

Preparing for CIS / MACS major

The CIS and MACS majors begin with CIS 210 Computer Science I and Math 231 Discrete Math I, and take approximately three years for completion of all major coursework. Any CIS or Math preparations should be added to this three-year timeframe. It can take one to three terms to prepare to begin the major.

1. Students with prior programming experience equivalent to CIS 122 is strongly recommended and the equivalent of Math 112 or higher is required to begin the major.

2. Programming experience includes: CIS 122 (recommended), CIS 111, or equivalent. CIS 110 or equivalent is not sufficient.

3. Math 112 or higher equivalence is demonstrated by college-level coursework, AP Calculus scores, or UO Math Placement scores.

4. Students must earn grade B- or higher in CIS 210, 211, 212 and Math 231, 232 for automatic advancement to upper-division CIS courses.

| Math Readiness Level | Blue = CIS / MACS Prep Courses | | Yellow = CIS / MACS Major Courses | | Green = CIT minor courses |
|------------------------------|--|---|-----------------------------------|---------------------------------------|---|
| | Recommended Courses for First Academic Year | | | | |
| | Fall | Winter | Spring | Fall | Notes |
| Math 101 | CIS 110 Math 101 | CIS 111 Math 111 | CIS 122 Math 112 CIT 281 | CIS 210 Math 231 CIT 381 | One year of math and/or programming preparation is needed. For students with no programming experience, CIS 111 or 122 (recommended) is required before beginning the major. Additional programming classes are strongly recommended. |
| Math 111 | CIS 110 Math 111 | CIS 111 Math 112 | CIS 122 Math 251 CIT 281 | CIS 210 Math 231 or 252 CIT 381 | |
| Math 112 | CIS 122 Math 112 | CIS 210 Math 231 | CIS 211 Math 232 | CIS 212 Math 251 | One term of math and/or programming preparation is needed. For students with no programming experience, CIS 122 is strongly recommended before beginning the major. |
| Math 251 (No Prog. Exp.) | CIS 122 Math 251 | CIS 210 Math 252 | CIS 211 Math 231 | CIS 212 Math 232 | |
| Math 251 | CIS 210 Math 231 | CIS 211 Math 232 | CIS 212 Math 251 | CIS 3XX Math 252 | Students who are ready for Math 251 or higher and have prior programming experience are ready to begin the major. |
| AP CS A Score = 4 or 5 | CIS 212 Math 231 | CIS 313/314/322* Math 232, See CIS Advisor | See CIS Advisor | See CIS Advisor | Students who have taken the AP CS A exam and scored 4 or 5 may begin the CIS Major with CIS 212. |