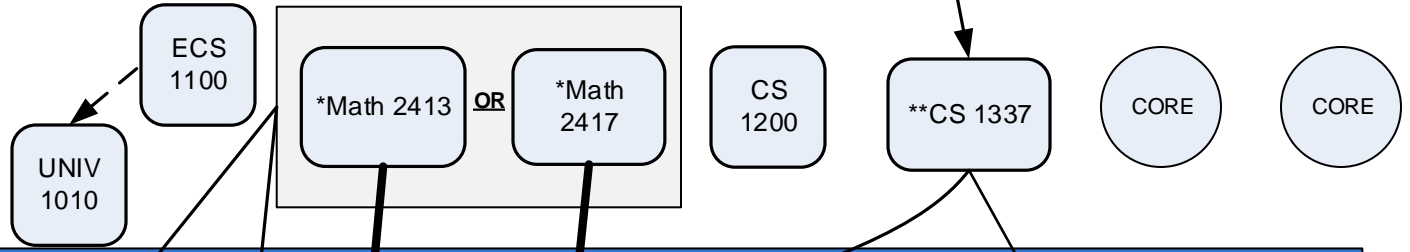


BS Software Engineering Suggested Four Year Plan 2021 – 2022 Catalog

**CS 1336/1136

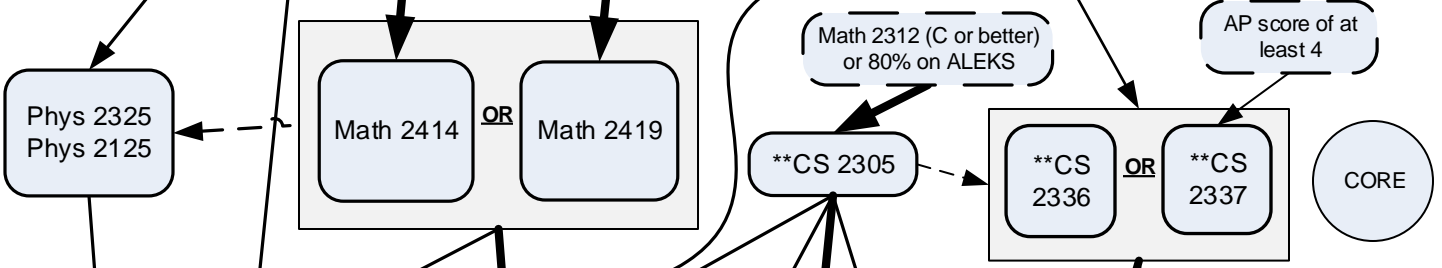
Freshman

| Description | Course No |
|-----------------------------|-------------------|
| Introduction to CS & SE | CS 1200 |
| Introduction to Engr & CS | ECS 1100 |
| Calculus I | Math 2413 or 2417 |
| Computer Science I | CS 1337 |
| 6 hours CORE: Choices below | |
| Freshman Seminar | UNIV 1010 |



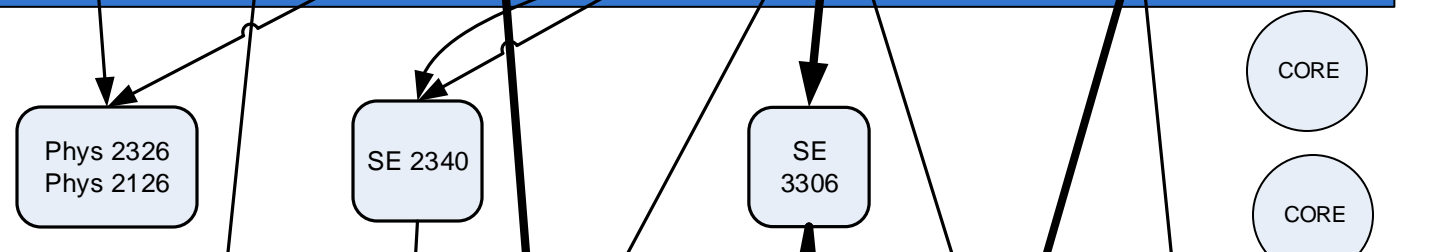
Freshman

| Description | Course No |
|-----------------------------|-------------------|
| Computer Science II | CS 2336 or 2337 |
| Discrete Mathematics I | CS 2305 |
| Calculus II | Math 2414 or 2419 |
| Mechanics and Heat | Phys 2325 |
| Mechanics and Heat Lab | Phys 2125 |
| 3 hours CORE: Choices below | |



