Career Launch Endorsement Review (CLER) Application

INSTITUTION Whatcom Community College

PROPOSED PROGRAM Associate in Science (AS) - Software Development

PROGRAM LEVEL (CHECK ALL THAT APPLY):

___High school Diploma

___College Certificate

 x College Associate Degree

___College Bachelor Degree

___Industry Recognized Certificate(s)

PROGRAM CIP 11.0201   PROGRAM NAICS CODE 541511

COLLEGES ONLY: PROGRAM EPC (Legacy) 515   PLAN CODE (PeopleSoft)_____

CONTACT INFORMATION

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_____

Chief Academic Officer   Date

Application contact: Scott A. Copeland
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                                Washington State Board for Community and Technical Colleges
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Applications reviewed monthly and are due the first business day of the month.

Electronic submissions only to scopeland@sbctc.edu

Program Checklist

P1. Program description including length of program in years and total hours (including split between classroom and worksite).

Whatcom Community College (WCC), has developed a new Software Development associate in science degree for fall 2021. This two-year 90 credit degree is a technical program designed to prepare students and address workforce needs both in Whatcom County and statewide. In partnership with Technology Alliance for Northwest Washington (TAGNW) and industry leaders, this program was developed to ensure graduates are competitive candidates for entry-level software development positions. The program is focused on providing students with a solid classroom education (231 hours), combined with hands-on lab work (198 hours), and 330 hours of work-based learning (internship). Paid internship opportunities, hosted by leading local and regional employers, are a core requirement of the curriculum to ensure meaningful, high quality work-based learning.

P2. Estimated number of hours per week at worksite and in classroom (this approach may shift throughout the program).

The estimated average hours per week in the classroom is 15-20. In addition to lecture credit hours, many core requirements include lab credits, which will entail approximately 4-6 additional hours per week during those quarters. The final quarter includes a required internship, where students are able to choose to complete between 5-10 credits (165-330 hours) at the worksite.

P3. Demonstration of labor market demand for specified skills/career in local region.

Statewide demand for software developers is strong, with annual total openings projected to be 24,742 and the annual growth rate to be 3.8% (2017-2027).*

Local industry partners have expressed strong demand for Whatcom and Skagit County, as well as strong demand along the I-5 corridor from Whatcom to King County. Given software developer positions lend themselves well to distance working, regional and statewide demand is relevant. In addition, in the post 2020 pandemic world, our industry partners inform us that more remote job opportunities will be available to graduates.

*Source - https://esd.wa.gov/labormarketinfo/learn-about-an-occupation#/search

Washington Employment data for Software Developers, Applications.*

Employment (2018)	Projected employment (2028)	Projected growth (2018-2028)	Projected annual job openings (2018-2028)
132,540 employees	145,290 employees	10%	41,090

*Source - https://www.onetonline.org/link/summary/15-1252.00

P4. Projected count of student enrollment, student completion, and anticipated employer participation for 5 years, post-pilot.

	Develop	2021-22	2022-23	Year 3	Year 4	Year 5
Student Enrollment	0	24	44	44	44	44
Student Completion	0	0	20	20	20	20
Employer's Participating	0	10	15	20	20	20

P5. Concise description of development process to create the Career Launch program (e.g. who was involved, when, how was the program piloted, etc.). Include a listing of program advisory committee members and their affiliation to the program.

To create this Software Development associate degree, Whatcom Community College (WCC) has partnered and collaborated closely with the Technology Alliance Group for Northwest Washington (TAGNW) to conduct outreach and develop relationships with regional software developer employers.

To ensure industry input, TAGNW and WCC launched a community input campaign in September 2020. Industry members from leading companies in the region (listed below) provided input on workforce needs, work-based learning opportunities, recommendations for curriculum and career opportunities after graduation.

To ensure alignment with workforce needs and to incorporate industry feedback, in October 2020 WCC and TAGNW hosted a virtual Develop a Curriculum (DaCUM) event with 19 industry representatives. This event built engagement with stakeholders and elicited valuable information regarding software development core competencies, work-based learning opportunities, job titles, occupational trends, and workforce needs for associate level graduates. The DaCUM report included a map of identified knowledge and skill areas that was directly integrated into the course curriculum.

Full program design included a number of stakeholders, including two full-time Computer Science faculty which were funded through the career launch intermediary project. All courses developed meet the highest standards of accessibility, universal design, and Transparency In Learning & Teaching (TILT). This is a vital element to ensure the developed curriculum is accessible and promotes success for students from diverse backgrounds.

Paid internship opportunities, hosted by leading local employers, were incorporated into the curriculum to ensure meaningful high quality on-the-job-experience. The total number of paid work-based learning positions is currently 7-8, with five committed employer partners. In the next 18 months, additional paid internships will be developed.

