Course Descriptions None 2024-2025

Course Title	Risk Management
Course Code	EBC4056
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	14-4-2025	8-6-2025	X			X	

Level	Advanced
Coordinator	Dennis Bams For more information:w.bams@maastrichtuniversity.nl
Language of instruction	English
Goals	Understand the different dimensions of risk in financial markets and financial institutions as well as financial risk management hedging strategies for corporations. Learn how to measure market-, credit-, liquidity- and operational risk and to apply it in risk assessment and risk mitigation strategies. Understand the concepts of regulatory- and economic capital in a Basel II context and how to integrate these in a firm wide framework for performance measurement and company steering. After completion of the course, participants should be able to measure alternative risk types, be able to carry out capital requirement calculations, and determine risk-mitigating strategies such as hedging and portfolio selection. Furthermore, participants should be able to gather corporate financial exposure information and financial data to arrive at a proper risk assessment. In the course, we will consider large historical data samples and carry out empirical analyses by making use of the risk management tools from the book. In particular, we will focus on extreme events as well as crisis periods to address the issue ‘how bad things could get'. During the group sessions, we translate these findings into a desire for a balance between ‘just enough risk taking' and profit optimization.
Description	The course is built around three topics: first, it is important to identify financial risks and to measure them. Topics, such as value-at-risk, volatility, correlation and copulas, as well as credit risk loss measurement will be addressed. The increased notion of concentration risk, warrants a proper discussion of alternative ways to model/measure co-movements (through copulas), as well as to provide alternative ways to represent the variability in a financial variable (this includes alternative volatility models, such as GARCH models). Second, this course focuses on understanding alternative approaches to manage risk. This includes the usage of derivative securities such as options and futures. It is a fact that derivatives markets are skyrocketing, and it is becoming increasingly common for both financial institutions and non-financial corporations to make use of financial derivatives. Internationally, over 60% of non-financial corporations are reported using derivatives. Financial risk management is considered the main reason for the use of financial derivatives by non-financial institutions. Third, this course will focus on regulatory developments for banks under Basel IV. Basel IV has set new capital requirements standards for credit risk, operational risk and market risk. We will review the Basel IV three pillar model and will discuss the three risk types mentioned above in detail as well.
Literature	Risk Management and Financial Institutions, 5th edition, John C. Hull, Pearson Prentice Hall, ISBN: 978-1-119-44811-2. Additional literature may be available through Canvas . Data and programs for assignments will be available through Canvas .
Prerequisites	This course is in transition for the: * master Business Research - Operations Research * master Fiscal Economics See the Master Education and Examination Regulations for more information. The following rule applies to master Business Research students who started the programme prior to academic year 2024-2025. TRANSITIONAL REGULATION (EBC4056): The master Business Research has been discontinued. Courses of the Business Research master's programme will continue to be offered until and including academic year 2025-2026 with exam opportunities running until and including 2026-2027. The following rule applies to master Fiscal Economics students who started the programme prior to academic year 2024-2025. TRANSITIONAL REGULATION (EBC4056): The master Fiscal Economics has been discontinued. Courses of the Fiscal Economics master's programme will continue to be offered until and including academic year 2024-2025 with exam opportunities running until and including 2025-2026. PREREQUISITES: * Exchange students need to have obtained a Bachelor degree in economics, econometrics or business administration. * An advanced level of English
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork
Assessment methods	Written Exam
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

Master Business Research - Operations Research	Transitional Regulation
Master Econometrics and Operations Research	Free Electives
Master Economic and Financial Research - Econometrics	Elective Course(s)
Master Economic and Financial Research - No specialisation	Elective Course(s)
Master Financial Economics - Asset Pricing	Elective Course(s)
Master Financial Economics - Banking	Compulsory Course(s)
Master Financial Economics - Financial Analysis	Elective Course(s)
Master Financial Economics - No specialisation	Elective Course(s)
Master Fiscal Economics	Transitional Regulation
Master Human Decision Science	Elective Course(s)
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses