

UMSL

Computer Science

UMSL is a NSA/DHS National Center of Excellence in Cyber Defense Education



Math

MATH

Cmp Sci

CMP
SCI

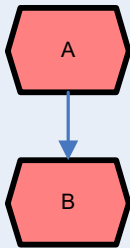
Engl

ENGL

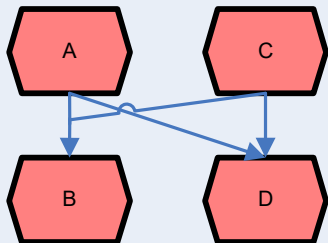
Required in BS Computer Science, Computing Technology, Cybersecurity



Required in all Departmental BS



A must be passed before B (prerequisite).
C must be passed before or concurrently with D (co-requisite).



Just one of A or C must be passed before B. Both A and C must be passed before D.

V2/12/2025

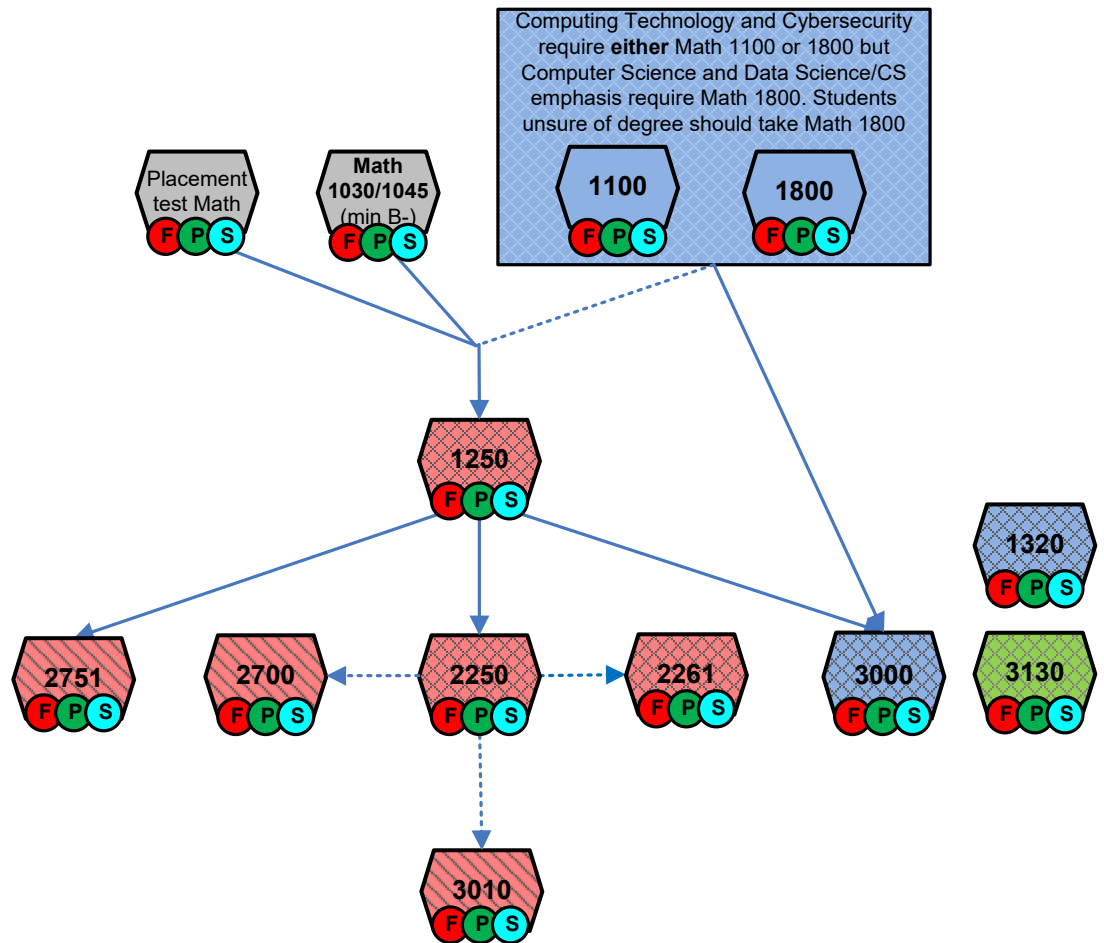
Choosing an undergraduate degree in the CS department

All departmental BS degrees related to computer science (Computer Science, Computing Technology, Cybersecurity) start with the same common CS, Math and English courses shown here. BS in Data Sciences and Analysis/CS emphasis also requires some of the same courses as noted.

This makes switching between these degrees easy before reaching 3000- and 4000-level CS courses – some of which are also shared.

All of these lower level common courses can be finished in the first two semesters if Desired, see the notes below.

These courses are typically available both in person and online asynchronous.



Computing Technology and Cybersecurity require **either** Math 1100 or 1800 but Computer Science and Data Science/CS emphasis require Math 1800. Students unsure of degree should take Math 1800

Students with any introductory general purpose programming background, but without 1250 transferred in, can request to start with 2250. This may require a rudimentary review of basic Python syntax and functions if unfamiliar. Such students will have 1250 credited upon successful completion of 2250 and they can also request to register for 2261, 2700, and/or 3010 concurrently with 2250.

1250 and 2250 can be taken in half semesters, or together in one semester as a combo course (6 credits). Cmp Sci 2261, 2700 and 3010 can only be taken concurrently with a full semester 2250 section.

Languages/technologies in Cmp Sci courses:
1250 – Python
2250 – Data structures and Python
2261 – Object-orientation with Java
2700 – Computer organization
2751 – Linux systems
3010 – Full-stack/JavaScript

Typical availability

Fall F
Spring P
Summer S