

## The Chair of Economics and Information Systems offers the following courses:

### Financial Economics

**Abbreviation:** FinEco

**Lecturer:** Prof. Pierfrancesco La Mura

**TWS:** 3

**Language:** English

**Participants:** Diploma, MSc, MBA, Exchange Students

**Objectives:** The main goal of this course is to get the students in touch with basic terms and models for the economic analysis of financial markets, and to enable them to apply those concepts in different scenarios of financial decision making.

**Content:** The course provides an introduction to the economic analysis of financial markets. The topics we shall touch upon include decisions under risk and uncertainty, optimal portfolios, equilibrium of financial markets and the price formation of securities. Based on the textbook by Huang and Litzenberger, the following concepts will be introduced and discussed:

- Risk aversion and stochastic dominance
- Portfolio frontier
- Security valuation
- Allocative efficiency
- Mean-variance analysis (CAPM)

**Literature:**

- Huang, C., Litzenberger, R.: Foundations for Financial Economics, Prentice Hall, New Jersey, 1988
- S.F. Leroy and J. Werner, Principles of Financial Economics, Cambridge U. Press, 2001

**Examination:** Assignments 20 %, final written exam 80 %

## **Knowledge Management**

**Abbreviation:** KM

**Lecturer:** Prof. Pierfrancesco La Mura

**CP:** 3,5

**Language:** English

**Participants:** MSc term 3, MBA, Exchange students

**Objectives:** The main aims of the course are to familiarize students with current academic literature, and with various aspects of research including the ability to structure and present academic subjects. Evaluation will take into account the quality of participation, of the presentation, and of the accompanying powerpoint slides.

**Content:** The course is organized as a series of seminars on a variety of research subjects relevant to business life. Each student is required to actively participate in the seminar, and to give a presentation on a subject to be decided together with the instructor.

**Literature:** ---

**Examination:** Take-home exam

## **Technology and Process Management**

**Abbreviation:** TPM

**Lecturer:** Prof. Pierfrancesco La Mura

**CP:** 3,5

**Language:** English

**Participants:** MSc term 3, MBA, Exchange students

**Objectives:** The course aims to provide an introduction to e-business and the economics of electronic markets.

**Content:** The course will provide an overview of the economic aspects and technical challenges of electronic commerce. You will become familiar with the principles and methods available to the entrepreneur or consultant, when he or she is called to provide solutions to e-business problems – be it the establishment of trust among business partners or the success of a web shop. We shall also focus on the economics and technical issues relating to electronic markets. Electronic markets are becoming quite pervasive: transacting on NASDAQ, Amazon, eBay, or other online markets can achieve an entirely new level of sophistication, and pose a variety of novel challenges, from issues of efficient design to privacy, security and scalability. The course will investigate both the theoretical and practical aspects relating to electronic mechanisms and markets.

**Literature:** Self-contained lecture notes will be provided at the beginning of the course. Additional readings are optional.

**Examination:** Written examination (2 h)

## **Fundamentals of E-Business**

**Abbreviation:** FeB

**Lecturer:** Prof. Pierfrancesco La Mura

**CP:** 3

**Language:** English

**Participants:** Diploma Students

**Objectives:** The course will provide an overview of the economic aspects and technical challenges of electronic commerce. You will become familiar with the principles and methods available to the entrepreneur or consultant, when he or she is called to provide solutions to e-business problems, be it the establishment of trust among business partners or the success of a web shop. We shall also focus on the economic and technical issues relating to electronic markets. Electronic markets are becoming quite pervasive: transacting on Nasdaq, Amazon, eBay, or other online markets is by now a common experience for many individuals and businesses. Compared to traditional ones, electronic markets can achieve an entirely new level of sophistication, and pose a variety of novel challenges, from issues of efficient design to privacy, security and scalability. The course will investigate both the theoretical and practical aspects relating to electronic mechanisms and markets.

**Content:** Technological foundations of the internet and world wide web  
-Value creation and business models of e-business  
-Electronic data transfer and security aspects  
-Basic terms of electronic markets  
-Economic foundations: theory of auctions  
-Specific problems of electronic markets

**Literature:** Course material will come in the form of self-contained ppt slides presentations. Additional background references will be provided during the course.

**Examination:** Written Exam (2h)

## **Economics of Transactions and Markets:**

**Abbreviation:** ETM

**Lecturers:** Prof. Dr. M. Kirchgeorg;  
Prof. P. La Mura, Ph.D.

**Participants:** MSc Students

**CP:** 3 CP

**Language:** English

**Objectives:** The objective of this sub-module is to provide a thorough understanding of the theoretical foundations of buying behavior and market transactions. The students should learn how to analyze buying behavior and how to manage negotiations as well as different types of market transactions. The sub-module also covers the application of various marketing research tools and multivariate methods. The students should be equipped to design, develop and implement questionnaires in order to apply this and other forms of marketing research tools in project work.

The sub-module ETM is a part of two series of courses:

### **Contents:**

(1) Theory of Buying Behavior and Marketing Research Methods (4 CP)

- Models of consumer and business buying behavior
- Types and determinants of buying decision behavior
- Marketing research process and tools
- Methods of multivariate analysis (SPSS)

(2) Introduction to the Economics of Transactions and Markets (3 CP)

- Transaction cost economics
- Methods of negotiation
- Auctions and markets

### **Literature:**

Malhotra, N.K., Birks, D.F., Marketing Research, 2000.

Bearden, W.O., Netemeyer, R. G.: Handbook of Marketing Scales, London et al. 1999.

Aaker, D. et al., Marketing Research, 7. Ed., New York et al. 2001.

The sub-module will be presented in lectures or seminars supplemented by,

**Examination:** presentation, assignment and written examination

## **Economics of Information and Incentives**

**Abbreviation:** EII

**Lecturer:** Prof. Pierfrancesco La Mura

**CP:** 4

**Language:** English

**Participants:** MSc Students

**Objectives:** This course belongs to the module "Governance".  
The aim of this module is to provide a thorough understanding of corporate governance rules and models which may serve as a basis for the consideration or evaluation of decision making in any managerial function in domestic or global companies.

In addition, students should comprehend the role of incentive systems and personal accountability within the process of financial accounting as well as using financial and non-financial information for investment decisions in an international setting.

**Content:**

1. The economics of asymmetric information
2. Moral hazard
3. Adverse selection
4. Signalling
5. Optimal incentives in commerce and organizations

**Literature:** Course material will come in the form of self-contained ppt slides presentations.  
- Macho-Stadler, I. and Perez-Castrillo, J.D.: An Introduction to the Economics of Information: Incentives and Contracts, Oxford, Oxford Press, 2001

**Examination:** Assignments and written exam (2h)

## **Economic Analysis and Policy**

**Abbreviation:** EAP

**Lecturer:** Prof. Pierfrancesco La Mura

**CP:** 5

**Language:** English

**Participants:** PhD Students

**Objectives:** This is a Ph.D.-level course in Microeconomics, which shall particularly emphasize the strategic roles of various actors (individuals, corporations...) in a variety of economic settings (market and non-market situations).

### **Content:**

The course is structured as follows: after the introduction to utility theory and the theory of decisions under uncertainty, we shall introduce the game-theoretical approach to modelling economic situations. Next, we shall look at two fields of application for our framework of particular business interests: the theory of auctions and mechanism design (including negotiation protocols) and the economics of information and incentives in organisations.

**Literature:** Kreps, A Course in Microeconomic Theory (1990), Princeton University Press

**Examination:** Participation (10%), assignments (30%) and final exam (60%)