SPECIAL REPORT

OF THE

ACADEMIC MATTERS COUNCIL

concerning

REVISION OF THE BA
IN COMPUTER SCIENCE
(#5179)

Presented at the
780th Regular Meeting of the Faculty Senate
October 18, 2018

COUNCIL MEMBERSHIP

ACADEMIC MATTERS COUNCIL

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ACADEMIC MATTERS COUNCIL

The Academic Matters Council recommends approval of this proposal.

Briefly describe the Proposal

The BS in Computer Science was revised in 2016 and some changes that were made to that curriculum should be consistent in the BA curriculum, as well. We neglected to make these changes to the BA at that time.

Revision of the Math Requirements for the BA by eliminating alternate calculus courses that do not align students for success in the 200-level CS core requirements.

Updating the SUBJECT of Computer Science courses: CMPSCI to COMPSCI on the ARR. This change was promoted by the Registrar's Office prior to Fall 2015 when the College of Information and Computer Sciences (CICS) was established.
Please describe the existing program requirements, listing all required courses and available electives, as well as any additional requirements, and continuation or admissions policies.

1) Alternate prerequisite courses offered by other departments:
   -- EC-ENG 242 for COMPSCI 187 (rg5534 and rg5574, r11995, ln40)
   -- MATH 455 for COMPSCI 250 (rg5534 and rg5574, r11996, ln40)

2) Obsolete courses:
   -- COMPSCI 287 (not offered since Spring 2010) as an alternate for COMPSCI 220 (rg5534 and rg5574, r11995, ln20)
   -- CMPSCI 291SP and 291SR (offerings prior to conversion to 230) as an alternate for COMPSCI 230 (rg5534 and rg5574, r11996, ln10)

3) Three math courses, including MATH 131-132 (or MATH 127-128) plus one additional math course to be approved by the department. Appropriate candidates include RES-ECON 211, RES-ECON 212, STATISTIC 240, STATISTIC 501, STATISTIC 515, or any other Math course at the 200-level or higher. Equivalent courses or appropriate AP exam placements are acceptable in place of MATH 131-132.

Please describe the requirements that you are proposing, listing course requirements, elective options, as well as any additional requirements, and continuation or admissions policies.

1) ELIMINATING alternate prerequisite courses offered by other departments from the ARR:
   -- EC-ENG 242 for COMPSCI 187 (rg5534 and rg5574, r11995, ln40)
   -- MATH 455 for COMPSCI 250 (rg5534 and rg5574, r11996, ln40)

2) REMOVING Obsolete courses:
   -- COMPSCI 287 (not offered since Spring 2010) as an alternate for COMPSCI 220 (rg5534 and rg5574, r11995, ln20)
   -- CMPSCI 291SP and 291SR - converted to COMPSCI 230(rg5534 and rg5574, r11996, ln10)

3) ELIMINATING the options of MATH 127-128 (rg5534 and rg5574, r11995, ln80 and ln90)
   -- Three math courses, including MATH 131-132 plus one additional math course to be approved by the department. Appropriate candidates include RES-ECON 211, RES-ECON 212, STATISTIC 240, STATISTIC 501, STATISTIC 515, or any other Math course at the 200-level or higher. Equivalent courses or appropriate AP exam placements are acceptable in place of MATH 131-132.

4) UPDATING the SUBJECT from CMPSCI to COMPSCI where appropriate (rg5534 and rg5574).

Please provide the rationale for these revisions.

1) ELIMINATION of Alternate Prerequisites is a preference of the Undergraduate Program Committee, so any exceptions deemed appropriate by the UPD can be made after a thorough review of the other department offering, instead of an automatic update on the student's ARR:
   -- EC-ENG 242 is being phased out by ECE and our understanding is that it will no longer be offered.
   -- MATH 455 does not require the same programming prerequisite as COMPSCI 250, and
MATH 455 was eliminated from the BS curriculum in 2016, now requiring UPD approval.

2) REMOVING Obsolete courses:
-- COMPSCI 287 (not offered since spring 2010) as an alternate for COMPSCI 220 (rg5534 and rg5574, r11996, ln20). This course would no longer be accepted in the current curriculum.
-- CMPSCI 291SP and 291SR - converted to COMPSCI 230, so no longer requires allowance of 2 courses on ARR (rg5534 and rg5574, r11996, ln10)

3) REMOVING MATH 127/128: MATH 131 and 132 are better preparation for most subsequent CS courses. MATH 132 is a required prerequisite for both COMPSCI 240 and 250, thus students without MATH 132 are not aligning themselves to complete the requirements for the BA in Computer Science. Incoming students interested in Computer Science have been encouraged on the Majors Guide (NSO Advising) to take the MATH 131/132 Calculus sequence for both programs (BS and BA). MATH 131/132 are considered predictor courses for success in the CS Major, while MATH 127/128 are not, thus students desiring to change to the CS Major must demonstrate success in MATH 131/132.

4) SUBJECT: The ARR should reflect the correct information about course offerings.

Academic Requirements Review

See uploaded pdfs for rg5534 (BA-CS) and rg5574 (SM-CS-BA).

Resources

If this proposal requires no additional resources, say so and briefly explain why. If this proposal requires additional resources, explain how they will be paid for. For proposals involving instruction, indicate how many new enrollments are expected and whether the courses have room to accommodate them.

No additional resources.

The number of CS majors pursing the primary/secondary BA is very small (currently 22 vs. 1,140 primary/secondary BS). Any required adjustments to the ARR will also be minimal.

CS Majors and students interested in changing to the CS Major are already taking MATH 131 and MATH 132 as required to be eligible for CS 200-level core.

MOTION: That the Faculty Senate approve the Revision of the BA in Computer Science, as presented in Sen. Doc. No. 19-007.