FACULTY OF ECONOMICS, ADMINISTRATIVE AND SOCIAL SCIENCES

DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS

Department Required Courses

1ˢᵗ Semester

English I

The English of the terms and concepts encountered in various branches of engineering are examined in depth, and for the proper use of these terms, Turkish-English bilingual translations are explained. English language training for students starts from simple forms and intended to develop over time.

Ataturk's Principles and History of Revolution I

In this course, Atatürk's Principles which form the basis of the state are explained within the framework of the conditions under the Republic of Turkey was established. The following topics are covered in the course: The concept of revolution, general view of the demise of the Ottoman Empire, and the reasons for preparing the Turkish Revolution, various movements of thought in the last period of The Ottoman Empire, the breakdown of the Ottoman Empire, Mondros Ceasefire Agreement, the situation of the country in the face of occupations, the national struggle and the foundation of the Grand National Assembly.

Turkish Language I

The aim of this course is to enable students to understand the structure and functioning of Turkish language properly and to gain the ability of building correct and beautiful Turkish speaking as a means of both written and oral communication. In the course, the place and importance of language as a social institution, language-culture relations, spoken and writing language topics are covered, and examples from Turkish literature are discussed.

Business (3,0) 5 (English)

Basic Concepts: Management, Organization, Manager, Entrepreneur; Production Factors, Relation of Business Science to Other Sciences, Objectives of Business, Economic Systems of Businesses, Business Environment; Types of Businesses, Size and Capacity In Business, Business Ethics and Social Responsibility, Economical Aspects of Businesses, Globalization and Enterprises, , Business Functions: Management, Production, Marketing, Human Resources, Accounting & Finance, Public Relations, R & D, Logistics

Critical Thinking (3,0) 5 (English)

Everyday Life Displays A Rich Dynamics Within Which We Try to Think Things Through to Logical Conclusions; Distinguish Between Solid Arguments on the One Hand and Stupid Ones on the Other; Determine the Value of Claims, Often For Competing Goods, That Others Are Presenting and Make Efforts to Figure Out What to Believe Or Not to Believe Based on the Evidence That Is Given; Gauge the Probability of Whether Something Might Or Might Not Occur; and Thoughtfully Construct Arguments to Present to Others In A Variety of Conversational Situations. the Purpose of This Course Is to Make You More Skilled In These Kinds of Everyday Reasoning.

2ⁿᵈ Semester

English II

The English terms and concepts encountered are examined in depth and Turkish-English bilingual translations are used in order to use the concepts correctly. To be able to master professional English language, the students are informed about grammatical structures of sentences, spelling and pronunciation.

Ataturk's Principles and History of Revolution II

The aim of this course is to teach young people the Turkish Revolution under the leadership of Mustafa Kemal Ataturk, the founder of the Turkish Republic, and of Atatürk's thoughts, and modernity and secularism concepts in the context of Turkey, the history of the modernization experience shaped by this foundation within the perspective of the establishment of the nation-state in a secular and unitary structure after the destruction of the Ottoman Empire, and by the establishment Republic of Turkey. The student who takes this course is aimed to gain the reasoning behind the founding principles of the Republic of Turkey, and in the context of the Turkish Revolution, reasons on the solution of contemporary problems by classification, description, explanation and analysis skills, within the norms of modernity, and according to the principles at the society, individual national and country levels.

Turkish Language II

This course aims to enable the students to comprehend the structure and functioning of the Turkish language properly and gain the ability of speaking Turkish correctly. In addition to the topics such as the current state of the Turkish language, the spread of the Turkish language, developments in Turkish culture from the Tanzimat period to the Republican era, and important works from the Turkish language literature are examined.

Maths For Social Science (3,0) 5 (English)

Functions; Systems of Linear Equations; Matrix and Determinant; Limit and Continuity; Derivative and Applications; Curve Drawing; Applications to Business Problems.

Economics (3,0) 5 (English)

The aim of this course is to introduce the student to economic analysis tools. The real and monetary parts of the economy are examined separately. The main economic problems, inflation and unemployment, are examined. Thinking Like An Economist, Supply and Demand, Market Equilibrium, Quotas and Price Ceilings, Shifting and Tilting Supply and Demand Curves, Market Power, Regulating Monopoly and Strategic Interactions, Externalities and Property Rights, Information Economics and Adverse Selection, Benefit-Cost Analysis, Income Distribution and Labour Markets, Public Goods and Political Economy, Measuring the Macroeconomy, Economic Growth In Long Run, Introduction to Finance

3ʳᵈ Semester

Business Management (3,0) 5 (English)

Basic Management Concepts, Organizational Culture, Management Functions: Planning, Organization, Execution, Coordination, Control; Management Theory: Classical, Neoclassical and Modern Approaches, Post-Modern Approaches and Applications: Learning Organizations, Personnel Empowerment, Benchmarking, Downsizing and Growth Strategies, Competitive Strategies, Total Quality Management.

