Scientific Preparatory Program (M.Sc.)
IAM 591 Programming Tech. in Appl. Math. I
IAM 592 Programming Tech. in Appl. Math. II
Tezli Yüksek Lisans Programı
IAM 561 Introduction to Scientific Computing I
IAM 562 Introduction to Scientific Computing II
IAM 566 Numerical Optimization
IAM 590 Graduate Seminar
IAM 500 M.S. Thesis
4 elective courses

M.S. Non-Thesis Program
IAM 561 Introduction to Scientific Computing I
IAM 562 Introduction to Scientific Computing II
IAM 557 Statistical Learning and Simulation
IAM 566 Numerical Optimization
IAM 572 Finite Elements: Theory and Practice
IAM 590 Graduate Seminar
IAM 589 Term project

Ph.D. Program
3 IAM elective courses

Ph.D. on B.Sc. Degree Requirements
IAM 561 Introduction to Scientific Computing I
IAM 562 Introduction to Scientific Computing II
IAM 566 Numerical Optimization
IAM 572 Finite Elements: Theory and Practice
IAM 590 Graduate Seminar
IAM 600 Ph.D. Thesis

Elective Courses
IAM 523 Introduction to Stochastic Processes
IAM 525 Game Theory
IAM 529 Applied Nonlinear Dynamics
IAM 530 Elements of Probability and Statistics
IAM 550 Portfolio Optimization
IAM 557 Statistical Learning and Simulation
IAM 560 Stochastic Aspects of Dynamics
IAM 563 Methods of Applied Mathematics
IAM 564 Basic algorithms and Programming
IAM 567 Mathematical Modeling
IAM 570 Hybrid Systems
IAM 571 Applications of Differential Quadrature Method in Engineering
IAM 572 Finite Elements: Theory and Practice
IAM 664 Inverse Problems
IAM 665 Advanced Continuous Optimization
IAM 672 Control and Optimization of Differential Equations

Admission Requirements and Application
The selection process requires documentation of the following:
• METU-EPE (English Proficiency Exam) ≥ 65 or TOEFL-IBT ≥ 79
• ALES ≥ 75 or GRE-Quantitative Score ≥ 713
• At least 2 reference letters
• Letter of intention
Application Deadline to program: June 22, 2017
Application Deadline to EPE: June 07, 2017
Applicants will be interviewed when necessary.
Why Study Scientific Computing?
Scientific Computing is a multidisciplinary area that encompasses applications in science and engineering, applied mathematics, numerical analysis, and computer science.

Today, many problems in science and engineering can only be treated by means of efficient use of computers. Scientific computing is now regarded as the “third pillar” of science, along with theory and experiment, in the advancement of scientific knowledge and engineering practice.

Importance of Scientific Computing in Turkey
The importance of efficient and accurate computational techniques is regarded as a factor in economic growth and competition has been recognized by leading industry nations.

Specific areas for Turkey are finding new energy resources, development of energy saving devices, solving large scale industrial problems and development of a sustainable environment.

Objectives of Scientific Computing Program
Mathematical modelling and developing efficient and reliable algorithms are the main ingredients of the program. The aims of the Program are to educate graduates from different disciplines with the aim to develop and apply their skills to the solution of real life problems from science, engineering and industry.

to establish the contacts between researchers from the Scientific Computing program and Turkish industry, demonstrate the benefits of modern methods for Scientific Computing for industrial problems.

Suitable for Students from all Disciplines
Scientific Computing is suitable for students from Faculty of Science and Faculty of Engineering who will work on interdisciplinary projects. Students are encouraged to work on real life problems with industrial partners.

Job Opportunities
- Universities
- Techno parks
- Defense industry

FACULTY
UGÜR, Ömür: B.S., M.S., Ph.D. METU.
WEBER, Gerhard-Wilhelm: B.S., M.S., Ph.D. Aachen Technical University.
YÜCEL, Hamdullah: B.S., Ph.D. METU.

AFFILIATED FACULTY
AKSEL, Haluk: B.S., M.S. METU; Ph.D. Lehigh University Bethlehem.
ALTINTAN, Derya: B.S. Ankara Üniversitesi; M.S., Ph.D. METU.
DOĞRU (SERİNAĞAOĞLU), Yeşim: B.S., M.S. METU; Ph.D. Northeastern University.
GENÇER, Nevzat Güneri: B.S. Boğaziçi University; M.S., Ph.D. METU.
KARASÖZEN, Bülent: B.S., M.S., Ph.D. Technical University Berlin.
KÖKSAL, Gülser: B.S., M.S. METU; Ph.D. North Carolina State University.
MANGUOĞLU, Murat: B.S. METU, M.S. University of Utah; Ph.D. Purdue University.
SARIYILDIZ-FİLLİBELİOĞLU, Ayşe: B.S. Kırıkkale Üniversitesi, M.S., Ph.D. METU.
TEZER, Münevver: B.S., M.S. METU; M.S. University of Saskatchewan; Ph.D. University of Calgary.
UZUNCA, Murat: B.S. Abant Izzet Baysal Üniversitesi; Ph.D. METU.