



# *i*<sup>2</sup> Biological Sciences (Semesters 5 − 10)

#### Core - Biology

**Biochemistry** 

**Bioinformatics** 

**Biostatistics** 

Cell Biology

**Developmental Biology** 

Genetics & Genome Biology

Immunology

Microbiology

Molecular Biology

Physiology

Structural Biology

## **Thematic - Systems & Synthetic Biology**

Systems Biology - theory & applications

Synthetic Biology

Biomaterials

Microbiome & Vaccinology

#### **Thematic - Precision Imaging & Medicine**

Biological spectroscopy & microscopy

Bio-imaging & Processing

Stem Cells & Regenerative Medicine

Human Genetics, Gene Therapy

Personal Genomics

#### **Electives - Biology**

Neurobiology

Chronobiology

**Ecological Interactions** 

**Evolutionary Ecology** 

Cancer Biology

Plant Molecular Biology

Host Pathogen Interactions

Cryo-Electron microscopy and 3D image

processing for Life sciences.

#### **Electives - Open**

Machine Learning

**Biophysical Chemistry** 

Enzymology & Biocatalysts

**Chemical Genomics** 

Probability & Stochastic Processes

Theory of Ordinary Differential Equations

#### **General Courses**

Communication Skills + Technical Writing

Intellectual Property Rights

Languages

Economics

Psychology

#### Research

Full time research project + project management, presentation and entrepreneurial skills.

## **Research Internships**