

# Shape the Future of Finance!

—ÖZYEĞİN—  
—UNIVERSITY—  
GRADUATE SCHOOL  
OF BUSINESS

## FERM Program

Financial Engineering and Risk Management

# Why an Özyeğin University FERM Program?

The OzU Master of Science in Financial Engineering and Risk Management (FERM) program is for those who want to apply quantitative finance, risk management methods and data science in solving business problems. It welcomes students from a wide spectrum of backgrounds and benefits from this diverse cross-disciplinary blend. FERM brings the best of two worlds together, the knowledge of the academia and the experience of the industry, and offers a program that focuses on real-world applications based on solid financial theory.

FERM is a 12-month program that consists of 8-week modules. The program has the “Financial Risk Management” and “Financial Data Analytics” tracks and offers Thesis and Non-Thesis degree options. This flexible program structure enables students to keep up with academic objectives and professional responsibilities. We offer merit-based scholarships for qualified applicants.

We look forward to your application and joining the FERM Network and the OzU Graduate School of Business family.



**Dr. Levent Güntay**

*Director, Center for  
Financial Engineering*

## Unique aspects of the FERM Program include:

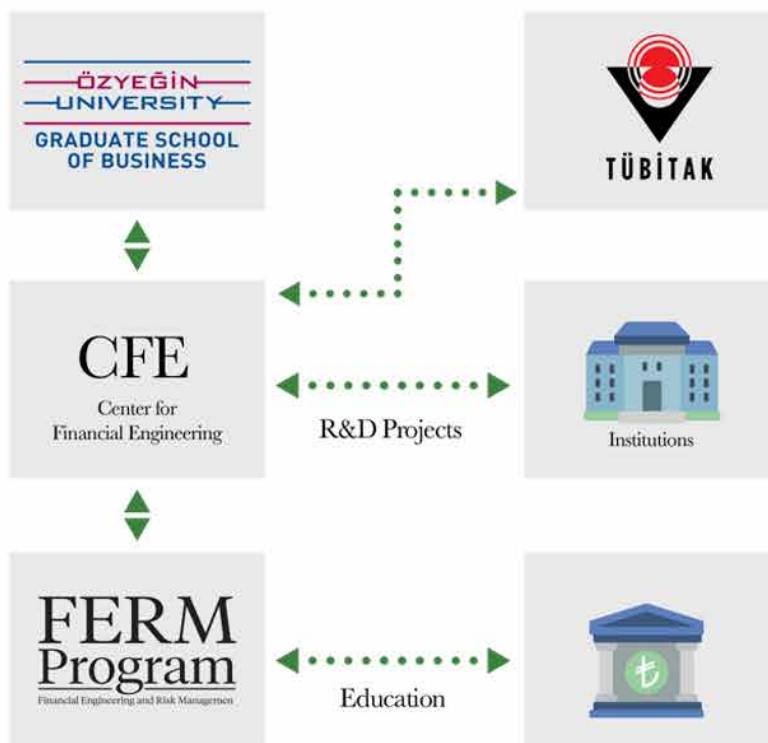
- » **World-class** Özyeğin faculty with PhDs from top universities in the world
- » **Case and project-based courses** focused on real-world business questions
- » Evening and Saturday **classes in Altunizade** are convenient for working participants
- » Nearly **20 elective courses** and modular course structure enable participants to customize their education and put **theory into practice**
- » The only Finance graduate program in Turkey offering specialization in **Data Science** and **Data Analytics**
- » **Courses cover financial and economic databases** (Bloomberg, Reuters, Wharton Research Database System) and **programming languages** (R, Python, SQL, Eviews) most commonly used in the financial industry
- » Participation in joint **R&D projects** in the OzU Risk Management Laboratory
- » Opportunity to complete a **Master's Thesis** and conduct **academic research** with Özyeğin faculty members
- » Interaction with experienced **industry representatives** in FERM elective courses, executive speaker series and graduation project
- » **Connection with FERM alumni** employed in top Turkish and international financial institutions
- » **Merit-based scholarships** for qualified candidates
- » **Ranked** among the top 150 MS in Finance programs globally and scored **86 percent** in “Value for Money” category according to **QS 2019 Business School Rankings**

The vision of the Özyeğin University and Center for Financial Engineering is to establish a bridge between academia and financial industry. For this purpose, the Center forms strategic partnerships and close ties with the commercial and investment banks, brokerage and asset management firms, insurance firms, real sector firms and regulatory institutions.

