





FIRST YEAR

FALL SEMESTER

GE A  4	ISE 105 2	MATH 125 (GE F)  4	WRIT 150 4	ENGR 102 2
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SPRING SEMESTER

GE B 4	CHEM 105aL or MASC 110L  4	MATH 126 or MATH 129 MATH 125  4	CSCI 101 3	OPTIONAL ELECTIVE 3
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SECOND YEAR

FALL SEMESTER

ISE 220 MATH 126 3	ITP 320 4	MATH 226 or MATH 229 MATH 126 or MATH 129 4	PHYS 151L (GE E) MATH 125 or 126 or 226 4	OPTIONAL ELECTIVE 3
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SPRING SEMESTER

GE C 4	ISE 225 ISE 220 3	ISE 331 ISE 220 3	ISE 460 3	MATH 225 MATH 126 or MATH 129 4	OPTIONAL ELECTIVE 1
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THIRD YEAR

FALL SEMESTER

ISE 330 MATH 225 3	ISE 435 CSCI 101 and ISE 225 3	DSO 435 4	PHYS 152L PHYS 151L 4	OPTIONAL ELECTIVE 4
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SPRING SEMESTER

GE B 4	ISE 315L ISE 225 and ISE 330 3	ISE 470 3	ISE 495ax ISE 225, ISE 460 and DSO 435 or ISE 382 2	INFO SYSTEMS COURSE 4	OPTIONAL ELECTIVE 2
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FOURTH YEAR

FALL SEMESTER

ISE 410 ISE 330 3	ISE 495bx ISE 315, ISE 435, ISE 495a and ISE 370 or ISE 470 2	WRIT 340 WRIT 150 3	INFO SYSTEMS COURSE 4	INFO SYSTEMS COURSE 3	REQUIRED ELECTIVE 3
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SPRING SEMESTER

BIOLOGY ELECTIVE (GE D)  4	GE C 4	ISE 440 3	INFO SYSTEMS COURSE 3	INFO SYSTEMS COURSE 3	OPTIONAL ELECTIVE 1
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MATHEMATICS (16 UNITS)

MATH 125: Calculus I
MATH 126 or 129: Calculus II
MATH 226 or 229: Calculus III
MATH 225: Linear Algebra and Diff. Equations

SCIENCE (12 UNITS)

CHEM 105AL: General Chemistry
 or **CHEM 115AL:** Advanced General Chemistry
 or **MASC 110L:** Materials Science
PHYS 151L: Mechanics and Thermodynamics
PHYS 152L: Electricity and Magnetism

GENERAL EDUCATION (32 UNITS)

GE A The Arts (1 Course)
GE B Humanistic Inquiry (2 Courses)
GE C Social Analysis (2 Courses)
GE D Life Sciences (1 Course)
GE E Physical Sciences (1 Course)
GE F Quantitative Reasoning (1 Course)
GE G, H Global Perspectives (2 Courses)*
GESM General Education Seminar (1 Course)*

WRITING (7 UNITS)

WRIT 150: Writing and Critical Reasoning
WRIT 340: Advanced Writing


ENGINEERING (54 UNITS)

CSCI 101L: Fund. of Comp. Programming
DSO 435: Enterprise Data Architecture
ENGR 102: Engineering Freshman Academy
ISE 105: Intro. to Industrial Engineering
ISE 220: Probability Concepts in Engr.
ISE 225: Engineering Statistics I
ISE 315L: Engineering Project Management
ISE 330: Intro. to Operations Research I
ISE 331: Introduction to Operations Research: Stochastic Models
ISE 410: Prod. Planning and Scheduling
ISE 435: Discrete Systems Simulation
ISE 440: Work, Technology and Organization
ISE 460: Engineering Economy
ISE 470: Human/Computer Interface Design
ISE 495A: Senior Design Project
ISE 495B: Senior Design Project
ITP 320: Enterprise information Systems

OTHER COURSES (8 UNITS)

INFO SYSTEMS COURSES:
DSO 431: Foundations of Digital Business Innv. and **DSO 433:** Business Process Design or **ITP 482:** Engineering Database Applications and **ITP 487:** Data Warehouse and Business Intel.
ISE 350: Principles of Systems Engineering
APPROVED ENGINEERING ELECTIVES

* SPECIAL NOTES

 Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 17 for more information.

GE: Engineering students are encouraged to satisfy GE G and GE H with a course that also satisfies a Core Literacy. GE H may be satisfied by exam. Additionally, your GESM course should be taken in categories A, B, C, or D only. See pp. 16-17 for more information and consult your advisor for detailed assistance.

OPTIONAL ELECTIVES: Consult with your academic advisor to explore optional elective courses. These courses are not required.

INFO SYSTEMS COURSES: Select at least 8 units among the following courses: DSO 431 (4), DSO 433 (4), ISE 350* (3), ITP 482* (3), ITP 487* (3).

Also select at least 5 units among the following classes: AME 341a, AME 341b, CE 408, CE 460, CE 471, DSO 427, EE 326, ENGR 345, ENGR 401, ISE 232L, ISE 310L, ISE 327, ISE 335L, ISE 344, ISE 350, ISE 375L, ISE 426, ITP 215Lx, ITP 320x, ITP 325x, ITP 421x, ITP 422L, ITP 454x, ITP 457, ITP 466, ITP 482*, ITP 486, ITP 487*, ITP 488x, NSC 335, NSC 337

Classes noted with a * will count for Info Systems course requirement and Approved Engineering Electives.