# Planner Requirements Overview

## CS--XXXBBS Fall 2025 Sequence (Requirement: 000020009, Effective Date: 08/01/2025)

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|---|---|---|---|---|---|---|---|
| Acad Prog: | UBACH | Undergraduate | Default Units Per Term: | 15 | Send to Degree Search: | Yes |
| Acad Plan: | CS--XXXBBS | Computer Science CS Opt BS | Total Units to Graduate: | 120 | Use Catalog Prefs: | Yes |
| | | | Reporting Only: | No | | |

[01] 1st Semester (Units: 16, Lines: 5)

01.01 **CS 111**
0020, Major Requirement (Major Requirement)
Units: 4,CRITICAL
Min Grade Points/Unit: 2
Typically Offered: Fall and/or Spring

Co-Req

**MATH 125 or MATH 126 (1 of 3)**
0010, Elective Requirement (Remediation), Units: 3
**MATH 125 or MATH 126 (2 of 3)**
0010, Elective Requirement (Remediation), Units: 3
**MATH 125 or MATH 126 (3 of 3)**
0020, Elective Requirement (Remediation), Units: 3

Pre-Requirement

- o MATH 125 or MATH 126 (1541/0010) [Same Term OK]
  - o see above
  - or
- o MATH 125 or MATH 126 (1644/0010) [Same Term OK]
  - o see above
  - or
- o MATH 125 or MATH 126 (1644/0020) [Same Term OK]
  - o see above

01.02 **MATH 160 (Fulfills Subject Area 2)**
0010, Major Requirement (GE-2 Math/Quant Reasoning), Units: 5
CRITICAL
Min Grade Points/Unit: 2
Notes: A strong background in HS MATH (Algebra I & II, Geometry & Trig) or MATH 125 with a grade of C or better.
Typically Offered: Fall/Spring/Summer

Pre-Requirement

- o MATH 125 or MATH 126 (1541/0010)
  - o see (01.01) above
  - and
- o MATH 125 or MATH 126 (1644/0010)
  - o see (01.01) above
  - and
- o MATH 125 or MATH 126 (1644/0020)
  - o see (01.01) above

01.03 **Additional Elective - 3 Units**
0300, Elective Requirement (Elective), Units: 3
Notes: Additional Elective - 3 Units: For First Year Freshman Students UNIV 180-5 is recommended.
Major 1 Only: Y
Typically Offered: Intermittently

01.04 **Additional Elective - 3 Units**
0330, Elective Requirement (Elective), Units: 3
Allow Any Course: Unused Courses
Notes: Please check all pre-requisites before making a selection on this line.

01.05 **CS 100**
0004, Major Requirement (Major Requirement), Units: 1
Min Grade Points/Unit: 2
Notes: CS 100
Typically Offered: Fall/Spring/Summer

[02] 2nd Semester (Units: 15, Lines: 5)

02.01 **CS 211**
0050, Major Requirement (Major Requirement)
Units: 4,CRITICAL
Min Grade Points/Unit: 2
Typically Offered: Fall and/or Spring

Co-Req

**MATH 160 (Fulfills Subject Area 2) (1 of 1)**
0010, Major Requirement (GE-2 Math/Quant Reasoning), Units: 5

Pre-Requirement

- o CS 111 (20009/0020)
  - o see above
  - and
- o MATH 160 (Fulfills Subject Area 2) (20009/0010) [Same Term OK]
  - o see above

# Planner Requirements Overview

02.02 **CS 231** — Typically Offered: Fall and/or Spring
0070, Major Requirement (Major Requirement), Units: 4
CRITICAL
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 111 (20009/0020)<br>o see (02.01) above |
|---|---|

02.03 **MATH 162** — Typically Offered: Fall/Spring/Summer
0060, Major Requirement (Major Requirement), Units: 4
Min Grade Points/Unit: 2

| Pre-Requirement | o MATH 160 (Fulfills Subject Area 2) (20009/0010)<br>o see (02.01) above |
|---|---|