The software development associate degree was officially approved by the college's curriculum committee on March 10 to be active fall quarter 2021. The degree is pending final approval from the State Board of Community and Technical Colleges, as well as approval from the Northwest Commission on Colleges and Universities. The pending request for approval was submitted on May 4th and WCC expects program approval to occur in the coming month.

Collaboration with K-12 is essential and from early on WCC has met with educational partners such as Northwest Educational Service District 189 and Whatcom County CTE Dual Credit Consortium to develop and promote technology career pathways and access for youth. For this Software Development degree WCC has articulations with five area high schools. WCC has also established two post-secondary education partnerships providing 45 college credits towards a postsecondary credential.

List of Focus Group & DaCUM Participants:

Participant	Title	Organization	Focus Group or DaCUM
Matt Bain	Owner	Sole Graphics	DaCUM
Aaron Dutton	Systems Engineer Lead	Faithlife	Both
Dean Haverstraw	IT Director	Sampson Rope	DaCUM

Dustin Masters	Software Engineer	OLO	Both
David LeBow	Senior Director	Alpha Technologies / Enersys	Both
Tami Morrison	Vice President of Technology	Saturna Capital	DaCUM
Ed O'Neill	Senior Security Officer	Principal Financial	Both
Andy Robinson	Software Engineer	Emergency Reporting	Both
David Yarnell	Software Engineer	Alpha Technologies / Enersys	Both
Mark Peck	HR Manager	Emergency Reporting	Focus Group
Steven Loeppky	Software Developer, Supervisor	Amazon	Focus Group
Eric Cole	Consultant	Nullspin	Focus Group
Allan Shepherd	Software developer for 30+ years of experience.	Retired	Focus Group
Ben Brigham	Software developer for 30+ years of experience.	Retired (Conversica)	Focus Group
Kris Volpenhein	VP Engineering	Samson Rope	Focus Group
Adrianne Czebatar	Technical Project Manager	Sampson Rope	Focus Group
Max Kaiser	Founder and CEO	Video Pipeline	Focus Group
Darrell Criss	Computer ScienceFT Faculty	WCC	DaCUM
Michael Gan	Executive Director	TAGNW	DaCUM
Michelle Heitman	Cooperative Education Program Coordinator	WCC	DaCUM
Trish Newbold	Workforce Education Coordinator	WCC	DaCUM
Ryan Parsons	Computer Science FT Faculty	WCC	DaCUM
Christina Saunders	Computer Information Systems Faculty	WCC	DaCUM
Tonya Wagner	Dean of Workforce Education	WCC	DaCUM

P6. Signed letter of endorsement from all relevant partners, stakeholders and regional networks (including employers, labor organizations, academic institutions, community-based organizations, individuals, and other relevant stakeholders in support of the proposed Career Launch program). Regional network endorsement preferred.

The following endorsement letters are attached
- Alpha Technologies Services, Inc
- Emergency Reporting
- Faithlife, LLC
- Körber Supply Chain
- Samson Rope Technologies
- Northwest Educational Service District 189 (NWESD)
- NW Washington STEM
- Technology Alliance Group for Northwest Washington

P7. Description of resources, supports, or other processes to recruit and support students from underserved backgrounds (e.g. including students of color, students from low income families, English language learners, students with disabilities, foster students, students experiencing homelessness, students from single parent homes, and other populations that face barriers to employment); or create an implementation plan to do so.

Advancing equity is one of four core themes at the foundation of WCC's strategic plan: "Whatcom integrates principles of diversity, access, and inclusion throughout policy, practice, services, and curriculum to close equity gaps in student outcomes and create an equitable work environment."

In order to create equitable pathways that begin in the high school, WCC is part of the Whatcom County CTE Dual Credit Consortium that is dedicated to helping students get connected to clear, meaningful educational pathways which lead to successful career opportunities. Students can earn college credit on the high school campus for articulated courses that prepare them for a professional/technical career. According to the Washington Student Achievement Council, students

who earn college credit are more likely to graduate high school, enroll in college, and complete college degrees.

To eliminate racial equity gaps for systematically marginalized students and ensure each student has the opportunity and access to resources necessary to reach their educational goals, Whatcom has adopted and is in the early stages of implementing the guided pathways model. This structured framework helps students explore programs, consider careers, and develop and complete academic plans in a timely fashion.

WCC offers myriad funding and supports programs to help students from underserved populations enroll, persist, and complete their post-secondary programs. For example:
- AIM program (achieve, imagine, motivate) serves students with limited income, students with disabilities, students who would benefit from additional academic support, students of color, and/or students who will be first in their families to graduate with a bachelor degree
- Basic Food Employment & Training (BFET) provides career planning, job search, educational services, and skills training to basic food (SNAP) recipients
- Whatcom partners with local agencies to help students with a conviction history to explore educational options and resources available for career pathways
- The Opportunity Grant is a scholarship available to low income students who are enrolled in a professional-technical program
- Passport to College is a scholarship and support program for students from foster care and those who have experienced unaccompanied homelessness

WCC's workforce education staff actively seeks to attract diverse students (e.g., collaborate with Foundation and Intercultural Center staff to build on their established relationships with communities and organizations of color).

