begin the course registration process by visiting this link: Course Registration Portal.

For additional guidance on how to register interactively, you can visit the following links:

Fall Semester 2020-2021 Registration and Advisor Approvals

If you encounter a situation where a course is already at full capacity, there's no need to worry. Keep attempting to register at different times. If the course still appears to be full and you genuinely need to enroll in it, don't hesitate to reach out to the course instructor and/or your academic advisor for further assistance.

4.2.4 Fourth Step

Obtaining Advisor Approval:

To obtain advisor approval for your course selections, please note the following:

- After you have successfully added your courses, click on the "Request Advisor Approval" button within the system.
- You will receive an email notification once your advisor approves your registration.

 Additionally, if your advisor requests any adjustments, you will also be notified via email.

4.2.4.1 Important Notes on Registrations and Approvals:

- If you need to enroll in "IS504 Computer Networks" and "IS507 Introduction to Software Engineering" courses, please be sure to register for these courses during Fall semester as they will not be available in Spring semester.
- Once you've chosen all your courses do not forget to click the "Request Advisor Approval" button.
- If you make any **changes** to your course selections during **the add/drop period**, you will need **advisor approval again.**
- Please note that, in accordance with university regulations, **graduate students** are **not permitted to withdraw** from courses.

After completing the four steps explained above, You can now login to ODTUCLASS to follow your courses: https://odtuclass.metu.edu.tr/

PART-5: Rules and Regulations

In this section, rules on course substitutions, incomplete grades, unsuccessful courses, thesis title and supervisor and doctoral comprehensive examination (DCE) are explained.

5.1 Course Substitutions

- You can substitute courses, if
 - You have taken a program course successfully with NI status during the deficiency program
 - Its mark will be visible on your transcript and will affect your Cum GPA after the substitution
 - You have taken a relevant graduate level course successfully from any university, but it was not counted for another diploma (either it was taken as NI, or you left without graduating)
 - Its mark will <u>not</u> affect your Cum GPA after the substitution, but you will be exempt from those course credits
- For every three courses substituted, one semester is deducted from the student's program duration (Except for MSc without thesis students)
- Except for the graduate courses taken with NI status, courses taken previously in another diploma program that the student has <u>completed</u> and/or courses taken simultaneously from two different graduate programs cannot be substituted in both programs.

5.1.1 Course Substitution Procedure Upon Deficiency Program Completion

- It is generally carried out once you finish your deficiency program.
 - Please visit http://ii.metu.edu.tr/student-forms and complete the following two forms:
 - Ders Saydırma İşlem Formu
 - Ders Saydırma Başvuru Formu (Eng)

5.2 Incomplete grades

If you do not complete the full requirements of a course, you may be given an I grade.

I grades can be changed to other grades, if you complete the requirements of the course before a certain deadline.

Otherwise, I grades turn to FF or U grades automatically.

5.3 Thesis courses

U grades mean Unsatisfactory.

If you fail your thesis courses twice in consecutive semesters, or three times in total you are dismissed.

You are required to show progress on your thesis at the end of each semester

5.4 Unsuccessful courses

In order to be deemed successful in a credit course, students are required to earn a minimum of a grade of CC in a Master's program and a grade of CB in a doctoral program.

If you fail a course, you should either repeat it or replace it (if it is an elective) during the registration.

IMPORTANT: If you do not replace or repeat a failed course in 4 semesters for M.Sc. with thesis and PhD and three semesters for MSc without thesis, you will be dismissed, irrespective of the total number of successful courses you have taken.

Read the warnings on the registration site!

5.5 Thesis title and supervisor

For MSc:

A thesis supervisor and a thesis topic should be assigned by the end of the first semester

From then on, every semester, you should register for the following courses: IS599 (MSc thesis) and IS8XX (Special Studies course of your supervisor).

For PhD:

A thesis supervisor and a thesis topic should be assigned by the end of the second semester

From then on, every semester, you should register for the following courses: IS699 (PhD thesis) and IS9XX (Advanced Studies course of your supervisor).

5.6 Doctoral Comprehensive Examination (DCE)

The doctoral comprehensive examination (DCE) is the assessment of the students' knowledge of the basic subjects and concepts in their field and of whether they possess the depth of scientific research related to doctoral work.

5.6.1 DCE Requirements and Regulations

In order to be eligible to take the DCE, students should successfully complete the courses and the seminar course, and their Cumulative Grade Point Average should be at least 3.00.

A student may take the DCE twice the most.

The DCE is administered twice a year, in May and November.

Names of applicants for the DCE are collected one month prior to the exam.

Students in Ph.D. programs must take the DCE latest by the end of the fifth semester, and students in Ph.D. on Bachelor's degree programs must take it latest by the end of the seventh semester.

5.6.2 DCE Rules for IS

- Written exam on 4 courses: IS501, IS503, IS504, IS507
 - O Students who took these specific courses from the Informatics Institute and got AA the first time they took are exempt from that course's written exam. However, students who got AA in all these courses must still take a written exam on one of the courses they choose.
- To be accepted to the oral exam, a student should have got at least CB cumulative from written exams
 - o e.g. AA, BB, CC, DD may take the oral exam, BA, BB, CC, DD may not
- Those who could not get cumulative CB should take the written exam in the next semester
 - They will be exempt from a course's written exam if they got at least BB in the previous exam.
- Oral exam includes all four courses and there is no exemption.
- To be successful from the proficiency exam, written and oral exam average should be at least BB.