

# COCC Continuing Education Apprenti Program Guide

## Apprenti Education Provider

COCC Continuing Education is an educational provider – also known as “training provider” for the Central Oregon Apprenti technology apprenticeship program.

*Apprenti provides a proven, reliable pipeline for underrepresented groups such as minorities, women and veterans to gain training, certification and placement within the talent-hungry tech industry. – <https://apprenticareers.org/about/>*

Currently, training is offered at no cost to apprentices.

## ADMISSION TO APPRENTI PROGRAM:

In order to begin the Apprenti Software Developer Program, a student must be successfully accepted into the program. Application and admission process requirements are listed below.

Potential Apprenti Program students must apply at <https://apprenticareers.org/locations/central-oregon/>

Apprenti Assessment is taken online and is divided into three sections with multiple choice answers: Math (60 questions), Logic & Critical Thinking (40 questions) and Soft Skills (14 questions) Potential students can choose which section of the assessment to start with, once a section is started, it must be finished – progress cannot be saved to be finished later. All sections do not have to be completed at once. Logic and critical thinking and softskills sections of the test take approximately 30 minutes each. The math section is longer, so 1.5-2.5 hours should be allocated. All three sections must be completed within 10 days. An option will be given to re-take the test if improved performance is desired. The assessment is not proctored, but must be completed individually without any assistance or support resources. A calculator may be used for the math section. Preparation resources are available.

Upon completion of the assessment, an email will be sent with the score of the three assessment areas along with information about comparisons with others who have completed the assessment (ranking).

**Ranked Candidates:** Those who perform well on the assessment will join the “ranked candidate pool.” These are the candidates who performed best on the assessment. For those in the ranked pool, beginning at the top of the list, candidates will be invited for interviews each time a group of companies present with jobs to fill. This will happen no less than once per quarter.

**Un-ranked Candidates:** Test re-takes are possible for up to three times, although there is a waiting period between tries.

Ranked Candidates who have a successful interview process and are offered an apprenticeship with a company then become part of the co-hort for classroom instruction, at which time a classroom schedule including all four programs within the Software Developer training area are announced.

## CREDIT FOR PRIOR LEARNING

During Apprenti’s application process, Student Apprentices are able to apply for credit for prior learning. The Apprenti Program Manager will review the applicant’s prior learning experience and make a recommendation to the Oregon Apprenticeship Committee on whether or not to grant credit. The Oregon Apprenticeship Committee will evaluate and vote on whether to ratify the Apprenti Program Manager’s recommendation.

The guidelines follow:

- Prior learning credit will be granted on a like-for-like basis.
- Certifications considered for credit must be current and active. Expired certifications are not eligible for credit.
- Existing certifications must be the same certifications required by the apprenticeship curriculum.
- In occupations where certifications are not available, such as in software application development or web application development, an assessment test may be administered by the training provider to determine course placement.

Prior experience in a subject area is not guaranteed to be sufficient for granting credit, as apprentices are expected to have the same base level of skill and experience, so prior learning is only possible for an exact match between an industry certification and one required by the employer.

## CODE OF CONDUCT – APPRENTI SOFTWARE DEVELOPER COHORT

The Student Life Office at Central Oregon Community College is charged with the task of reviewing, distributing and enforcing the *Code of Student Rights and Responsibilities*.

The Director of Student Life serves both as an **advocate** for students who believe that they have been treated unjustly by the college or one of its officials **and** as the college **adjudicator** with students who have allegedly violated the code of student conduct, a college policy or state/federal law.

In order to provide for the maximum comfort, convenience, and well-being of the total College community, certain standards of behavior have been established at Central Oregon Community College. Upon admission to the College, all students accept an unqualified commitment to adhere to such standards and to conduct themselves in a manner appropriate to an educational environment, one which reflects pride in themselves and the College. Such actions as academic dishonesty, abuse of property, any violation of federal or state law, possession of alcoholic beverages, and possession of illegal drugs are in violation of the College's standards and are cause for disciplinary action. The disciplinary action taken by the College has a range of possibilities up to and including dismissal from college. Full information on Student Policies found here <https://www.cocc.edu/departments/student-life/student-policies.aspx>

