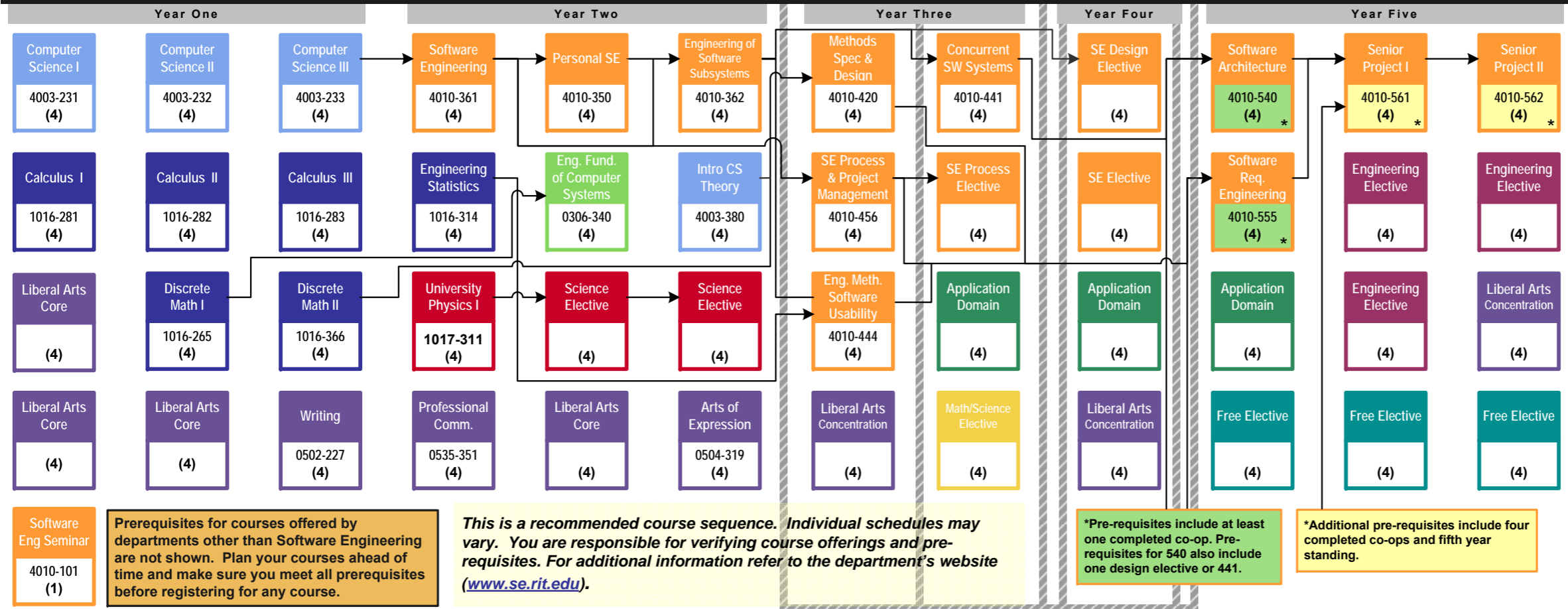


# Department of Software Engineering

## UNDERGRADUATE CURRICULUM

Course Sequence v 5.2  
Last Updated: August 26, 2009



**Software Design and Process Electives**  
Software engineering elective courses are designated as either "design" or "process" electives. You are required to take one of each. For an up-to-date list of elective courses see the department's website.

**Engineering Elective Requirement**  
Take three courses from any of the disciplines below:  
Computer engineering  
Computer science (see course listing on website)  
Industrial & systems engineering  
Mechanical engineering  
Microelectronic engineering  
Software engineering  
Courses need not be from the same discipline; pre-requisites apply.

**Application Domain Requirement**  
Choose an Application Domain – suggested fields include:  
Artificial intelligence  
Bioinformatics  
Business applications  
Computational mathematics  
Computer engineering  
Computer security  
Economics  
Entrepreneurship  
Industrial & systems engineering  
Interactive entertainment  
Public policy  
Scientific & engineering computing  
Statistics  
Usability  
Alternate application domains require department approval. Applicable courses and additional information can be found on the department's website.

First Year Experience  
1105-051 (1) → 1105-052 (1)

**Tracks**  
A track of study centers around an application domain, a minor, or both; it provides suggestions for related elective courses in Software Engineering and other programs of study. More information can be found in the department's website.

**Wellness Education Requirement**  
Complete two different wellness activity courses.  
Details, along with a list of course offerings, can be found on SIS under "Schedule of Courses of the Center for Intercollegiate Athletics and Recreation".

**Co-op**  
Complete at least four co-op blocks (10 weeks each) before registering for Senior Project (4010-561). You are responsible for coordinating appropriate quarters within your course schedule to complete co-ops; pre-requisites for co-op are Engineering of Software Subsystems (4010-362) and Personal SE (4010-350).

**Key**

- Software Engineering Courses
- Computer Science Courses
- Math Courses
- Application Domain Electives
- Engineering Electives
- Science Electives
- Liberal Arts Courses
- Free Electives
- RIT Required Courses
- Computer Engineering Courses

Course Name  
Course Number (Credits)

→ Prerequisite  
--- Corequisite

**Science Elective Requirement**  
Take any two courses:

- 1001-201 General Biology I + lab (1001-205)
- 1001-202 General Biology II + lab (1001-206)
- 1011-215 General and Analytical Chemistry I + Lab (1011-205)
- 1011-216 General and Analytical Chemistry II + Lab (1011-206)
- 1017-312 University Physics II
- 1017-313 University Physics III

**Math/Science Elective Requirement**  
Take one Math/Science Elective course from the list below:

- 1001-203 General Biology III + Lab (1001-207)
- 1011-217 Gen. and Analyt. Chem. III + Lab (1011-207)
- 1016-306 Differential Equations
- 1016-331 Matrix Algebra
- 1016-365 Combinational Math
- 1016-467 Theory of Graphs & Networks

**Liberal Arts Requirements**  
Take all:  
0502-227 Writing  
0504-319 Arts of Expression  
0535-351 Professional Communications

Select two of the following Humanities courses from different areas:  
0504-2xx Literature  
0505-2xx Fine Arts  
0507-3xx History  
0508-2xx Science, Technology, Values  
0509-2xx Philosophy  
0509-2xx Ethics

Select two of the following Social Sciences courses from different areas:  
0510-2xx Cultural Anthropology  
0511-2xx Microeconomics  
0513-2xx Political Science  
0514-2xx Psychology  
0515-2xx Sociology

**Liberal Arts Concentration:**  
Select a concentration discipline approved by the College of Liberal Arts. Upper-division students are required to complete three 400- or 500-level courses in this concentration.

**Ethics / Economics Requirement**  
Take one course from each of the disciplines below; pre-requisites apply:

Course	Discipline	Applied as:
0102-438	Business Ethics	App. Dom.
0508-211	Science Tech Values	LA Hum.
0509-211	Ethics	LA Hum.
0509-217	Ethics in the Info Age	LA Hum.
0509-445	Social & Political Philosophy	LA Hum.
0509-447	Contemp. Moral Problems	LA Hum.
0509-451	Professional Ethics	LA Hum.
0101-301	Financial Accounting	App. Dom.
0101-494	Cost Accounting	
0303-520	Engineering Economy	Eng. Elect.
0511-211	Prin. of Microeconomics	LA Soc. Sci.

All courses may also be applied as Free Elective credit.