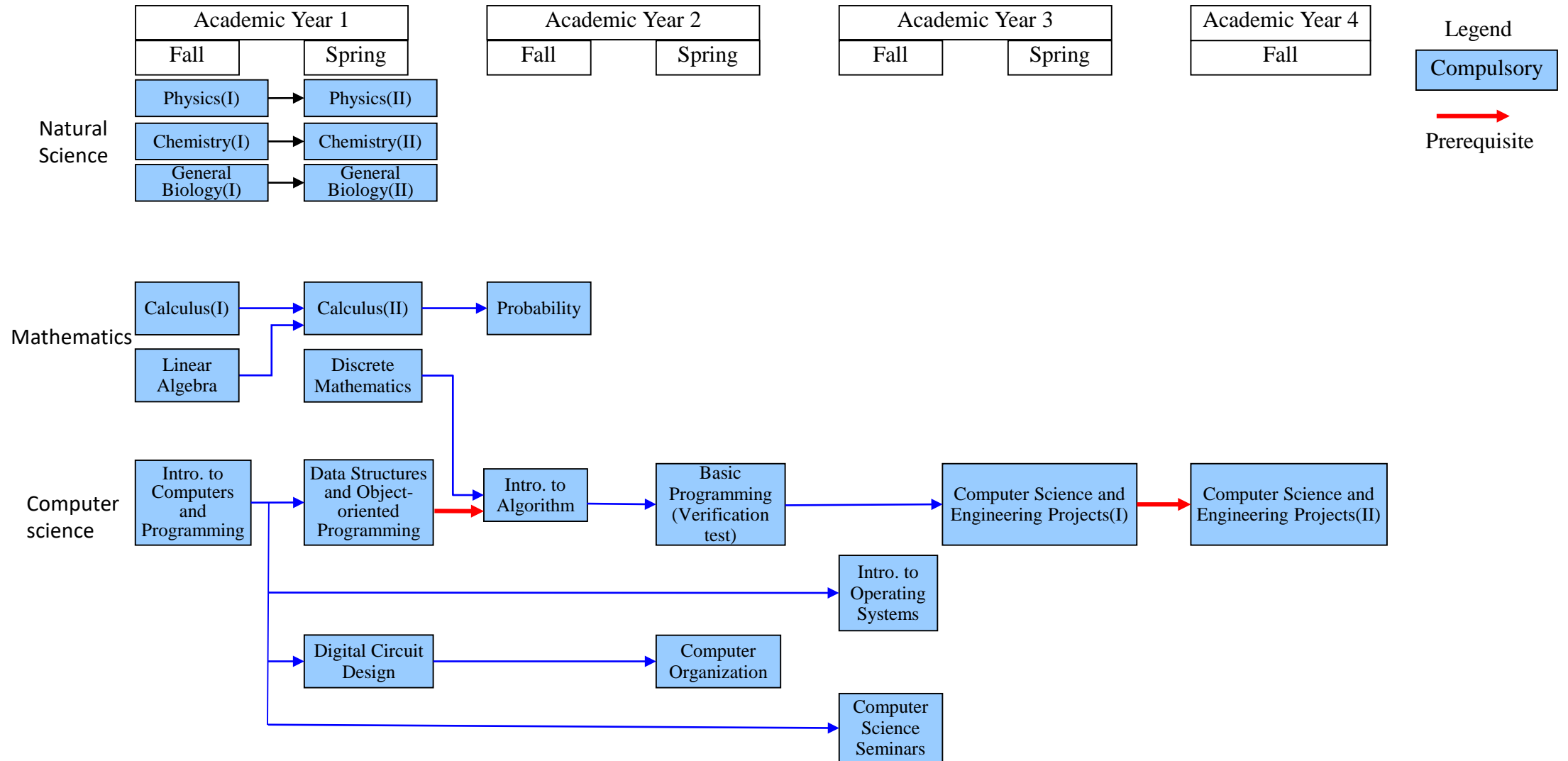


Course Flow (Basic Science & Compulsory courses)

Academic Year 2023



Course Flow of Seven Topics Program

Academic Year 2023

Legend

Program Compulsory

Program Compulsory

Common Compulsory of 2 Programs

Topics	Academic Year 2		Academic Year 3		Academic Year 4	
	Fall	Spring	Fall	Spring	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 Cryptography or Cryptography Engineering		Computer Security Capstone		
Network Engineering	Intro. to Computer Networks	Principles of Communications and Wireless Networks	Intro. to Network Programming	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)	Algorithmic Foundation of Machine Learning Introduction to Approximation Algorithms	Information Theory and Data Compression Practices Randomized Algorithms

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