Marmara University Computer Engineering

Computer Engineering Department has been established along with Faculty of Engineering in 1987. A total of 1327 computer engineers were graduated from our department until June 2022. Our masters of science program is active since 1993 and PhD program is active since 2011. Our department has well-educated, internationally experienced and young academic staff consisting of 13 full-time faculty members (with 3 professors, 6 associate professors and 4 assistant professors) and 7 research assistants.
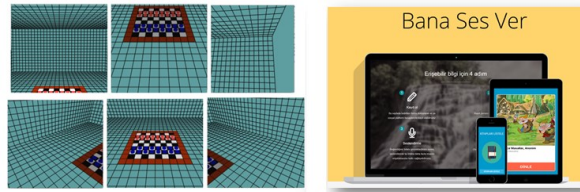
All undergraduate and graduate programs in our department are completely *in English*, which help our alumni to find prestigious positions in international level. Besides the classes for natural sciences, engineering sciences and compulsory department courses, our students are offered a wide range of technical and social elective courses that can help to lead them in the direction of their individual talents and desires.

The education quality of our department has been already approved with the accreditation of MÜDEK since 2014, providing international recognition for the department. As a result of the qualified education, *our graduates qualify to get hired in most respected companies in Turkey as well as abroad*. Further a good number of our graduates pursue or have pursued graduate programs in prestigious universities in Turkey or U.S., Canada and European countries.

Our faculty members carry out research and project studies intensively in addition to their educational activities. Extensive research projects supported by the national organizations (TUBITAK) and international organizations (Horizon 2020) are being carried out by our faculty members. Undergraduate students that are interested in research in different areas of computer engineering can take part in these projects during their junior and senior years.

Why Marmara?

⇨ **Well-educated, young and dynamic academic staff with international experience**
⇨ **100% English education**
⇨ **MÜDEK accreditation**
⇨ **Project-oriented courses at world standards**
⇨ Advanced laboratory facilities
⇨ Possibility of Double Major or Minor in all programs of Marmara University
⇨ High employment rate for graduates
⇨ Opportunities to work in real life projects integrated with industry during training
⇨ New campus (Maltepe), wide and modern physical facilities
⇨ Friendly student-instructor relationship through Open Door Policy
⇨ International student exchange agreements (Erasmus)
⇨ Social and cultural activities & Club activities
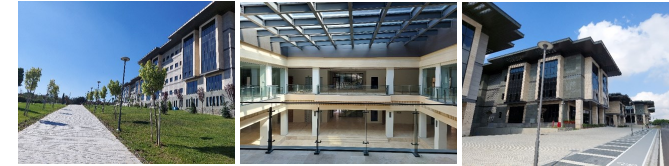⇨ Sports, culture, rectorate and special scholarships

Graduation Projects

A graduation project gives a student an opportunity to prove his/her knowledge and skills as a professional computer engineer to execute a multi-disciplinary project.
⇨ It is a unique step for the future career of the learner.
⇨ Contributions to the student:
  ‣ Project responsibility, group work and management skills
  ‣ Presentation skill
  ‣ Opportunity to meet academics, industry leaders and employees
⇨ You may take a look at sample projects on our web page.

MARMARA UNIVERSITY

FACULTY of ENGINEERING

COMPUTER ENGINEERING DEPARTMENT

What is Computer Engineering?

Computer Engineering is a very enjoyable profession that is based on mathematical thinking skills. It is a favored profession today with a large variety of application areas and it is a promising profession with its constantly increasing importance. We are in an information era, where computers are used everywhere, from entertainment to health systems, from defense industry to communication systems, from all kinds of personal services to large scale government systems. The world's leading developed economies have their leading edge by the breakthroughs they make in the field of information technology. Undoubtedly, the leading pioneers of this technology are the computer engineers. As a natural consequence of this, computer engineering has become one of the most popular, demanded and value added jobs of our time. Regarding the data of international statistical institutions, computer engineering is among the professions that receive the highest demand.

The Skills of Computer Engineering

⇨ Engineering approach
⇨ Analytical thinking ability
⇨ Mathematical expression skill
⇨ Ability to perform design
⇨ Research and learning skills
⇨ Ability to develop software and hardware project
⇨ Ability to work in teams
⇨ Management techniques
⇨ Effective communication skills
⇨ Professional behavior and ethics

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

What does a Computer Engineer do?

⇨ Software development
⇨ Software architecture development
⇨ Database administration
⇨ Microprocessor based hardware design
⇨ Design, operation and maintenance of computing systems and other peripheral devices
⇨ Design, installation and operation of computer networks and telecommunication devices
⇨ Designing algorithms on hard real-world problems
⇨ Research and development in various areas of computer science and engineering
⇨ Data science and analysis

Employment Opportunities

⇨ Communication systems (mobile phones)
⇨ Financial Sector (banking, finance companies)
⇨ Public sector (e-government, defense industry)
⇨ Health (hospital automation, bioinformatics)
⇨ Entertainment (3D movies, animations, games)
⇨ Internet infrastructure, computer networks
⇨ Educational sector
⇨ Social media, mobile services, e-commerce
⇨ **In short, every area of life!**

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

Faculty Members

⇨ Prof. Dr. Haluk Rahmi TOPÇUOĞLU (Department Head)
⇨ Prof. Dr. Çiğdem ERDEM
⇨ Prof. Dr. Ali Fuat ALKAYA
⇨ Assoc. Prof. M. Borahan TÜMER
⇨ Assoc. Prof. Murat Can GANİZ
⇨ Assoc. Prof. Müjdat SOYTÜRK
⇨ Assoc. Prof. Mustafa AĞAOĞLU
⇨ Assoc. Prof. Ömer KORÇAK (Vice Head)
⇨ Assoc. Prof. Ali Haydar ÖZER
⇨ Asst. Prof. Mehmet K. BARAN
⇨ Asst. Prof. Betül DEMİRÖZ BOZ (Vice Head)
⇨ Asst. Prof. Fatma CORUT ERGİN
⇨ Asst. Prof. Sanem ARSLAN

Our Main Research Areas

⇨ Software Engineering
⇨ Parallel / Distributed and Multicore Computing
⇨ Embedded Systems
⇨ Artificial Intelligence and Machine Learning
⇨ Data Mining and Big Data Analytics
⇨ Image and Video Processing, Computer Vision
⇨ Nature Inspired Computing
⇨ Natural Language Processing and Bioinformatics
⇨ Computer Networks, Wireless Networks and Vehicular Networks
⇨ Optimization and Game Theory

Computer Engineering Department
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