WCC's access & disabilities services (ADS) office exists as a center for disability education and resources for students, staff, and faculty. Resources and services include captioning, trainings for accessible instructional materials, and teaching tips for UDL-friendly classrooms and the Center for Universal Design in Education.

Industry-Related Checklist

I-R1. Address of worksite(s) where Career Launch students will complete supervised training.

Employee	Address	Wages
Alpha Technologies Services, Inc	3767 Alpha Way, Bellingham, WA 98226	$17.50/hr
Emergency Reporting:	Remote (Office: 2200 Rimland Dr., Bellingham, WA 98226)	$21.90/hr
Faithlife, LLC	1313 Commercial Street Bellingham, WA 98225	$20-$25/hr
Körber Supply Chain	4164 Meridian Street Bellingham, WA 98225	$15/hr
Samson Rope Technologies	2090 Thornton Street, Ferndale, WA 98248	$15-$16/hr

I-R2. Hourly wage for Career Launch participants.

See table above

I-R3. List of entry-level positions and associated job descriptions for which a Career Launch student would be eligible for upon completion.

Examples of entry level positions Career Launch students who complete the program will be eligible for are listed below and the full job descriptions are attached:

Faithlife, LLC: Software Developer, Logos Desktop
Körber Supply Chain: Support/Sustainment Analyst and Solution Consultant L1

I-R4.   List of specific skills and competencies required for completion of Career Launch program, with demonstrated alignment to entry-level positions, job descriptions, and average local salary ranges.

The software development degree was designed, in conjunction with industry leaders, to prepare individuals to work as entry-level applications or web programmers. Students will acquire the core skills to design, code, implement, and maintain programs and database systems that provide programming solutions for industry.

Upon successful completion of the software development degree, graduates are able to:
1.   Write and test applications that meet specifications for industry standard platforms.
2.   Apply data management concepts to databases.
3.   Design solutions utilizing software tools.
4.   Apply steps of the software development lifecycle.
5.   Analyze systems to develop recommendations for projects.
6.   Communicate professionally with clients and coworkers.
7.   Conduct software development research.

Starting wages in Whatcom County for software developers are strong, ranging from $25.06 (10% percentile) to $35.37 (25th percentile) per hour, with potential for up to an approximate $15/hour premium the closer the employee and/or the position is to the Seattle area.*

Software developer	25% Percentile	Median: 50% Percentile
Bellingham	$35.37/hour	$50.17/hour
Seattle-Tacoma-Bellevue area	$52.91/hour	$66.00/hour
Washington	$50.82/hour	$65.13/hour

*Sources: https://esd.wa.gov/labormarketinfo/learn-about-an-occupation#/search
https://www.careeronestop.org/explorecareers/explore-careers.aspx

I-R5.   Employer attests that Career Launch program is in compliance with required federal, state, and local regulations.

Please see attached industry letters for attestation to alignment and compliance with required federal, state, and local regulations.

I-R6   Employers will outline a student supervision and mentorship model.

Please see attached industry letters for attestation to student supervision and mentorship model.

I-R7   Description of common career pathway(s) beginning with entry-level position specified with demonstration of likely salary growth over specified time period.

With an associate degree, graduates of Whatcom's software development program may be more likely to start at wages closer to the 25th percentile; however, the built-in work-based learning component may put them on a fast track to higher wages. For Computer System Analyst, regional

beginning wages are approximately $38.35, with an annual salary of $79,768. It is expected that students who continue their education to earn a bachelor's degree or with additional work experience will experience significant increases in wages to approximately $103,636.

Potential career pathways for software developers:

Computer System Analyst ($38.35/hr)--> Software Developers and Software Quality Assurance Analysts and Testers ($49.83/hr) -->Computer Programmer ($64.76/hr)*

*Source- https://www.esd.wa.gov/labormarketinfo/occupations

I-R8. Demonstrated competency alignment with relevant professional standards for specified entry-level positions when applicable.

This software development degree is a technical program developed with employer partners to prepare students to meet industry standards. The Develop a Curriculum (DaCUM) process with 19 industry representatives, built engagement with our industry stakeholders and elicited valuable information to identify core skills and competencies for entry level positions in software development. The process concluded with identified job titles, occupational trends, knowledge and skill needs for entry level software developers, as well as industry trends.

These competencies and core duties from the DaCUM were utilized to develop the associate degree program outcomes to ensure graduate's career readiness and alignment with industry standards.

