



# SCIENCE MAJOR

Double Degree in Physics

Mathematics

**HAADI NAQVI**

From Pakistan



## CURRICULUM PLAN

- Humanities
- Social Science
- Science
- Other

### YEAR 1

Fall

Classical and Relativistic Physics

Research in context

Introduction to Political Theory

Introduction to Philosophy

Spring

Calculus and Linear Algebra

Wave Phenomena

Introduction to Economics

Introduction to Arabic Language and culture

Summer term: Computational Physics Lab & Wave Optics Lab

### YEAR 2

Fall

Research in Practice: Methods and statistics for the Social Scientist

Mathematic Methods

Classical Electrodynamics

Political Science: State of the Art

Spring

Statistical Mechanics & Introduction to Quantum Measurement

Analysis and Algebra

Topics in Physics: Physics of Sustainability, Soft Matter & Light, Bose-Einstein Condensation

Probability and Networks

Summer term: Academic Internship

### YEAR 3

Fall

Advanced Physics: The Quantum World

Foundations of Mathematics

Gravitational Waves

Experimental Statistical Mechanics

Advanced Mechanics

Spring

Advanced Mechanics (UCU)

Structure of Matter

Subatomic Physics

Introduction to Scientific Computing



**YEAR 4**

Fall

Advanced Statistical Physics

Advanced Quantum Mechanics

Introduction to Machine Learning

Spring

Thesis (Department of Physics)

Classical Field Theory