**Principles of Community at Central Oregon Community College** The Community of Learners at Central Oregon Community College is dedicated to personal and academic excellence. Choosing to join the community obligates each member to a code of civilized behavior and responsibility for academic success. This introduction submits that membership in the Central Oregon Community College community is not without its responsibilities. It is understood that joining is evidence of subscribing to certain ideals and an agreement to strive for the level of achievement and virtue suggested by the following:

### **The Practice of Personal and Academic Integrity**

A commitment to this principle encourages honesty and fairness in and out of the classroom. It should eliminate cheating, plagiarism, lying, deceiving, and making excuses and dishonesty in academic and professional relationships.

### **Respect the Dignity of all Persons**

A commitment to this principle encourages understanding. It is inconsistent with behaviors that compromise or demean the dignity of individuals or groups, including discrimination, intimidation and hazing, taunting, baiting, ridiculing, insulting and harassing other individuals.

### **Respect for the Rights and Property of Others**

Commitment to these principles is inconsistent with all forms of theft, vandalism, misappropriation, and

malicious damage to or desecration and destruction of property. Respect for others' personal rights is inconsistent with any behavior that violates an individual's right to move about freely, to express appropriately and enjoy privacy.

### **Promote Empathy and Learn from Differences in People, Ideas and Opinions**

Support for equal rights and opportunities for all members of the community regardless of their age, sex, race, religion, disability, ethnic heritage, socioeconomic status, sexual orientation and political, social, other affiliation or disaffiliation.

### **Promote a Healthy and Safe Learning Environment**

A commitment to this principle is a pledge to be compassionate and considerate, to avoid behaviors that are insensitive, inhospitable or inciteful or that unjustly or arbitrarily inhibit another's ability to feel safe and welcomed in his or her pursuit of personal and academic excellence.

### **Allegiance to these Principles**

Community members are not only obliged to embrace these principles and appropriate actions but also have a responsibility to confront, challenge and respond to or report inappropriate behaviors whenever and wherever they are encountered.

### **COCC Americans with Disabilities Statement**

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students may also wish to contact the COCC Disability Services Office in the Barber Library, Lower Level, (541) 383-7583.

### **COCC Non-Discrimination Policy**

Central Oregon Community College is an affirmative action, equal opportunity institution. It is the policy of the Central Oregon Community College Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, race, religion, sexual orientation, or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and non-discrimination, please contact Human Resources for referral to the appropriate personnel, 541-383-7236.

### **Harassment**

It is the policy of Central Oregon Community College that no member of the college community may sexually harass another. Pursuant to Title IX guidance provided the Department of Education's Office of Civil Rights, sexual harassment is defined as unwelcome conduct of a sexual nature. It includes unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature and may come in the form of a hostile environment, quid pro quo, retaliation, or violence. Sexual harassment may happen between individuals of the same or different genders and may be based on gender stereotypes, sexual orientation and gender identity.

For more information on sexual harassment, go to the [Sexual Misconduct and Sexual Violence Information](#) for a description of the three type of sexual harassment (section 2).

### **Reporting Issues**

As a member of the COCC community, you are entitled to a safe and respectful environment. If you have experienced harassment, discrimination, intimidation, physical danger, or disrespect on any COCC campus, please let us help you.

If you experience or witness unacceptable behavior—or have any other concerns—please report it by contacting us via [rknox@cocc.edu](mailto:rknox@cocc.edu). All reports will be handled with discretion.

When reporting an incident, we will ask that you fill out a report. After filing a report, a COCC representative will contact you personally, review the incident, follow up with any additional questions, and make a decision as to how to respond.

### **Student Discipline Process**

The Student Discipline Process is laid out in detail in the Judicial section of the [Student Right and Responsibilities](#). The process involves five basic steps, although some cases may involve fewer steps than others. Because of the compressed nature of the education in the Apprenti program, Student Discipline for Apprenti students can include an immediate decision for complete sanctions with no option for appeal.

1. [Submit Incident Report](#) (Written by a college official in most cases.)
2. Attend Disciplinary Hearing
3. Receive Sanctions
4. Appeal Sanctions
5. Complete Sanctions

### **TERMINATION & DISMISSAL:**

The skills training period of the Apprenti program is part of the student apprentice's initial probationary period. Therefore, registered apprenticeship rules apply to student apprentice termination from the program.

#### **INITIAL PROBATIONARY PERIOD:**

1. All apprentices are subject to an initial probationary period, stated in hours of employment during this time; an apprenticeship agreement may be terminated without cause. It is the period following the effective date of the apprentice's current registration into the program and during which the apprentice's appeal rights are restricted. (See ORS 660.126 (1g))
2. The initial probationary period must be reasonable in relationship to the full term of the apprenticeship unless otherwise required by Civil Service, CBA or law. It cannot exceed one year (12 months) or 25 percent of the length of the program, whichever is shorter. (See ORS 660.126 (1g))
3. During the initial probationary period, either party to the agreement may terminate the apprenticeship agreement upon written notice to the Apprenticeship and Training Division of the Oregon Bureau of Labor and Industries. (See ORS 660.126 (1g) & ORS 660.060 (6))
4. An appeal process is available to apprentices who have completed the initial probationary period. (See ORS 660.060 (6) & (7) and section X of this standard)

The probationary period shall be the first 400 hours of OJT hours of employment, or one year after the current registration to this standard, whichever is shorter. (See ORS 660.126 (g))

### **READMISSION:**

Apprentices terminated from the Apprenti Oregon Program are eligible to re-apply. Circumstances of the termination will be considered by the Joint Apprenticeship and Training Committee (JATC) when determining eligibility for re-application.

The training provider (COCC) provides information only to the committee regarding termination and readmission decisions in accordance with the Family Educational Rights and Privacy Act (FERPA).

## APPRENTI SAP (PROGRAM STANDARDS):

Apprenti Software Developer Program Standards:

- 1) Foundations of Software Development NCTC Program
- 2) Intermediate Software Development NCTC Program
- 3) Advanced Software Development: JavaScript NCTC Program
- 4) Advanced Software Development Advanced JavaScript NCTC Program

Students in the four (4) above NCTC programs will adhere to the following academic policy:

### *Attendance:*

Daily attendance is recorded for each student in each course. To pass a course 90% attendance is required, tracked and included as part of the overall grade. This policy is presented to students at the start of each course. If a student slips to 95% attendance, a warning is provided. When lack of attendance causes a student's grade to fall below 90% irrecoverably, the student is dismissed with a failing grade. In the event of unavoidable absences for reasons such as sickness or bereavement, the administrator and instructor may make case-by-case exceptions to this requirement, as long as coursework is made up in a timely manner with a passing grade, as described below.

### *Make-up Work:*

All assignments missed due to absence must be completed and turned in to the instructor within five (5) business days of the student returning to class, unless the student in question makes explicit arrangements with the instructor. The instruction team will grade and return those assignments within five (5) business days.

### *Tardiness:*

Attendance is significantly important, not only for the students as individuals but also for the class as a whole. Instructors have broad latitude to take whatever actions are necessary in order to correct tardiness problems with students. Tardiness is defined as arriving any later than the scheduled class time. Five (5) instances of tardiness will be tracked as the equivalent of a single day of missed attendance, and class attendance is tracked as part of each student's grade. 90% attendance is required for students to pass, so tardiness can lead to course failure. For example, if a course consists of 180 clock hours, no more than 18 hours are allowed for absences.

### *Grading Policy:*

Students will receive a pass or no-pass grade on the official COCC non credit transcript, indicated by a P for pass or NP for no pass. In order to monitor student progress throughout each course and program, a point-based grading system is used. This system is introduced to the students on the first day of each program.

Students receive a specified number of points for assignments, quizzes, projects, participation, and other deliverables during the program. Program instructors maintain and update point totals throughout the program such that students can log in to the Learning Management System (LMS) software, Canvas by Instructure, and view their scores.

Instructors do not assign grades on any curve or adjusted system; all points are assigned completely based on completion of assignments and quality of work and energy invested. Students who maintain point totals of less than 90% of their potential points are considered to be underperforming.