Software Development Program Outcome Map

Key Idea	Duty	Task
Pre Design (web/software applications)	Project Management	Develop conceptual understanding of applied layered software architecture to project development.
	Determine Requirements	
Design (web/software applications)	Develop Applications	Develop conceptual understanding of the software development methodologies.
Lifecycle (web/software applications)	Deploy Solution(s)	Develop conceptual understanding of the software development life cycle.
	Maintain Application	
Communication	Create Technical Documentation	Develop a conceptual understanding of industry language and terminology
	Communicate Professionally	
Programming	Operate in a Software Environment	Develop conceptual understanding of cloud computing capabilities.
	Write Coding	
Database	Utilize Data Technologies	Develop conceptual understanding of types of databases.

I-R9. Signed letter from employers partners attesting that Career Launch completers will be ready for specified entry-level jobs, including an optional, non-binding commitment estimating number of Career Launch completers they plan to interview/hire over the first three years of the program.

Please see attached letters of endorsement

Academic-Related Checklist

A-R1. List of academic institution(s) providing career-aligned instruction for Career Launch program.

Whatcom Community College

A-R2. Curriculum scope and sequence aligned to skills and competencies provided in employment checklist.

Software Development (AS) Course requirements:
CIS 105 - Computer operating systems I This course introduces the fundamentals of computer operating systems, including history, evolution, and design, as well as support, maintenance, and troubleshooting.
CIS 201 - Introduction to database design Students will learn how to use Structured Query Language (SQL) to retrieve and organize information from a relational database, filter, modify, group and summarize data, and retrieve joint information from multiple tables in a database.
CIS 220 - Cloud foundations This course introduces foundational cloud computing concepts and best practices. Students will examine the benefits and cost of operating cloud architecture. They will discuss the financial impact of cloud migration and the general impact of migrating to a cloud-based architecture.
CIS 236 - Cisco networking I First in the three quarter networking sequence. This course introduces the fundamentals of networking, including introduction to the OSI and TCP/IP network models, and IP addressing and sub-netting. Other topics include: network design, topologies, protocols, wiring, network devices, and network security fundamentals.
CS 120 - HTML fundamentals Teaches the fundamentals of web page design and implementation. Emphasizes text formatting, web page layout, links, lists, tables, frames and forms using HTML, scripting, and database connectivity.
CS& 141 -Computer science I java This course provides an introduction to computer programming with Java. It covers computer architecture, machine instruction processing, basic data types, program control structures, functional decomposition, classes, and fundamental data structures. Recommended for math, science, engineering, computer science, and software development majors.
CS 145 - Computer Science II This course is a continuation of CS&141. Teaches the fundamentals of computer programming. Covers searching and sorting, object oriented design, error handling, file input and output, event based programming, bitwise operators, multithreaded and network programming. Recommended for math, science, engineering, computer science, and software development majors.
CS 240 - Data structure and algorithm fundamentals Teaches software development skills that emphasize the study of abstract data types using object oriented programming techniques, Big O algorithm analysis, fundamental data structures such as lists, stacks, queues, and trees, and searching and sorting.
SD 130 - System analysis and design This course examines the system-development cycle in depth. Topics include problem identification, problem solving, and information-gathering techniques. Current structured tools are used to describe business rules and objects, data flow, data structures, and process flow and documentation. Creative problem solving and working in a team environment are stressed.
SD 180 - Technical internship and career preparation This course is designed for software development students preparing to obtain an internship/job, while fostering career readiness skills. They will highlight their

strengths and skills within a professional application, including resume, cover letter, and technical interview. Common strategies for successful interviews will be discussed while practicing solving interview problems.

SD 230 - Web programming Utilizing various scripting languages, students will learn to create interactive and dynamic web pages and applications. Topics include client and server side scripting, basic web security, and writing code on the web that interacts with a database.

SD 235 - Programming for mobile devices This course teaches the principles of mobile application design and development. Students will learn application development for major mobile platform(s). Topics will include user interface design, memory management, user interface building, input methods, data handling, and network techniques.

SD 247 - Applied computer architecture This course is an overview of basic computer architecture where concepts are applied to course labs and projects. Topics include introduction to assembly, introduction to C programming language, data representation, and memory organization and management.

SD 250 - Software security principles Students will explore fundamentals of software security, and learn how to write more secure code. Topics include common software and website vulnerabilities, proactive coding practices, and basics of cryptography

SD 299 - Software development capstone Students will work in teams to develop a real world software application, applying concepts taught in the Software Development program. In developing their application, students will complete the entire application development lifecycle, including analysis, design, specification, implementation, testing, debugging, and deployment.

SD 290 - Software development internships Students will complete an academic internship that offers experience-based learning in a structured, supervised, and career-related setting. Measurable learning outcomes are collaboratively created by students, internship supervisor, and faculty mentor. Students will develop professional readiness by fostering skills necessary to work in the software development field.

A-R3. Demonstration of student supports (e.g. mentoring, advising, financial aid, tutoring) available for Career Launch students enrolled in the course.

