# **ACTUARIAL SCIENCES**

**INSTITUTE OF APPLIED MATHEMATICS** 



#### What is Actuarial Science?

Actuarial science is interested in the probability of unlikely events affecting lives and their financial effects. It applies the principles of statistics, mathematics, economics, finance and business management to assess the risks in the insurance and financial sector.

## Why Actuarial Sciences?

In many countries, the actuarial profession is one of the best business fields in terms of prestige, wages and job satisfaction. The interest in actuaries, among the top five most demanding professions in developed countries, has increased in our country in recent years. The low number of actuaries also increases the demand in the sector.



## Actuarial Sciences Program

Actuarial Science students complete their education in the concentration of mathematics, statistics, economics, computer software, finance, legislation, accounting and insurance by following the changing world conditions.

Institute of Applied Mathematics (IAM) is offering M.Sc. program in Actuarial Sciences. The program is mainly based on the following topics:

- Basic Economics and Insurance
- Risk Theory and Financial Mathematics
- Life and Non-life Insurance Mathematics
- Pension Systems
- Financial Derivatives and Stochastic Processes

The compulsory summer internship enables students to develop their industry skills.

More on the curriculum information can be found:

https://iam.metu.edu.tr/en/curricula

#### Research Areas

The research areas depend on the basic of mathematics, statistics and probability theory and vary in practical topics such as risk theory, catastrophic loss modeling technique, actuarial algorithms, actuarial data science, risk management, actuarial mathematics, financial economics and financial management, time series, reinsurance, and credibility theory.



# **Business Opportunities**

Over 90% of our graduates are employed in the insurance industry there is big demand on our graduates even before the completion of their Master program.

- Insurance and reinsurance companies
- Secretariat of Treasury
- Social Security Institution
- Consulting companies

# Admission Requirements and Application

For admission requirements please visit:

https://iam.metu.edu.tr/en/application-and-admission

#### Contact

For contact information please visit:

https://iam.metu.edu.tr/en/contact











