

# Course Descriptions Master 2018-2019

Course Title Risk Management  
 Course Code EBC4056  
 ECTS Credits 6,5  
 Assessment None

Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	15-4-2019	7-6-2019	X/E				X/E	

Level Advanced

Coordinator Dennis Bams For more information:w.bams@maastrichtuniversity.nl

Language of instruction English

Goals Understand the different dimensions of risk in banks, learns how to measure market-, credit-, liquidity- and operational risk.  
 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.  
 After completion of the course, participants should be able to measure alternative risk types, be able to carry out capital requirements, and determine risk mitigating strategies such as hedging and portfolio selection.

Description The course is built around three important topics: first, it is important to identify financial risks and to measure them. Important 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, warrant a proper discussion of alternative ways to model/measure co-movements (through copulas), as well as 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 non-financial corporations to make heavy use of financial derivatives. Indeed, internationally, over 60% of non-financial corporations are reported using derivatives. As of December 2007, the total notional value of over-the-counter derivatives was \$596 trillion, a 200% increase over its value in December 2005. Financial risk management is reported to be 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 II. Basel II has set new capital requirements standards for credit risk, operational risk and market risk. We will review the Basel II three pillar model and will discuss the three risk types mentioned above in detail as well.

Literature Risk Management and Financial Institutions, 3rd edition, John C. Hull, Pearson Prentice Hall, ISBN: 978-1-118-26903-9.

Additional literature may be available through Canvas .

Data and programs for assignments will be available through Canvas .

Prerequisites Exchange students need to have obtained a Bachelor degree in economics or business administration.  
 Exchange students need to major in finance in their master.  
 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	IB Electives
Master Business Research - Operations Research	IB Electives
Master Econometrics and Operations Research	Free Electives
Master Economic and Financial Research - Econometrics	Electives
Master Economic and Financial Research	Electives
Master Financial Economics	Banking
Master Financial Economics	Electives
Master Fiscal Economics	Economics Electives
Master Human Decision Science	Electives
Master International Business - Accountancy	Electives
Master International Business - Controlling	Electives
Master International Business - Entrepreneurship and SME Management	Electives
Master International Business - Organisation: Management, Change and Consultancy	Electives
Master International Business - Strategic Corporate Finance	Electives
Master International Business - Strategy and Innovation	Electives
Master International Business - Sustainable Finance	Electives
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses