

**PROPOSAL TO EXTEND AN EXISTING DEGREE TO  
ANOTHER CAMPUS (PHYSICAL OR GLOBAL)**

**Proposals will only be accepted electronically as a Word document to the Office of the Provost when submitted to [provost.deg.changes@wsu.edu](mailto:provost.deg.changes@wsu.edu)**

Degree Title:	Bachelor of Science in Computer Science
Academic Program:	Computer Science
Academic Plan:	Bachelor of Science in Computer Science
Number of Credits:	120
Department(s) or Program(s):	Electrical Engineering and Computer Science
Campus(es):	Everett
College(s):	Voiland College of Engineering and Architecture
Method of Instructional Delivery:	Classroom and instructional delivery system (Canvas)

Contact Name:	Jacob Murray	Email Address:	<a href="mailto:jamurray@wsu.edu">jamurray@wsu.edu</a>
Contact Phone:	425-405-1735	*Proposed start date:	Spring 2026

***\*Proposed Start Date: Advertising of the proposed degree cannot commence until approved by Washington State University and added to the Northwest Commission on Colleges and Universities (NWCCU) degree catalog. Approval notification will be sent by the Office of the Provost and Executive Vice President.***

**Proposal**

**Mission and Strategic Goals:**

Provide a clear statement of the nature and purposes of the degree extension to a different campus in the context of WSU's mission and strategic plan.
Washington State University (WSU) Everett aims to expand its educational offerings to the Everett campus by extending a Bachelor of Science degree in Computer Science. This initiative is designed to fulfill WSU's mission of providing practical education, fostering scholarly inquiry, and sharing expertise to benefit society. The program will: encourage students and faculty to engage in cutting-edge research and creative activities that address the needs of our local community; provide students in the North Puget Sound region with access to high-quality education in computer science; offer experiential learning opportunities, including internships, research projects, and industry collaborations, to prepare students as future leaders and global citizens; strengthen WSU's role as a leader in advancing quality of life and economic development in the Everett region; and leverage WSU's multi-campus system to provide resources and support for the new program.

**Educational Offerings:**

Describe the degree program, including the total number of credits required. Provide the four-year degree plan (undergraduate) or appropriate plan of study (graduate and professional).
Computer science is a discipline that provides a scientific foundation for computing expertise and skills. The curriculum is geared to provide the fundamental computing concepts derived from mathematics and sciences, and the practical application of these concepts through substantial hands-on course project experiences. The coursework in computer science prepares students for a variety of careers that involve the extensive use of computers. Graduates will have a solid technical background in mathematics and sciences. The program offers courses in a wide variety of topics including theory of computation, design and analysis of algorithms, software engineering, operating systems, computer networks and security, computer graphics, parallel and distributed systems,

artificial intelligence, machine learning, and database systems. The coursework is supplemented by several general purpose computing labs dedicated to computer science students, and specialized labs for courses such as operating systems, software engineering, and computer networking. Option area course sequences allow students to specialize in specific areas such as artificial intelligence, software engineering, data sciences, and computer systems.

The Computer Science degree consists of a total of 120 credits. At WSU Everett, students interested in the Computer Science degree would transfer from a local community college with a Direct Transfer Agreement degree (DTA). As such, a 2-year upper-division course plan for a Computer Science student is shown below. This plan aligns with the majority of course offerings in EECS already available on the Everett campus.

Sample 2-year BS Computer Science plan:

Year 1 (Junior year):

Fall I:

CPT S 101	1
MATH 216	3
CPT S 302	3
CPT S 317	3
CPT S 322	3
STAT 360	3
Total	16

Spring I:

CPT S 327	3
CPT S 350	3
CPT S 355	3
CPT S 360 / 370	4
CPT S Technical Elective I	3
Total	16

Year 2 (Senior year):

Fall II:

CPT S 421	3
CPT S Elective I	3
CPT S Elective II	3
CPT S Technical Elective II	3
CPT S Technical Elective III	3
Total	15

Spring II:

CPT S 423	3
CPT S Elective III	3
CPT S Elective IV	3
CPT S Elective V	3
CPT S Technical Elective IV	3
Total	15

Provide descriptive information regarding the method(s) of instructional delivery (percent face-to-face, hybrid, distance, and/or competency-based).