Management Information Systems (3,0) 5 (English)

The aim of the course is to motivate students to learn the role of Information Systems in organizations. It covers technical and managerial issues related to computer technology, knowledge development, information systems, and information architecture for business organizations.

4th Semester

Analysis of Algorithms (2,2) 5

This course aims to give students the ability to solve any computing science problem using the techniques discussed in class. By the end of the course, you will have learned basic algorithm techniques including brute-force, greedy, divide and conquer, dynamic programming, and linear programming.

Statistics (3,0) 5

This statistics course introduces the basic concepts of statistical analysis, with a focus on both univariate (single-variable) and bivariate (two-variable) data. The course starts with an introduction to statistics terms and then moves on to organization and display of data. Analysis of univariate data by way of measures of central tendency (such as the mean or average), dispersion (such as the variance), and asymmetry ("skewness") is presented next, followed by an introduction to probability theory.

5th Semester

Computer Architecture (3,0) 5 (English)

This course emphasizes today's computer architectures, especially the basic principles modern computer architecture, and the critical role of performance in computer design. Topics to be covered include number systems, computer arithmetic, evolution and performance of computers, memory, storage, input / output, processors, multi-core processors and clustered computer structures.

Marketing Management (3,0) 5 (English)

Marketing Process, Marketing Plan, Marketing Strategies, Marketing Information System, Market Research and Its Types, Market Segmentation, Target Market Selection, Product Life Cycles, New Product Development, Pricing, Distribution Channels and Distribution Policies, Direct Marketing, Consumer Behavior, Competitive Strategies, Integrated Marketing Communication and Positioning.

E-Commerce (3,0) 5 (English)

Technology İnfrastructure of Electronic Commerce, Examples of Web-Based Enterprises; Internet Economy and Business Models. Internet Security, Electronic Commerce; Social, Legal, Business Ethics and Public Policy Dimension of E Commerece; Creating A Business Plan For A Web-Based Business. Developing, Developing and İmplementing Web Based Business Project in Virtual Business Environment.

Computer Programming (3,0) 5 (English)

The aim of this course is to provide students with practical skills in computer programming using a specific programming language and its tools. The main goal of the course is to prepare the software engineer mentality in preparation for the high-level courses in the department curriculum.

6th Semester

Programming Languages (3,0) 5 (English)

In this course students will have a general knowledge of the basic concepts of syntactic and semantic structures of programming languages through comparative analysis of several programming languages. Additionally, awareness will be given to the students on the characteristics of several programming languages so that the gain the ability to understand general conceptual grammatical issues necessary for designing new programming languages and compilers.

Database Management (2,2) 5

This course describes the design and implementation of databases for database backed software applications. Students will learn about relational database management systems, keys, indexes, stored procedures, normalizations, join operations, database management and query techniques by using the standard SQL language.

Law (3,0) 5

Commercial Contracts; Documents Used in İ Commercial Contracts; Payment Methods; Transnational Reunification; the Legal System of the Turkish Community; the Authority of the Community Organs to Create Law.

7th Semester

Strategic Management (3,0) 5 (English)

Strategy and Performance Concepts, Swot Analysis, Resource Based Approach; Business Strategies: Vertical Integration, Cost Leadership, Product Differentiation, Flexibility, Confidential Agreements; Corporate Strategies; Strategic Cooperation, Diversification, Mergers and Acquisitions, International Strategies

Enterprise Resource Planning (3,0) 5 (English)

This course will introduce to enterprise systems and show how organizations use enterprise systems to run their operations more efficiently and effectively. Students who complete this course learn about the critical success factors and implementation strategies that lead to enterprise system success, and about the informational, knowledge, and decision-making opportunities afforded by enterprise systems.

Internet and Web Programming (3,0) 5

This course has a practical emphasis on the design and techniques for developing internet-based applications, mainly focusing on web programming. Topics include HTML, client-side scripting language, server-side programming, and XML/web services. This course will also cover some important topics needed for internet-based application developments, such as Internet architectures and web security.

