UNIVERSITY of ALASKA
Many Traditions One Alaska

Board of Regents Program Action Request

Proposal to **Add or Change** a Program of Study
University of Alaska

1a. UA University	1b. School or College	1c. Department or Program
UAF	College of Engineering and Mines	Computer Science

2. Complete Program Title: Computer Science, Bachelor of Arts

3. Type of Program:

Undergraduate Certificate		Associate		Baccalaureate	✓
Master's		Doctorate		Post-Baccalaureate Certificate	

4. Type of Action: ✓ Add ☐ Change

Implementation Semester: Fall 2022 Year: 2022

6. Projected Revenue and Expenditure Summary:

Provide information for the 5th year after program change approval if a baccalaureate or doctoral degree program; for the 3rd year after program approval if a master's or associate degree program; or for the 2nd year after program approval if a graduate or undergraduate certificate. If information is provided for another year, specify () and explain in the program summary attached. Note that revenues and expenditures are not always entirely new; some may be current (see 7d.)

Projected Annual Revenues in FY25		Projected Annual Expenditures in FY25	
Unrestricted		Salaries & benefits (faculty and staff)	$ 30,500.00
General Fund		Other (commodities, services, etc.)	
Student Tuition & Fees	$ 91,164.00	**TOTAL EXPENDITURES:**	$ 30,500.00
Indirect Cost Recovery		One-time Expenditures to Initiate Program (if >$250,000)	
TVEP or Other (specify):		(These are costs in addition to the annual costs, above.)	
Restricted		Year 1	
Federal Receipts		Year 2	
TVEP or Other (specify):		Year 3	
TOTAL REVENUES	$ 91,164.00	Year 4	

Page # of attached summary where the budget is discussed, including initial phase-in: 9, 11

7. Budget Status. Items a., b., and c. indicate the source(s) of the general fund revenue specified in item 6. If any grants or contracts will supply revenue needed by the program indicate amount anticipated and expiration date, if applicable.

Revenue source	Continuing	One-Time
a. In current legislative budget request		
b. Additional appropriation required		
c. Funded through new internal UA university redistribution		
d. Funds currently committed to the program[1]		
e. Funded all or in part by external funds, expiration date		
f. Other funding source (specify type):		

8. Facilities. New or substantially (>$25,000 cost) renovated facilities will be required. ☐ Yes ✓ No

If yes, discuss the extent, probable cost, and anticipated funding source(s), in addition to those listed in sections 6 and 7 above.

9. Projected Enrollments (headcount of majors). If this is a program discontinuation request, project the teach-out enrollments.

Year 1: 5 Year 2: 10 Year 3: 15 Year 4: 20

Page number of attached summary where demand for this program is discussed:	5

10. Number2 of new TA or faculty hires anticipated (or number of positions eliminated if a program discontinuation):		**11. Number2 of TAs or faculty to be reassigned:**	
Graduate TA		Graduate TA	
Adjunct		Adjunct	
Term		Term	
Tenure track		Tenure track	
		Former assignment of any reassigned faculty:	
		For more information see attached summary page:	

12. Other programs affected by the proposed action, including those at other campuses (please list):

Program Affected	Anticipated Effect
UAF CS BS	Increased enrollment in shared courses.

Page number of attached summary where effects on other programs are discussed: 5-6

13. Specialized accreditation or other external program certification needed or anticipated. List all that apply or	**14. Aligns with University or campus mission, goals, core themes, and objectives (list):**	
n/a	Educate, Prepare, Research, Connect, Engage	
	Page in attached summary where alignment is discussed:	7
15. State needs met by this program (list):	**16. Program is initially planned to be: (check all that apply)**	
Alaskan software developers.	Available to students attending classes at campuses	✓
	Available to students via e-Learning	✓
	Partially available to students via e-Learning	
	Page # in attached summary where e-Learning is discussed:	3

17. If this program is an addition, would program be eligible for State's Eligible Training Provider List program?

Yes ☐ No ☐ (Click here for more information)

Submitted by:	DocuSigned by: Anupma Prakash C64F280FC864A7... Chancellor/Provost	April 26, 2022 Date:
Consensus support of AC	☒ Not supported by AC ☐	
Recommend **approval** by VPASR		Date: 4/26/22
Recommend **disapproval** by VPASR		Date:

2Net FTE (full-time equivalents). For example, if a faculty member will be reassigned from another program, but his/her original program will hire a replacement, there is one net new faculty member. Use fractions if appropriate. Graduate TAs are normally 0.5 FTE. The numbers should be consistent with the revenue/expenditure information provided.

