

PROPOSAL TO DISCONTINUE A DEGREE PROGRAM

DEANS: Send this completed proposal electronically in Word to the Office of the Provost:
provost.deg.changes@wsu.edu

Degree Title:	Bachelor of Arts, Computer Science
Academic Program:	Computer Science, BA
Academic Plan:	Computer Science BA
Number of Credits:	120
Department(s) or Program(s):	Bachelor of Arts, Computer Science
College(s):	Voiland College of Engineering and Architecture
Campus(es):	Pullman, Tricities

Contact Name:	Paul Wilmoth,	Email Address:	paul.wilmoth@wsu.edu
Contact Phone:	509-335-6736	*Proposed start date:	January 1, 2023

Rationale for discontinuing the degree:
<p>The Bachelor of Arts in Computer Science (BACS) is being discontinued for several reasons listed below.</p> <p>- The BA CS does not serve its intention: The intention behind the BA CS when it was devised was that students would apply the knowledge they gain from CS in another domain: "The BA degree is designed for multi-disciplinary students who wish to learn the basics of computer science and apply it to a different field. A minor in another area, such as art, biochemistry, music, psychology, architecture, etc., is encouraged."</p> <p>Very few students however declare a minor in another domain. Instead, the BA CS seems to have become an escape path for students struggling with the Bachelor of Science in Computer Science (BS CS) major:</p> <ul style="list-style-type: none"> - For example, in Spring 2022, only 1 student is pursuing an additional major with the BA CS, and only 4 students are doing a minor with the BA CS. - There seems to be a steep decline in the number of students earning a minor going from 2020 to 2021. - The shift from the certification process to direct admit seems to have decreased the total number of students that have expressed academic interest in the BA CS major. <p>- Enrollment numbers remain low about 50-60 active students each year between Pullman and Tri-Cities with Tri-Cities generally the reason for the fluctuations. When non-enrolled students are removed from this list those numbers are even lower, for example for Spring 2022 we only have 48 actual BACS students between Pullman and Tri-Cities but from those only 33 are active (23 in Pullman, 10 in TriCities). The remaining 15 students are either not calculus ready or have a GPA below 2.5.</p> <p>- Overall, BA CS students don't perform well in upper-division CS courses that are heavy in programming (for example CptS 355, CptS 321, CptS 360). BA CS requires fewer math and programming courses requirements and they are not well prepared for succeeding in 300x and 400x courses.</p> <ul style="list-style-type: none"> - BA CS students repeat those programming heavy upper-division CS courses more frequently and have a lower success rate compared to BS CS students.

- The GPA of BA CS students is on average 0.2 lower than the GPA of BS CS students if we look at data from the last 5 years.

- The cost of maintaining the program is high in terms of assessment, accreditation, advising, and keeping the major consistent with other majors in the department.

- For instance, about half of the assessment resources come from the BA in CS as due to the low numbers all students (rather than a sample) are assessed each year.

- Recently, ABET revised the BA CS program requirements and we had to make changes in our BA curriculum to meet these. With these changes, BS CS and BA CS programs became very similar which brings us again to the first point regarding the intent of the program and the fact that very few students apply the knowledge they gain to other domains.

Students interested in gaining fundamental technical skills in Computer Science or Software Engineering will still be able to do so. They will be advised to take a minor in those domains.

Implications for currently enrolled students (how many)? Attach teach out plan.

We have a total of 65 students currently enrolled in the program. Of these, 45 students have been admitted to the major and 20 students with academic interest in the program. In addition, we have 23 students who are not currently enrolled in the program. The following table provides a breakdown by campus.

STUDENTS IN BA CS PROGRAM (Fall 2022)			
Academic Plan Type by Campus	Not Enrolled	Enrolled	Grand Total
Admitted to Major - BA CS	5	45	50
PULLM	3	40	43
TRICI	2	5	7
Academic Interest - BA CS	18	20	38
PULLM	12	16	28
TRICI	6	4	10
Grand Total	23	65	88

Due to the similarity between BACS and BSCS programs and confusion over the distinction between a BA versus a BS, many students transition from BA CS to BS CS after their first year. We anticipate the number of students with academic interest to significantly decrease at the end of Fall.