As discussed above, the majority of courses above are face-to-face local version offerings.

Course(s) currently offered locally (face-to-face): CPT S 101, 302, 317, 322, 327, 350, 355, 360, 370, 415, 421, 422, 423, 426, 455, 487, 583, MATH 216, STAT 360

Course(s) currently offered locally (global campus): CPT S 451, 484

Course(s) proposed to be offered locally (face-to-face): None

Course(s) currently broadcast from Pullman campus: CPT S 321, 425, 427, 434, 437, 440, 453, 471, 489

Course(s) proposed to be broadcast from Pullman campus: CPT S 466 (Optional elective addition, not required for degree completion)

Additionally, there are a variety of face-to-face and broadcast options currently available for the computer science electives.

### **Assessment of Student Learning and Student Achievement\*:**

*\*For graduate programs, please contact the Graduate School before completing this section.*

For undergraduate programs, provide the department's current plan for assessing student learning outcomes and describe how it will be successfully applied at the new location.

To lay a foundation for the successful accreditation of EECS degree programs, and to continuously improve them, the School of EECS engages in a continuous improvement process, in accordance with requirements for ABET accreditation. This process, which is thoroughly documented in the "School of EECS Assessment Manual," collects seven different forms of assessment data:

- Student coursework
- Professional skills discussions
- Senior design teamwork surveys
- Senior exit surveys
- Junior writing portfolio
- Executive Council discussions
- Faculty Retreat discussions

Using systematic and principled processes documented in the Assessment Manual, EECS assesses these data according to a regular schedule, and document the results in an annual report. The results presented in the annual report are organized around the seven data sources listed above. However, as we have a two-year assessment cycle, not all seven items are necessarily discussed in a given year. Note that all assessment data we have collected in recent years are stored in an EECS Assessment archive.

The School of EECS follows this assessment process for its programs across the system, and this process includes the programs that already exist on the Everett Campus (EE, SE, Cyber). Extending the Computer Science degree program would follow an identical approach for both continuous assessment as well as extending the ABET accreditation to the new Everett degree.

For reference, the student learning outcomes for the Computer Science degree include: 1) an ability to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions; 2) an ability to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline; 3) an ability to communicate effectively in a variety of professional contexts; 4) an ability to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles; 5) an ability to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline; 6) an ability to apply computer science theory and software development fundamentals to produce computing-based solutions; 7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

### **Planning:**

Describe plans and include descriptions which provide evidence of:

1. The need for the degree to be extended.

The Seattle region is home to numerous prominent employers in the technology and engineering sectors, making it an ideal location for a Computer Science program. Major companies such as Amazon, Microsoft, Boeing, and T-Mobile are headquartered in the area. These companies, along with tech firms and startups provide ample opportunities for internships, research collaborations, and employment opportunities for graduates. The presence of these industry leaders underscores the demand for skilled computer scientists and the potential for strong industry-academic partnerships. Additionally, with the recent passing of the CHIPS and Science Act in 2022 has significantly boosted the semiconductor industry in the United States. This legislation includes a \$53 billion investment in the U.S. semiconductor manufacturing, research and development, along with tax incentives for capital investments in semiconductor manufacturing. By extending the Computer Science program to Everett, WSU can contribute to the growing demand for skilled professionals in the semiconductor industry, further supported by the CHIPS Act. Additionally, with the recent decision by Washington State legislature to increase BS CS degrees in the state by way of allowing the community colleges to offer baccalaureates, there is a sensitivity to the timing of expanding the traditional Computer Science degree in Everett. This alignment with national priorities enhances WSU's role in driving technological innovation and economic growth.