Whatcom offers a plethora of programs that provide eligible students with financial resources, academic advising, and general counseling services to help them succeed at Whatcom and beyond:

- **Career Support:** WCC offers students career exploration and readiness services, including career interest assessments and corresponding education requirements, job search, resume writing, and interview preparation and practice.
- **Counseling:** The Whatcom Community College Counseling Center provides short-term personal counseling for currently enrolled students.
- **Veteran Services:** The Veterans Services office provides a supportive environment for veterans, current military, and their dependents.
- **Financial Aid:** Financial aid is available to those students that qualify through the Free Application for Federal Student Aid (FAFSA®). In addition, The WCC Foundation, and numerous friends of the College have developed several scholarship opportunities.
- **Tutoring:** Academic tutoring is available through live online support for all subjects.
- **Computer Access & Tech Help:** Technology (laptops) checkout is available as is the student technology helpdesk for technology assistance.
- **Access & Disability Services:** The ADS Office values the diversity students with disabilities bring to WCC's campus community. Through intentional programs, services, and reasonable accommodations, ADS strives to ensure students with disabilities have equal access to Whatcom Community College. In addition, ADS staff encourage the development of independence and self-advocacy skills while supporting the learning experience.

A-R4. Number of postsecondary credits provided and / or credential earned upon completion of program.

Upon completion of the AS Software Development Degree students will complete a total of 90 credits.

A-R5. Demonstrated curricular alignment with relevant professional and / or academic standards associated with coursework and credential, when applicable.

The entire software development program degree is aligned with relevant industry and academic standards. WCC ensured curricular alignment with professional standards through the industry DaCUM process, that developed program outcomes and informed course curriculum development. The program outcome map can be referenced in I-R8. Industry leaders such as Faithlife, Samson Rope, Emergency Reporting, Amazon, Körber Supply Chain, and Alpha Technologies informed the course development and curricular alignment with industry standards. The college will continue to ensure alignment, through the involvement of these partners on the professional/technical advisory committees. From the industry informed program outcomes, the college further ensured alignment with course curriculum by mapping these outcomes to specific courses.

Program outcomes: Graduates should be able to…	CS 120	CS &141	CS 145	CS 240	CIS 105	CIS 201	CIS 236	CIS 220	SD 130	SD 180	SD 230	SD 235	SD 247	SD 250	SD 290	SD 299
1. Write and test applications that meet specifications for industry standard platforms.		I	R	A							R	R	R	R	R	
2. Apply data management concepts to databases.						A					R					
3. Design solutions using software tools.	R	I	R	R							A		R	R	R	
4. Apply steps of the software development lifecycle.		R	R	R					I		R	R			A	
5. Analyze systems to develop recommendations for projects.				R	R	R	R	R	I		R	R	R	R	A	
6. Communicate professionally with clients and coworkers.		R	R	R					I	A		A			R	
7. Conduct software development research.		R	R	A					I						R	R

"I" is introducing the outcome. "R" is reinforcing the outcome. "A" is a formal assessment of the outcome.

A-R6. Details of potential for current or future partnerships and/or scalability of the program within and across sectors and/or geographic locations (e.g. articulation, degree pathways), when applicable

Five leading local employers have committed to paid work-based learning positions (see attached letters). In the next 18 months, additional paid internships will be developed with local and regional partners. WCC's Cooperative Education Program Coordinator will contact local and regional employers to formalize industry partnership commitments for paid-work based learning opportunities and continue to implement a comprehensive strategic outreach plan to engage industry partners.

WCC, in partnership with Bellingham Technical College (BTC), sits on a Whatcom County Career and Technical Education (CTE) Dual Credit Consortium. This ongoing partnership between the community college and K-12 schools, will continue to develop in order to strengthen technology education pathways. Further, WCC will continue to work with Northwest Educational Service District (NWESD) 189 career connect coordinator and Washington STEM to develop pathways across the region. See attached letters for endorsement from these partners.

To develop degree pathways, WCC has partnered with Lake Washington Institute of Technology (LWIT) and Skagit Valley College, to formalize articulations to their bachelor's degrees in software development. The WCC Workforce Education Coordinator will continue to partner with other colleges to develop articulations, such as Eastern Oregon University and Edmonds Community College.

EnerSys®

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Fax: +1 360 671 4936
www.alpha.com

March 10, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Alpha Technologies Services, Inc. would like to offer this letter of endorsement to Whatcom Community College (WCC) Software Development program for Career Launch Endorsement. We have joined WCC as an Industry Partner, to support meaningful work-based learning and invest in our region's software development workforce pipeline.

Due to our strong need for new entry level software developers, Alpha Technologies Services, Inc. is committing to hiring 2 second-year students for paid internships. Students who participate in this these work-based learning program will be assigned one designated supervisor to oversee their training experience, help develop specific learning objectives, provide weekly coaching meetings, attend a required site visit, and provide a thorough written evaluation at the end of the experience. We will ensure that students placed with us are trained on and adhere to federal, state and local regulations covering the work and the workplace.

