

Foundational Bridge Courses (1 month)

- Foundation of Maths 1- 2 credit P/F
- Computational Thinking and Python Programming - 2 credit P/F
- Critical Thinking and Problem Solving -1 credit P/F

Semester 1

- Linear Algebra (2 credit)
- Numerical methods (2+1 credit)
- Probability and Statistics (3 credit)
- Advanced Data Structures and Algorithms (2+1 credits)
- Computer Architecture and OS (1+1 credit)
- Data and Big Data Management (2 credit)

Semester 2

- Optimization Methods (2 credits)
- Differential equations (2+1 credits)
- Stochastic Modelling (2 credits)
- Machine learning (2+1 credits)
- Networks and Distributed Computing (2 credits)
- Web 3.0 technologies (2+1 credits)

Semester 3

SPECIALIZATIONS:

- Environment and Sustainability
- Ocean and Climate
- Materials Engineering
- Embedded Systems
- Business Strategy
- Computational Finance
- Artificial Intelligence and Robotics
- Cyber Physical Systems
- Scientific Computing
- Computational Chemistry
- Digital Law
- Digital Media and Journalism

Semester 4

- Capstone Project (15 Credit)