Applications of academic research conducted by the Center will turn into industrial solutions for the financial industry. The Center in turn aims to publish the academic research in risk management at the leading international journals on the fields of finance, statistics, and engineering.

The collaborative research and education environment at the Center and the FERM program benefits the students in several ways.

- » The Center provides the FERM students and researches in Altunizade with the necessary data, computing, and software needs. FERM students and researchers can use the 13 Bloomberg terminals, Reuters, and Wharton Research Database installed in the FERM Classroom for lectures and research projects.
- » FERM students can contribute to the R&D projects conducted at the OzU Risk Management Laboratory and work with the supercomputers in the lab.
- » FERM students can conduct innovative academic research with Özyeğin faculty members and complete the Master's Thesis. Students might potentially pursue an academic career after the Thesis.
- » FERM students may work together with experienced executives from the finance industry on the graduation (Capstone) projects.





# Curriculum

The program consists of a **Pre-Term**, 15 courses and a Graduation Project.

All admitted students attend a **Pre-Term** Week which features an orientation event and lectures designed to supply core mathematics, statistics and programming skills.

The Pre-term is followed by a **common core** consisting of **8 required courses**, which provides a strong foundation in mathematics, econometrics and economics necessary for solving financial problems.

The core is followed by a total of at least **7 elective courses** and allow participants to customize their program.

The FERM program offers two specialization areas (tracks) which prepare students with the applied knowledge about financial markets and institutions for the incoming information age.

The FERM Program offers two specialization areas:

- » **Financial Risk Management (FRM)**
- » **Financial Data Analytics (FDA)**

The program is concluded with a Graduation (Capstone) Project in which the participant applies many of the concepts and skills acquired in the program to real-life cases.

| MODULE            | COURSES                           |                               |                      |
|-------------------|-----------------------------------|-------------------------------|----------------------|
| Pre-Term          | Pre-Term Week                     |                               |                      |
| Fall Module 1     | Applied Financial Econometrics I  | Financial Engineering I       | Elective 1           |
| Fall Module 2     | Applied Financial Econometrics II | Financial Engineering II      | Portfolio Management |
| Spring Module 3   | Derivatives Best Practice         | Applied Financial Economics I | Elective 2           |
| Spring Module 4   | Applied Financial Economics II    | Elective 3                    | Elective 4           |
| Summer Module 5/1 | Elective 6                        | Elective 6                    |                      |
| Summer Module 5/2 | Elective 7                        |                               |                      |
| Summer-Fall       | Capstone Project                  |                               |                      |

# Required Courses

- » Applied Financial Economics I
- » Derivatives Best Practice
- » Applied Financial Economics II
- » Portfolio Management
- » Financial Engineering I
- » Financial Engineering II
- » Applied Financial Econometrics I
- » Applied Financial Econometrics II

# Elective Courses

Participants are required to successfully pass 7 elective courses to graduate from the program. Participants must pass at least 4 elective courses from “Risk Management” and/or “Data Analytics” tracks to complete them.

## **Financial Risk Management (FRM) Electives:**

- » Applied Asset and Liability Management I
- » Applied Asset and Liability Management II
- » Demystifying Turkish Economy
- » Financial Ethics
- » Financial Markets, Institutions and Instruments
- » Financial Modeling and Business Valuation
- » Fixed Income in Emerging Markets
- » Macroeconomic Projections and Scenario Analysis
- » Quantitative Asset Management
- » Quantitative Trading
- » Risk Management in Financial Institutions

## **Financial Engineering and Data Analytics (FDA) Electives:**

- » Big Data Management
- » Customer Analytics
- » Data Analytics and Statistical Learning
- » Financial Technologies (FinTech)
- » Introduction to Financial Economics and Statistics
- » Machine Learning and Deep Learning
- » R for Financial Data Analytics

# Our Alumni



“The FERM program focuses on creating a vibrant network among participants and lecturers. This feature of the program not only helps in the exchange of professional ideas but also provides an invaluable network that is otherwise hard to penetrate.”

