Minor Data Science & Entrepreneurship

Offered by: Tilburg University
Language: English
Primarily interesting for: Major Data Science
Prerequisites:
Contact person: Anne Lafarre

What is this package about?

During the minor courses, students are introduced to all aspects of independent and corporate entrepreneurship that are especially relevant to data scientists, from entrepreneurial finance to data protection risks. The minor is relevant for students who are considering starting their own company, but also for students who rather want to work for a (larger) corporation as it offers an all-round business minor program.

Note 1: to participate in this minor, you need to register as an individual minor student at Tilburg University, see https://www.tilburguniversity.edu/students/administration/registration/first-minors/

Note 2: select at least 3 out of these 4 courses (at least 15 ECTS).

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Course descriptions:

Firm’s lifecycle:
This course is intended to provide students with a basic understanding of entrepreneurship, businesses and business law. The course follows the life cycle of the company from business idea to a start-up and from a start-up to an IPO and discusses the related business and business law aspects in each stage. In the first (introduction) part of the course, an introduction to entrepreneurship is provided. In the second part of the course, we continue with launching the venture and its organization. Topics that are covered in this part of the course are the economics of organizations, the differences between several business forms including partnerships and corporations, the internal organization of corporations and corporate governance. Part three of the course focuses on exit strategies, thereby completing the firm’s lifecycle. Topics that are covered include M&A and the liquidation of companies.
**Business contracting:**
This course is intended to provide students with basic knowledge and understanding of a variety of business contracts. The course starts with an introduction to contract law and to business contracting, and it evolves to address the steps to enter into a contractual relationship and the different parts of the contract. Then, students are introduced in the world of contract negotiation and drafting and are required to negotiate and draft a contract. Next, different contract clauses in contracts at the start of a venture (COC, drag along, tag along, divorce clauses, etc.), and during the life span of a venture (force majeure, EAC, severability, etc.) are assessed and discussed. Lastly, students will gain familiarity with contract clauses in the venture in transaction (including the M&A process, with eg. Earn-out, MAC, non-compete).

**Finance and entrepreneurship:**
This course is intended to provide students with a basic understanding of entrepreneurial finance, exploring the intersection of the fields of (corporate) finance and (corporate) entrepreneurship. Important topics in the course are for example entrepreneurial financial contracting and term sheets, but also corporate finance and business valuation. The course is divided into two blocks. The aim of block I is to familiarize students with the essential knowledge in finance. Students will be equipped with the key concepts of finance, among which the time value for money, the capital structure of a corporation and the related problems, and corporate valuation. Differing considerably from corporate finance in a number of key assumptions, entrepreneurial finance will be the focus of block II. Students will learn about start-up financing and crowdfunding. The course ends with a termsheet analysis, both from the perspective of a venture capitalist and the entrepreneur.

**Risk management and data protection:**
Businesses face many uncertainties and risks, especially data science companies that usually have to manage and protect large amounts of data. It is of utmost importance to think about what could go wrong with your business and how to mitigate risks in an efficient way. This course discusses risk management from the perspective of data science companies, focusing on the internal control and responsibilities of companies and the role different (corporate) actors play. It starts with a clear identification of the different sources of risk data science firms are exposed to. An important source stems from the nature of data science firms; therefore this course provides an introduction to privacy and data protection issues and regulations data science firms face. Afterwards, students will be introduced to a case to establish a risk management system themselves.