8th Semester

Software Life Cycle and Construction (3,0) 5 (English)

Students who take this course will be able to identify and analyze the various stages of a software development process from the beginning till the end, i.e., feasibility analysis, scope definition, identification of problems, meeting system requirements, data collection, object and process modelling and proposing alternative solutions. The basic principles and techniques of software development will be explained. How to design easy-to-understand and easy-to-change software without errors will be illustrated in this course. This course consists of a number of problem sets and a term project. Some of the important issues are: specifications, invariants, testing, abstract data types, procedural programming, object oriented programming, concurrent programming, and functional programming.

Software Requirements and Analysis (3,0) 5

Techniques for eliciting requirements. Languages and models for representing requirements. Analysis and validation techniques, including need, goal and use-case analysis. Requirements in the context of system engineering. Specifying and measuring external qualities: performance, reliability, availability, safety, security, etc. Specifying and analyzing requirements for various types of systems: embedded systems, consumer systems, web-based systems, business systems, systems for scientists and other engineers.

Entrepreneurship (3,0) 5 (English)

Entrepreneurship Culture, Types of Entrepreneurship, Entrepreneurship Process, Business Idea and Business Idea Development, Organizations Supporting Entrepreneurship and Support Conditions in Turkey, Business Plan and İts Parts, Business Plan Writing

DEPARTMENT ELECTIVE COURSES

Research Methods (3,0) 5

This course will provide an opportunity for participants to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. Participants will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, social, local and global environment

Data Management and Network Security (3, 0) 5

This course covers the concept of information security at the beginning level, cryptographic algorithms and systems, as well as the creation of protection mechanisms using the techniques and approaches required to achieve network security. Students who complete this course successfully will have learned security algorithms, cryptographic algorithms, and simple encryption systems, electronic signatures, together with secure messaging and authentication topics.

User Experience Design (3,0) 5 (English)

The course on user experience design following the user-centered design process. The course is oriented toward practical methods for approaching a design problem holistically, beyond usability and usefulness. In this class, you will develop an appreciation for the notion of user expe- rience including how to design for it and how to evaluate it. The course will focus on storytelling, sketching, and

communication of design ideas within a design team and to potential users. As- signments will focus on hands-on learning through individual assignments, application of design skills in group mini-projects, and peer critique.

Human Resource Management (3,0) 5

Definition and Scope of Human Resources Management, Human Resources Planning, Occupational Selection and Placement, Hr Training and Improvement, Performance Appraisal, Job Appraisal, Wage Management, Personality, Learning Theories, Perception, Attitudes, Groups and Teams, Communication, Motivation, Power, Politics and Leadership, Conflict Management, Stress Management, Time Management

Decision Support Systems (3, 0) 5

Decision Support Systems are tools decision makers use to gain a better understanding of their business and customers. They make it possible to connect with a data warehouse, and a modeling warehouse, along with tools to help the user get more out of their data and models to help decision makers see avenues through which to gain competitive advantage.

System Analysis and Design (3,0) 5 (English)

The course's overall objective is that the students should acquire an overview of principles, methods and techniques of systems development, and gather experience from a development project in which a specific development method is used.

Advanced Programming (3,0) 5 (English)

The aim of this course is to provide students with practical skills in advanced computer programming using a specific programming language and its tools. Advanced concepts (threads, packages, modules, serialization, closures, patterns, etc.) in computer programming and software development will be communicated to the students. The main goal of the course is to prepare the software engineer mentality in preparation for the high-level courses in the department curriculum.

Human Computer Interaction (3,0) 5

The aim of this course is to teach user-centered design in software engineering. The topic will be addressed through an academic, professional and interdisciplinary approach. The subjects of computer science, anthropology and educational psychology are covered. It is aimed to describe the basic techniques and tools for user interface design, which are critical to the needs of end users in the software development process.

Analysis of Algorithms (3,0) 5

This course aims to give students the ability to solve any computing science problem using the techniques discussed in class. By the end of the course, you will have learned basic algorithm techniques including brute-force, greedy, divide and conquer, dynamic programming, and linear programming.

Network Programming (3,0) 5 (English)

The aim of this course is to familiarize the students with the general concepts of network programming and to give experience on network programming. Topics include; Introduction to network layers, TCP and UDP socket programming, client and server-side programming, consistency, latency, scalability, security and compression algorithms.