Alpha Technologies Services, Inc. has worked closely with Whatcom Community College faculty and program coordinators to provide feedback during the development of the Software Development degree. We are confident that completers of this program will be ready for entry-level jobs as software developers. We intend to offer 2 successful graduates, who meet our employment qualifications, interviews and/or potential employment based on our hiring needs.

We are grateful for Whatcom Community College's efforts to meet our needs for entry level software developers. Please feel free to contact me for more information regarding this endorsement or our partnership with Whatcom Community College.

Sincerely,

David LeBow

Sr. Director, Software Engineering
ENERGY SYSTEMS

Direct: +1 360 392 2322
Cell: +1 360 966 6742

DLeBow@alpha.com

Emergency Reporting
2200 Rimland Dr, Suite 305
Bellingham, WA 98226 USA

May 28, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Backdraft OpCo LLC (dba Emergency Reporting) would like to offer this letter of endorsement to Whatcom Community College (WCC) Software Development program for Career Launch Endorsement. We have a longstanding relationship with WCC and have seen many graduates become successful employees with our company.

Due to our strong need for new entry level software developers, Emergency Reporting, is committing to interviewing students for paid internships. Students who participate in these internships will be assigned one designated supervisor, to oversee their experience, help develop specific learning objectives, provide regular coaching meetings, and provide a written evaluation at the end of the experience. We will ensure that students placed with us are trained on and adhere to federal, state, and local regulations covering the work and the workplace.

Emergency Reporting has worked closely with Whatcom Community College faculty and program coordinators to provide feedback during the development of the Software Development degree. Our desire is graduates of this program will be ready for entry-level jobs as software developers. We intend to offer successful graduates, who meet our employment qualifications, interviews and/or potential employment based on our hiring needs in the future.

We are grateful for Whatcom Community College's efforts to meet our needs for entry level software developers. Please feel free to contact me for more information regarding this endorsement or our partnership with Whatcom Community College.

Sincerely,

Mark Peck

Mark Peck

HR Manager

Emergency Reporting

March 8th, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Faithlife, LLC would like to offer this letter of endorsement to Whatcom Community College (WCC) Software Development program for Career Launch Endorsement. We are thankful to WCC for allowing us to participate in this investment in Whatcom County's software development workforce pipeline.
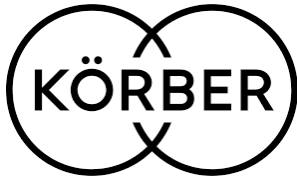
Due to our continued need for software developers Faithlife, LLC anticipates filling a couple of our 12-20 annual intern positions with second year students from the WCC Software Development program. Students who participate in a Faithlife internship will be assigned a mentor to oversee their experience, help develop specific growth goals, provide weekly one-on-one meetings, and provide documented evaluations throughout the experience.

We are grateful for WCC's efforts to meet our needs for entry level software developers. Please feel free to contact me for more information regarding this endorsement or our partnership with Whatcom Community College.

Sincerely,

Todd White

Todd White
Software Development Manager
Faithlife, LLC

March 9, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Körber Supply Chain would like to offer this letter of endorsement to Whatcom Community College (WCC) Software Development program for Career Launch Endorsement. We have a longstanding relationship with WCC and have seen many graduates become successful employees with our company.

Due to our strong need for new entry level software developers, Körber Supply Chain is committing to hiring final year students for paid internships, with the intent to hire when graduated. Students who participate in both of these work-based learning will be assigned one designated supervisor, to oversee their training experience, help develop specific learning objectives, provide weekly coaching meetings, attend a required site visit, and provide a thorough written evaluation at the end of the experience. We will ensure that students placed with us are trained on, adhere to, federal, state, and local regulations covering the work and the workplace.

Körber Supply Chain has worked closely with Whatcom Community College faculty and program coordinators to provide feedback during the development of the Software Development degree. We are confident that completers of this program will be ready for entry-level jobs as software developers. We intend to offer successful graduates, who meet our employment qualifications, interviews and/or potential employment based on our hiring needs in the coming years.

We are grateful for Whatcom Community College's efforts to meet our needs for entry level software developers. Please feel free to contact me for more information regarding this endorsement or our partnership with Whatcom Community College.

Sincerely,
Dawn Carpenter
Körber Supply Chain
Körber HR Employee Services - Talent Acquisition Specialist
4164 Meridian Street Ste 620, Bellingham, WA 98226
Phone: +1.800-328-3271 ext. 3101
Dawn.Carpenter@koerber-supplychain.com

03/05/2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Samson Rope Technologies would like to offer this letter of endorsement to Whatcom Community College (WCC) Software Development program for Career Launch Endorsement. We have joined WCC as an Industry Partner, to support local efforts to create meaningful work-based learning and invest in our region's software development workforce pipeline.