Attachments: ☐ Summary of Degree or Certificate Program Proposal ☐ Other (optional)

Updated January 2020

ftnref1

MOTION:

The UAF Faculty Senate moves to approve the Computer Science, Bachelor of Arts.

EFFECTIVE: Fall 2022, upon all approvals

RATIONALE: Currently, the only bachelor's degree in CS at UAF is a bachelor of science, an ABET-accredited degree program with enough required math coverage that students at graduation have enough math courses for a math minor.

Adding this bachelor of arts degree would broaden access to the CS degree for students who have other interests, such as in linguistics, languages, humanities, or art. While retaining rigorous C++ programming, we have removed most of the upper-division math requirements in the BA pathway to make space for the required 15-credit minor complex in a bachelor of arts degree.

Calculus, particularly Calculus II, has been identified as a key impediment to women pursuing STEM careers (Ellis et al, 2016 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0157447). Offering the minimal-calculus degree path of the BA may help improve the gender ratio in CS.

In the long run, the many courses shared between the BS and BA will keep both programs strong. It should also help keep our MS program sustainable, and a BA/MS accelerated program should be possible in the future.

****

DocuSigned by:
Sandra J Wildfeuer
Sandra Wildfeuer, UAF Faculty Senate President

The Chancellor: X Approves _____ Vetoes _____ Acknowledges

DocuSigned by:
Daniel M. White
Daniel M. White, UAF Chancellor

Date: April 6, 2022

: COMPUTER SCIENCE, BACHELOR OF ARTS

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In Workflow

1. CS Chair (jdgenetti@alaska.edu)
2. EM Curriculum Chair (swkim@alaska.edu)
3. EM Dean (weschnabel@alaska.edu)
4. Faculty Senate Coordinator (jjruge@alaska.edu; aclindsoe@alaska.edu)
5. UCRC Admin (pwestley@alaska.edu; zjones@alaska.edu; aclindsoe@alaska.edu; rhpike2@alaska.edu)
6. UCRC Sort (rhpike2@alaska.edu; jjruge@alaska.edu; aclindsoe@alaska.edu)
7. CRC Team A1 (pdoak@alaska.edu)
8. Undergrad Curriculum Committee Chair (pwestley@alaska.edu; zjones@alaska.edu)
9. Faculty Senate President (sjwildfeuer@alaska.edu)
10. Provost (aprakash@alaska.edu)
11. Chancellor (aclindsoe@alaska.edu)
12. Registrar (wmearnest@alaska.edu)
13. Registrar Processing (jjruge@alaska.edu; rhpike2@alaska.edu; slbarber2@alaska.edu)

Approval Path

1. Sat, 06 Nov 2021 04:17:39 GMT
   Jon Genetti (jdgenetti): Approved for CS Chair
2. Sat, 20 Nov 2021 06:07:12 GMT
   Sun Kim (swkim): Approved for EM Curriculum Chair
3. Sat, 20 Nov 2021 23:58:50 GMT
   William Schnabel (weschnabel): Approved for EM Dean
4. Mon, 22 Nov 2021 22:51:39 GMT
   Ashley Lindsoe (aclindsoe): Approved for Faculty Senate Coordinator
5. Tue, 23 Nov 2021 18:49:10 GMT
   Zoe Marie Jones (zjones): Approved for UCRC Admin
6. Tue, 23 Nov 2021 18:58:11 GMT
   Renee Pike (rhpike2): Approved for UCRC Sort
7. Tue, 30 Nov 2021 14:56:18 GMT
   Patricia Doak (pdoak): Approved for CRC Team A1
8. Tue, 30 Nov 2021 22:27:11 GMT
   Zoe Marie Jones (zjones): Approved for Undergrad Curriculum Committee Chair
9. Wed, 01 Dec 2021 19:19:46 GMT
   Janeen Culbertson (jjruge): Rollback to Undergrad Curriculum Committee Chair for Faculty Senate President
10. Mon, 13 Dec 2021 22:38:49 GMT
    Zoe Marie Jones (zjones): Approved for Undergrad Curriculum Committee Chair

New Program Proposal

Date Submitted: Sat, 06 Nov 2021 00:30:00 GMT

Viewing: : Computer Science, Bachelor of Arts

Last edit: Thu, 25 Nov 2021 01:55:50 GMT by Patricia Doak

Changes proposed by: oslawlor

Please select Major Change if you are changing any courses in the Program Requirement section. Answering the question incorrectly could result in the curriculum being returned to you. Please click the Help bubble for more information.