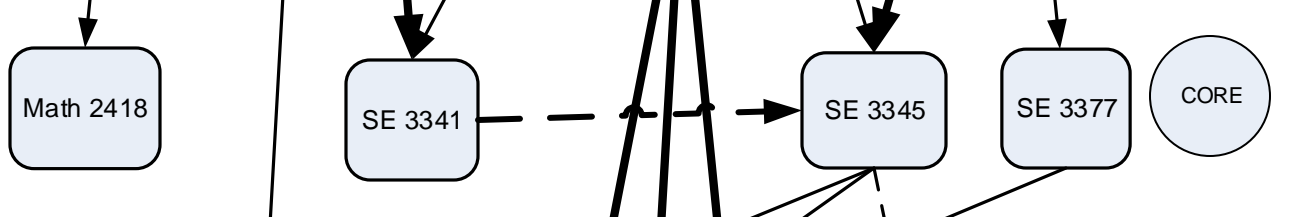
Sophomore

| Description | Course No |
|-------------------------------|-----------|
| Mathematics Foundations of SE | SE 3306 |
| Computer Architecture | SE 2340 |
| Electricity and Magnetism | Phys 2326 |
| Electricity and Magnetism Lab | Phys 2126 |
| 6 hours CORE: Choices below | |



Sophomore

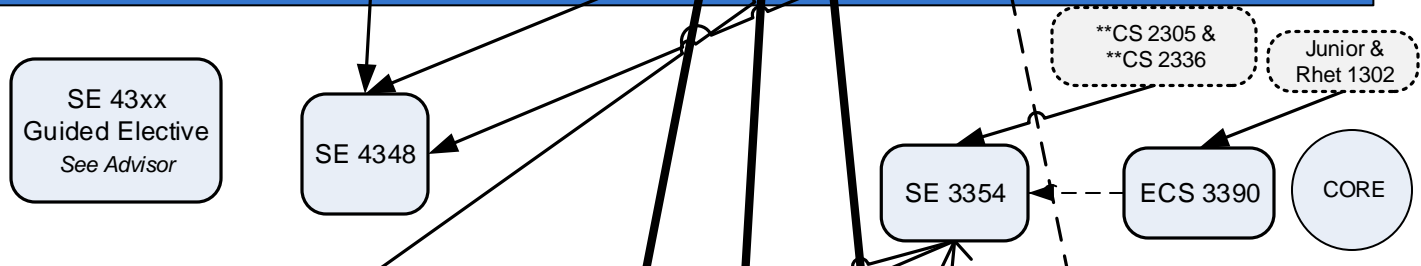
| Description | Course No |
|-----------------------------------|-----------|
| Probability & Statistics in CS | SE 3341 |
| Algorithms Analysis & Data Struct | SE 3345 |
| C/C++ Prog'ing in a UNIX Env. | SE 3377 |
| Linear Algebra | Math 2418 |
| 3 hours CORE: Choices below | |



At this point, you should choose a domain.

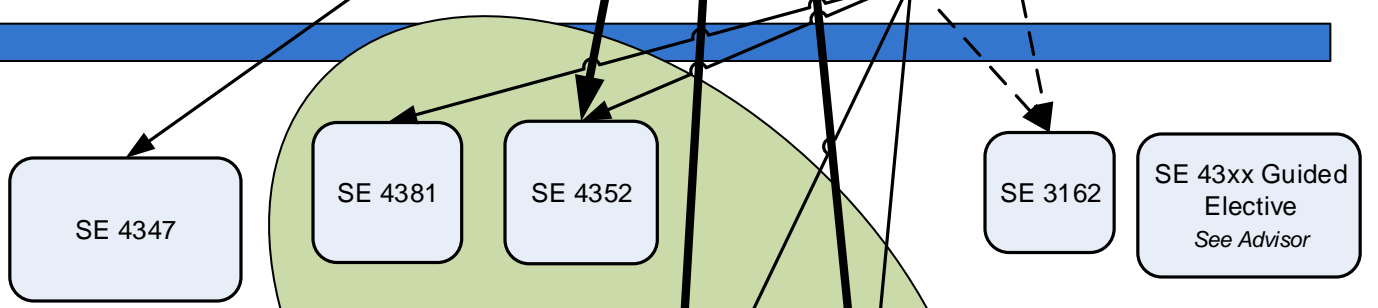
Junior

| Description | Course No |
|-----------------------------|-----------|
| Software Engineering | SE 3354 |
| Operating Systems | SE 4348 |
| SE Guided Elective | SE 43XX |
| Prof & Tech Communication | ECS 3390 |
| 3 hours CORE: Choices below | |