Due to our strong need for new entry level software developers, Samson, is committing to hiring 1-2 second year students for paid internships. Students who participate in both of these work-based learning will be assigned one designated supervisor, to oversee their training experience, help develop specific learning objectives, provide weekly coaching meetings, attend a required site visit, and provide a thorough written evaluation at the end of the experience. We will ensure that students placed with us are trained on, adhere to, federal, state, and local regulations covering the work and the workplace.

Samson has worked closely with Whatcom Community College faculty and program coordinators to provide feedback during the development of the Software Development degree. We are confident that completers of this program will be ready for entry-level jobs as software developers. We intend to offer successful graduates, who meet our employment qualifications, interviews and/or potential employment based on our hiring needs in the coming years and to help build this program into an important resource for the future.

We are grateful for Whatcom Community College's efforts to meet our needs for entry level software developers. Please feel free to contact me for more information regarding this endorsement or our partnership with Whatcom Community College.

Sincerely,

Dean Haverstraw
Director of IT

Samson Rope Technologies, Inc

Northwest Educational
Service District 189
Together We Can

1601 R. Avenue, Anacortes, WA 98221
(360) 299-4000 | Fax (360) 299-4070
www.nwesd.org

May 28, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Northwest Educational Service District 189 (NWESD) is pleased to support Whatcom Community College's (WCC) Career Launch endorsement application for their newly developed Software Development Associate degree. WCC has been a committed partner in developing and implementing Career Connected learning opportunities for youth in Northwest region.

While promoting accessible pathways for youth, this degree will help address the growing gap in Washington State for skilled software developers. We at, NWESD 189, recognize WCC's Associate in Science software development degree is an industry-aligned program that was developed with strong employer engagement. With integrated, paid work-based learning embedded in the program, students will be prepared to meet industry demand in this rapidly growing field. Leading IT employers in the region have signed onto provide work-based learning opportunities including: Alpha Technologies, Faithlife and Korbor Supply Chain.

Students in this program will gain high-demand skills in back-end and front-end computer programming, web programming, computer architecture, database design, programming for mobile devices, and more. This program will increase access to diverse students and prepare youth in the region for competitive technology careers. WCC has developed recruitment strategies and collaborations with local school districts to raise awareness about this career pathway. We are committed to supporting the continued outreach and recruitment of this program by collaborating to offer specific engagement activities for youth in our region.

Please feel free to contact me for more information regarding this support of Whatcom Community College's Career Launch endorsement application.

Sincerely,

Sinead Fitzpatrick Plagge
Career Connected Learning Coordinator
Northwest Educational Service District 189
360.551.4903

NW Washington STEM
Helping Island, San Juan, Skagit, and Whatcom Students Dream Big

June 2, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

The NW Washington STEM Network strongly supports Whatcom Community College's (WCC) Career Launch endorsement application for their newly developed Software Development associate degree.

The NW Washington STEM Network is one of Washington STEM's statewide networks that work to create unified systems of STEM education in their communities. The Network advocates for students to have the opportunity to take part in relevant, real-world learning activities to help them stay engaged in school and understand the long term purpose of what they're learning. Aligned with this WCC has developed an innovative partnership with TAGNW to engage businesses in providing paid work experiences for this program.

Informed by the 'Northwest: STEM by the Numbers Report' issued by WA STEM, careers in IT are one of the top 6 high demand living wage jobs in the region.

While promoting accessible pathways for youth, this degree will help address the growing gap in Washington State for skilled software developers. NW Washington STEM recognize WCC's associate in science software development degree is an industry-aligned program that was developed with strong employer engagement. With integrated, paid work-based learning embedded in the program, students will be prepared to meet industry demand in this rapidly growing field.

Students in this program will gain high-demand skills in back-end and front-end computer programming, web programming, computer architecture, database design, programming for mobile devices, and more. We believe this program will increase access to diverse students and prepare youth in the region for high-demand, high-wage technology careers.

Please feel free to contact me for more information regarding this support of Whatcom Community College's Career Launch endorsement application.

Sincerely,

Michelle Judson
Director, NW Washington STEM
Michelle@NWWashingtonSTEM.org
(360)383-7086

June 15, 2021

RE: WCC Software Developer Program Career Launch Endorsement

To the Career Launch Endorsement Review Team:

Technology Alliance Group for Northwest Washington (TAGNW) is strongly supportive of Whatcom Community College's (WCC) Career Launch endorsement application for their newly developed Software Development associate degree.

Developed in close collaboration with the technology community, this degree will help address the growing gap in Washington state for skilled software developers. We recognize WCC's associate in science software development degree is an industry-aligned program designed to prepare students to meet industry demand in the rapidly growing field.

Students in this program will gain high-demand skills in back-end and front-end computer programming, web programming, computer architecture, database design, programming for mobile devices, and more. We believe this program will increase access to diverse students and prepare youth in the region for high-demand, high-wage technology careers.

