RISK ENGINEERING AND MANAGEMENT

Make a difference with BAU in graduate education!

RISK ENGINEERING AND MANAGEMENT MASTER'S PROGRAM

BAU Risk Engineering and Management program is the first master program in Turkey to study and develop integrated multidisciplinary approaches for assessing and managing risk and reliability.

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**PROGRAM OBJECTIVES**

Risk Engineering and Management program involves all sectors: construction, insurance, consultancy, transportation (air, rail, road), energy (nuclear plants, oil and gas platforms, refineries, dams, fuel cells), waste disposal, mining, production (pharmaceutical, agri-business, manufacturing), etc. This program emphasizes a systems approach and the use of statistical decision theory to assess the potential for extreme events, and also the costs and benefits of their consequences.

The objective of this multidisciplinary master program is to offer lectures in English, dealing with generic aspects of risk management and their applications in various fields of engineering. This program will allow you to build on your existing engineering or management undergraduate degree by developing specialized technical knowledge in risk management. Graduates of the Risk Engineering and Management program will have achieved the higher levels of specialization necessary to excel in their chosen field. Students will benefit from a leading group of academics and an exciting international environment. Lecturers of courses are selected from leading experts in corresponding fields. They possess both academic and practical background which provides the genuineness of the study program.

**WHO SHOULD APPLY?**

Practicing engineers and scientists with backgrounds in civil, environmental, or another branch of engineering who wish to earn a master’s degree providing them with expertise in risk analysis, added competence in an engineering specialty, proficiency in risk policy, economics, or law, and advanced leadership and management skills. This program is designed for graduates and young professionals who wish to develop their knowledge, skills and competences in the field of modeling, formulation, analysis and implementation of simulations for advanced risk problems as well as skills for understanding these approaches in the broader context of management and engineering.

**CAREER OPPORTUNITIES**

There is an increasing demand for risk professionals with technical and managerial skills, so career prospect for graduates of Risk Engineering and Management program are above the average. Combining theoretical excellence, working experience and a strong network of a variety of stakeholders, this master program offers the perfect environment to enhance your career. Graduates from this program will be prepared to work in sectors as varied as risk assessment, engineering and business consulting, insurance and reinsurance industry, financial engineering, and infrastructure analysis, and more.

Upon completion of the program, graduates can start/continue their career as risk managers, engineers, inspectors, legislators, project managers, IT managers, safety and risk assessors in the fields of industrial engineering, process engineering, financial risks, risk psychology, etc.

**PROGRAM STRUCTURE**

Risk Engineering and Management Master Program is offered only with non-thesis option. Non-thesis program consists of 11 courses (equal to 31 credits), and project course.

Risk Engineering and Management Master Program courses continue for 14 weeks in Bahçeşehir University Beşiktaş Campus during both fall and spring semesters. Courses are held between 19:00-22:00 on weekdays.

**CURRICULUM**

**I. Semester**
1. Required Course
   - INE510
2. Required Course
   - RSI5001
3. Elective Course
4. Elective Course

**II. Semester**
1. Required Course
   - ENM6227
2. Required Course
   - RSI5002
3. Elective Course
4. Elective Course

**III. Semester**
1. Required Course
   - RSI5999
2. Required Course
   - RSI5101
3. Elective Course
4. Elective Course

**ELECTIVE COURSES**

Safety and Reliability
Numerical Methods in Engineering
Project Management
Technology Management
Strategic Management
Renewable Energy Sources in Fuel Production
Sustainable Energy Systems
Implementation of Oil and Gas Markets
Introduction to Wind Energy Engineering
Decision Making and Governance in Business Environment
Strategic Approaches in Logistics Management
Project Management in Engineering
Optimization
Quality Management
Design of Experiments

*The elective courses listed for the graduate programs will be opened based on the availability of the lecturer and according to the number of enrolled students.*