### *Incomplete Grades:*

If an assignment or set of assignments is missed, the student is allowed five (5) business days to make up missed work and submit missed deliverables. If a student does not believe that he/she can complete

the missed work in this amount of time, he/she is responsible for establishing an alternative plan for making up the work with the course instructor(s).

Instructors verify grades for the official transcript within 10 business days of the end of each course or program.

*Completion Requirements:*

All four Apprenti Software Developer Programs require a final grade of 90% or higher and a minimum class attendance rate of 90% for completion. Students who successfully complete each of the four programs will receive a corresponding Non-credit Training Certificate.

**WARNING, PROBATION, SUSPENSION:**

Instructors meet with students on a regularly scheduled basis to assess progress, no less frequent than once per week. At each meeting, students are apprised of their successes and failures with opportunity to remediate and make up failing work. The instructor will assess and document progress, reporting to the student, the Continuing Education Program Manager and the Apprenti Program Manager to develop an improvement plan with specific dates for remediation. Students have at least two opportunities to re-take exams following each section before being terminated academically. The final determination decision is made by the JATC based on information provided by the instructor and the Continuing Education Program Manager.

## Apprenti Software Developer Program Information

### Program Name: Web Development Foundations

**Program Award:** Non-Credit Training Certificate

**Number of Clock Hours:** 160

**Certificate As Awarded on Transcript:** Web Development Foundations

### PROGRAM DESCRIPTION:

The Web Development Foundations program prepares individuals for employment in the web development industry and is the first required module for the Apprenti Software Developer program. Web developers design and create websites. They are responsible for the look of the site and for the site's technical aspects, such as its performance and capacity. In addition, web developers may create content for the site.

Courses are offered in a face-to-face classroom setting, five days per week. Concepts are taught in a stacked module format, where a new concept is introduced in each class session, building upon what came before it. This is a challenging style that requires persistence, practice and collaboration, but allows more concepts to be introduced over the length of the course. This method helps students learn and retain more information in a short period of time.

The curriculum focuses on defining the structure of a web page, applying CSS and HTML to implement page layout styles, utilizing JavaScript to make web projects interactive and utilizing industry standard version control tools and workflows. Students will collaboratively design and create a single page web application using MVC architecture and will have the skills to move on to the next software development program, Intermediate Software Development.

### PROGRAM ENTRANCE REQUIREMENTS & PREREQUISITES:

Must be successfully accepted into the Apprenti Software Developer program.

### COURSE:

#### **CAPR PR201 Foundations of Software Development** **160 clock hours**

Build a strong software development foundation and learn how to use HTML, CSS, JavaScript and various libraries to create fully functional web apps. This course guides students toward developing a well-rounded foundation of skills necessary for modern web development. These skills include HTML, CSS and JavaScript coding; utilizing Git workflow processes; project organization; designing with wireframing; and employing introductory Agile development methods.

#### Course Outcomes:

1. Define the structure of a web page utilizing the semantic hierarchical structural conventions of HTML5
2. Apply CSS and HTML to implement page layout styles including grid, fluid and responsive techniques; and to style content with color, topography and images
3. Utilize JavaScript to make web projects interactive, such that user input is stored and processed to create updated and personalized content when a user interacts with a page.
4. Write JavaScript that leverages the fundamentals of Computer Science, the Object-Oriented Programming paradigm, basic data types, data structures and basic algorithms, so that the code is efficient, error-free and matches commonly accepted standards and practices of syntax and styles, as measured by the code's functionality and ability to pass a code linter



5. Utilize industry standard version control tools and workflows, including Git and GitHub, to write functional, properly styled code and to work efficiently and harmoniously in professional environments

**VOCATIONAL OBJECTIVE:**

Upon completion of the Non-credit Training Certificate in Web Development Foundations, the successful candidate will have the skills necessary to attain an entry-level website development job or internship. By completing the requirements and receiving the Non-credit Training Certificate in Web Development Foundations award, the successful candidate will have completed the pre-requisites required to enter the next module of the Apprenti Software Developer training area: Intermediate Software Development.