Additionally, Litecast data suggests that Snohomish, Skagit, and King Counties show strong occupational demand for Computer Science roles, particularly Software Developers, along with Computer Systems Analysts; Computer and Information Systems Managers; and Computer User Support Specialists. Across the three-county region, net demand for Computer Science occupations declined by 2.1% from 2022-2024. However, much of this is being driven by declines within King County. Within the same period, demand for Software Developers grew by 5.7% in Skagit County and by 11.8% in Snohomish County, precisely where the Everett campus is located.

2. The student population to be served.

- Provide realistic justification for the projected FTE.
- How can transfer students articulate smoothly into the program and complete it with approximately the same number of total credits as students who enter WSU as freshmen?
- Please describe specific efforts planned to recruit and retain underrepresented students in this discipline.

Information provided by the Washington State Employment Security Department regarding “Occupations in Demand” demonstrates that occupations requiring a bachelor’s in computer engineering are projected to be in higher demand. The 2017 Washington State Regional Educational Needs Assessment listed computer occupations as highly important according to employers in the region. For example, the “software developers, applications” occupation which requires a bachelor’s degree is projected to have 24,742 average annual openings statewide from 2017-2027. Another example is the “software developers, systems software” occupation. This occupation is projected to be in-demand statewide with estimated annual job opening of 6,071. In a study for WSU Everett, Ruffalo Noel Levitz (RNL) projects these findings as important well into 2031, where occupations related to computer science, will grow in need over 14% on average.

During the 2018-19 school year, 12 community colleges within the WSU-E extended service area graduated 900 students with a transfer associate degree focused on STEM. This was a 7% increase from the previous year, and a 12% increase from 2016. Within Snohomish County for the 2018-19 school year, Edmonds Community College and Everett Community College combined for a total of 192 graduates with a STEM focus. In 2017 the SBCTC and Washington Achievement Council reported that, “the largest supply and demand gap at the baccalaureate level is in computer science and information technology, with the majority of jobs going to software developers, programmers, and systems analysts.” RNL cites that there are over 400,000 individuals who fit the baccalaureate serviceable category in WSU Everett’s regional influence. These are individuals ready to enter the pipeline with high school diplomas and/or some-college-no-degree.

Post-pandemic numbers from SBCTC groups have been difficult to assess given the fluctuations in college attendance. However, Everett Community College graduated over 1,000 associates earning students from 2022-2023 according to SBCTC. Other feeder institutions such as Edmonds, Shoreline, and Skagit all combined for over 1,900 associates earning students in the same timeframe. Of these graduates at these institutions, SBCTC reports that over 150 earned a STEM focused transfer degree. RNL asserts that computer science related degrees are a category one program prioritization for WSU Everett in the region. With related job fields expected to grow over 19% in the coming years, this is a highly sought after degree market. The Education Research & Data Center indicates that over 38% of Washington SAT takers intend on completing a STEM related college major, which was last updated in 2023.

In addition, WSU Everett is a proud education partner of Amazon’s Career Choice Program. Through this partnership, hourly-wage Amazon employees can take advantage of pre-paid tuition to start or continue their education on our state-of-the-art campus. Career Choice is an educational benefit that empowers current Amazon employees to learn new skills for career success at Amazon or elsewhere. We meet individual learners where they are on their education journey through a variety of education and upskilling opportunities, including full college tuition, industry certifications designed to lead to in-demand jobs, and foundational skills such as English language proficiency, high school diplomas, and GEDs. With this, there will be an opportunity for a collaborative pipeline of prospective students taking advantage of this pathway.

Enrollment Projections:

2026-27: 15  
2027-28: 15  
2028-29: 20  
2029-30: 25  
2030-31: 30

Transfer students, especially students transferring from Everett Community College (or other local community colleges), will be well prepared for degree transfer to the Computer Science degree at WSU Everett with a Direct Transfer Agreement (DTA) degree.

