

Course Descriptions Finance and Law

Conversion courses

Advanced Computational Boot Camp

Credits: 1 ECTS

Course Objectives:

The aim of this course is to obtain an advanced knowledge of Excel, so that the assignments in the Duisenberg programme pose no technical difficulties. Apart from that, we know that Excel is used in every company, especially in financial firms, so that having advanced knowledge is a plus for any job qualification. The course covers Excel basics and worksheet functions, manipulating text, counting and summing techniques, lock-up functions, goal seek/solver, array formulas, conditional formatting and data validation, debugging formulas, macros, and VBA.

Learning outcomes:

At the end of the course, students are able to

- Do a regression analysis in Excel and report the outcomes in Word with the appropriate formatting;
- Transform large datasets into a usable format for analysis;
- Perform a portfolio analysis in Excel for a given time-series of return data;
- Create macros to perform a rolling portfolio analysis and Monte-Carlo simulation.

Law Refresher

Credits: 0.5 ECTS

Course Objectives:

The purpose of the course is to obtain an understanding of the foundations of corporate law.

Learning Outcomes:

At the end of this course students will have an understanding of:

- The foundations of corporate law;
- Key corporate governance issues such as the role of the Board of Directors;
- Basic principles of Mergers & Acquisitions;
- Foundations of contract law.

Quantitative Methods in Finance

Credits: 0.5 ECTS

Course Objectives:

This course covers basic quantitative and conceptual techniques in finance such as net present value, discounting and compounding, interest rates, and loan amortisation. It also reviews key concepts in statistics and probability, and provides an introduction to regression techniques.

Learning Outcomes:

At the end of this course, students are able to:

- Define and use financial statements;
- Use quantitative tools of investment decision analysis;
- Select the appropriate tools in statistics depending on the research question in finance.

Block I

Core Courses

Corporate Valuation

Credits: 3.5 ECTS

Course Objectives:

This course will cover modern principles and tools of valuation. It creates a strong foundation for the discounted cash flow model by analysing all features and assumptions implicit in any valuation analysis, starting from the term structure of interest rates, estimating discount rates, measuring cash flows, calculating growth rates. The course then moves on to value enhancement tools and techniques such as EVA and CFROI. It covers relative valuation techniques such as equity and firm value multiples, and the valuation consequences of cash, cross-holdings and stock options. The course seeks to ensure a full understanding of the explicit and implicit assumptions underlying modern valuation models.

Learning Outcomes:

At the end of the course students will have an understanding of:

- Conducting a corporate valuation using different valuation models, especially the DCF model;
- Inputs of valuation models, such as estimating cash flows, discount rates, and growth rates;

- The biases in valuation models;
- The implicit and explicit assumptions of valuation models;
- Relative valuation models and value enhancement tools.

Financial Econometrics

Credits: 3.5 ECTS

Course Objectives:

This course aims to provide an introduction to modern econometric and time series techniques that are relevant for the analysis of financial data. It not only covers the necessary econometric theory, but also teaches the students how to apply the models and techniques to empirically relevant financial decision-making problems in portfolio management, asset allocation, and risk management.

In the first part of the course, we focus on modeling and forecasting the conditional mean of asset returns. We discuss relevant issues in "backtesting" of forecasting models, including recursive estimation, variable selection, selection among (and combination of) competing forecasting models, and the evaluation of forecasts. We cover regression models for describing returns on a single asset, as well as factor models for describing (the relations between) returns on multiple assets. In the second part of the course, we discuss GARCH models for asset return volatility, from both a theoretical and empirical perspective. In addition to univariate models, we also consider multivariate models that describe the correlation among different asset returns. The use of high-frequency data to measure and forecast volatility and correlation is discussed as well.

Learning Outcomes:

At the end of this course students are able to:

- Understand (univariate and multivariate) econometric models for modeling and forecasting asset returns and volatility;
- Implement these models using standard packages or self-developed code;
- Assess the quality of return and volatility forecasts, in particular in the context of risk management;
- Maintain a critical attitude towards the limitations of models used for modeling and forecasting returns and volatility.

