## UNDERGRADUATE COUNCIL <br> Request for Change(s)

Originating unit requesting change Computer Science
Type of Change requested: Program requirements and description


Course prerequisite(s)
Drop course(s) $\quad \square$ Program description
Drop program(s) $\square$ Program requirements
Semester and year change(s) take effect: Fall 2023
Appropriate computer abbreviation if course title is more than 30 spaces:

Briefly summarize the change requested:

1. Changing associated requirement from MATH 30803 - Probability to MATH 30853 Statistics.
2. Changing science requirements.
3. Changing minimum GPA requirements.

## Programs Only Program Name: <br> Program Name:

Current Code: COSC-BS Proposed New Code (list 2): $\qquad$ or $\qquad$
(ex: INDE-BFA)
Can have second major: $\underset{ }{X} \quad$ Yes $\qquad$ No

Current 6-digit CIP Code: 11.0701

Does the change require a new or change in CIP code? $\qquad$ Yes $\qquad$ No

If yes, what is the proposed 6-digit CIP code?
*for reference, please visit: https://nces.ed.gov/ipeds/cipcode/resources.aspx?y=56

## Catalog copy

Present catalog copy (paste-up from catalog is acceptable.

See attached.

Proposed change(s). (Include exact catalog copy as desired. Underline changes)
See attached.

1. What is the justification for the change(s) requested?
2. Students must take 3 hours of statistics. Either MATH 10043 or MATH 30853.
3. We are simplifying the science requirements. Students must take a two-course sequence in physics and astronomy, plus any two science courses (NSC).
4. We are dropping the requirement of a minimum GPA of 2.2 to be more in line with CITE and DASC and other majors.
5. If applicable, explain how the change(s) will affect the current program outcomes and assessment mechanisms.

N/A
3. Faculty Resources: How will the unit provide faculty support for this change and any other impact this change may have on other current departmental listings.
N/A
4. Educational Resources: Will this change require additional resources not currently available (e.g. space, equipment, library, other)?

5. If this change affects other units of the University, include a statement signed by the chairperson(s) of the affected unit(s).
6. If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and cross-listed units.

## CURRENT Computer Science, BS Requirements

The program of study requires a minimum of 48 hours, on a 120 -hour degree, consisting of:

Core Requirements<br>COSC 10403 Introduction to Programming 3<br>COSC 20203 Techniques in Programming 3<br>COSC 20803 Data Structures 3<br>COSC 30203 Computer System Fundamentals 3<br>COSC 30253 Computer Organization 3<br>COSC 30403 Programming Language Concepts 3<br>COSC 30603 Database Systems 3<br>COSC 40203 Operating Systems 3<br>COSC 40403 Analysis of Algorithms 3<br>COSC 40943 Software Engineering 3<br>COSC 40993 Senior Design Project 3<br>CITE 30103 Unix/Linux System Administration 3<br>12 hours from CITE 30363 or COSC electives at the 30000 level or above 12<br>Associated Requirements:<br>17 hours of mathematics<br>MATH 10524 Calculus I 4<br>MATH 20123 Discrete Mathematics I 3<br>MATH 30123 Discrete Mathematics II 3<br>MATH 30224 Linear Algebra 4<br>MATH 10043 Elementary Statistics 3<br>OR<br>MATH 30803 Probability 3

A two-semester science sequence in (including laboratories)
Plus two additional one-semester science courses

All science courses must be selected from biology, chemistry, environmental science, geology, physics or psychology (10514 and/or 10524 only). Courses for non-science majors may not be counted in this category.

A computer science major must have a minimum 2.2 GPA in all computer science coursework to graduate.

## PROPOSED <br> Computer Science, BS Requirements

The program of study requires a minimum of 48 hours, on a $\underline{122 \text {-hour degree, consisting of: }}$

## Core Requirements:

COSC 10403 Introduction to Programming 3
COSC 20203 Techniques in Programming 3
COSC 20803 Data Structures 3
COSC 30203 Computer System Fundamentals 3
COSC 30253 Computer Organization 3
COSC 30403 Programming Language Concepts 3
COSC 30603 Database Systems 3
COSC 40203 Operating Systems 3
COSC 40403 Analysis of Algorithms 3
COSC 40943 Software Engineering 3
COSC 40993 Senior Design Project 3
CITE 30103 Unix/Linux System Administration 3
12 hours from CITE 30363 or COSC electives at the 30000 level or above 12
Associated Requirements:
17 hours of mathematics are required.
MATH 10524 Calculus I 4
MATH 20123 Discrete Mathematics I 3
MATH 30123 Discrete Mathematics II 3
MATH 30224 Linear Algebra 4
MATH 10043 Elementary Statistics 3
OR
MATH 30853 Statistics 3
12-16 hours of science are required.
PHYS 10154 General Physics I with Laboratory 4
PHYS 10164 General Physics II with Laboratory 4
OR
PHYS 20474 Physics I with Laboratory: Mechanics 4
PHYS 20484 Physics II with Laboratory: Electromagnetism and Optics 4
OR any 2 of 3 astronomy courses
PHYS 10263 Cosmic Origins 3
PHYS 10273 Introductory Astronomy: Earth and Planets 3
PHYS 10293 Archeoastronomy 3

## Plus

Two additional science courses (must be approved by the department chair) 6-8