**PROGRAM STANDARDS:**

Students in the Web Development Foundations Program will receive a Pass/No-Pass Grade on the official COCC Non-credit Transcript, based on the following course assessments:

1. Attendance and participation: Professional code of conduct and adherence to attendance policy.  
No more than 10% of face-to-face classes can be missed
2. Homework: required with passing grade of 90% or above
3. Projects for portfolio
4. Labs with code-writing challenges
5. Minimum of 75% grade upon completion of coursework
6. Quizzes and tests
7. Peer programming, co-lab (co-working) team projects

**ACADEMIC PROGRESS RECORDS:**

Students in the Web Development Foundations Program will receive weekly course status surveys and a bi-weekly progress report consisting of attendance and performance based on measured outcomes.

**PROGRAM CALENDAR:**

The Web Development Foundations Program will be offered Winter 2019 and in subsequent terms as the Apprenti Software Developer partnership program demands.

Web Development Foundations Program – 160 Clock Hours  
February 25-March 22; 8 am to 5 pm each day with 1 hour lunch period

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**Program Name: Intermediate Software Development****Program Award:** Non-Credit Training Certificate**Number of Clock Hours:** 160**Certificate As Awarded on Transcript:** Int Software Development**PROGRAM DESCRIPTION:**

The Intermediate Software Development program prepares individuals for employment as a software developer. Studying the common core of software development, including MVC architecture, object-oriented and functional programming, students will gain a solid understanding of intermediate software development concepts. This is the second required module for the Apprenti Software Developer program. Students will create and launch web apps in HTML, CSS and JavaScript with the help of third-party APIs and libraries from around the web. Students will study professional software development techniques and practices while advancing skills.

Courses are offered in a face-to-face classroom setting, five days per week. Concepts are taught in a stacked module format, where a new concept is introduced in each class session, building upon what came before it. This is a challenging style that requires persistence, practice and collaboration, but allows more concepts to be introduced over the length of the course. This method helps students learn and retain more information in a short period of time.

The curriculum focuses on programming and computer science fundamentals such as basic data structures and algorithms. Students will collaboratively design and create a single page web application using MVC architecture and will have the skills to continue advancing skills or obtain an entry-level web development role or internship.

**PROGRAM ENTRANCE REQUIREMENTS & PREREQUISITES:**

Successful completion of the Web Development Foundations Non-credit Training Certificate.

**COURSE:****CAPR PR301 Intermediate Software Development  
160 clock hours**

Becoming a well-rounded developer is much more than learning language syntax. In this intensive course, you will study the common core of software development, including MVC architecture, object-oriented and functional programming, and computer science fundamentals such as basic data structures and algorithms. Come learn how to create and launch web apps in HTML, CSS, and JavaScript, with the help of third-party APIs and libraries around the web.

Course Outcomes:

1. Collaboratively design and create a single page web application from scratch using MVC architecture built with clean HTML, CSS and JavaScript that satisfies stakeholder requirements captured in user stories.
2. Have the skills to move on to CAPR PR4X1 Advanced Software Development by successfully completing all requirements of the Intermediate Software Development Program

**VOCATIONAL OBJECTIVE:**

Upon completion of the Non-credit Training Certificate in Intermediate Software Development, the successful candidate will have the skills necessary to attain an entry-level website development position

or internship and will have completed the pre-requisites required to enter the next module of the Apprenti Software Developer training area: Advanced Software Development.

### **PROGRAM STANDARDS:**

Students in the Intermediate Software Development Program will receive a Pass/No-Pass Grade on the official COCC Non-credit Transcript, based on the following course assessments:

1. Attendance and participation: Professional code of conduct and adherence to attendance policy.  
No more than 10% of face-to-face classes can be missed
2. Homework: required with passing grade of 90% or above
3. Projects for portfolio
4. Labs with code-writing challenges
5. Minimum of 75% grade upon completion of coursework
6. Quizzes and tests
7. Peer programming, co-lab (co-working) team projects

### **ACADEMIC PROGRESS RECORDS:**

Students in the Intermediate Software Development Program will receive weekly course status surveys and a bi-weekly progress report consisting of attendance and performance based on measured outcomes.

### **PROGRAM CALENDAR:**

The Intermediate Software Development program will be offered Spring 2019 and in subsequent terms as the Apprenti Software Developer partnership program demands.