Recently, WSU Everett opened the second in the state MESA (Mathematics, Engineering, Science Achievement) center at the University level. Washington MESA provides enrichment and access opportunities to science, technology, engineering, and mathematics (STEM) programs for grades 6 –12 and college students across the state with the goal of increasing representation of historically underrepresented students of color and women in STEM fields. Our programs support students through college and as they prepare for careers in STEM. We provide students with tutoring, specialized courses, mentorship, and supportive networks. Additionally, the large network of community college students completing their two-year STEM degrees through

MESA programs have an opportunity at WSU Everett specifically to continue having these additional supports through their Baccalaureate degree.

**3. Procedures used in arriving at the decision to extend the degree (e.g., consultation with advisory boards, input from industry or employers, commissioned studies, faculty task force, etc.).**

With the confluence of industry and employer feedback, federal legislation through the CHIPS act, input from a WSU Everett commissioned study by RNL, the development of the Amazon Career Choice program, the increased push for BS CS programs in the state by Washington legislation, direct feedback from community college faculty, and internal department and college-level discussions, we arrived at the decision to extend the Computer Science degree to the Everett Campus.

Additionally, with the currently available resources in terms of EECS faculty at WSU Everett, the Computer Science degree implementation will be an extremely low lift.]

**4. Organizational arrangements required within the institution to accommodate the degree extension.**

Currently, Electrical Engineering, Software Engineering, and Cybersecurity programs are offered at WSU Everett.

As of Fall 2025, the additional coursework for offering the BS in Computer Science is now available at WSU Everett. Specifically, the current course offerings available in Everett and broadcast to Everett satisfy the BS in Computer Science degree requirements already. There are a wide range of electives available across the different technical areas including data and information management, software, artificial intelligence and machine learning, scientific and visual computing, and cybersecurity. We would propose offering additional electives where currently local faculty bandwidth or broadcast capabilities allow.]

**5. Lay out a three-year timetable for implementation, including hiring plans, partnership contracts if needed, facilities modification, recruiting, and other elements of implementation. Provide dates for each step.**

Due to the current existing EECS faculty as well as the current existing course offerings on the WSU Everett campus, extension of the Computer Science degree is effectively ready to launch immediately. A focus on recruiting for this new program would happen as soon as program extension and NWCCU approvals would be granted.]

**Budget:**

Attach the Financial Worksheet with five-year FTE, revenue and expenditure projections. Fully account for costs such as staff support, training, library, facilities and so on.

Please describe the funding picture narratively, including funding sources, department, college and/or campus commitments, investments already made, one-time costs, facilities costs (labs, classrooms, offices, telecom, etc.) and library costs.

[No additional funding resources are being requested for this proposal.]

**Student Services:**

Describe the capacity of student support services to accommodate the degree extension at this location. Include a description of admissions, financial aid, advising, library, tutoring, and other services specific to this request.

[Based on current enrollments at the WSU Everett campus. The projected enrollments for this degree program would not impact the student support services currently available.]

Describe the implications of the degree extension for services to the rest of the student body.

[Based on current enrollments at the WSU Everett campus. The projected enrollments for this degree program would not impact any services available to the rest of the student body.]

**Physical Facilities and Equipment:**

Outline the provision(s) made for physical facilities and equipment at the proposed location that will support the program and its projected growth. Include videoconferencing and other technologies that support course delivery, as well as classrooms, labs, and office space.

[No additional facilities or equipment are being requested for this proposal nor its projected future growth. Videoconferencing is available widely in all classroom spaces. The addition and/or restructuring of the proposed elective courses will not impact classroom availability. The additional seats in the courses would be available for medium / large classroom spaces in the WSU Everett building to accommodate additional students in these courses.]

**Library and Information Resources:**

Using the Library Analysis form, describe the availability and adequacy of library and information resources for this degree, degree level, and location. Note plans to address gaps.

As is for all degree programs at WSU Everett, students in the Computer Science degree program would have identical access (book delivery / online libraries access). This level of access is adequate for the Computer Science degree program and its courses.

**Faculty:**

- List the educational and professional qualifications of the faculty relative to their individual teaching assignments.
- List the anticipated sources or plans to secure qualified faculty and staff.