Students currently enrolled in the program will be advised to complete their requirements in the Bachelor of Science in Computer Science degree program (BSCS). As noted in the Rationale section, recent revisions to the BACS program requirements, prompted by program accreditation by ABET, have made it very similar to that of the BSCS program--the BSCS program. We have attached a quick comparison chart between the requirements of the BACS and BSCS programs. It is evident from the comparison chart that the BACS students should find it easy to transition to the BSCS program. Moreover, all the required courses in the BACS major (CptS prefix courses) are also required for the BSCS major. Therefore, the discontinuation of the BACS program will not result in a change to course CptS offerings--i.e., the teach out plan would simply be to continue offering CptS courses as we currently are. A currently enrolled student who does not transition to the BSCS program will be able to complete the BACS program within 4-5 years from the date of discontinuation of the program.

Attach teach out plan

Impact on or responses of current faculty and staff:

This will not have an adverse impact current faculty and staff since they are and will continue to teach and support students in the Bachelor of Science in Computer Science program offered by the School of Electrical Engineering and Computer Science. Indeed, this will have a positive impact on staff as it will constitute a considerable administrative time savings not having to provide upkeep on the program and save advising time not having to explain the difference to first year or students going through admissions.

Impact on or responses of other degree programs, departments, colleges or campuses:

Discontinuation of the BACS program will not impact other degree programs, departments, or colleges. The program is currently offered in Pullman and Tricities campuses and will be discontinued in both locations.

Impact on or responses of other stake holders (e.g., advisory or alumni groups):

The advisory board members were supportive of discontinuing the BACS program.

SIGNATURES: The names typed below certify that the relevant academic and campus officials have reviewed and approved this proposal:

Chair Signature:	Dr. Partha Pande	Date:	
Chair Signature	Dr. Changki Mo	Date:	

Dean Signature:	Dr. Mary Rezac	Date:	
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→ Submit to the Provost’s Office at provost.deg.changes@wsu.edu

Everett Chancellor	Dr. Paul Pitre	Date:	
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Spokane Chancellor	Dr. Daryll B. DeWald	Date:	
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Tri-Cities VCAA	Dr. Kathleen McAteer	Date:	
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Vancouver VCAA	Dr. Renny Christopher	Date	
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VP Global Campus	Dr. David R. Cillay	Date:	
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Provost Office:		Date:	
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Comments:

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Send completed form in Word version to: provost.deg.changes@wsu.edu

Approvals from campus leadership to discontinue the BA in Computer Science:

From: Sivakumar, K. <siva@wsu.edu>

Sent: Friday, September 23, 2022 12:10 PM

To: Mo, Changki <changki.mo@wsu.edu>; Pande, Partha Pratim <pande@wsu.edu>; Rezac, Mary <mary.rezac@wsu.edu>

Subject: Discontinuation of BA Computer Science Program

Dear Mary, Partha, Changki:

Attached is the proposal to discontinue the BA Computer Science program. It includes rationale based on recommendation from the Computer Science curriculum committee (made of faculty from Pullman and TC). It also has details/options for students currently in the program.

An attachment comparing the BS and BA degrees in Computer science is also included. This shows the similarity between the two programs (how students could transition from BA to BS) as well the impact it would have on teaching out the BA coursework for students currently enrolled (essentially, we just continue offering the courses for the BS program since no CptS course is offered exclusively for the BA program).

If you have any questions or have edits, please let me know. Otherwise please send me your approval by replying to this email. Once I get approvals from the three of you, I will gather email approvals from the different campus administrators and submit to the Provost.

Thanks,
Siva

Hi, Siva—I have no concerns regarding this proposal—you have my approval.

Renny

Hello Siva,

Thank you for following up. I don't have any questions on the discontinuation of the BACS degree. Thanks for checking.

All the best,

Paul

Paul E. Pitre, Ph.D.
Chancellor

WSU Everett
Office: (425)405-1712

I approve.

Partha



Partha Pratim Pande, FIEEE

Director and Professor
Boeing Centennial Chair in Computer Engineering
School of EECS, WSU
Voiland College of Engineering and Architecture
Washington State University
Office: 509-335-5055
Email: pande@wsu.edu

Siva,
There is no concern from Global. Thank you

Dave

Hi Siva,

I approve it.
Thanks,

Changki

Siva,

No concerns from health sciences.

Daryll



Daryll B. DeWald, Ph.D.

