Doktora bilim sınavı, B.Ü. YBS yüksek lisans zorunlu ders konularını içermektedir.

Bu dersler aşağıdaki gibidir:

PhD exam subjects consist of mandatory course contents of B.Ü. MIS master's program.

The courses are as follows:

**MIS 511: Veri Kaynakları Yönetimi / Database Resources Systems**

This course provides an introduction to database systems implemented and utilized in today’s enterprises as an operational system. Course focuses on database modeling and systems that provide the foundation for managing data in operational systems. Topics covered will include the overview of the database management systems and technologies, data modeling techniques, query languages (SQL), data warehousing concepts and architectures, data mining concepts.

Learning objectives of the course;

* Understand database management systems and learn data modeling and database query languages
* Gain insight on the transactional and analytical processing used in business applications and decision-making processes
* Get familiar with the data warehousing and data mining concepts

Course book: Raghu Ramakrishnan and Johannes Gehkre, “Database Management Systems”, 3rd Edition, Pearson A. Silberschatz, H.F. Korth, S. Sudarshan, “Database System Concepts”, 6th Edition, McGraw-Hill

**MIS 513: İletişim Teknolojisi Yönetimi / Information Communication Technology Governance**

In this course, we study cybersecurity, IT governance and the data communication fundamentals used in business environment. The objective of this course is to teach fundamentals concepts and practical aspects of IT infrastructures and their governance. First Emphasis is on IT governance. Later, Local Area Networks from architecture to setup and management. Local, wide and storage area networking including: protocols, standards, media, topologies, layered networking models, hardware and software. Students shall learn about cybersecurity and information technology governance also. Important topics include COBIT, ITIL, ISO 27000, ISO 20000.

Course book: Michael E. Whitman, Herbert J. Mofford, Management Of Informatıon Securıty, 6th edition, Cengage

Reading List

* Data Communications and Computer Networks: A Business User's Approach, Curt White, Course technology.
* Cloud Computing: Concepts, Technology & Architecture, Erl, Puttini & Mahmood, 2013
* Prentice Hall Business Data Communications and Networking, Fitzgerald Dennis, John Wiley & Sons, 2007.
* Business Data Networks and Security, 10/e, Raymond and Julia Pank

**MIS 515: Sistem Analiz, Modelleme ve Tasarım / Systems Analysis, Modeling And Design**

Life cycle phases, techniques for requirements determination, team organization and communication, project feasibility assessment and risk analysis, design reviews, object oriented analysis and design, data organization and design, software and system quality metrics, application categories, software package evaluation and acquisition, globalization issues, professional code of ethics.

Course book: John W. Satzinger, Robert B. Jackson, Stephen D. Burd, Systems Analysis and Design in a Changing World

**MIS 518: İleri Yöneylem Yönetimi / Advanced Operations Management**

The aim of operations management is to accomplish the mission of a service or manufacturing organization by using the resources in the most efficient and effective ways. This course is devoted to discuss the basic issues involved in design and development of products and services while emphasizing the coordination of resources to improve cost, quality and customer service. Along with the computer revolution, i.e., pc’s, internet service providers, www, information systems and software that runs on information systems,  traditional OM concepts has passed over an adaptation period. In this course the emphasis will be on ERP systems and supply chain management with an MIS perspective.

Course book: Heizer, J, Render, B., “Operations Management”, 12th edition, Prentice Hall, 2017

**MIS 519: Araştırma Yöntembilimi / Research Methodology**

MIS 519 is a course offered to graduate students in the MIS Department aiming to equip

them with an understanding of the basic concepts of research methodology and

scientific research process. Major components of the course include conducting

literature reviews, constructing research models, hypothesis development, research

design, qualitative and quantitative data collection techniques, investigation of sampling

and various data analysis methods, deriving conclusions and implications for research

findings and understanding how to use research outputs in practice.

Course book: P.S. Schindler, Business Research Methods, McGraw-Hill Irwin, 2019, 13th ed.

**MIS 522: Proje ve Değişim Yönetimi / Project and Change Management**

Managing projects within an organizational context, including the processes related to

initiating, planning, executing, controlling, reporting, and closing a project. Project

integration, scope, time, cost, quality control, and risk management. Managing the changes in

organizations resulting from introducing or revising information systems. Identifying project

champions, working with user teams, training, and documentation. The change management

role of the IS specialist.

Course book: Pinto, J.K. (2015). *Project Management: Achieving Competitive Advantage* (4th Edition). Boston: Pearson. ISBN: 9781292094793

You may also find the course descriptions at the [courses catalog page.](https://bogazici.edu.tr/tr_TR/Content/Akademik/Lisansustu_Katalogu/Sosyal_BilimlerEnstitusu/Yonetim_Bilisim_Sisteml%20%20eri_Lisans%C3%BCst%C3%BC_Programi)