

Full Stack Developer Career Launch

In partnership with

T Mobile[®]

And







And



Career Launch Endorsement Review (CLER) Application

IT Full Stack Developer Expansion



INSTITUTION North Seattle College

PROPOSED PROGRAM Full Stack Developer

PROGRAM CIP11.0201 PROGRAM EPC (Legacy) 515 PLAN CODE (PeopleSoft) COPWTC45

NAICS Code 5173

Please note: Registered Apprenticeship programs become automatically endorsed for Career Launch. You need not submit an application.

CONTACT INFORMATION

Name: John Lederer, Ed. D.

Title: Executive Dean, Career/Workforce Education

Address: 9600 College Way N., Seattle, WA 98103

Telephone: (206) 934-4604

Fax: (206) 934-3606

Email: john.lederer@seattlecolleges.edu

Peter Lortz

Chief Academic Officer

June 17, 2021

Date

Peter Lortz

Application contact: Scott A. Copeland

Associate Director, College Relations and Policy

Guidance

Education Division

Washington State Board for Community and Technical

Colleges

Office: 360-704-4397 Cell: 360-791-6026

Applications reviewed monthly and are due the first business day of the month.

Electronic submissions only to scopeland@sbctc.edu

Introduction

The Career Launch Program Endorsement recognizes high-quality career connected learning opportunities addressing persistent educational opportunity gaps, meeting the talent needs of employers and leading to academic learning and building awareness of, exposure to, and preparation for career opportunities.

Application Materials

This abbreviated application is designed to assist the Career Launch application process for adding similar fields of study previously endorsed.

Please note the following:

- Respond completely to the following three (3) checklist requirements in your submission packet.
- Include letter(s) of endorsement and letter(s) of employer partners.
- Submit your completed application to Scott Copeland at <u>scopeland@sbctc.edu</u>.

Program Checklist

P1. Program description including length of program in years and total hours (including split between classroom and worksite). Include program plan/degree planner.

Technology Career Accelerator Program seeks to recruit students into a program that leads to well-paying Full Stack Developer jobs at T-Mobile. These positions are currently filled by employees with a BA, but through this program can be filled by a 59-credit certificate paired with two **paid**, 6-week summer internships. This program began Cohort 1 in the Summer of 2020 with Edmonds College and Edmonds School District. For cohort 2, we are expanding to include Seattle Colleges and Seattle Public Schools. This will be hosted at North Seattle College for their initial group.



Paid internship one occurs right after the junior-year of high school. The certificate program starts as Running Start during the senior-year. Paid internship two occurs the summer after senior-year. The certificate program is completed within an additional 1 to 3 quarters after the second paid internship. In total, the program will be approximately 1,365 hours. This is about 480 hours of internship time and about 885 hours of contact time at the college. There may be some additional mentoring, career exposure, and financial aid support meeting time during the senior year. Students will be encouraged to apply at T-Mobile with 1 to 2 manager recommendations resulting from the paid internships and an approved certificate program on their resume.

The program timeline will consist of two paid, 6-week summer internships, Running Start during Senior-year, and a 4 quarter (59-credit) certificate. Knowing that students will have the opportunity to overlap earning credit with part-time and full-time Running Start, we can only estimate when each student will complete the program.

For Cohort 1, all students started the program together in the summer of 2020. When they are ready to interview for a position at T-Mobile, most students will be about one year out of high school. Cohort 2 was recruited Spring of 2021 and will begin the same process in July 2021. This cohort has doubled to have 19 participants, 9 from Seattle Public Schools and 10 from Edmonds Public Schools. The two cohorts will run simultaneously, but will be at different points in the program.