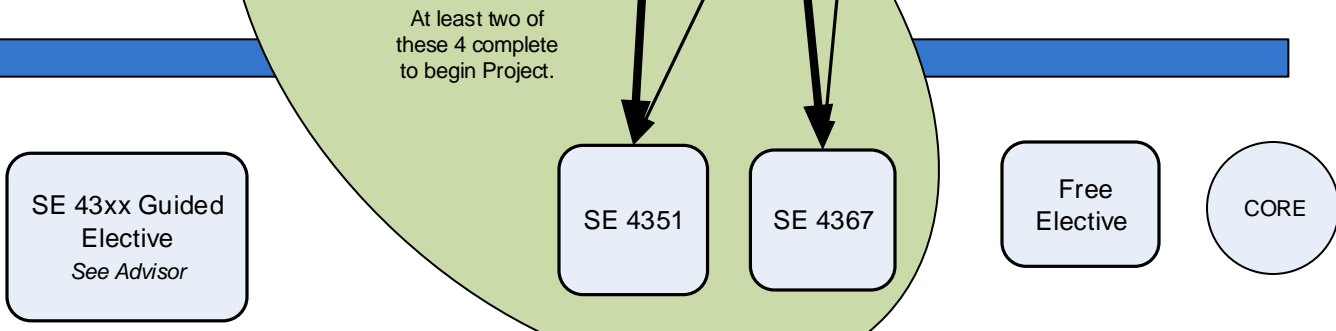
Junior

| Description | Course No |
|-----------------------------------|------------|
| Software Project Planning & Mgmt. | SE 4381 |
| Software Architecture & Design | SE 4352 |
| 3 hours SE Guided Elective | SE 43XX |
| Database Systems | SE 4347 |
| Prof. Responsibility in CS & SE | SE/CS 3162 |



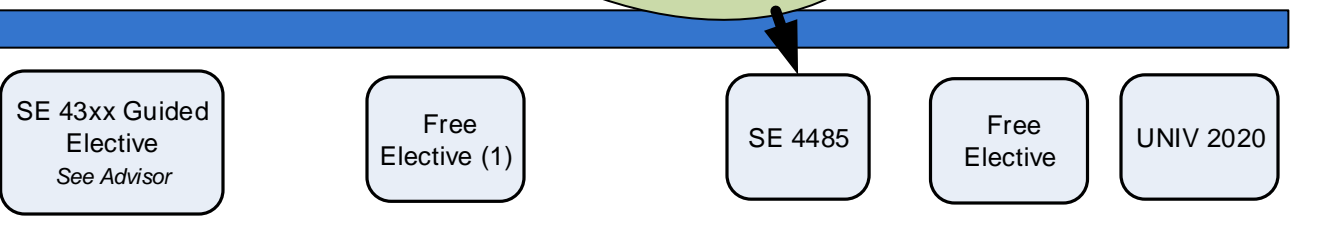
Senior

| Description | Course No |
|------------------------------------|-------------|
| Software Testing, Verif, Valid, QA | SE 4367 |
| Requirements Engineering | SE 4351 |
| 3 hours SE Guided Elective | SE/CS 43XX |
| 3 hours Free Elective | See Advisor |
| 3 hours CORE: Choices below | |



Senior

| Description | Course No |
|------------------------------|-------------|
| Software Engineering Project | SE 4485 |
| 3 hours SE Guided Elective | SE 43XX |
| 4 hours Free Elective | See Advisor |
| Core Curriculum Assessment | UNIV 2020 |



*A grade of C- or better is needed in Math 2413 or Math 2417 to move forward.
**A grade of C or better is required for CS 1336, CS 1337, CS 2305, and CS 2336.

Courses may be taken in any order, as long as prerequisites are met.

Core Choices

| Rhet 1302 | 3 hours From: | 3 hours From: | 6 hours From: | 3 hours From: |
|------------------------|---|---|---|--|
| Govt 2305 Govt 2306 | Ahst 1303, 1304, 2331 Arts1301 Danc 1310 Film 2332 Musi 1306 Thea 1310 | Ams 2300 Ams 2341 Huma 1301 Lit 2331 Phil 1301 Phil 2316, 2317 | Hist 1301 Hist 1302 Hist 2301 Hist 2330 Hist 2332 | Crim 1301 Econ 2301 Econ 2302 Geog 2303 Psy 2301 |

Domains and Guided Electives (12hrs)

Students should complete three courses from one of the application domains. See the document entitled "Application Domains." Further guided electives can be selected from the CS/SE 43xx level classes.

