Curriculum Items

Jan 30, 2024

Relevant Courses

- ENGG*1410: Introductory Programming for Engineers
- ENGG*1420: Object-oriented Programming for Engineers
- CIS*1300: Programming
- ENGG*1500: Engineering Analysis
- CIS*1910: Discrete Structures in Computing
- CIS*2170: User Interface Design
- CIS*2520: Data Structures
- CIS*2750: Software Systems Development and Integration
- CIS*3700: Introduction to Intelligent Systems
- CIS*3750: System Analysis and Design in Applications
- CIS*3760: Software Engineering
- ENGG*4450: Large-scale Software Architecture Engineering

CIS*3700

- CIS*3700 is a challenge for Co-op students to take as it requires CIS*3750 as a pre-requisite. The pathway for these students makes it impossible to take CIS*3700 in third year.
- The consensus of the curriculum committee is that CIS*2750 provides sufficient background to successfully complete CIS*3700.
- Motion: That prerequisites for CIS*3700 be changed from:
- (CIS*3750 or CIS*3760) and (CIS*2460 or STAT*2040) to
 CIS*2750 and (CIS*2460 or STAT*2040)

CIS Minor and Engineering

- Engineering has requested that some of its courses be considered acceptable for the minor in CIS:
 - 1. CIS*1300 or ENG*1410
 - 2. CIS*1910 or ENG*1500
 - 3. CIS*2430 or ENG*1420
 - (also update pre-requisite for CIS*2170 to include ENG*1410)
- The curriculum committee finds 1. and 3. to be acceptable and 2. to be unacceptable (ENG*1500 is a linear algebra course and has nothing to do with Discrete Structures however, it is accepted as a prerequisite for CIS*2910)

CIS Minor and Engineering

Motion:

- Change the requirements of the minor to include (CIS*1300 or ENG*1410) in place of CIS*1300
- Change the requirements of the minor to include (CIS*2430 or ENG*1420) in place of CIS*2430
- Add ENG*1410 to the set of acceptable prerequisites for CIS*2170
- Communicate to Engineering that ENG*1500 won't be accepted alone in place of CIS*1910
 - do we consider CIS*1910 or (ENG*1500 and CIS*2910)?

Broader Issues

- Recently experience is that ENGG*1410 and ENG*1420 don't seem to provide sufficient experience with pointers for CIS*2520
- Engineering has proposed to solve this by introducing their own data structures course based on Java
- There is concern on our end about the implications of this for CIS*3110 (at least) – Required only for Computer Engineering
- Discussion among the curriculum committee identified that now may be time to try to treat the root cause of these issues rather than treat symptoms as they arise.
- The decision to bring this to Departmental Council for discussion was made.

Possible issues and responses

- Not only will students lack practice with pointers from the ENG*1410, ENG*1420 stream, they will also lack the experience that CIS*2520 provides
- Possible responses:
 - Respond with a strong concern that this will put students required to take CIS*3110 in jeopardy – and propose that Engineering provide possible solutions
 - Suggest that if Engineering proceeds on this path, they may wish to also consider an alternative to CIS*3110 within their own curriculum
 - Others?

In the pipeline

- While not a point for formal discussion or any motions yet, Engineering also seems to have plans to substitute CIS*3750, CIS*3760 with their own offering ENG*4450 (Large Scale Software Architecture Engineering)
- Thus far, this is proposed as an alternative entryway into CIS*4150, CIS*4300.
- Preliminary analysis suggests that this might be acceptable and this will likely be brought to the next council as a motion. (with all relevant context)
- Are there any general concerns with Engineering developing their own parallel pathway? Is this good news?

Any further discussion?

• Thanks!