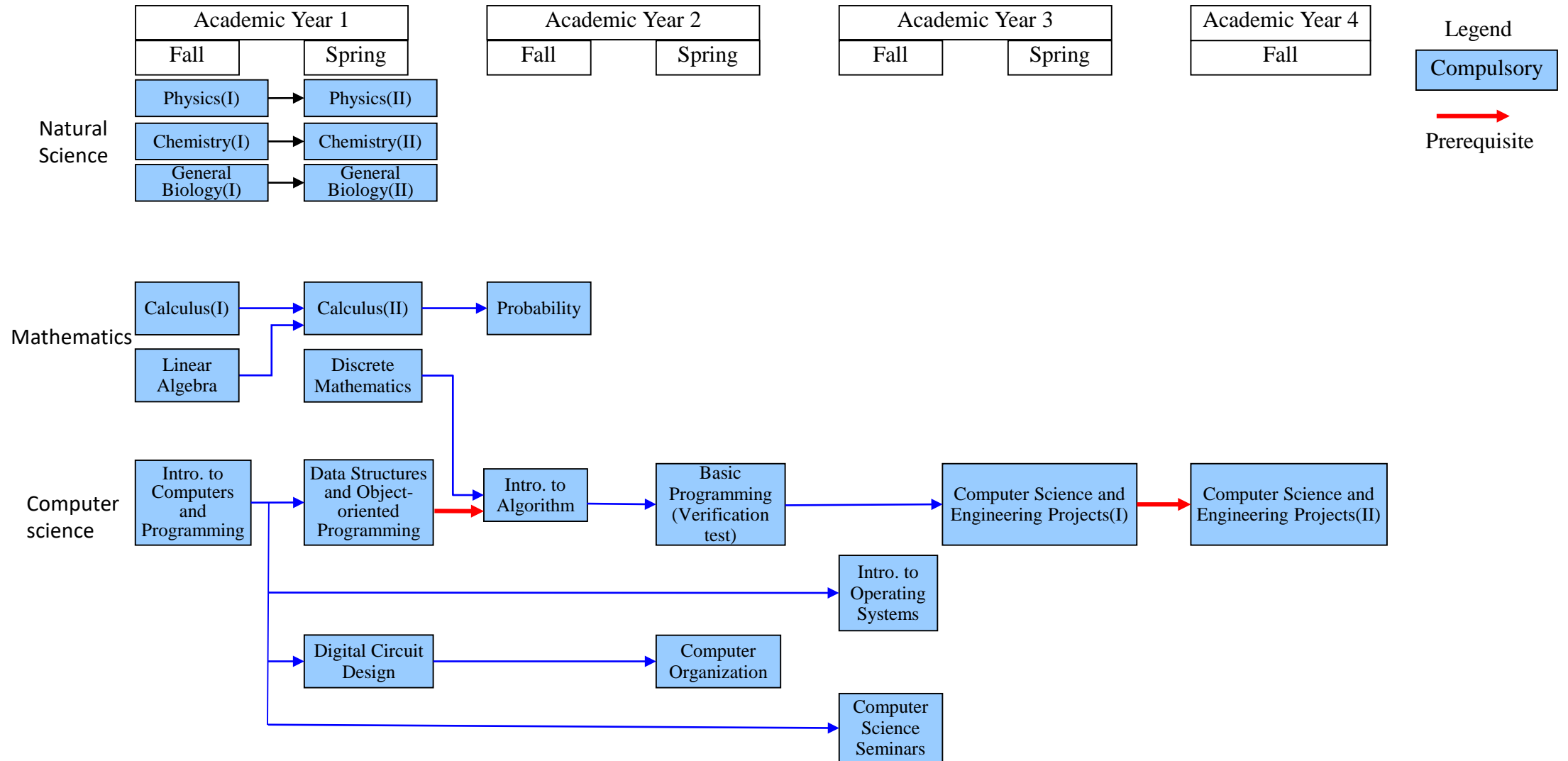


Course Flow (Basic Science & Compulsory courses)

Academic Year 2022



Course Flow of Seven Topics Program

Academic Year 2022

Legend

Program Compulsory

Program Compulsory

Common Compulsory of 2 Programs

Topics

Academic Year 2	
Fall	Spring

Academic Year 3	
Fall	Spring

Academic Year 4	
Fall	Spring

AI and Data Science

Intro. to Database Systems

Intro. to Artificial Intelligence

Intro. to Machine Learning

Artificial Intelligence Capstone

Computer Security

Intro. to Computer Networks

Intro. to Cryptography or Cryptography Engineering

Intro. to Network Programming

Computer Security Capstone

Network Engineering

Principles of Communications and Wireless Networks

Network Systems Capstone

Multimedia Engineering

Numerical Methods

Intro. to Computer Graphics

Intro. to Image Processing

Multimedia and Human Computer Interaction Capstone

System Software

Intro. to Compiler Design

Advanced Programming in the UNIX Environment

Computer System Administration

Operating Systems Capstone

Software and Hardware Integration

Digital Circuit Lab.

Microprocessor Systems: Principles and Implementation

Embedded System Capstone

Theory of Computation

Intro. to Formal Languages

Numerical Methods

Combinatorial Mathematics

Intro. to Artificial Intelligence

Graph Theory or Elementary graph theory

Competitive Programming(I)

Randomized Algorithms

Introduction to Approximation Algorithms

Algorithmic Foundation of Machine Learning

Information Theory and Data Compression Practices

(Theory of Computation: Choose four courses from the right column)