Faculty Contact(s)

Name	Phone	Email
Dr. Orion Lawlor	907 474-7678	oslawlor@alaska.edu

Academic Level
Undergraduate

Effective Catalog
2022 - 2023

Department
Computer Science

College
College of Engineering and Mines

Certificate or Degree Type
Bachelor of Arts (BA)

Program Title
Computer Science, Bachelor of Arts

Abbreviated Program Title
B.A., Computer Science

Program Code

Brief Program Statement
Computer science is the study of software development, information handling, and their application to the problems of the world. Computing is widely used in support of science, engineering, business, law, medicine, education and the social sciences, and offers abundant employment opportunities.

The B.A., B.S. and M.S. degrees follow the recommendations of the Association for Computing Machinery and the Institute for Electrical and Electronic Engineers. The B.S. degree is accredited by the Computing Accreditation Commission of ABET.

The computer science undergraduate program introduces the fundamentals of computer programming, hardware and theory. It emphasizes the application of general principles to real-world problems. The B.S. degrees provide students deep mathematical abilities to analyze of the meaning and efficiency of programs; while the B.A. is designed to provide students a broader background in uses of the technology. Combining solid fundamentals with modern technology enables graduates to not only make full use of today's computers, but to help build the future.

Minimum Requirements for Computer Sciences Degrees: B.S.: 120 credits; B.A.: 120 credits; B.S./M.S.: 141 credits

Learn more about the bachelor's degree in computer science (https://uaf.edu/academics/programs/bachelors/computer-science.php), including an overview of the program, career opportunities and more.

Learn more about the bachelor's/master's degree in computer science (https://uaf.edu/academics/programs/bachelors/computer-science-bs-ms.php), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Computer Science (https://www.cs.uaf.edu/)
907-474-2777

Admissions Requirements
Students are ready to declare a BA in CS when they successfully pass CS 103 or place into math at the F122X or F151X level.

Requirements for the Degree (catalog layout copy of the program)

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Science B.A.: 120 credits

Code	Title	Credits
General University Requirements		
Complete the general university requirements. (http://catalog.uaf.edu/bachelors/)		
General Education Requirements		
Complete the general education requirements. (http://catalog.uaf.edu/bachelors/general-education-requirements/)		
B.A. Degree Requirements		
Complete the B.A. degree requirements. (http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofartstext)		
As part of the B.A. degree requirements, complete:		
MATH F230X	Essential Calculus with Applications	3-4
or MATH F251X	Calculus I	
STAT F200X	Elementary Statistics	3
or STAT F300	Statistics	

Computer Science Program Requirements

CS F201	Computer Science I	3
CS F202	Computer Science II	3
CS F241	Computer Hardware Concepts	4
CS F301	Assembly Language Programming	3
CS F311	Data Structures and Algorithms	3
CS F321	Operating Systems	3
CS F331	Programming Languages	3
CS F371	Computer Ethics and Technical Communication	3
CS F372	Software Construction	3
CS F441	System Architecture	3-4
or EE F443	Computer Engineering Analysis and Design	
CS F471	Senior Capstone I [1]	3
CS F472	Senior Capstone II [1]	3
Electives in computer science at the F300 or F400 level, or approved electives.		12

[1] Fulfills the baccalaureate capstone requirement.

Sample course of study and a 3-Year Cycle of course offerings

Program Goals

Brief identification of objectives and subsequent means for their evaluation

Relationship of program objectives to "Purposes of the University"

Occupational/other competencies to be achieved

Relationship of courses to the program objectives

Personnel directly involved with program

Enrollment Information

Projected enrollment/present enrollment

How was projected/present enrollment determine? Who was surveyed and how?

Minimum Enrollments to maintain program for years 1, 2, 3, 4 and 5
Year 1
Year 2
Year 3
Year 4
Year 5

Maximum enrollment which program can accommodate

Are there special restrictions on enrollments?

What are the special restrictions?

Need for Program

Required for other programs?
No

In what way is the program required? How has this requirement been met to date?

Employment Market Needs:

Who surveyed? How?

Data below is from the US Bureau of Labor Statistics, https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm

Job opportunities, including how these predictions were determined.

Now

The Bureau of Labor Statistics lists the median base pay in 2020 for software developers as $110,140 per year, for bachelor's level positions. The annual predicted 189,200 national openings reflects the huge demand for software by nearly every sector of our society.