Academic-Related Checklist

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

- 1. Edmonds College, 20000 68th Ave W, Lynnwood, WA 98036
 - a. 59-Credit Certificate Program, 100% online available- Career Launch Approved June 2020
- 2. Edmonds School District, 20420 68th Ave W, Lynnwood, WA 98036
 - a. K-12 CTE elective work experience credit during summer internship one

- 3. (New 2021) North Seattle College, 9600 College Way N, Seattle, WA 98103
 - a. 59-Credit Certificate Program
- 4. (New 2021) Seattle Public Schools, 2445 3rd Ave S, Seattle, WA 98134
 - a. K-12 CTE elective work experience credit during summer internship one

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

Seattle Education Partner Support with Seattle Promise

North Seattle College will support students transitioning from high school to its Full Stack Developer certificate program through the Seattle Promise Scholarship, which provides up to 90 credits in free tuition towards a student's first Associate's degree. Thus, students participating in this Career Launch Program at North Seattle College will have their tuition covered through their certificate degree with the option of free tuition through their Associate degree.

As more than a free tuition program, Seattle Promise provides extensive guidance to support and mentor students through their first two years of college. Dedicated student success specialists work with each Seattle Promise scholar from high school through college graduation, offering assistance with financial aid and college admissions applications, class selection, and registration. These specialized advisors meet at least once a quarter with students to develop and check in on their educational plans and goals. A separate Seattle Promise Equity Scholarship is available to pay for college costs beyond tuition, including school related expenses such as books, childcare, food, housing, and transportation.

In addition, students will have access to the full array of services available to all students. Services include the Student Learning Center, which provides free tutoring to students, several drop-in computer labs, and extensive student assistance programs, including:

- Emergency grants to help with critical basic needs such as food, housing, childcare, care repairs, and more.
- An on-campus food pantry.
- Benefits assistance and financial counseling through the United Way Benefits Hub.
- Affinity groups offered through the Equity & Welcome Center.
- Career guidance and planning available in the campus-based Opportunity Center for Employment & Education, a WorkSource site.
- A technology loan program.

Seattle Colleges also has the intention of applying for a grant through the City of Seattle to provide a Navigator to support students in this Career Launch program.

If funded, the part-time Navigator would:

- Serve as a point of contact for the student cohort & T Mobile partners (provide updates on participation and progress)
- Work with NSC Running Start advising and Seattle Promise to ensure T Mobile cohort students are on track with coursework, Seattle Promise program requirements and financial aid
- Organize college orientation, quarterly cohort check ins and program graduation (in person and virtual)
- Conduct in-person check-ins to be located at site most convenient for students in the cohort (ex: host at Seattle Central College if students are located mainly around central/south Seattle)

- Organize guest speakers for quarterly check-ins. May include employers, IT/Computer Science department students, college resources
- Support with referrals to emergency funding, counseling, tutoring and other student support services at NSC as needed

Student Experience Timeline with Seattle Colleges

•	
e welcome/orientation rter begins September 27th nts are encouraged to apply for FAFSA/WAFSA arter meeting quarter registration opens Nov 1st rter ends Dec 16th quarter begins Jan 4 th	
rter begins September 27th nts are encouraged to apply for FAFSA/WAFSA arter meeting quarter registration opens Nov 1st rter ends Dec 16th quarter begins Jan 4 th	
nts are encouraged to apply for FAFSA/WAFSA arter meeting quarter registration opens Nov 1st rter ends Dec 16th quarter begins Jan 4 th	
arter meeting quarter registration opens Nov 1st rter ends Dec 16th quarter begins Jan 4 th	
quarter registration opens Nov 1st rter ends Dec 16th quarter begins Jan 4 th	
rter ends Dec 16th quarter begins Jan 4 th	
quarter begins Jan 4 th	
Running Start- Winter quarter begins Jan 4 th Cohort Activity- Winter quarter meeting, reminders for Seattle Promise application	
ation deadline	
uarter registration opens February 7th	
quarter ends March 23rd	
uarter begins April 4 th /WAFSA due April 15th for Seattle Promise students quarter meeting	
uarter registration opens for 1st year of college after e and program selection due	
ness Academy (three-day event)	
ete financial aid file for Seattle Promise uarter ends June 17th	
r internship	
ner Bridge (2-day event)	
arter starts late September	
quarter registration opens early Nov arter meeting	
arter ends mid-December	
College at NSC – Winter quarter starts early January Cohort Activity- Winter quarter meeting	
quarter registration opens early February	
quarter ends late March	
quarter starts early April	
quarter meeting	