Intermediate Software Development - 160 Clock Hours  
April 1-April 26; 8 am to 5 pm each day with 1 hour lunch period

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**Program Name: Advanced Software Development: JavaScript****Program Award:** Non-Credit Training Certificate**Number of Clock Hours:** 200**Certificate As Awarded on Transcript:** Adv Sftware Dev: JavaScript**PROGRAM DESCRIPTION:**

The Advanced Software Development: JavaScript program prepares individuals for employment in the software development industry and is the third of four required modules for the Apprenti Software Developer program. Software developers are the creative minds behind computer programs. Some development applications that allow people to do specific tasks on a computer or another device. Others develop the underlying systems that run the devices or that control networks. Software developers analyze users' needs and then design, test and develop software to meet those needs. They are responsible for the entire development process for a software program, identifying core functionality that users need from software programs. Software developers must also determine user requirements such as level of security and performance needs. Developers write code or give instructions to others to write code.

Courses are offered in a face-to-face classroom setting, five days per week. Concepts are taught in a stacked module format, where a new concept is introduced in each class session, building upon what came before it. This is a challenging style that requires persistence, practice and collaboration, but allows more concepts to be introduced over the length of the course. This method helps students learn and retain more information in a short period of time.

The curriculum focuses on Full-Stack JavaScript development, core competencies and best practices. Students will build back-end, server-side web applications with Node.js. Throughout this intensive course, students will study data structures and algorithms, professional software development techniques, and established industry best practices while advancing skills in full-stack JavaScript. Upon completion of Advanced Software Development: JavaScript, students will have the skills to move on to the next software development program, Advanced Software Development : Advanced JavaScript.

**PROGRAM ENTRANCE REQUIREMENTS & PREREQUISITES:**

Successful completion of the Full Stack Intermediate Software Developer Non-credit Training Certificate.

**COURSE(S):****CAPR PR411 Advanced Software Development: JavaScript  
200 clock hours**

Learn to write clean, well-tested, JavaScript code using industry standard software engineering patterns.

**Course Outcomes:**

1. Build and contribute to a server-side and client-side application demonstrating industry best practices, architecture/framework that promotes maintainability, scalability, and collaboration.
2. Apply Computer Science fundamentals in analyzing and choosing algorithms, differentiating between JavaScript coding patterns and practices, and using byte formats in application building.
3. Assess differences between Object Relational Mapping and Object Document Mapping.
4. Demonstrate the ability to model data using a NoSQL Object Document Mapper for MongoDB.
5. Host a full-stack web application on Heroku.

**VOCATIONAL OBJECTIVE:**

By completing the requirements and receiving the Non-credit Training Certificate in Advanced Software Development: JavaScript award, the successful candidate will have completed the pre-requisites required to enter the next module of the Apprenti Software Developer training area: Advanced Software Development: Advanced JavaScript Program.

**PROGRAM STANDARDS:**

Students in the Advanced Software Development: JavaScript Program will receive a Pass/No-Pass Grade on the official COCC Non-credit Transcript, based on the following course assessments:

1. Attendance and participation: Professional code of conduct and adherence to attendance policy.  
No more than 10% of face-to-face classes can be missed
2. Homework: required with passing grade of 90% or above
3. Projects for portfolio
4. Labs with code-writing challenges
5. Minimum of 75% grade upon completion of coursework
6. Quizzes and tests
7. Peer programming, co-lab (co-working) team projects

**ACADEMIC PROGRESS RECORDS:**

Students in the Advanced Software Development: JavaScript Program will receive weekly course status surveys and a bi-weekly progress report consisting of attendance and performance based on measured outcomes.

**PROGRAM CALENDAR:**

The Advanced Software Development: JavaScript Program will be offered Spring 2019 and in subsequent terms as the Apprenti Software Developer partnership program demands.