**Ali Gökhan**, FERM Class of 2012

Vice President Treasury, JPMorgan Chase&Co., Switzerland



“The opportunity to interact with faculty members in the OzU Trading Laboratory helped me put theory into practice. Having this kind of an opportunity was the decisive factor in choosing OzU FERM over other comparable programs. It was a big milestone in my trading carrier. I also enjoyed getting to know my classmates in person most of whom were working at top financial institutions.”

**Mehmet Gençtürk**, FERM Class of 2012

Head, Group Treasury, Turkcell, İstanbul



“The FERM curriculum closely overlapped with the CFA exam contents. This feature of the program not only enriched my theoretical understanding on risk management and financial markets but also provided a different vision for financial markets. Being a FERM alumnus helped me in various ways throughout my professional career.”

**Serdar Aybatan**, FERM Class of 2012

Advisor, Central Bank of the Republic of Turkey, Ankara



“The program fully met my expectations. It gave me a big picture and enabled me to approach events differently. I learned a lot from the program, I can make more logical sense of the concepts that I already know. I strongly recommend this program to those who want to learn how markets function and how expectations are formed, and to those who want to approach events different.”

**Berkay Aytekin**, FERM Class of 2017

Head of Corporate Finance, Phillip Capital, İstanbul



“The OzU Ms in Financial Engineering and Risk Management (FERM) has been an invaluable experience which has provided me with a solid foundation both in technical and theoretical aspects of risk management with practical-oriented teaching methods and approachable professors. I would highly recommend it to anyone that wants to pursue a Master Degree in the field of finance and risk management.”

**Ayşin Özgül**, FERM Class of 2019

Market Risk Manager, T. Vakıflar Bankası T.A.O., İstanbul



# Application & Admission

## Application Requirements

To apply for the OzU FERM program the applicant is expected to have:

- » A bachelor degree
- » Excellent command of written and spoken English

## Application Documents

- » Online Application Form
- » Undergraduate Diploma
- » Transcript of Grades
- » Recently updated CV / Resume
- » Two Letters of Recommendation
- » English Proficiency Test Score

| FERM PROGRAM             |                   |          |
|--------------------------|-------------------|----------|
| EXAM*                    | SCORE             | VALIDITY |
| TOEFL - IBT**            | Minimum 66 points | 2 Years  |
| YDS / E-YDS /<br>YÖK-DİL | Minimum 55 points | 5 Years  |
| TRACE***                 | Minimum 50 points | 2 Years  |

\* If the English level of the candidate student is evaluated as adequate and if this candidate student graduated from a university where the language of the undergraduate program is English minimum two years ago, s/he will be exempt from the English proficiency test.

\*\* As per YÖK Regulations, the TOEFL exam is only valid if taken at a state university.

\*\*\*The test of Readiness for Academic English (TRACE) will test the ability to read, listen to, and write academic English.

Applicants who pass the initial screening will be invited for an in-person interview.

## Online Application

Please follow the link below for submitting your online application.

[www.ozyegin.edu.tr/en/financial-engineering-and-risk-management](http://www.ozyegin.edu.tr/en/financial-engineering-and-risk-management)

Applications will be considered on a rolling basis. Early applications are strongly recommended. Before beginning the online application please read the application instructions. Online applications can be saved and completed in multiple sessions.

For further questions, please contact the FERM Administration Department.

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ÖZYEĞİN  
UNIVERSITY

GRADUATE SCHOOL  
OF BUSINESS



- MBA
- Executive MBA (EMBA)
- Financial Engineering and Risk Management (FERM)
- PhD in Business



Contact Admission Office: Graduate School of Business, Özyeğin University  
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Çekmeköy - İSTANBUL, TURKEY

For More Detailed Information  
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