

SITC – New course proposals, major and minor plan updates, course catalog changes, and course removals

We are proposing four new courses, updates to the computer science major and minor, updates to the computer science & math high school teacher certification major, and updates to the digital entertainment technology minor. The new courses and degree plan updates are intended to expand opportunities for our students, introducing greater flexibility where possible and better incorporating undergraduate research as part of the degree plans, and to better fit the changing nature of our fields of study. We are also proposing changes to the catalog listings for ten existing courses and the removal of eight existing courses, together intended to reflect shifts in content and emphasis in the curriculum and degree plans.

Proposed courses

CS 375 – Software Engineering II

This course will follow the existing Software Engineering course (CS 374) and is proposed on the recommendation of our visiting committee, who strongly recommended a two-semester SE sequence for computer science students

IT 473 – Cybersecurity Policies, Standards and Compliance

This course will be included in our concentration on security administration, an active and growing subfield in IT

ITC 399 – ITC Research

This course will allow students to earn credit hours for work on active research projects, comparable to research-credit courses in other departments in the university

ITC 480 – Reflections on Faith and Work

This course will be a culmination of students' liberal arts education, asking them to critically reflect on their chosen careers and how their faith will direct their lives. We plan to make this our new capstone and writing-intensive course.

Degree plan updates: majors and minors

CS major – proposed changes will include the new courses (listed above) in appropriate concentrations for CS students and make some previously required courses optional, to reflect trends in the field

CS minor – proposed changes will make the minor more flexible, hopefully encouraging more students to pursue it

CSMT major – proposed changes will bring the degree expectations into better alignment with the expected experience and skill set for high-school computer science teachers. The Teacher Education Council has approved these proposed changes.

DET major – proposed changes will include recently added courses in appropriate concentrations and merge two current concentrations into one new concentration, reflecting current trends in the field

DET minor – proposed changes will shuffle some required courses, to remove DET 410 (intended only for DET majors) and allow for including new DET courses. The minor will also reduce to 18 hours (instead 21 hours).

Removal from catalog

CS 111

Will not be required for any degree plan or concentration. Replaced by ITC 110

CS 320

Will not be required for any degree plan or concentration. Little interest when offered as upper-level major elective.

CS 355

Will not be required for any degree plan or concentration. Some content will be shifted to other courses, including CS 352 and CS 376.

CS 370

Will not be required for any degree plan or concentration. Little interest when offered as upper-level major elective.

CS 376

Will not be required for any degree plan or concentration. Has never been taught.

CS 420

Will not be required for any degree plan or concentration. Little interest when offered as upper-level major elective.

CS 474

Will not be required for any degree plan or concentration. Relevant content will be shifted to other courses, including CS 230 and CS 376.

CS 495

Will not be required for any degree plan or concentration. This course will be replaced by ITC 399.

IT 120

Will not be required for any degree plan or concentration. Replaced by ITC 110

IT 330

Will not be required for any degree plan or concentration. Degree emphasis is shifting away from this content.

IT 420

Will not be required for any degree plan or concentration. Degree emphasis is shifting away from this content.

IT 430

Will not be required for any degree plan or concentration. Degree emphasis is shifting away from this content.

Updates to catalog listing

CS 315

Change course title to "Mobile Application Development"

CS 316

Change prerequisite to "IT 220; CS 315 or CS 230"

Change course title to "Advanced Mobile Application Development"

CS 330

Change catalog listing to show course offerings "fall" (not "fall, on demand"). This course is required in several concentrations in SITC degree plans and will be offered regularly every fall.

CS 374

Change catalog listing to show course offerings "spring" (not "fall, on demand"). We are changing the scheduling of this course to better align with other changes currently proposed for the computer science degree plan.

Change course title to "Software Engineering I"

Change the description to:

" A study of the development of large scale software systems. Includes an overview of the software development life cycle. Principles of software testing will be introduced. Projects will afford practical experience in the development of interpersonal communication skills needed for team software development."

DET 350

Change course title to "Digital Entertainment Development" to better reflect diversity of projects covered in class.

Change course description to: "Digital cinematic, game, and level design. Students will learn to develop and design 2D and 3D games, cinematic, and levels using game engines or development tool set. Course may be repeated once.

Prerequisite: DET 210"

DET 410

Specify DET 410 as "Majors only". Restricting DET 410 to DET majors only will enable better preparation for entry into the career field or graduate study."

IT 220

Change catalog listing to show course offerings "fall, spring of even years, summer of odd years" to better reflect current practice.

IT 221

Change catalog listing to show course offerings "fall, spring of odd years, summer of even years" to better reflect current practice.

IT 310

Change catalog listing to show course offerings "fall" (not "spring") to reflect current practice.

ITC 499

Change title to "Information, Technology, and Computing Internship". The change will better reflect that this course will be taken by students across the SITC majors, not just the Information Systems majors.