Title of the Module: Financial Risk Management	**Module-Number:** 51200?
Module-Abbreviation: Risk Management	**Credit Points:** 6
Duration: One Semester	**Level:** Master
Units: This module will be taught in one unit.	**Frequency of the Course:** Once a year
Teaching Language: English	**Form of Examination:** Combined Examination
Subject: Risk Management	**Status:** Compulsory Subject
Teaching Form, Attendance Time: Seminaristic, Teaching Hours (4 SWS = 72 academic hours of 45 Minutes = 54 hours)	
Time needed for self-studies, examinations, and examination preparation: 126 hours	**Total Work Load:** 180 hours

Required Preconditions:
Basic knowledge in Finance, Accounting, Statistics and Financial Mathematics from basic courses (Bachelor)

Learning Outcomes and Competences:

The major aim of the course is to understand the value at risk approach and to use the value at risk approach in practice of corporate and financial markets. The students should be able to distinguish the different calculation methods for interest rate risks, foreign exchange risks, equity risks and credit default risks. A further aim of the course is to calculate value at risk for several case studies (e. g. simple asset portfolios). The students should know, how correlations between the several risk factors can reduce the value at risk. They should understand the link between financial markets and risk management in corporate. Finally the students can use the different kinds of instruments to control risk.

Content of Course:

1. Basics of Risk Management: Definitions and Reasons for Risk Management, Risk Management as an process, Identification and Kinds of Risks
2. Risk Measurement and Analysis: Simple Measures, Volatility, Sensitivity, Value at Risk, VaR of Portfolios (Correlation), Back Testing, Lower Partial Moments, Historical Simulation, Stress-Tests
3. Risk Control: Precaution, Limits, Diversification and Compensation
4. Financial Risks: Peculiarities of Market Risks (Interest Rate Risk, Foreign Exchange Risk, Equity Risk), Credit Default Risk and Liquidity Risk

Literature Recommendations:

Brealey, Richard A.; Myers, Stewart C.: Principles of Corporate Finance, McGraw-Hill, 8 ed. 2006

Dowd, Kevin: Beyond Value at Risk, John Wiley&Sons, 1998

Dowd, Kevin: An Introduction to Market Risk Measurement, John Wiley&Sons, 2002

Elton, Edwin J.; Gruber, Martin J.; Brown, Stephen J.; Goetzmann, Wiliam N.: Modern Portfolio Theory and Investment Analysis, Wiley, 2006

Holton, Glyn A.: Value at Risk. Theory and Practice, Academic Press, 2003/2009

Hull, John C.: Options, Futures and other Derivatives, Prentice Hall International, 2008

Jorion, Philippe: Value at Risk: The Benchmark for Controlling Market Risk, McGraw Hill, 2007

Penza, Pietro; Bansal, Vipul K.: Measuring Market Risk with Value at Risk, Wiley, 2000

Wolke, Thomas: Risikomanagement, Oldenbourg, 2 ed, 2008