

Marmara University Computer Engineering Department

The Computer Engineering Department was established June 27, 1987, and started its operation in the academic year 1990-1991. The department's 13 faculty members and 9 research assistants are responsible for research as well as teaching and have graduated nearly 800 computer engineers to date.

Students entering the Computer Engineering Department at Marmara University are learning to successfully approach any technical problem while taking into account social as well as economical implications and learn to apply interdisciplinary approaches. Each course, homework, and project, is a means to develop students' method of thinking. During their studies, students are not only receivers, they are expected to implement, interpret, and evaluate, which requires them to express their thoughts in front of others. This encourages a culture of giving service to society in a high quality.

Our main goal is to provide our students with the abilities of understanding complex systems, creating the most suitable solution, and improving performance of these systems.

In the Computer Engineering Department we consider high quality research as a part of the academic environment. Our department's research activities focus on Software Engineering, Parallel Programming, Multi-Core Computing, Computer Networks, Heuristic Problem Solving, Microprocessor Design, Image Processing, Artificial Intelligence, Natural Language Processing, and Data Mining.

Thanks to the high standards of the department, students easily obtain positions in prestigious companies. Those students who want to pursue graduate studies can continue in our department or apply other good national or international universities where they are well accepted.

Why study Computer Engineering Department at Marmara University?

- * Young and dynamic faculty members with strong international experience
- * 100% English education
- * Campus in central location (Kadikoy)
- * Open-door policy and positive student-faculty relationship
- * Syllabus at world standards
- * MÜDEK accreditation
- * International Erasmus network
- * Double major and side major possibilities with **all programs** at Marmara University
- * Student clubs for social and cultural activities
- * Scholarship for sports and culture, from rectorate and private institutions
- * Wireless free Internet with EDUROAM
- * Best chances on the job market



Educational Objectives

1. Becoming an expert for performing research and development in national and international universities and R&D centers.
2. Become leader, entrepreneur, and manager in the areas of computer engineering and information science.
3. Become an engineer who understand the requirements of national and international sectors, societal needs, and produces suitable solutions for these requirements using information technology and system design.
4. Be preferred by IT departments of foremost companies as an engineer that knows software development processes and has teamwork skills.



MARMARA
UNIVERSITY

FACULTY OF
ENGINEERING



COMPUTER
ENGINEERING
DEPARTMENT



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What is Computer Engineering?



In the current information age, computer and information technologies, from toys to defense technologies, from durable consumer goods to very large public systems, from agriculture to medicine, from education to art, are being used in every aspects and applications of life in every shape that you imagine.

Computer Engineering is a very active and rapidly growing branch of engineering which includes structure, design, improvement and usage of computer systems. Software programming, algorithm design, hardware programming, computer networks, database management, hardware design and embedded systems constitute basic working areas of computer engineering.

Computer Engineers create solutions for information systems, analyze, design, realize, and test them, in many problem domains. They are able to solve complex problems efficiently by designing appropriate algorithms, realizing them in a reliable and safe program, designing solutions suitable for the environment and integrating with existing infrastructure.

Skills gained through Computer Engineering Education

- * Approach problems as an engineer
- * Analytical thinking
- * Express problems mathematically
- * Design and realize designs
- * Research and learning abilities
- * Software project development
- * Teamwork strategies
- * Management techniques
- * Efficient human communication
- * Behaving professional and ethical

Marmara University
<http://www.marmara.edu.tr/>

Jobs of a Computer Engineer

- * Design, production, management and maintenance of computer systems and related hardware
- * Research and development of computer engineering methods
- * Software development
- * Software architecture development
- * Microprocessor-based hardware design
- * Computer network device design
- * Establishing computer networks
- * Setting up and running telecommunication machinery
- * Software and hardware sales and marketing
- * Database management



Sectoral Fields

- * Software Development Companies
- * Telecommunication Operators
- * Technology Infrastructure Companies
- * Financial Institutions
- * Research Development Institutions/Departments
- * Software Package Distributors and Users
- * Technology Consulting Companies
- * IT Departments of Production Companies
- * IT Departments of Service Companies
- * IT Departments of Government Agencies

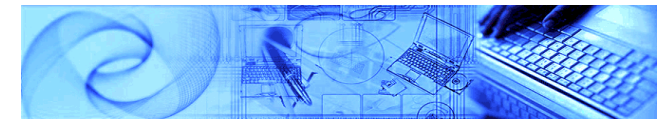


Faculty of Engineering
<http://eng.marmara.edu.tr>



Core Areas of Computer Engineering

- * Algorithms
- * Computer Architecture and Organization
- * Computer Systems Engineering
- * Computer Graphics
- * Database Systems
- * Digital Logic
- * Signal Processing
- * Electronic
- * Embedded Systems
- * User Interfaces and Human Computer Interaction
- * Operating Systems
- * Fundamentals of Programming
- * Software Engineering
- * VLSI design and production
- * Computer Networks
- * Artificial Intelligence



Main Courses of Computer Engineering

- * Fundamental Engineering Courses
- * Data Structures and Algorithms
- * Programming Languages
- * Operating Systems
- * Database Design
- * Software Projects Management
- * Computer Graphics and Image Processing
- * Computer Architecture and Design
- * Computer Networks
- * Network Security
- * Artificial Intelligence and Intelligent Systems

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