02.04 **GEW 101B (formerly GEW 101) (Fulfills Subject Area 1A)** — Major 1 Only: Y
0200, CAL GETC (GE-1A English Composition), Units: 3
Min Grade Points/Unit: 1.7

| Pre-Requirement | o (1603/0010)<br>and<br>o [Support Course] GEW 101A (1603/0020)<br>and<br>o (1604/0010)<br>and<br>o [Support Course] GEW 101A (1604/0020)<br>and<br>o (1603/0030)<br>and<br>o (1603/0040)<br>and<br>o (1603/0050)<br>and<br>o DSP 3/4 [Support Course] GEW 101A - GE A3 (1603/0060)<br>and<br>o [REQUIRED Support Course] DSP 2 (1603/0070) [Same Term OK]<br>and<br>o (1604/0030)<br>and<br>o (1604/0040)<br>and<br>o (1604/0050)<br>and<br>o DSP 3/4 [Support Course] GEW 101A - Subject Area 1B (1604/0060)<br>and<br>o [REQUIRED Support Course] DSP 2 (1604/0070) [Same Term OK] |
|---|---|

[03] 3rd Semester (Units: 15, Lines: 6)

03.01 **CS 311**
0100, Major Requirement (Major Requirement)
Units: 3,CRITICAL
Min Grade Points/Unit: 2
Typically Offered: Fall/Spring/Summer

Co-Req

**CS 310 (1 of 2)**
0005, Major Requirement (Major Requirement), Units: 3
**MATH 270 (2 of 2)**
0090, Major Requirement (Major Requirement), Units: 3

| Pre-Requirement | o CS 211 (20009/0050)<br>o see above<br>and<br><br>o MATH 270 (20009/0090) [Same Term OK]<br>o see above<br>and<br><br>o CS 310 (20009/0005) [Same Term OK]<br>o see above |
|---|---|

03.02 **MATH 270**
0090, Major Requirement (Major Requirement)
Units: 3,CRITICAL
Min Grade Points/Unit: 2
Typically Offered: Fall and/or Spring

Co-Req

**CS 311 (1 of 1)**
0100, Major Requirement (Major Requirement), Units: 3

| Pre-Requirement | o MATH 160 (Fulfills Subject Area 2) (20009/0010)<br>o see (02.01) above |
|---|---|

03.04 **Subject Area 1B - Critical Thinking** — Major 1 Only: Y
0260, CAL GETC (GE-1B Critical Thinking), Units: 3

03.05 **GE - Oral Communication (Fulfills Subject Area 1C)** Major 1 Only: Y
0190, CAL GETC (GE-1C Oral Communication), Units: 3
Min Grade Points/Unit: 1.7

03.05 **CS 310** Typically Offered: Fall and/or Spring
0005, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 111 (20009/0020)<br>o see (02.01) above |
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[04] 4th Semester (Units: 16, Lines: 5)

04.01 **CS 331** Typically Offered: Fall and/or Spring
0120, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 231 (20009/0070) [Same Term OK]<br>o see above |
|---|---|

04.02 **CS 351** Typically Offered: Fall and/or Spring
0150, Major Requirement (Major Requirement), Units: 3
CRITICAL
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 311 (20009/0100) [Same Term OK]<br>o see above<br>and<br><br>o MATH 270 (20009/0090) [Same Term OK]<br>o see (03.01) above |
|---|---|

04.03 **BIOL, CHEM or PHYS course that count toward a science major**
0140, Major Requirement (Major Requirement), Units: 4
Min Grade Points/Unit: 2

04.05 **SUBJECT AREA - 3A, 3B, 4H, 4C, 6** Major 1 Only: Y
0240, CAL GETC (GE-3/4/6), Units: 3

04.06 **SUBJECT AREA - 3A, 3B, 4H, 4C, 6** Major 1 Only: Y
0210, CAL GETC (GE-3/4/6), Units: 3

