

Notes

- A typical schedule of courses is:
 - CS 112 & 113 and MATH 118 & 228 in the first year
 - MATH 227 & 229 and CS 333 in the second year
 - MATH/CS 346, CS 347 and BUS 100 & 221 in the third year
 - Internship and LIS 473 in the fourth year
- Students starting the major in their second year will combine the third and fourth year programs.

Major Core

Majors will complete a core of the following courses.

Course #	Course Title	Credits	Completed
CS 112	Introduction to Computer Science	4	
CS 214	Data Interoperability	4	
CS 333	Database Management Systems	4	
CS/MATH 346	Data Mining	4	
CS 347	Applied Data Science (a capstone course)	4	
MATH 118	Introductory Statistics (unless taken in H.S.)	4	
MATH 211	Linear Algebra	4	
MATH 227	Statistical Design & Analysis	4	
MATH 228	Introduction to Data Science	4	
MATH 229	Regression Analysis	4	
BUS 100	Foundations of Business & Management	4	
BUS 221	Project Management	4	

Areas of Concentration

- Complete all of the courses in one “area of concentration,” as outlined below.
- Students with other interests should consult program faculty or their advisors.

Biology-Bioinformatics

Course #	Course Title	Credits	Completed
BIOL 113/ 115	General Biology or Advanced General Biology	4	
BIOL 225	Cell Biology	4	
BIOL 336	Genetics	4	
CHEM 111/ 113/ 115	Principles of General Chemistry, General Chemistry I, or Intensive General Chemistry (all Fall, based on placement)	4	
CHEM 112	Principles of Organic Chemistry	4	

Biochemistry

Course #	Course Title	Credits	Completed
BIOL 113/ 115	General Biology or Advanced General Biology	4	
BIOL 225	Cell Biology	4	
BIOL 336	Genetics	4	
CHEM 111/ 113/ 115	Principles of General Chemistry, General Chemistry I, or Intensive General Chemistry (all Fall, based on placement)	4	
CHEM 112	Principles of Organic Chemistry	4	
CHEM 223	Principles of Biochemistry	4	

Chemistry

Course #	Course Title	Credits	Completed
CHEM 111/ 113/ 115	Principles of General Chemistry, General Chemistry I, or Intensive General Chemistry (all Fall, based on placement)	4	
CHEM 112 OR CHEM 224 & 225	Principles of Organic Chemistry OR Organic Chemistry I & II	4 or 8	
CHEM 216	General Chemistry II & Quantitative Analysis	4	
CHEM 223 OR CHEM 345	Principles of Biochemistry OR Biochemistry	4	

Communications

Course #	Course Title	Credits	Completed
COMM 121	Visual Communications	4	
COMM 244	Web I: Design for the World Wide Web	4	
COMM 210	Introduction to Graphic Design	4	
COMM 240	Intermediate Graphic Design I: Typography	4	
COMM 248	Intermediate Graphic Design II: Type and Image	4	

Computer Science

Course #	Course Title	Credits	Completed
CS 226	Computer Organization and Architecture	4	
CS 227	Computer Networks	4	
CS 232	Data Structures and Algorithms	4	
CS 244	Data Visualization	4	
CS 327	Cybersecurity	4	
CS 330 OR CS Elective	Structure & Organization of Programming Languages OR other CS elective (chosen with advisor)	4	

Economics

Course #	Course Title	Credits	Completed
ECON 100	Principles of Microeconomics	4	
ECON 101	Principles of Macroeconomics	4	
ECON 393	Econometrics	4	

TWO electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	

- ECON 216 Economic Development
- ECON 218 International Trade
- ECON 220 International Monetary Systems
- ECON 222 Comparative Economies of East Asia
- ECON 231 Money and Banking
- ECON 236 Public Economies
- ECON 247 Environmental Economics
- ECON 241 Business Competition and Antitrust Policy

Management - Finance

Course #	Course Title	Credits	Completed
ACCT 110	Financial Accounting	4	
BUS 260	Finance	4	

THREE electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	
	4	

- BUS 310 Financial Statement Analysis
- BUS 311 Investments
- BUS 314 International Finance
- BUS 315 Corporate Financial Planning & Strategy
- BUS 393 Financial Modeling

Management- Health Care Management

Course #	Course Title	Credits	Completed
BUS 100	Introduction to Management	4	
BUS 120	Introduction to Health Systems	4	
BUS 239	Health Care Finance	4	

TWO electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	

- BIOL 246 Foundations of Exercise and Health
- BUS 137 Entrepreneurship and Innovation
- BUS 180 Business Law
- BUS 225 The Manager and the Legal Environment
- BUS 234 Organizational Behavior and Communication
- ECON 239 Government Regulation of Industry
- IT 225 Health Informatics
- NURS 100 Professional Issues in Nursing
- NUTR 249 Leadership in Food Service Management
- PHIL 131 Biomedical Ethics
- POLS 217 American Public Policy
- PSYC 232 Health Psychology
- PSYC 239 Psychology of Aging
- SOCI 241 Health, Illness and Society
- SOCI 245 International Health
- SOCI 345 Health Systems and Policy
- SW 101 Introduction to Social Work and Social Welfare
- SW 200 Social Welfare Policy

