

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 (excluding 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.

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