[05] 5th Semester (Units: 16, Lines: 6)

05.01 **CS 433** Typically Offered: Fall and/or Spring
0180, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 231 (20009/0070)<br>o see (04.01) above<br>and<br><br>o CS 311 (20009/0100)<br>o see (04.02) above |
|---|---|

05.02 **BIOL, CHEM or PHYS course that count toward a science major**
0170, Major Requirement (Major Requirement), Units: 4
Min Grade Points/Unit: 2

05.03 **GE Science 5A (NOTE: The 5A and 5B courses should be chosen so that one of these also satisfies the laboratory (5C) requirement.)**
0040, CAL GETC (GE-5A Physical Science)
Units: 3
Major 1 Only: Y
Typically Offered:




**GE Science 5A Lab (Fulfills GE Area 5C: Only One Science Lab is Required) (1 of 1)**
0045, CAL GETC (GE-5C Laboratory), Units: 0

| Co-Sequence | GE Science 5A Lab (Fulfills GE Area 5C: Only One Science Lab is Required) (20009/0045) |
|---|---|

| Pre-Requirement | o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0040)<br>or<br>o (1602/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0040) |
|---|---|

05.03 **MATH 242 or MATH 440** Display Note: Y
0080, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2
Notes: If MATH 440 is selected, you must click "Add Course" and add MATH 260 to your Planner prior to taking MATH 440.

| Pre-Requirement | o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0080) |
|---|---|

05.04 **GE Science 5A Lab (Fulfills GE Area 5C: Only One Science Lab is Required)**
0045, CAL GETC (GE-5C Laboratory)
Units: 0
Advisor Approved: Y
Major 1 Only: Y
Typically Offered:

Co-Req

**GE Science 5A (NOTE: The 5A and 5B courses should be chosen so that one of these also satisfies the laboratory (5C) requirement.) (1 of 1)**
0040, CAL GETC (GE-5A Physical Science), Units: 3

| Pre-Requirement | o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0040)<br>or<br>o (1602/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0040) |
|---|---|

05.05 **SUBJECT AREA - 3A, 3B, 4H, 4C, 6** Major 1 Only: Y
0280, CAL GETC (GE-3/4/6), Units: 3

[06] 6th Semester (Units: 15, Lines: 6)

06.01 **CS 436** Typically Offered: Fall and/or Spring
0130, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 311 (20009/0100)<br>o see (04.02) above |
|---|---|

06.02 **CS 471** Typically Offered: Fall and/or Spring
0030, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o MATH 242 or MATH 440 (20009/0080)<br>o see above<br>and<br><br>o CS 351 (20009/0150)<br>o see above |
|---|---|

06.03 **CS 370 or SE 370**
0390, Major Requirement (Major Requirement)
Units: 3
Min Grade Points/Unit: 2
Typically Offered: Fall and/or Spring

Co-Req

**MATH 270 (1 of 2)**
0090, Major Requirement (Major Requirement), Units: 3
**CS 311 (2 of 2)**
0100, Major Requirement (Major Requirement), Units: 3

| Pre-Requirement | o CS 211 (20009/0050)<br>o see (03.01) above |
|---|---|

06.04 **SUBJECT AREA - 3A, 3B, 4H, 4C, 6** — Major 1 Only: Y
0290, CAL GETC (GE-3/4/6), Units: 3

06.05 **GE Science 5B**
0220, CAL GETC (GE-5B Biological Science)
Units: 3
Major 1 Only: Y
Typically Offered:

Co-Req

**GE Science 5B Lab (Fulfills Subject Area 5B) (1 of 1)**
0230, CAL GETC (GE-5C Laboratory), Units: 0

| Co-Sequence | GE Science 5B Lab (Fulfills Subject Area 5B) (20009/0230) |
|---|---|

| Pre-Requirement | o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0040)<br>or<br>o (1602/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0040) |
|---|---|