Investments

Credits: 3.5 ECTS

Course Objectives:

The objective of this course is two-fold. First, to introduce

students to the most commonly used quantitative tools and fundamental financial concepts: optimal portfolio selection, the relationship between risk and return, and market efficiency. Second, to introduce students to important classes of financial assets and investment vehicles: fixed income, public equity, and mutual funds. This course is internationally-oriented in that we consider and compare different financial markets (US, European, etc.) and adopt a global market perspective on several topics. The course is intended to provide you with both a lasting conceptual framework and, through the incorporation of real-world data, a greater understanding of how real-life situations play out. Finally, in an effort to link theory to practice, most exercises assigned at the end of each session come from past CFA (Chartered Financial Analyst) exams.

Learning Outcomes:

At the end of this course students are able to:

- Define the main concepts and use the tools of modern portfolio investment theory in:
- Optimal portfolio selection
- Capital asset pricing theory
- Performance evaluation
- Term structure of interest rates and fixed income portfolio management.

Financial Accounting

Credits: 3.5 ECTS

Course Objectives:

Financial statements are relevant to the decisions of many individuals including investors, creditors, consultants, managers, auditors, directors, analysts, regulators and employees. This course is a rigorous introduction to financial accounting designed for business students with no prior knowledge of the subject. A key purpose of this course is to deal with the measurement of value (and value creation from the point of view of outside decision-makers) and the use of financial accounting information.

We adopt a user perspective, rather than a preparatory one, because most Master's students will become users of financial statements, internal (managers, executives) or external (investors, analysts etc.), rather than preparers of financial statements. However, in order to become users, students must also understand how the financial statements are constructed.

Learning Outcomes:

At the end of this course, the student will be able to read financial statements, make a judgement about the quality of the accounting processes adopted, and then assess

the financial performance of a firm in comparison with its competitors. The student will also be able to **understand, analyse and evaluate** a range of accounting and finance issues relating to the analysis of financial statements and **appreciate** the sources of data that may be useful in analysing the position, performance and future business prospects of firms. Also, the student will have knowledge of several advanced topics such as (detecting) earnings management, consolidation and accounting for pensions.

Block II

Core Courses

Corporate Financial Management

Credits: 3.5 ECTS

Course Objectives:

Students will learn to apply advanced corporate finance tools and techniques to practical situations. Students are assumed to be familiar with (through previous study or professional experience) basic valuation methods (including the use of the CAPM for determining the cost of capital). As such, this course is designed as a follow-up to core courses in finance. In the area of valuation, the course explores advanced issues on how to value companies, using multiples and discounted cash flow analysis, investments in emerging markets, cost of capital estimation in emerging markets, corporate governance and information risks at the country and firm level. In the area of corporate financing decision-making, the course surveys a number of key financial decisions faced by companies, including optimal capital structure and the link to strategy, corporate liquidity issues, the use of project finance, and the use of real options.

Learning Outcomes:

At the end of this course students are able to understand and analyse:

- Advanced valuation models, including applications in emerging markets contexts;
- Corporate financial decisions, such as capital structure decisions or payout decisions;
- The finance of projects using cash flow based valuation methods;
- Valuations using real options methods.

Law of Banking and Financial Markets

Credits: 3.5 ECTS

Course Objectives:

This course will examine the regulation of the banking and financial services industry in the EU. The lectures will offer an introduction to the overall legal structure of financial market regulation, situating bank regulation in a broader context of other financial institutions including investment funds, broker-dealers and insurance companies. In addition to covering EU banking law, the lectures will consider issues in central banking, group of banks and financial conglomerates, cross-border regulatory cooperation, and regulating finance after the financial crisis. Part two of the course will examine the corresponding developments at the European and domestic level in commercial fundraising transactions, and how the legal and market principles shape and structure these transactions. The objective of this course will be to familiarise students with international and EU banking law and regulation and recent international harmonisation efforts, along with the how the contractual framework for different types of banking transactions are influenced by these structures.

