

## Course Descriptions NonDegree 2019-2020

Course Title	Empirical Analysis of Financial Markets
Course Code	EBC4010
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	14-4-2020	5-6-2020	X			X	

Level	Advanced
Coordinator	Peter Schotman For more information:p.schotman@maastrichtuniversity.nl
Language of instruction	English
Goals	The purpose of the course is to provide students with an overview of empirical methods and stylised facts that will enable them to make their own assessment of events on financial markets.
Description	In this course we consider in depth the fluctuations of stock prices. The purpose of the course is to provide you with an overview of recent empirical research in asset pricing and portfolio management. How are theoretical models of asset pricing being tested in practice? What are the strengths and weaknesses of various methodologies? What kind of statistical techniques are used?

Statistical methods in empirical asset pricing have evolved into a separate field called financial econometrics. These techniques are specifically designed to answer typical questions in finance. Examples are models of risk that look at how risk is measured, how it evolves over time, and how risks in different stocks are related. It also considers probabilities of crashes, bankruptcies and defaults, and statistical tests for the performance of trading strategies.

A more recent development are prediction models that build on insights from machine learning and advances in big data methodologies. These techniques seem to uncover new patterns in stock prices. From an investment perspective it is important to assess whether such new facts will remain or will be arbitrated away as soon as large investors start trading to exploit these patterns. In the course we will review and discuss interpretations of new techniques and empirical findings.

A second aim of the course is to let you gain some experience in doing empirical research. An important aspect of the course is learning about the characteristics of stock returns by doing a small research project. The research projects are concerned with predictability of stock returns and the profitability of various trading strategies based on (seeming) anomalies. At the end of the course you should be able to make your own assessment about events on financial markets. Are reported superior returns pure chance, statistical illusion, a reward for risk or really an anomaly?

Literature	recent research papers - recent journal articles
Prerequisites	Knowledge of basics of asset pricing and portfolio management, and linear regression models. Exchange students need to have obtained a Bachelor degree in economics or business administration, and sufficient quantitative background. Exchange students need to major in finance in their master. An advanced level of English
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork
Assessment methods	Final Paper / Participation / Written Exam
Evaluation in previous academic year	For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>

This course belongs to the following programme / specialisation

Master Business Research - No specialisation	Year 2 Free Elective(s)
Master Business Research - Operations Research	Year 1 Elective Course(s)
Master Business Research - Operations Research	Year 2 Elective Course(s)
Master Econometrics and Operations Research - Econometrics	Compulsory Course(s)
Master Econometrics and Operations Research - Mathematical Economics	Elective Course(s)
Master Econometrics and Operations Research - No specialisation	Elective Course(s)
Master Econometrics and Operations Research - Operations Research	Elective Course(s)
Master Economic and Financial Research - Econometrics	Year 1 Core Course(s)
Master Economic and Financial Research - Econometrics	Year 1 Elective Course(s)
Master Economic and Financial Research - No specialisation	Year 1 Elective Course(s)
Master Financial Economics - Asset Pricing	Compulsory Course(s)
Master Financial Economics - Asset Pricing	Elective Course(s)
Master Financial Economics - Banking	Elective Course(s)
Master Financial Economics - Financial Analysis	Compulsory Course(s)
Master Financial Economics - Financial Analysis	Elective Course(s)
Master Financial Economics - No specialisation	Core Course(s)
Master Financial Economics - No specialisation	Elective Course(s)
Master Human Decision Science	Elective Course(s)
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses