Statistical Learning

Home Department: Statistics and Actuarial Science
Faculty of Economic and Management Sciences

Description of focal area

In almost all environments, decision-making is driven by massive amounts of data, which means that there is a dire need for skilled individuals who can make sense of this data deluge. In general, data science entails the gathering and storage of data, the transformation and graphical representation of data and the analysis of data in order to make predictions or inferences. The statistical learning focal area entails identifying trends and patterns in data, and using these to construct statistical models, which can be used to predict or classify. This is an important task across all industries, meaning that individuals with these particular skills can work on solving real-world problems found in a variety of domains.

BDatSci			
Focal area: Statistical Learning			
First year (120 credits)	**Second year (128 credits)**	**Third year (128 credits)**	**Fourth year (124 credits)**
Compulsory modules Computer Science 113/114(16), 144(16) Data Science 141(16) Mathematics 114(16), 144(16) Probability Theory and Statistics 114(16) **Plus electives between** Actuarial Science 112(8) Applied Mathematics 144(16) **or** Economics 114(12), 144(12)	**Compulsory modules** Data Science 241(16) Computer Science 214(16), 244(16) Mathematics 214(16), 244(16) Mathematical Statistics 214(16), 245(8), 246(8) Operations Research 214(16)	**Compulsory modules** Mathematical Statistics 312(16), 316(16), 344(16), 364(16) Computer Science 315(16), 343(16) Data Science 316(16), 346(16)	**Compulsory modules** Data Science research in Statistical Learning 471(40) Introduction to Statistical Learning 441(12) Machine Learning 441(16) **Electives (min 56 credits)** Stochastic Simulation 441(12) Multivariate Statistical Analysis A 441(16) Multivariate Statistical Analysis B 441(16) Bayesian Statistics 441(16) Time Series Analysis 441(12)