06.06 **GE Science 5B Lab (Fulfills Subject Area 5B)**
0230, CAL GETC (GE-5C Laboratory)
Units: 0
Major 1 Only: Y
Typically Offered:

Co-Req

**GE Science 5B (1 of 1)**
0220, CAL GETC (GE-5B Biological Science), Units: 3

| Pre-Requirement | o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1602/0040)<br>or<br>o (1602/0020)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0080)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0060)<br>or<br>o [Support Course] MATH 105 (Fulfills Subject Area 2) (1601/0040) |
|---|---|

[07] 7th Semester (Units: 15, Lines: 6)
Taking 12 units or more of CS courses per semester will be a very heavy load, requiring 6-8 hours outside the class per course. Be mindful of arranging your work schedule.

07.01 **MATH 264** — Typically Offered: Fall/Spring/Summer
0110, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o MATH 162 (20009/0060)<br>o see above |
|---|---|

07.02 **CS 443** — Typically Offered: Fall and/or Spring
0160, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 311 (20009/0100)<br>o see (04.02) above |
|---|---|

07.04 **SUBJECT AREA - 3A, 3B, 4H, 4C, 6** — Major 1 Only: Y
0250, CAL GETC (GE-3/4/6), Units: 3

07.04 **CS 400-LEVEL ELECTIVE**
0340, Major Requirement (Major Elective), Units: 3
Min Grade Points/Unit: 2
Notes: You are encouraged to consult with your faculty advisor prior to choosing CS Elective courses.Please be sure to check course Pre-requisites. Once ALL course selections are made on this page, please be sure to run your ARR Planned Report (see link at the top of this page) to make sure your selections complete all degree requirements.

| Pre-Requirement | o CS 311 (20009/0100) [Same Term OK]<br>o see (04.02) above<br>and<br><br>o MATH 270 (20009/0090) [Same Term OK]<br>o see (03.01) above |
|---|---|

07.05 **CS 400-LEVEL ELECTIVE**
0350, Major Requirement (Major Elective), Units: 3
Min Grade Points/Unit: 2
Notes: You are encouraged to consult with your faculty advisor prior to choosing CS Elective courses.Please be sure to check course Pre-requisites. Once ALL course selections are made on this page, please be sure to run your ARR Planned Report (see link at the top of this page) to make sure your selections complete all degree requirements.

| Pre-Requirement | o CS 311 (20009/0100) [Same Term OK]<br>o see (04.02) above<br>and<br><br>o MATH 270 (20009/0090) [Same Term OK]<br>o see (03.01) above |
|---|---|

[08] 8th Semester (Units: 12, Lines: 5)
Taking 12 units or more of CS courses per semester will be a very heavy load, requiring 6-8 hours outside the class per course. Be mindful of arranging your work schedule.

08.01 **CS 490** Typically Offered: Fall and/or Spring
0370, Major Requirement (Major Requirement), Units: 3
Min Grade Points/Unit: 2

| Pre-Requirement | o CS 370 or SE 370 (20009/0390)<br>o see above |
|---|---|

08.02 **CS 400-LEVEL ELECTIVE**
0360, Major Requirement (Major Elective), Units: 3
Min Grade Points/Unit: 2
Notes: You are encouraged to consult with your faculty advisor prior to choosing CS Elective courses.Please be sure to check course Pre-requisites. Once ALL course selections are made on this page, please be sure to run your ARR Planned Report (see link at the top of this page) to make sure your selections complete all degree requirements.

| Pre-Requirement | o CS 311 (20009/0100) [Same Term OK]<br>o see (04.02) above<br>and<br><br>o MATH 270 (20009/0090) [Same Term OK]<br>o see (03.01) above |
|---|---|

08.03 **GE Upper Division** Major 1 Only: Y
0320, CAL GETC (Upper Division GE), Units: 3

08.04 **GE Upper Division** Major 1 Only: Y
0310, CAL GETC (Upper Division GE), Units: 3