Advanced Software Development: JavaScript - 200 Clock Hours  
May 6-June 14; 8 am to 5 pm each day with 1 hour lunch period; No class May 27-31

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**Program Name: Advanced Software Development: Advanced JavaScript****Program Award:** Non-Credit Training Certificate**Number of Clock Hours:** 208**Certificate As Awarded on Transcript:** Adv Sftware Dev Adv JavaScript**PROGRAM DESCRIPTION:**

The Advanced Software Development: Advanced JavaScript program prepares individuals for employment in the software development industry and is the final required module for the Apprenti Software Developer program. Software developers are the creative minds behind computer programs. Some development applications that allow people to do specific tasks on a computer or another device. Others develop the underlying systems that run the devices or that control networks. Software developers analyze users' needs and then design, test and develop software to meet those needs. They are responsible for the entire development process for a software program, identifying core functionality that users need from software programs. Software developers must also determine user requirements such as level of security and performance needs. Developers write code or give instructions to others to write code.

Courses are offered in a face-to-face classroom setting, five days per week. Concepts are taught in a stacked module format, where a new concept is introduced in each class session, building upon what came before it. This is a challenging style that requires persistence, practice and collaboration, but allows more concepts to be introduced over the length of the course. This method helps students learn and retain more information in a short period of time.

The curriculum focuses on fundamental computer science concepts, analyzing algorithms, testing asynchronous actions, communicating over the web in real time, utilizing cryptography concepts and creating online brand, network and resume. At the completion of this program, students will have the skills and portfolio to obtain an entry level position as a Full-Stack JavaScript or Front-End Web Developer.

**PROGRAM ENTRANCE REQUIREMENTS & PREREQUISITES:**

Successful completion of Advanced Software Development: JavaScript Non-credit Training Certificate.

**COURSE(S):****CAPR PR412 Advanced Software Development: Advanced JavaScript****208 clock hours**

Students will focus on client-side development centered around designing and building "Single Page Apps" using a modern JavaScript application framework or library that integrates with an application server.

**Course Outcomes:**

1. Apply Computer Science fundamentals in analyzing algorithms, testing asynchronous actions, and communicating over the web in real time using websockets.
2. Utilize cryptography concepts with public/private keys and digital certificates.
3. Create an online brand, network, and resume; and will demonstrate aptitude in personal and technical interviews of varying formats.

**VOCATIONAL OBJECTIVE:**

Upon completion of the Non-credit Training Certificate in Advanced Software Development: Advanced JavaScript, the successful candidate will have the skills necessary to attain an entry-level software developer job or apprenticeship. By completing the requirements and receiving the Non-credit Training Certificate in Advanced Software Development: Advanced JavaScript award, the successful candidate will have completed the pre-requisites required to begin an onsite year-long apprenticeship in the Apprenti Software Developer training area.

**PROGRAM STANDARDS:**

Students in the Advanced Software Development: Advanced JavaScript Program will receive a Pass/No-Pass Grade on the official COCC Non-credit Transcript, based on the following course assessments:

1. Attendance and participation: Professional code of conduct and adherence to attendance policy.  
No more than 10% of face-to-face classes can be missed
2. Homework: required with passing grade of 90% or above
3. Projects for portfolio
4. Labs with code-writing challenges
5. Minimum of 75% grade upon completion of coursework
6. Quizzes and tests
7. Peer programming, co-lab (co-working) team projects

**ACADEMIC PROGRESS RECORDS:**

Students in the Advanced Software Development: Advanced JavaScript Program will receive weekly course status surveys and a bi-weekly progress report consisting of attendance and performance based on measured outcomes.

**PROGRAM CALENDAR:**

The Advanced Software Development: Advanced JavaScript Program will be offered Summer 2019 and in subsequent terms as the Apprenti Software Developer partnership program demands.

Advanced Software Development: Advanced JavaScript - 208 Clock Hours

June 24-August 9: 8 am to 5 pm each day with 1 hour lunch period; no class July 1-5 and August 5-8

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## **Software Developer Instructional Team**

COCC Continuing Education (training provider)

### **RACHEL KNOX**

#### **Program Manager Continuing Education**

B.A. in English/British Literature, Oakland University. At COCC since 2003.

### **ADAM DUQUETTE**

#### **Lead Instructor**

B.S. in Applied Computer Science, Oregon State University-Cascades, Bend. At COCC since 2018.

### **TIM LEAVEY**

#### **Teaching Assistant**

B.A. in Asian Studies and Japanese, University of Oregon, Eugene. At COCC since 2018.