Within Alaska, BLS's May 2020 estimate was for 510 computer programmers and 360 software developers, which assuming even a 5% turnover rate would allow in-state positions for 40+ graduates, corresponding to hundreds of majors. https://www.bls.gov/oes/2020/may/oes_ak.htm

Two years from now

We expect the need for software to continue, even in the post-COVID era as we return to face-to-face operations.

Demand for software seems sufficiently elastic that we will not saturate the market for software developers and computer programmers soon.

Five years from now

The use of software beyond traditional STEM fields is growing, and we expect this to continue.

Ten years from now

The Bureau of Labor Statistics estimates the job category of software development will grow by 22% from 2020 to 2030, from a base of 1.8 million current jobs.

How have positions been filled to date?

UAF has produced CS BS students for at least three decades. Many software development and computer programming jobs are still currently filled by people from out of state, or without a bachelor's degree. Adding a UAF BA in CS will provide more access to qualified Alaskan graduates.

Resource Impact

Budget

BOR Resource Commitment Form_ CS BA-wes.pdf (http://catalog.uaf.edu/courseleaf/archive/programadmin/384/1/BOR%20Resource%20Commitment%20Form_%20CS%20BA-wes.pdf)

Facilities/Space Needs

All existing CS major courses are shared between the BS and BA except for CS 411, which is required for the BS and would count as an elective for the BA. These courses are all taught regularly, so the primary impact would be potentially larger classrooms needed for the additional BA students.

Credit Hour Production

We expect substantial additional credit hour production from the new BA students, both within CEM and across the campus. Existing CS BS majors produce 11.8 CEM SCH per year (FY19 data).

Faculty

All existing CS major courses are shared between the BS and BA except for CS 411, which is required for the BS and would count as an elective for the BA, hence these courses can be taught using existing faculty teaching resources. We expect only a small additional need for faculty time to handle recruiting, advising, and program assessment for the new BA program.

Library/Media Materials, Equipment and Services

No substantial impacts expected.

Relation of Program to other Programs within the System

Effects on enrollments elsewhere in the system

We expect a small number of current CS BS students may switch to a BA degree, but primarily students who would have never applied, or dropped out after failing math courses will be able to stay at UAF and build skills in their chosen career. (We expect increased enrollment by improving recruiting and retention, not by taking students from existing programs.)

Does it duplicate/approximate programs anywhere in the system?

Yes

What is the justification for the duplication?

This program is modeled after UAA's BA in CS program, and is designed to bring the UAA and UAF computer science offerings closer to alignment. This change would give UAF students the same opportunities available at UAA.

UAA and UAF CS have shared institution-leading numbers of courses between the departments, and have a productive working relationship.

How does the program relate to research or service activies? Contributions to research or service. Benefits from research or service activities.

Our existing CS undergraduates contribute to a variety of research and service projects across campus: Due to the widespread need for programming support on many projects, current CS undergraduates work as research assistants for OIT, INE, ACEP, GI, ASF, and several other research and service groups on campus. Our BA degree would expand both the number and variety of skills and interests in our students.

Implementation/Termination

Plans for recruiting students

Plans for phasing out program if it proves unsuccessful

Assessment of the program

Attach SLOA Plan

CS SLOA Plan BA 2021.pdf (http://catalog.uaf.edu/courseleaf/archive/programadmin/384/1/CS%20SLOA%20Plan%20BA%202021.pdf)

Regents Guidelines

Upload Program Action Request Form

BOR Program Action Request_ CS BA - Sheet1.pdf (http://catalog.uaf.edu/courseleaf/archive/programadmin/384/1/BOR%20Program%20Action%20Request_%20CS%20BA%20-%20Sheet1.pdf)

Prospectus

Upload Prospectus Document(s)

Prospectus CS BA (1).pdf (http://catalog.uaf.edu/courseleaf/archive/programadmin/384/1/Prospectus%20CS%20BA%20(1).pdf)

Rationale

Currently, the only bachelor's degree in CS at UAF is a bachelor of science, an ABET-accredited degree program with enough required math coverage that students at graduation have enough math courses for a math minor.

Adding this bachelor of arts degree would broaden access to the CS degree for students who have other interests, such as in linguistics, languages, humanities, or art. While retaining rigorous C++ programming, we have removed most of the upper-division math requirements in the BA pathway to make space for the required 15-credit minor complex in a bachelor of arts degree.

Calculus, particularly Calculus II, has been identified as a key impediment to women pursuing STEM careers (Ellis et al, 2016 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0157447). Offering the minimal-calculus degree path of the BA may help improve the gender ratio in CS.