Management- Marketing

Course #	Course Title	Credits	Completed
BUS 100	Foundations of Business & Management	4	
BUS 250	Principles of Marketing	4	

THREE electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	
	4	

- BUS 225 The Manager and the Legal Environment (Fall)
- BUS 229 People, Planet and Profits (Spring)-May be part of a LC
- BUS 231 Creating Brand Values
- BUS 232A Strategic Marketing Communications I: Advertising
- BUS 232B Strategic Marketing Communications II: NSAC Competition
- BUS 233 Developing Customer Relationships
- BUS 335 Marketing Research
- BUS 348 The Sustainable Supply Chain
- BUS 392 Marketing Decision Making
- BUS 394 Comparative Retail Strategies

Mathematics- Statistics

Course #	Course Title	Credits	Completed
MATH 220	Multivariable Calculus	4	
MATH 338	Probability	4	
MATH 339	Mathematical Statistics	4	
MATH electives	2 MATH or STAT electives to be chosen with advisor:	8	

Political Science/International Relations

Course #	Course Title	Credits	Completed
POLS 101	Introduction to American Politics	4	
POLS 102	Introduction to International Politics	4	
POLS 104	Introduction to Comparative Politics	4	

TWO electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	

- POLS 213 Politics in the Republic: Congress and the Presidency
- POLS 215 The Politics of Exclusion
- POLS 217 American Public Policy
- POLS 218 Parties and Elections
- POLS 219 Gender and Politics
- POLS 229 Comparative Foreign Policy
- POLS 249 U.S. Foreign Policy 1945 – Present
- POLS 250 Democratization in Latin America

Public Health

Course #	Course Title	Credits	Completed
BIOL 104	Introduction to Environmental Science	4	
BIOL 346	Epidemiology of Infectious Disease	4	
SOCI 241	Health, Illness and Society	4	
SOCI 245 OR SOCI 345	International Health OR Health Systems and Policy	4	
Elective	An elective to be chosen with advisor:	4	

Sociology

Course #	Course Title	Credits	Completed
SOCI 101	Principles of Sociology	4	
SOCI 239	Introduction to Social Research	4	

THREE electives chosen from the following courses.

Course Selected	Credits	Completed
	4	
	4	
	4	

- SOCI 245 International Health
- SOCI 249 Inequality: Race, Gender and Class
- SOCI 262 Criminology
- SOCI 263 Sociology of Education
- SOCI 321 Sociology of Food

Capstone

Complete 4 credit hours to fulfill the Capstone Requirement in computer science (CS 346 Data Mining and/or CS 347 Applied Data Science)

Course Selected	Credits	Completed

PLAN Requirements

The Simmons PLAN is the undergraduate core curriculum. Some PLAN courses will be fulfilled with courses required for this major, as indicated below. Additional PLAN requirements may be fulfilled through electives, courses in minors or other course offerings. Work closely with your advisor(s) to choose courses.

Year	Semester	Course Title	Credits	Completed
One	Fall	BOS 101: The Boston Course	4	
		SIM 101: The Simmons Course: Explore	2	
	Spring	LDR 101: The Leadership Course	4	
Two	Fall or Spring	The Learning Community: Two discipline courses & one integrative seminar	8	
		SIM 201: The Simmons Course: Experience	1	
Three	Fall or Spring	SIM 301: The Simmons Course: Excel	1	

Three & Four	Fall or Spring	3D* – Design Across Diverse Disciplines	12		
Any	Requirements		Course Selected		
	Language: Two semesters in the same language, taken sequentially and strongly encouraged to complete within their first two years.			4	
				4	
	Quantitative Literacy (QL)		MATH 118 or higher	4	
	Key Content Areas** (KCAs)	Aesthetic, Literary and Artistic (ALA)			4
		Global Cultural (GC)			4
Scientific Inquiry (SCI)		CS 112	4		
Social and Historical (SH)		BUS 100	4		

*3D – Design Across Diverse Disciplines – requirement may be met with one course in your major, and two additional courses that may also count as KCAs.

**KCAs – May be covered by Major, Learning Community and/or 3D courses.

Department Contact

Margaret Menzin

Professor of Mathematics

Mathematics and Computer Science

College of Organizational, Computational, and Information Sciences

margaret.menzin@simmons.edu

Office: S209

(617) 521-2704

Bob Goldman

Professor of Mathematics

Mathematics

College of Organizational, Computational, and Information Sciences

robert.goldman@simmons.edu

Office: S216

(617) 521-2960