Learning Outcomes:

By the end of the course, students are able to:

- Produce accounts for a variety of legal relationships, including between domestic and EU banking law and international banking law and regulation;
- Perform the major legal tasks required for both banking and financial market transactions;
- Demonstrate an understanding of the role of finance within banking and financial market transactions;
- Articulate the sources of banking and financial market regulation and apply them to practical situations;
- Articulate an understanding of the nature and purpose of particular banking and financial market transactions;
- Demonstrate an awareness of the regulatory framework for addressing complex cross-border financial transactions;
- Articulate an awareness of the theory informing the practices of financial conglomerates;
- Articulate an awareness of the ethical issues facing the banking and financial market profession with respect to the development of modern financial transactions;
- Articulate a conceptual basis for financial market regulation;
- Articulate the role of theory in informing the development of financial market transactions and their regulation.

M&A Transactions and Law

Credits: 3.5 ECTS

Course Objectives:

The focus of this course is the law of mergers and acquisitions and alternatives to mergers. We will analyse how mergers and acquisitions are structured and why particular deals create value for firms. The course will examine the various techniques and deal terms that have profound effects on both parties and the outcome of the transaction. The course will include actual transactions as well as drafting exercises. We will focus on the barriers to optimal structuring and techniques for eliminating drafting problems. Emphasis will be given to understanding the legal responsibilities of the buyer and seller, as well as the legal, tax and regulatory treatment for the deal, the techniques for putting the deal together, corporate acquisition agreements and securities and governance issues that arise in deals involving publicly listed companies. The course will encourage students to become familiar with the techniques used in corporate acquisitions and joint venture deals. Guest speakers from a top M&A law firm will also discuss recent M&A transactions in the Netherlands and Europe.

Learning Objectives:

At the end of this course students will be able to use the main concepts and theoretical tools of modern M&A analysis for use in the:

- Valuation of mergers;
- Deal structuring;
- Capital raising decisions;
- Deal protection measures;
- Spin-offs and restructuring;
- Private equity based acquisitions.

Behavioural Finance

Credits: 3.5 ECTS

Course Objectives:

This course is set out as a series of lectures and readings on the determinants and effects of irrational decision-making and excessive risk creation in financial markets. The recent crisis, and previous episodes such as the internet bubble, have highlighted the failure of the rational representative investor paradigm as a foundation for financial equilibrium. It is now recognised that deviations from this paradigm are both pervasive and structural. The course will highlight two leading approaches, both competing and complementary, promising novel insight into actual financial behaviour.

The first approach is Behavioural Finance, which recognises

human limits to rational inference. Investors are subject to structural biases such as excess confidence, self attribution, lack of time consistent preferences, vulnerability to herd mentality, and bounded rationality.

The second, named Dysfunctional Finance, incorporates rational strategic behaviour in decision-making and identifies its systemic effect on risk taking and pricing. It recognises that most financial intermediation is performed not by individuals but by intermediaries, and that delegated investment and lending suffers from agency conflicts. Accordingly, asset pricing and risk choices may be collectively inefficient but individually rational. Perverse incentives may be created by differential information and horizons, limited liabilities of financial decision makers, and public guarantees.

Learning Outcomes:

At the end of the course, successful students will have solid knowledge of the most relevant behavioural deviations from the traditional, rational paradigm in Economics and Finance. Students will know in which contexts of Finance (and, more generally, decision-making) behavioural preferences, biases and heuristics are most pronounced, and what are their impacts on market outcomes, such as asset prices and corporate decisions. On the incentives side, students will have an understanding of how institutional and corporate factors can lead to individually rational, but collectively detrimental risk-taking in the financial sector, and how such behaviour can possibly be mitigated.