June 2023	Cohort Activity - Cohort Graduation Ceremony
July 2023	T-Mobile – Interview and Employment

Supports Through Public Schools and the Colleges

- Both Seattle Public Schools and Seattle Colleges have guidance counselors and career counselors to help support career choices, post-secondary choices, scheduling of Running Start courses, financial aid, etc. Seattle Public Schools can also provide students access to a Chromebook through their senior year.
- School Districts and the colleges also have systems in place to support English Language Learners and students with disabilities.
- School District: For English Language Learners and students with learning disabilities, the School District provides building-based case management, specialized direct instruction, additional adult support in the mainstream classroom, and modifications and accommodations to curriculum in order to support student access, success, and learning. For those with physical disabilities, accommodations and adaptations to the physical environment are provided. In addition, all teachers are provided training on how to best support the inclusion and success of students representing special populations including Special Education and English Language Learners.
- North Seattle College has well-established departments that support students with physical disabilities and students who are English Language Learners. The department Services for Students with Disabilities has a full range of accommodations and supports that they offer to students in need. The English as a Second Language department works closely with professional/technical programs to support ELL students as they move from ELL classes to college-level coursework.

T-Mobile Support

- T-Mobile is offering paid internships to ensure students will be able to participate
- Mentors: T-Mobile will be providing each student team of 2 to 3 with a mentor contact during each summer internship. In most of these situations, students will be able to stay in contact with their mentors after the internship. We also plan to provide additional adult workforce contact during the senior year and during college courses when it fits.
- Branded Clothing: T-Mobile will provide a free t-shirt to ensure access to T-Mobile branded clothing during the internship. They will also have a relaxed dress code, allowing students to wear what they would normally wear to school.
- Summer Shuttle: T-Mobile will provide a summer shuttle to pick students up at a local Park and Ride, ensuring easier access to the T-Mobile campus in Bellevue or Bothell.
- Online option: T-Mobile will provide an online internship if needed due to COVID-19. They also provide a computer and wifi support.
- Employee Resource Groups: With diversity and inclusion in mind, T-Mobile has formed six Employee Resource Groups: Access for Disabilities, Pride & Allies, Multicultural, Multigenerational, Military Honor & Support Community, and Women's Leadership.

Industry-Related Checklist

I-R1. Address of worksite(s) where Career Launch students will complete supervised training T-Mobile Headquarters 3625 132nd Ave SE, Bellevue, WA 98006

I-R2. Hourly wage of Career Launch participants

During each 6-week summer internship at T-Mobile, students will earn \$15 per hour, or higher as the regional minimum wage increases.

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

Associate Software Developer (\$58,000) \Rightarrow Software Developer (\$72,000) \Rightarrow Senior Software Developer (\$106,000) \Rightarrow Principle Developer (\$143,000) *Estimated salaries

There could also be opportunities to move into Technical Project Manager roles or to become a specialist, meaning they could specialize in a certain aspect of technology such as Big Data, database development, website development, etc. The other possible option is a People Manager. While it is hard to give a definite timeline for an individual employee to grow in their role as it really depends on the person, work ethic, and ability to learn, on average, 2 to 3 years is a good timeline for an Associate Software Developer to move up to a Software Developer role.

Attachments:

- T-Mobile Job Description (Same as submitted for Edmonds)
- College Program Sequence
- Letters of Continued Support from:
 - T-Mobile
 - Seattle Colleges
 - CCW Regional Network
 - Seattle Public Schools

End of Application

T-Mobile Associate Software Developer

Designs and develops internal and external business systems/applications, systems interfaces, databases, reporting, or business intelligence systems, as required to deliver new systems functionality supporting corporate business objectives. This position is an entry level developer position working under the direction of a Developer, Sr Developer, or Principal Developer, with project complexity limited and commensurate with experience level.