In the long run, the many courses shared between the BS and BA will keep both programs strong. It should also help keep our the MS program sustainable, and a BA/MS accelerated program should be possible in the future.

Additional Information

Supporting Documents

Reviewer Comments

Prospectus for Computer Science (CS) Bachelor of Arts (BA) Degree Program

University of Alaska Fairbanks

A. Mission and Goals:

The goal of the CS BA program is to broaden access to the modern technical skills of our existing successful computer science bachelor's, particularly for students with interests beyond mathematics.

Relating to UAF's core themes, the BA matches best with Educate, giving students a bachelor's degree and the underlying technical skills. BA students will also be able to assist with Research, both undergraduate and after graduation. BA students will thus be Prepared for the modern workforce. BA students will Connect and Engage with Fairbanks during the course of the degree.

B. Authorization:

The University of Alaska Fairbanks (UAF) is one of four individually accredited universities within the University of Alaska system. UAF has been continuously accredited since 1934 by the Northwest Commission on Colleges and Universities.

The Constitution of the State of Alaska establishes the University of Alaska as the state university, governed by a Board of Regents appointed by the governor. Alaska Statutes provide for a board of eleven voting members, including one student, with authority to carry out the mission of the university system and its constituent units, including the determination and regulation of the university's course of instruction and the conferring of degrees. Members of the board have no contractual, employment, or financial interest in the university. The chair is elected from among the board. The board appoints the president of the university system, who in turn appoints the chancellor of UAF. Both officers are full-time employees whose only responsibility is to the institution

C. Educational Offerings:

1. Descriptive information of the educational offering(s):

Minimum Requirements for Computer Science B.S.: 120 credits

CODE	TITLE	CREDITS
General University Requirements		
Complete the general university requirements.		
General Education Requirements		
Complete the general education requirements.		
B.A. Degree Requirements		
Complete the B.A. degree requirements.		

As part of the B.A. degree requirements, complete:		
MATH F230X	Essential Calculus with Applications	3-4
or MATH F251X	Calculus I	
STAT F200X	Elementary Statistics	3
or STAT F300	Statistics	
Computer Science Program Requirements		
CS F201	Computer Science I	3
CS F202	Computer Science II	3
CS F241	Computer Hardware Concepts	4
CS F301	Assembly Language Programming	3
CS F311	Data Structures and Algorithms	3
CS F321	Operating Systems	3
CS F331	Programming Languages	3
CS F371	Computer Ethics and Technical Communication	3
CS F372	Software Construction	3
CS F441	System Architecture	3-4
or EE F443	Computer Engineering Analysis and Design	
CS F471	Senior Capstone I [1]	3
CS F472	Senior Capstone II [1]	3
Electives in computer science at the F300 or F400 level, or approved electives.		12

Briefly:

- We include limited coursework in mathematics up to calculus level, which students use to understand program runtime costs, and statistics for understanding the results of controlled experiments despite randomness.
- CS 201 (Computer Science I), 202 (Computer Science II), and 311 (Data Structures and Algorithms) are an introduction to professional-quality computer programming in C++, starting from simple loops and progressing to templated data structures.
- The computer architecture sequence of CS 241 (Computer Hardware Concepts) covers boolean logic and introduces students to gate-level circuit understanding of computer operation, continued in CS 301 (Assembly Language Programming) with machine code and assembly language and how they relate to performance, and CS 441 (Computer Architecture) with high performance parallel hardware.
- Topic-specific courses in CS 321 (Operating Systems and security), 331 (Programming Languages), and 371 (Ethics & Technical Communication) cover these key aspects of modern development.
- Finally, during the capstone sequence of CS 372 (Software Construction), 471 (Capstone I), and 472 (Capstone II) students demonstrate complex end-to-end software development including working with customers, being productive in multi-developer teams, testing, and prioritizing, debugging, and delivering features.

Since the COVID era, we have offered distance options for all our courses, normally synchronous lecture capture for both in-classroom and distance students around the state.

2. Evidence of approval by the appropriate academic policy body of the institution:

Senate signature page and BOR approval from the minutes will be provided by the Office of the Provost.

D. Planning:

1. Evidence of need for the change and the students to be served:

Currently, the only bachelor's degree in CS at UAF is a bachelor of science, an ABET-accredited degree program with enough required math coverage that students at graduation have earned enough math courses (15 credits) for a math minor.