Block III

Core Courses

Corporate and Tax Law

Credits: 3.5 ECTS

Course Objectives:

This course will cover the legal and tax aspects of business transactions. The course will examine how lawyers identify, assess and manage risk by efficient contractual design, while achieving the optimal legal, fiscal or regulatory treatment for the transaction. The course will include actual transactions as well as drafting exercises. The lectures will focus on the legal and financial principles to represent privately held companies, their founders and managers, and their investors. Emphasis will be given to the organisation and financing of start-ups, structuring buyout transactions, exit strategies, legal

organisation of hedge funds and other investment funds. The course will encourage students to become familiar with the main aspects of corporate law and the fiscal techniques that guide the design and creation of limited liability companies, partnerships, and holding companies. A guest speaker from a top corporate law firm will also lecture on recent trends in corporate transactions.

Learning Outcomes:

At the end of this course students will:

- Understand the main corporate law rules and techniques used in the EU and US;
- Understand the main structure of corporate taxation in the US;
- Understand the legal concepts of partnership taxation (Regulation K) in the US;
- Understand the fiscal concepts used in structuring investment funds in the EU and US;
- Be able to write argumentative texts for use in structured transactions.

Entrepreneurial Finance

Credits: 3.5 ECTS

Course Objectives:

The aim of the course is to present the theory and practice of the financing of entrepreneurial firms. Special attention will be devoted to understanding the motivations of the different players (mainly financiers and entrepreneurs) and how to reconcile their interests. The course is largely based on case studies that will be discussed in class. Students will learn how to choose among different types of investors and to value new ventures. In particular, the course will focus on valuation methods for innovative start-ups. Students will also get a better understanding of various source of finance for start-up firms and how deals are structured between investors and entrepreneurs to mitigate potential conflicts and agency issues inherent to young companies.

Learning Objectives:

At the end of this course students will be able to:

- Define the main concepts in entrepreneurial finance and use the tools;
- Understand the financing techniques used in new ventures;
- Understand the processes used in incubating and growing a new venture;
- Use the main strategy and tools of financial forecasting and valuation of new ventures;
- Use the contractual tools to design optimal contracting structures for new ventures.

Electives

Economics of Enforcement

Credits: 3.5 ECTS

Course Objectives:

This course introduces the economics of competition law and its enforcement. Most Western economies – and increasingly other countries worldwide – have competition laws to control cartels, monopolisation strategies, the abuse of dominance, large mergers and state aid for effects that are detrimental to competition. To assure a continued compliance with these laws in all business transactions, is an important corporate responsibility. This is not always straightforward. It is often hotly debated what novel business strategies may potentially raise competition concerns. Increasingly, economic analysis is turned to for answers, which is sometimes referred to as “the more economic approach” to competition law. Economics also plays an increasingly important role in the shaping of tools of enforcement, such as leniency programmes, detection, determination of fines and settlements, and alternative sanctions.

This course offers insight into the main processes of competition law enforcement. On a basic coverage of mainstream industrial organisation theory and competition law, we study analytical tools to understand and fight anticompetitive behaviour. Amongst other things, cartel behaviour, the determination of corporate and criminal sanctions, leniency programmes, and settlements and antitrust damages claims, are discussed. In this context, issues of internal organisation, corporate governance and incentive compensation are known to be essential. Principles on crime and punishment from the area of law and economics can be applied to the competition law enforcement process. In the area of merger control, we study market and efficiency analysis and divestiture strategies. In European state aid control, we consider the recent support that various Member States gave to their financial institutions.

The focus in this course will be on how EC competition law is interpreted and enforced by national competition authorities, the European Commission and the courts. This course will enable students to familiarise themselves with the core principles of competition law enforcement in Europe, and in particular the use of economics therein. It aims to raise awareness of the common good of our legal systems for a proper functioning of markets.

Learning Outcomes:

At the end of this course students will be able to:

- Define the main concepts of EC competition law and legal rules used in EU level and national courts;
- Understand the main enforcement rules at the EU and national levels;
- Understand the law and economics approach to analysing the system of EC competition law;
- Understand the legal rules for private enforcement and arbitration in the EU;
- Understand how competition law is interpreted and enforced by national competition authorities and courts;
- Be able to write argumentative tests for use in enforcement actions.

Commercial Banking

Credits: 3.5 ECTS

Course Objectives:

In this course, we study the business of commercial banks, taking mainly a risk management approach. The course starts with an in-depth analysis of the traditional intermediation activities (collecting deposits and granting loans, relationship lending).