Translate business, and functional requirements into documented technical specifications.	5%
Utilize development skills to build (code) and unit test new systems functionality per technical specifications, with deliverables to include code builds and documented unit test results.	5%
Develop application support documentation as required by the application support teams for acceptance of systems changes into production.	5%
Build and unit test production deployment packages and implementation plans for scheduled systems enhancements.	5%
Participate in reviews (walkthroughs) of technical specifications and program code with other members of the technical team, communicating design, requirements, feature set, functionality and limitations of systems/applications to team and development lead.	5%
Utilize departmental Systems Development Lifecycle Methodology as a guide for development activities.	5%
Provide on call and after hours support as required for production releases and to respond and provide Tier 4 support on production outages.	5%
Contribute to and work to meet project schedules by providing accurate estimates of effort required for development deliverables, by providing updates on project progress to development and project management, and by escalating issues that might affect project success to management.	5%
Maintain technical skills and expertise through continuing education and training.	5%
Collaborate/Partner with other teams including Enterprise Testing, Release Planning and Management, Business Systems Analysis, Project Management, and Application Support on successful delivery of systems enhancements.	5%
Also responsible for other Duties/Projects as assigned by business management as needed.	10%

Preferred Experience

- Less than 2 years of Application Development Experience
- Requires competency in customer focus, change & innovation, strategic thinking, relationship building & influencing, talent management, results focus and inspirational leadership.
- Experience programming in one or more of the following Languages Java, Python, SQL, Javascript
- Minimum 1 years' Application Development Experience.
- Minimum of one year work experience is desirable, preferably in the wireless industry.



Full Stack Developer Certificate

Requirements Effective Fall 2021
Program Planning Guide

Program Description: This certificate program is a program option in the Application Development pathway and will articulate closely with the Application Development AAS-T and BAS programs. The certificate is very intensive and is for students looking for the shortest path to an entry-level position as a web/cloud application technician. Students looking to design and develop applications are advised to seek further study in the pathway. The certificate program is ideal for students looking for entry-level work in the field or for career changers with some knowledge of coding and programming, but no formal training.

Course Prerequisites: Many courses have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering. Courses in this certificate with pre-requisites are marked with an asterisk (*). See catalog for more information.

Full Stack Developer Prerequisites: Students entering this certificate should have taken and passed MATH 081 or have a higher math placement.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Program Requirements				
Course Number	General Education/Related Instruction Requirements (15 credits)	Credit Hours		
BUS 236	Interpersonal Communications for the Workplace	5		
EET 109*	Mathematical Applications for Circuit Analysis	5		
HUM 105	Intercultural Communication	5		
Course Number	Certificate Requirements (43 credits)			
BUS 169	Using Computers in Business (T-Mobile Sequence Only)	5		
IT 102	Intro to Programming	5		
IT 161	Web Authoring I	5		
IT 111	Programming Fundamentals	5		
IT 112	Web Applications (Standard Sequence Only)	5		
IT 115	Introduction to Software Development and Versioning	5		
IT 211	Object Programming with Java	5		
IT 212	Data Structures and Algorithms with Java	5		
IT 125	SQL and SQL Server	5		
CWE 110	Internship	3		
		Total Credits: 58		
	(exclu	iding pre-requisites)		

Program Outcomes:

- Students will be able to transition into the Application Development AAS-T degree program where, upon
 completion they will meet the prerequisite requirements for entry into the Bachelor of Applied Science Degree
 in Application Development.
- Students will apply scientific or technical knowledge in order to understand issues, solve problems, and engage in useful and responsible practices in computer programming
- Debug and manage software applications
- Test full stack web applications and develop simple applications.
- Share code and function effectively as a member of a team, collaborate with development teams to discuss, analyze, or resolve usability issues.

What Skills do I need to be successful in this field?

- Web Administrator, https://www.onetonline.org/link/summary/15-1299.01
- Web Developer, https://www.onetonline.org/link/summary/15-1254.00

What are some potential job titles and employment trends?

