# **UNDERGRADUATE COUNCIL Request for Change(s)**

| Originating unit requesting change   |  |  |  |  |
|--|--|--|--|--|
| Type of Change requested:  |  |  |  |  |
| Course number(s) Course prerequisite(s) Course title Drop course(s) Course description Drop program(s) | Program description Program requirements |  |  |  |
| Semester and year change(s) take effect:   |  |  |  |  |
| Appropriate computer abbreviation if course title is more than 30 spaces:                              |  |  |  |  |
| Briefly summarize the change requested:  |  |  |  |  |
|  |  |  |  |  |
| Programs Only Program Name:  |  |  |  |  |
| Current Code:Proposed New Code (list 2):(ex: INDE-BFA)   | or                                       |  |  |  |
| Can have second major:YesNo  |  |  |  |  |
| Current 6-digit CIP Code:  |  |  |  |  |
| Does the change require a new or change in CIP code?YesNo  |  |  |  |  |
| 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

|    | ent catalog copy (paste-up from og is acceptable.                                   | Proposed change copy as desired. | e(s). (Include exact catalog<br>Underline changes) |
|----|---|----------------------------------|--|
|    |   |                                  |  |
|    |   |                                  |  |
|    |   |                                  |  |
|    |   |                                  |  |
|    |   |                                  |  |
| 1. | What is the justification for the change(s) re                                      | equested?                        |  |
| 2. | If applicable, explain how the change(s) wi assessment mechanisms.                  | ill affect the curre             | nt program outcomes and                            |
| 3. | Faculty Resources: How will the unit provother impact this change may have on other |                                  |  |

| 4. | Educational Resources: Will this change require additional resources not currently available (e.g. space, equipment, library, other)?  If yes, list additional resources needed.  NO |  |  |
|----|--|--|--|
| 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.   |  |  |
|    | Approval signature of chairperson of originating unit  |  |  |

Revised 02/2020

#### **CURRENT**

### Computer Science, BS Requirements

The program of study requires a minimum of 48 hours, on a 120-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

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 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**

## Computer Science, BS Requirements

The program of study requires a minimum of 48 hours, on a 122-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 <u>30853 Statistics</u>  | 3     |
| 12 - 16 hours of science are required.                                    |       |
| PHYS 10154 General Physics I with Laboratory                              | 4     |
| PHYS 10164 General Physics II with Laboratory                             | 4     |
| <u>OR</u>   |       |
| 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 |