As a partner in the execution of the Software Development Career Launch project, it has been both encouraging and rewarding to experience excited community interest and consummate professionalism of the WCC staff in program development. WCC is widely recognized and appreciated for its strong program curriculum and high quality education. It is an honor for TAGNW to assist in the establishment of the Software Development program. We actively support the continued success of the program for all stakeholders: community partners, education partners, industry partners, and students.

I welcome the opportunity to provide more information in support of Whatcom Community College's Career Launch endorsement application.

Sincerely,

Michael Gan, Executive Director
Technology Alliance Group for Northwest Washington
michael.gan@tagn.org | 360-499-2099

List of entry-level positions and associated job descriptions for which a Career Launch student would be eligible for upon completion.

Software Developer, Logos Desktop REMOTE

Software Development Bellingham, Washington, United States Full time (9/3/2020)

Description: Write code that matters. This is your opportunity to be a part of the team behind the industry-leading Logos Bible Software! We are looking for a software developer to join our Bible Study Products Desktop Team. The desktop team develops our flagship Bible study applications for Windows and macOS.

There is a lot that goes into building an Integrated Ministry Platform and Logos Bible Software.

Requirements
What we are looking for:
2+ years experience in a software development
C#/.NET/Mono experience
Shipped a WPF or Cocoa application
Ideal candidates will have experience with:
Objective-C, C++
Javascript/React
Cross-platform development

Performance optimization
Multi-language interop
Data storage, indexing, and retrieval
Text rendering and string encoding
Benefits
Competitive salary
Unlimited vacation time
Health insurance plan
401(k) retirement plan with employer matching
Free beverages and espresso

Solution Consultant L1, Körber Supply Chain, Bellingham

Join our team at Körber Supply Chain! You will be part of our implementation team, designing, configuring, testing, and implementing warehouse management system (WMS) solutions. You will be working daily to problem solve and create personalized solutions for our customers.

Your role on our team
- You will assist in the translating of business requirements into technical design documents using Microsoft Visio, Word, Project and Excel
- You will configure, develop, debug, and trouble shoot solutions per design documents
- You will assist in training of customer management team and end-users
- You are self-motivated, tenacious and a natural problem solver
- Other duties as assigned

Your profile
- You have Intermediate configuration or programming experience in (Java, Python, C#) and databases (SQL / Oracle) queries and stored procedures
- You have excellent listening, oral, and written communication skills with strong interpersonal skills
- You have the ability to prioritize tasks and self-manage

- You have strong consulting, analytical and problem-solving skills
- You may have supply chain and distribution industry knowledge and experience
- You can travel up to 20%
- You have a BA / BS / AA Degree
- You might have knowledge of barcode scanning and RF hardware (Intermec, LXE, Motorola, Symbol)
- You might have warehouse Management Systems (WMS) expertise in HighJump Software, RedPrairie (JDA), Manhattan Associates, SAP- WM, Oracle-WM, Accellos, Infor, etc.
- You might have labeling (Bartender or Loftware) experience
- You might have reporting experience (Cognos, Business Objects, SSRS)

Support/SUSTAINMENT ANALYST, Körber Supply Chain, Bellingham

Join our team at Körber Supply Chain! Your role is providing day-to-day operational support for the Warehouse Management Solution to build value for our customers distribution solutions.

Your role on our team
- You troubleshoot business and operational issues associated with the Warehouse Management System (WMS) and ancillary software
- You quantify issues and provide supporting data if issues are escalated
- You manage the WMS environments and migration of configurations between environments
- You report changes in Dashboard, SSRS and Crystal Reports
- You modifying existing reports with additional search criteria
- You develop and mentor operations team members
- You take care of WMS data administration including: new users, menus, locations, pick and put-away sequences, zone data, etc.
- You design and implement enhancements and modifications to existing customer WMS environments.
- You know how to do SQL performance monitoring / index and query tuning

Your profile
- You have a BA / BS Degree, Computer Science, MIS, or equivalent

- You have relevant experience in a similar environment
- You have excellent listening, oral, and written communication skills with strong interpersonal skills
- You have strong analytical and problem solving skills
- You have the ability to prioritize tasks and self-manage
- You may have supply chain and distribution industry knowledge
- You have intermediate to advanced experience in SQL/Oracle and database procedures
- You may have expertise with interface technologies – TCP/IP Sockets, XML, Table-to-Table, etc.
- You may have some knowledge of barcode scanning and RF hardware
- You may have some knowledge of Warehouse Management Systems like HighJump or JDA
- You may have experience with voice software like Honeywell/Vocollect, Voxware, etc.
- You may have labeling experience (Bartender or Loftware)
- You may have reporting experience (Cognos, Business Objects, SSRS)
- You may have some networking experience (Cisco, WAN/LAN troubleshooting