Certificate completers may qualify for entry-level positions in these occupational areas:

- Web Administrator
- Web Developer
- Software Developers, Applications

Suggested Course Sequence: This program of study is outlined by quarter, and courses should be taken in the indicated sequence. However, it should not be concluded that students will always proceed through their program of study exactly as prescribed here. The number of quarters listed here is minimal. Not all courses are offered every quarter. Individual student experiences, educational and training background, and personal schedules and demands all may affect the time it takes to finish this program. Also, in general, summer quarter is not considered one of the full-time quarters in the program.

Quarter	Standard Sequence (58 credits)	T-Mobile Project Sequence (58 credits)
Pre-College		CWE 110, BUS 169, IT 102, MATH 098*
1 st Quarter	IT 102, IT 161, EET 109	IT 161, IT 115, EET 109
2 nd Quarter	IT 111, IT 115, BUS 236	IT 111, IT 125, BUS 236
3 rd Quarter	IT 112, IT 125, HUM 105	IT 211, IT 212, HUM 105
4 th Quarter	IT 211, IT 212, CWE 110	

^{*}Required for students whose math placement is MATH 098.

Program Contact: Robert Bunge, Robert.Bunge@seattlecolleges.edu, (206) 934-4530

Website: https://northseattle.edu/programs/information-technology

T··Mobile·

June, 4th 2021

Brian King EVP and CIO, Product and Technology T-Mobile 12920 SE 38th St Bellevue, WA, 98006

T-Mobile is pleased to support the expansion of a Career Launch program designed in partnership between Washington Alliance for Better Schools (WABS), Edmonds School District, and Edmonds College. For this expansion, we are requesting Career Launch Endorsement for our partners in Seattle Public Schools (SPS) and Seattle Colleges. Over the past several years, T-Mobile has partnered with WABS on a variety of projects that benefit youth in the Puget Sound region, and we are excited to continue expanding these programs to better serve students in the Seattle area.

The Technology Career Accelerator Program (TCAP) is a Career Launch endorsed program that combines two paid internships at T-Mobile with a Full Stack Developer Certificate program, resulting in participants who are eligible to apply for a full-stack developer position at our company, which would have typically been a position requiring a 4-year degree. The original Career Launch Endorsement with Edmonds School District and Edmonds College was granted in June 2020. We see this partnership and program as a beneficial opportunity for underserved students to gain access to critical Career Launch opportunities that will improve the ability of young people to connect with high-demand, high-wage careers in Washington, as well as to strengthen and diversify our workforce pipeline.

For the expansion of TCAP, T-Mobile has added 9 Seattle students that were recruited in April 2021. These students will begin their 2-year program in June 2021. We are excited to provide access to this opportunity for students in Seattle Public Schools while also maintaining access for those from Edmonds School District, where the program rolled out in Summer 2020. We look forward to the continued opportunity to work with WABS, school districts, and higher education partners to bring meaningful Career Launch opportunities to this region.

Sincerely,

Brian King

EVP and CIO, Product and Technology

T-Mobile



June 2, 2021

Letter of Support for Career Launch

I am writing to express my support for the Technology Career Accelerator Career Launch program into Seattle Public Schools (SPS). This project will be a partnership between WABS, SPS, Seattle Colleges, and T-Mobile. Initially designed by WABS, Edmonds School District, Edmonds College, and T-Mobile, the Technology Career Accelerator Program (TCAP) received Career Launch endorsement in Spring 2020.

The Technology Career Accelerator Program combines two paid internships with a certificate program, resulting in participants who are eligible to apply for a full-stack developer position at T-Mobile, which would have typically been a position requiring a 4-year degree. This program has a strong support system with Seattle Colleges working to hire a Navigator to fully support SPS students with every step. We see this partnership and program as a beneficial opportunity for underserved students to gain access to critical Career Launch opportunities that will improve the ability of young people to connect with high-demand, high-wage careers in Washington.

Seattle Public Schools is committed to working with WABS, T-Mobile, and Seattle Colleges to adapt this program for students in our district, including assisting with program implementation and student recruitment. For the 2021 cohort, we have recruited 9 students that will start in July of 2021. SPS supports the Career Launch Endorsement of this program and is committed to helping move it forward.