In the CS department we have seen students who excel at software development repeatedly fail at these advanced mathematics courses, particularly the detailed trigonometric transforms required in calculus II. Some sub-disciplines of computer science, such as algorithm analysis or physics simulation, make extensive use of mathematics, but minimal mathematics are used in other areas like visual simulation or user interface design.

Adding this bachelor of arts degree would broaden access to the CS degree for students who have other interests than math, such as in linguistics, languages, humanities, or art.

2. The procedures used in arriving at the decision to change[1]:

For years, the UAF CS department has discussed meeting the student demand for a less math-focused pathway to a CS bachelor's degree. This proposal began at the department due to faculty discussions, and went up through CEM and faculty senate as normal.

3. **The organizational arrangements that must be made within the institution to accommodate the change[2]:**

   No organizational changes are required--the BS and BA will be housed in the existing CS department, using our existing department and faculty.

4. **Timetable for implementation[3].**

   Since all required courses are already offered for the BS, we can start BA students immediately. We expect a few existing BS students to switch to the BA immediately to enable them to pursue their existing interests, such as a minor in linguistics or languages.

E. Budget:

1. **The budget projections (revenue and expenditures) for each of the first three years of operation:**

   We do not anticipate requiring any new courses, so this is primarily a paperwork change.

   We do budget 0.2 FTE faculty time to create the program, recruit and advise students, assess the courses, and cover additional course sections such as expanded elective offerings to meet the increased enrollment. This may also be needed for some new courses, in the contingency that BA students need an additional prerequisite course developed and taught, such as a non-Calculus discrete math.

2. **Revenue and expenditures associated with the change itself:**

   Assuming we are able to recruit 5 net students per year, the financials are as follows, based on measured average FY19 CS BS data of 11.8 SCH per declared major, measured FY19 CEM revenue of $386 per SCH, and our 0.2 FTE estimate above times a fully-loaded new faculty salary and benefits. (Uncertainties are large: no number in this table has more than one significant figure.)

Year (fall)	CS BA majors	CEM SCH	CEM Revenue	CEM Expenditures
2022	5	59	$22,786	$30,500
2023	10	118	$45,572	$30,500
2024	15	177	$68,358	$30,500
2025	20	236	$91,144	$30,500

3. **Institutional financial support to be reallocated to accommodate the change:**

   No external financial changes are needed.

4. The budgetary and financial implication of the change for the entire institution:

Assuming we can recruit and retain these new students, this is a clear net financial benefit to CEM. The financial benefit to the institution as a whole is even higher, since these students will take their GER and BA minor courses in other departments. Since these students will be available to provide technical expertise in these other departments, there are also non-financial benefits to the institution.

This program is modeled after UAA's BA in CS program, and is designed to bring the UAA and UAF computer science offerings closer to alignment. This change would give UAF students the same opportunities available at UAA. Most students appear to prefer taking courses from their local institution rather than moving or taking courses from another city via distance, so we do not expect to impact UAA's enrollment with this change.

In general we expect increased enrollment by improving recruiting and retention, not by taking students from existing programs, so impacts on other programs should be almost exclusively positive. In particular, synergy from BS and BA student enrollment in CS major courses should allow us to offer more sections and more electives, expanding choices for all students.

F. Student Services:

Additional students will need incremental additional services, but nothing unique to this change.

G. Physical Facilities:

The CS department's space in Duckering has been recently renovated, and is sufficient for the increased student enrollment.

H. Library and Information Resources:

No significant budget impact expected.

I. Faculty and Staff:

Existing faculty and staff support should be sufficient, assuming the replacement of any departing faculty.

RESOURCE COMMITMENT TO THE PROPOSED CEM CS BA DEGREE PROGRAM

Resources	Existing	New		Total
	College/School	College/School	Others (Specify)	
Regular Faculty (FTE's & dollars)	0	0.2 FTE $30,500 (fully loaded)		$30,500
Adjunct Faculty (FTE's & dollars)	0	0		
Teaching Assistants (Headcount)	0	0		
Instructional Facilities (in dollars and/or sq. footage)	0	0		
Office Space (Sq. footage)	0	0		
Lab Space (Sq. Footage)	0	0		
Computer & Networking (in dollars)	0	0		
Research/ Instructional/ office Equipment (in dollars)	0	0		
Support Staff (FTE's & dollars)	0	0		
Supplies (in dollars)	0	0		
Travel (in dollars)	0	0		

Signature William E. Schrader 11/5/2021

Dean of College/School Proposing New Degree Program Date