

Memo

Date: October 31, 2019

To: Faculty Senate

RVB

From: University Curriculum Committee: Raj Boppana (Chair), Langston Clark, Debra Peña, Liang Tang, and John Zarco.

Subject: New Program, Certificate, Minor, or Concentration Proposals

The University Curriculum Committee (UCC) reviewed the following proposals for a new degree program or a concentration option and recommends with the following vote for Faculty Senate discussion and approval.

UCC Recommendation			Proposal
Yes	No	Abstain	
5	0	0	1. BA in Computer Science with Teaching Track (new degree program)
5	0	0	2. Hydrology Concentration for B.S. and B.A. students in Geology

UCC summaries of the proposals are given below.

1. BA in Computer Science with Teaching Track (BA-CS-TT)

Proposed by the Department of Computer Science in College of Sciences.

UCC Recommendation		
Yes	No	Abstain
5	0	0

- This is a new degree program for students who are interested in teaching computer science (CS) at middle school and/or high school levels as a certified teacher.
- Semester credit hours required: 120.
- According to Code.org, 58% of all new STEM jobs are in computing and yet less than 3% of Texas high school students complete a CS class. Code.org also reports that students who take CS in HS are six times more likely with women being 10 times more likely to major in CS. But universities are preparing too few CS teachers to offer CS in the secondary schools; only 35% of schools in Texas were able to offer CS course in 2017.
- This degree complements the current B.S. in Computer Science degree. All students pursuing the BA-CS-TT will be able to switch to/from the current BS-CS program.
- Enrollment projections:

Year	1	2	3	4	5
FTSE	4	6	12	16	24

- Resources: The required CS and Education courses are already being offered by the currently existing BS and BA Science programs including Computer Science, Math, Biology, Chemistry, Physics, and Multidisciplinary Studies.
- Dependency on courses (other than core courses) outside the college: none.

2. Hydrology Concentration for B.S. and B.A. students in Geology

Proposed by the Department of Geological Sciences in College of Sciences.

UCC Recommendation		
Yes	No	Abstain
5	0	0

- This concentration will provide geology students with the technical and conceptual background necessary to address the challenges faced by water planners and policy makers.
- Semester credit hours required: 17, taken as electives for the B.A or B.S. in Geology degree.
- Bureau of Labor estimates that the employment of hydrologists will grow by 10% per year from 2018 to 2026, faster than the average for occupations in Geology.
- Organizes several of currently offered electives into a concentration that formally recognizes students’ specialization and enhances their competitiveness.
- Enrollment projections:

Year	1	2	3	4	5
FTSE	14	16	18	20	24

- Resources: one lecture (3 credit hours) course and one lab (1 credit hour) course need to be added. No additional faculty needed.
- Dependency on courses (other than core courses) outside the college: none.