

## Statistical Physics

Home Department: Physics

Faculty of Science

### Description of focal area

Statistical physics uses sophisticated maths and simulations to explore and understand the physics underlying everything from quantum mechanics to phase transitions to factory nuts and bolts.

BDataSci			
Focal area: Statistical Physics			
First year (128 credits)	Second year (128 credits)	Third year (128 credits)	Fourth year (132 credits)
<b>Compulsory modules</b> Computer Science 114(16), 144(16) Data Science 141(16) Mathematics 114(16), 144(16) Probability Theory and Statistics 114(16) Physics 114(16), 144(16)	<b>Compulsory modules</b> Data Science 241(16) Computer Science 214(16), 244(16) Mathematics 214(16) Mathematical Statistics 214(16), 245(8), 246(8) Physics 224(16), 254(16)	<b>Compulsory modules</b> Mathematical Statistics 312(16) Computer Science 315(16), 34X(16) Data Science 314(16), 344(16) Physics 314(16), 344(16), 334(16)	<b>Compulsory modules</b> Introduction to Statistical Learning 441(12) Statistical Physics B 441(16) Bayesian Physics 441(8) or Dynamic systems and complexity 441(8) Lagrange and Hamilton mechanics 441(16) Applied Markov processes 441(16) Stochastic Simulation 441(12) Time series analysis 441(12) Data Science Research Assignment 441(40)