Next, we cover why and how these activities pose risks to banks, both from an idiosyncratic and systemic point of view (credit risk, maturity transformation, depositor bank runs, systemic banking crises). Finally, the course investigates the role of (regulatory) capital as well as the implications of a shift to non-interest income generating activities (universal banking). The course will involve a mix of theory, empirical and topical issues.

Learning Outcomes:

The goal of the course is manifold. After the course, students will be able to:

- Identify important trends in banking;
- Analyse the return/risk trade-offs in financial institutions;
- Use modern quantitative and analytical methods for bank management;
- Develop a critical attitude towards the various paradigms in bank research;
- Be able to confront results of own empirical work with theory and practice.

Block IV

Core Courses

Securities Regulation

Credits: 3.5 ECTS

Course Objectives:

This course introduces students to the regulation of banks and financial intermediaries. The first part of the course addresses international aspects of banking regulation, capital adequacy, and clearance settlement procedures. The second part examines the regulation of US and European securities markets.

Over the last few decades, finance has become a field of serious scientific study. It has been increasingly used by scholars as a method for analysing issues in securities regulation. Particularly in the United States, this trend has had a significant influence on decisions relating to securities regulation made by the legislature, the courts and the SEC. This course will explore the use of financial economics as a normative tool to suggest the best way to regulate securities transactions. Issues considered in the course in the first week will include: (1) the implications of the efficient market hypothesis, noise theory and portfolio theory for the regulation of disclosure by issuers making public offerings of securities and by issuers whose shares are publicly traded; (2) the debate over the need for mandatory disclosure; (3) the allocation of authority for regulating the disclosures of issuers whose shares are offered, or trade, in markets covering an area involving multiple countries, with attention also paid to the questions of the appropriate role for regulatory competition and the optimal regulatory area (e.g. EU vs. member states); (4) the role of securities regulation in capital market development and economic growth; (5) the impact of securities regulation on the private generation of information and its reflection in price.

The last four classes will be devoted to using these tools to study two substantive areas of securities regulation. The first area will be the regulation of trading on non-public information under the U.S. Rule 10b-5. The second area will be the regulation, through civil damages litigation, of corporate misstatements by issuers that do not trade.

Learning Outcomes:

At the end of this course students will be able to:

- Understand the main regulations of banks and financial intermediaries;
- Understand the capital adequacy rules and clearance

settlement procedures;

- Understand the main components of US securities regulation;
- Understand the main concepts of EU securities market regulation;
- Understand how financial instruments are regulated by banking and securities regulation regimes both onshore and offshore.

Bankruptcy and Corporate Reorganisation

Credits: 3.5 ECTS

Course Objectives:

The focus of this course is various corporate restructuring policies that firms carry on around the world. We will analyse their motivation and consequences in an international context. Besides small changes of operations, corporations engage in 3 different major types of restructuring policies: (1) corporate transformations or asset sales; (2) bankruptcy and reorganisation; and (3) mergers or large acquisitions. We will cover these three major policies with a focus on their financial consequences in various legal environments.

Learning Outcomes:

At the end of this course students will be able to:

- Understand the law and economics of bankruptcy, corporate restructuring and takeovers in the US;
- Understand the decision-making processes of corporate managers, shareholders, creditors, unions and financial specialists;
- Understand the investment law and its potential decision-making process of corporate Boards;
- Understand raising capital on foreign markets.

International Corporate Governance

Credits: 3.5 ECTS

Course Objectives:

The focus of this course is on international corporate finance. The current wave of financial scandals in the U.S., Europe, and elsewhere has alerted investors to the lack of efficient mechanisms of transparency and corporate control across countries. To face these challenges, the course starts by addressing valuation in an international context and setting up the framework for understanding how financial contracts are written around the world. Differences in institutional characteristics have recently been shown to be key determinants of how corporations are owned and valued, as well as how they raise capital and give it back to investors.

