

## **COMPUTER ENGINEERING MS PROGRAM (with Thesis, in English)**

*“A MS Program for theoretical and applied research in specific areas of computer engineering”*

Currently, computer systems, as a very important and critical component, are used in almost every area of our daily life, in industry, commerce, banking, insurance, health, company management, telecommunications and Internet, automotives, construction, land/air/sea transportation, etc. Computer Engineering, when compared with other branches of engineering, is a relatively new area of engineering and aims the design, production, operation and integration with other engineering systems by using established principles of engineering. Since computer systems are being used in every aspect of our daily lives, Computer Engineering has interdisciplinary applications and has a role in almost all disciplines.

**Computer Engineering MS Program (with Thesis)** aims specialization in both theory and applications and also state-of-the-art research experience in Computer Engineering. Research areas of faculty members are Forensics, Semantic Web, Discrete Optimization, Computer Networks, Computer Security, Design of Computer Systems, Cloud Computing, Geographical Information Systems, Distributed Systems, Formal Specification and Verification, Embedded Systems, Image Processing, Hospital Communications Systems, Theory of Computation, Business Intelligence, Operating Systems, Cryptography, Machine Learning, Ontology, Robot Motion Planning, Number Theory, Testing Theory, Cyber Security Systems, Cyber War Simulation, Data Science, Data Mining, Databases, Artificial Intelligence, Software Development and Software Engineering. Graduates of 4-year undergraduate programs can apply to the program. Graduates of the MS Program are awarded the “MS Degree in Computer Engineering”

**Computer Engineering MS Program (with Thesis)** is among the earliest established MS programs at Yaşar University. As of December 2020, Computer Engineering graduate programs are supported by 14 faculty members from the departments of Computer Engineering, Software Engineering, Mathematics, and Management Information Systems.

**Computer Engineering MS Program (with Thesis)** is planned to be completed in three semesters and must be completed in at most six semesters. Courses are organized in three groups, as prerequisite, mandatory and elective courses. Candidates without an undergraduate degree in computer or software engineering are expected first to complete a preparatory program of at most two semesters, then they can start the MS Program.

In the **Computer Engineering MS Program (with Thesis)**, it is expected that MS students take graduate courses in relation to their research areas, prepare a seminar and participate in seminars of other students, prepare a thesis with original research results and defend their MS thesis, It is also suggested students publish their research results in journals and/or conferences and participate in joint research projects with some industrial collaboration.

Graduates of **Computer Engineering MS Program (with Thesis)** will be able to work as engineers or researchers in private and public organizations and/or companies that emphasize R & D. Additionally, they will be able to initiate or participate in start-up companies that aim creativity, innovation and entrepreneurship. As of December 2020, Computer Engineering MS Program has 42 graduates and 22 MS students.