Vice President, Health Sciences
Chancellor, WSU Spokane
Washington State University
Office: 509-358-7521

Email: daryll.dewald@wsu.edu
spokane.wsu.edu

From: McAteer, Kathleen <kmcateer@wsu.edu>

Sent: Tuesday, September 27, 2022 8:34 AM

To: Sivakumar, K. <siva@wsu.edu>; Pitre, Paul E <pep@wsu.edu>; DeWald, Daryll B <daryll.dewald@wsu.edu>; Christopher, Renny <renny.christopher@wsu.edu>; Cillay, David R <dcillay@wsu.edu>

Cc: Rezac, Mary <mary.rezac@wsu.edu>

Subject: Re: Discontinuation of BA Computer Science Degree Program

Good morning Siva,

On behalf of the School of Engineering and Applied Sciences at WSU Tri-Cities, I approve this proposal.

Kate



Kathleen (Kate) McAteer

VICE CHANCELLOR
Academic and Student Affairs
Washington State University Tri-Cities
Office: 509-372-7371

Email: kmcateer@wsu.edu

BA Computer Science vs BS Computer Science Course Comparison Chart

Differences Highlighted

	BA Computer Science	BS Computer Science	
No Difference	UCORE COURSES	UCORE COURSES	No Difference
	[ARTS]	[ARTS]	
	[DIVR]	[DIVR]	
	ENGL 101 [WTNG]	ENGL 101 [WTNG]	
	ENGL 402 [WTNG][M]	ENGL 402 [WTNG][M]	
	HIST 105 [ROOTS]	HIST 105 [ROOTS]	
	[HUM]	[HUM]	
	[SSCI]	[SSCI]	
- Math + Science	MATH AND SCIENCE REQUIREMENTS	MATH AND SCIENCE REQUIREMENTS	+ Math - Science
	MATH 171 [QUAN]	MATH 171 [QUAN]	
	MATH 172	MATH 172	
	MATH 216	MATH 216	
	MATH 220	MATH 220	
		MATH 273 or 301	
	PHIL 201	PHIL 201	
	PHYSICS 101/111, 201/211, CHEM 101, 105, or BIOLOGY 106*	PHYSICS 201/211 [PSCI]	
	PHYSICS 102/112, 202/212, CHEM 102, 106, or BIOLOGY 107*	PHYSICS 202/212	
	STAT 212 OR 360	STAT 360	
	[BSCI] or [PSCI] w/ LAB*	[BSCI] w/ LAB	
	[BSCI] or [PSCI]*		
No Difference	CORE CODING COURSES	CORE CODING COURSES	No Difference
	CPTS 121 or 131	CPTS 121 or 131	
	CPTS 122 or 132	CPTS 122 or 132	
	CPTS 223 or 233	CPTS 223 or 233	
	CPTS 260	CPTS 260	
	CPTS 302	CPTS 302	
	CPTS 317	CPTS 317	
	CPTS 322 [M]	CPTS 322 [M]	
	CPTS 327	CPTS 327	
	CPTS 350	CPTS 350	
	CPTS 355	CPTS 355	
	CPTS 360 or 370	CPTS 360 or 370	
	CPTS 421	CPTS 421	
	CPTS 423 [CAPS]	CPTS 423 [CAPS]	
- 6 Advanced CS	ADVANCED CODING COURSES	ADVANCED CODING COURSES	
	CPTS 315, 415, 451, 471, or 475	CPTS 315, 415, 451, 471, or 475	
		CPTS 321, 422, 443, 479, 481, 484, 487, 489	
		CPTS TECHNICAL ELECTIVE	
		CPTS TECHNICAL ELECTIVE	
	CPTS 300/400 LEVEL	CPTS 300/400 LEVEL	
		CPTS 300/400 LEVEL	
		CPTS 300/400 LEVEL /APPROVED ALT	
		CPTS 300/400 LEVEL /APPROVED ALT	
	ADDITIONAL COURSES**	ADDITIONAL COURSES	- Minor Focus
	MINOR ELECTIVE (Lower Division)		
	MINOR ELECTIVE (Lower Division)		
	MINOR ELECTIVE (Lower Division)		
	MINOR ELECTIVE (Upper Division)		
	MINOR ELECTIVE (Upper Division)		
	MINOR ELECTIVE (Upper Division)		
	38 TOTAL COURSES	38 TOTAL COURSES	

*Need 1 year science series w/ Lab, one additional science w/ Lab and a fourth science; for a combined 4 [BSCI] and [PSCI] w/ 3 Labs and minimum 1 each [BSCI] AND [PSCI].

** Minor recommended, but not required. Students need a minimum of 120 total credits.