The proposed additional course(s) would be offered by current WSU Everett or WSU Pullman faculty:

CPT S 466: This course is an optional elective that we would like to offer via broadcast by faculty currently teaching the courses in Pullman or by one of WSU Everett’s computer science related faculty locally. If

Computer science related faculty on the Everett campus include: Dr. Bolong Zeng, Dr. Jeremy Thompson, Dr. Linus Lu, Dr. Ishaani Priyadarshini , Prof. Srinivasulu Badri, and Dr. Jacob Murray.

**Impact on Other Locations/Programs:**

Briefly describe any impacts on other WSU programs and locations, and how you came to these conclusions (who was consulted?). If there are potential adverse impacts, describe how these will be addressed. Consider such things as: reallocation of faculty time, reallocation of AOI courses, impact of blended courses, internal competition, “cannibalization” of other programs, curricular effects for other degrees, effects on recruitment markets for other campuses. Indicate how such problems will be addressed for each campus or department affected.

We do not anticipate any impacts to other WSU programs or locations. Consultation was done with the department and college, with the staff and administration at the campus, and with external stakeholders. We believe that typically, students interested in the Everett campus are non-traditional and/or place bound. We are recruiting students directly from local community colleges. Based on feedback from community college faculty as well as prior noted student interest, this degree program would recruit new students who may not have had interest in the Software Engineering or Cybersecurity programs directly. Additionally, the recruited students in Computer Science would help bolster enrollments in courses already on the books in Everett.

**Sustainability:**

What are the plans for continuing the program past 5 years if the goals for enrollment are not met, or other circumstances prevent the execution of the plan described here?

As this degree program will leverage current degree offerings in Everett from EECS, we believe that there would be no significant concerns regarding sustainability if enrollments were not met. Specifically, no new funding is being requested, as the current course offerings, facilities and labs, and support services can handle the increased load introduced by this new degree program.

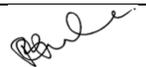
**Attachments:**

- Financial Worksheet
- Demand Analysis
- Library Analysis
- Four-Year Degree Plan (undergraduate); curriculum overview (graduate and professional)
- Letters of financial commitment
- Contracts or MOUs if applicable

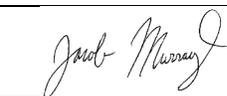
Submit completed form as a Word document to the Provost's Office at [provost.deg.changes@wsu.edu](mailto:provost.deg.changes@wsu.edu)

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

Chair or Director Signature:		Date:	4/21/2025
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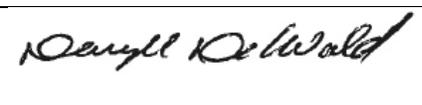
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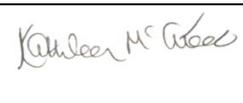
*Signatures are required from all Chancellors (or delegates). A signature denotes endorsement if the degree will be offered and/or impact the respective campus. A signature will also denote receipt of notification if the degree is not being offered and/or will impact the respective campus. If needed, a signature abstention box is provided immediately below.*

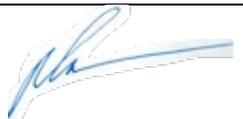
Everett Chancellor Signature:		Date:	2/12/25
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Global Chancellor Signature:	Dave Cillay	Date:	4/21/2025
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Pullman Chancellor Signature:	Dave Cillay	Date:	4/21/2025
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Spokane Chancellor Signature:		Date:	4/24/25
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Tri-Cities Chancellor Signature:		Date:	April 23 <sup>rd</sup> 2025
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Vancouver Chancellor Signature:		Date:	4/24/25
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Comments regarding abstention of signature(s)

Submit completed form as a Word document to the Provost's Office at [provost.deg.changes@wsu.edu](mailto:provost.deg.changes@wsu.edu)

Provost's Office Signature:		Date:	
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For Registrar's Office Use Only:

Current CIP Code:		New CIP Code:		Date:	
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