Therefore, in the second part of the course, we will analyse: (1) agency conflicts; (2) corporate governance mechanisms; (3) corporate ownership and groups; (4) and the role of various financial contracts in mitigating opportunistic behaviour.

Learning Outcomes:

At the end of this course students will be able to:

- Define the main legal rules that protect investors and assess their impact on investment banking and financial markets;
- Understand how shareholder protective mechanisms affect how financial contracts are written;
- Understand good investor protection and corporate governance practices;
- Use the main components to mitigate opportunistic behaviour;
- Understand financial intermediaries' role in corporate finance and governance in many countries.

Electives

US M&A Law

Credits: 3.5 ECTS

Course Objectives:

An examination of the law relating to the acquisition of businesses through asset and stock acquisitions and corporate mergers. The course examines applicable state corporate law, federal securities law, and the structure of acquisition agreements. We will focus on Delaware law relating to friendly and hostile acquisitions, as well as control shareholder squeeze-outs of minority shareholders. In addition, we discuss the federal Williams Act.

Learning outcomes

At the end of this course students will be able to:

- Understand the law relating to Mergers and Acquisitions;
- Understand the main concepts of corporate transactions and the acquisition of businesses, particularly with respect to asset and stock acquisitions and corporate mergers;
- Understand state and federal law with respect to corporate acquisitions;
- Understand the Delaware corporate law relating to friendly and hostile takeovers, as well as shareholder squeeze-outs.

International Corporate Law

Credits: 3,5 ECTS

Course Objectives:

This course will cover the major areas of corporate law, including an overview of key organs of the company; the duties and responsibilities of directors, including non-executives; the evolution of corporate law; capital maintenance rules; voting rules and the one share one vote controversy; the legal control of insiders; regulation of takeover bids and regulatory competition in Europe. An important goal will be to familiarise students with the economic environment, legal rules and challenges of corporate governance reform. Emphasis will be given to the contemporary debates over the failure of Boards to protect the interests of minority shareholders and the declining importance of the market for corporate control to restrain managers. The course will encourage students to use various analytical tools to deal with key governance issues that face managers, directors, and investors.

Learning outcomes:

At the end of this course students are able to:

- Understand the main concepts in the area of company law;
- Understand the main legal systems of company law in Europe and the US;
- Compare the different legal systems of company law in Europe;
- Write argumentative texts in the area of company law;
- Participate in academic and professional debates in law and economics of company law.

Block V

Thesis

Credits: 10 ECTS

Course Objectives:

All students need to write a Master's thesis, which requires students to develop and show the ability to independently produce a piece of innovative research. Prior to the writing the thesis, all students attend the Master's Thesis Seminar, where they learn how to develop research questions, how to find data, how to structure a thesis and how to conduct empirical analysis. Moreover, all students need to present their own thesis proposal and obtain/provide feedback.

The thesis is written in an area related to the track of specialisation. The thesis has to satisfy the standards of an independent academic piece of work, building on existing literature and combining both a theoretical analysis and

hypothesis development and an empirical analysis of real-world, survey or experimental data.

Learning Outcomes:

After finishing their theses, students will be able to:

- Independently develop a research question;
- Understand the academic literature in the area of the Master's thesis;
- Independently work on a clearly defined research project;
- Build on existing literature and combine theoretical hypothesis development and an empirical analysis of data;
- Analyse data using statistical methods.

Internship

Credits: 5 ECTS

Course Objectives:

This internship is designed to provide an opportunity for students to develop practical skills in dealing with financial issues related to the track of specialisation. It is also included in the programme to allow students to develop professional skills, such as presentation skills and interaction with clients and higher management. Students may wish to combine the mandatory internship with the writing of the final thesis. DSF has a number of partner institutions that are supportive of thesis work based on a student's placement.

Learning Outcomes:

By the end of the internship, students will:

- Have applied their academic knowledge in a practical context;
- Have learned institutional details in their specific track of specialisation;
- Have developed practical skills in dealing with financial issues related to the track of specialisation;
- Have developed professional skills, such as presentation skills and interaction with clients and higher management.