Thank you for your consideration.

Sincerely,

Dr. Keisha Scarlett, Chief Academic Officer



June 9, 2021

This letter supports the Career Launch Endorsement of the Technology Career Acceleration Program (TCAP), developed in a partnership between T-Mobile, Washington Alliance for Better Schools (WABS), Edmonds College, and Edmonds School District in 2020, and now expanding to Seattle Colleges and Seattle Public Schools in 2021. This partnership has developed a strong program that will prepare participants for an in-demand career at T-Mobile and now has doubled the 10 students in cohort 1 to 20 students in cohort 2.

The TCAP was designed to fill a workforce need for a Full Stack Developer at T-Mobile while also furthering equitable access to high-demand roles that provide family-sustaining wages for underserved students. All partners have ensured that the certificate program designed at North Seattle College matches the original certificate at Edmonds College. Both certificates will fill the need for the Full Stack Developer role being targeted at T-Mobile. Program participants will gain workplace skills and knowledge, mentorship, participate in two paid internships, and learn applicable coding languages, including Java, Python, SQL, C++, and JavaScript. Taken as a whole, this experience will fast track them to a career that usually requires a BA.

The TCAP will prepare and launch students to be active, productive, and well-compensated members of the workforce in our region. Upon program completion, students are expected to be earning family-sustaining wages, with significant room for increased compensation as they gain experience and/or optional additional credentials. The Full Stack Developer position is in demand across multiple companies in our region, giving this program significant possibilities for scaling to more colleges and employers.

The Regional Network and WABS can amplify this work out into additional districts, increasing the applicant pool across the tri-county area. We look forward to being a part of this future work as it scales and grows. This program, carefully developed with involvement from all partners, meets the requirements and goals of a Career Launch program and we are in support of this endorsement.

Sincerely,

Emily Yim

Executive Director

Emily yun

Washington Alliance for Better Schools

CCW King and Pierce Regional Network



Shouan Pan Chancellor Seattle Colleges 1500 Harvard Avenue Seattle, WA 98122

June 9th, 2021

Scott A. Copeland
Associate Director, College Relations and Policy Guidance Education Division
Washington State Board for Community and Technical Colleges
Re: Career Launch Endorsement Review Application: IT Full Stack Developer

Dear Mr. Copeland,

I am pleased to offer my continued support for the expansion of a Career Launch program in partnership with Washington Alliance for Better Schools (WABS), Seattle Public Schools (SPS), and T-Mobile. The Technology Career Accelerator Program (TCAP) was initially developed in a partnership between WABS, T-Mobile, Edmonds College, and Edmonds School District. The first cohort of students launched in Summer 2020, after the program received Career Launch endorsement in spring 2020. The expansion of this program with Seattle Colleges included will launch July 2021.

Over the past several years, Seattle Colleges has partnered with WABS on projects that benefit the greater Seattle community. For this project, Seattle Colleges committed to working with WABS, T-Mobile, and SPS to adapt the certificate program developed at Edmonds College to Seattle Colleges, increasing access to the Technology Career Access Program (TCAP) for students in Seattle, which leads participants to a role as a full-stack developer. These are in-demand roles that offer family-sustaining wages and upward mobility. We see this partnership and program as a beneficial opportunity for underserved students to gain access to critical career launch opportunities that will improve the ability of young people to connect with high-demand, high-wage careers in Washington.

In partnership with T-Mobile, Seattle Colleges has created a comparable certificate program to the original Edmonds College Full Stack Developer Certificate. Seattle Colleges' deans and staff have also been working closely with the planning team that meets monthly. We are prepared to seek out grant funds to provide a Navigator for student access and success in the Seattle College system. Additionally, we are excited to make sure students have access to the Seattle Promise. Seattle Colleges supports the important work being done by WABS and their partners to expand Career Launch programs in the Seattle region. Thank you for your consideration of this Career Launch Endorsement proposal.

Sincerely,

Dr. Shouan Pan Chancellor

Seattle Colleges