Office of Educational Improvement and Innovation
Public Service Building
255 Capitol Street NE
Salem, OR 97310-0203
503-947-5600
Fax 503-378-5156
http://www.ode.state.or.us/go/cte/

Oregon Department of Community Colleges and Workforce Development
Public Service Building
255 Capitol Street NE
Salem, OR 97310-0203
503-378-8648
Fax 503-378-3365
http://www.odccwd.state.or.us/prgapproval/

DEPARTMENT OF
EDUCATION

CTE™
Learning that works
for Oregon

COMMUNITY COLLEGES AND WORKFORCE DEVELOPMENT
WORKSOURCE OREGON

Career and Technical Education
Program of Study Application
2017 Version
(Full Application)

Directions—please enter information into ALL the fields in this application. If you have technical problems with this application, contact Ron Dodge POS.Application@state.or.us.
(For detailed information on how to complete this application consult the **Guide to Using the Oregon CTE Program of Study Application 2017***.)* ***DEADLINE for submission: June 30, 2017; (Early Bird: April 28, 2017)***

CTE POS—Title:	Software Design and Information Technology
Career Area:	Industrial Engineering Systems--IE
Cluster Area (& appropriate secondary CTE licensure):	IE--Engineering Technology
Focus Area (if applicable):	
Secondary CIP Code: (Link to CIP website)	11.0103 (6 digit)
Community College CIP Code: (Link to CIP website)	11.0101 (6 digit)

Secondary School Name:		Aloha High School
Secondary School District:		Beaverton School District
Secondary School ID Number:		**48J**
Secondary Teacher Name	**Email**	**Current CTE License**
(Lead Teacher)		Select Current Teacher CTE Endorsement
Terrance Richesin	terrance_richesin@beaverton.k12.or.us	IES-Information and Communications Technology IES-Engineering Technology

Secondary Technical Skill Assessment (TSA): Use the code from this table for your selected TSA.	2AREG038

CC Technical Skill Assessment (TSA): Use the code from this table for your selected TSA.	2AREG029

Primary Oregon Community College Name: (Contact POS.Application@state.or.us to add multiple colleges)	Portland Community College
College Point of Contact:	PCC Sally Earll sally.earll@pcc.edu
Community College CTE Program Title(s):	Computer Information Systems (CIS)
Community College Award:	Associate of Applied Science

Visual/Roadmap: (Insert link, or identify location where sample of visual can be found)	https://www.beaverton.k12.or.us/schools/aloha/academics/Documents/20172018ProgramGuide.pdf

Regional Coordinator/Contact:	2A--Beth Molenkamp elizabeth.molenkamp@pcc.edu

CTE Teacher: Submit complete electronic application materials to your CTE Regional Coordinator.
Regional Coordinator: Email application and addenda to this mailbox-- POS.Application@state.or.us) , or follow an alternative process described in Step 8 of the *Submission Process* on the last page of this application*.*

DEADLINE for submission: June 30, 2017

☐

CTE POS Course Lists—Secondary

<div style="border:1px solid">

Directions:

1) Please list below the CTE Program of Study <u>Secondary Courses</u> in which the instructor will:
- Teach with intent and purpose the CTE POS knowledge and skills identified in the CTE POS Skill Set, <u>and</u>
- Assess and record student achievement of those standards

2) Mark as "TSA" those courses that are necessary for students to take before they are required to take the Technical Skill Assessment for this POS.

Note: Additional CTE courses may be listed (and supported with Perkins funds) if they support the identified skill set; but do not mark those as "TSA" Required"

</div>

Secondary Core CTE Courses (Please be complete; this information will be entered into the CTE Program Update database and all fields are required)

TSA* Required	School Course #	Secondary Course Name	# of Credits	5-digit NCES Code	Course Description (brief) (boxes below will expand)	Articulating College (if applicable)	College Course #	College Course Name
☐	A451X	C-Programming 1	.5	10152	A semester long, introductory, programming course. Students will be exposed to software design principles and practices, programming concepts, structured problem solving and critical thinking, through the use of LEGO EV3 robot and Mindstorm "drag and drop" programming environment. No prerequisites required.	Select College		
☐	A454X	C++ Programming	.5	10154	A semester long, intermediate, structured programming course. Students will be exposed to software design as part of the software development life cycle. Includes problem solving, basic logic constructs, testing programs, and modular programming, through 2D game design. Provides examples of well-designed software projects. Prerequisite: Computer Programming 1, or instructor approval.	Portland Community Col	CIS-122	Introduction to Programming Logic
☒	A4812	AP Computer Science Principles	1.0	10019	A year long, intermediate programming course. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing	Select College		AP CSP

					impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Prerequisite: Completion of Computer Programming I and C++ programming OR Instructor approval.			
☐	A470X	Information Technology 1	.5	10254	A semester long, introductory, hardware course. Students will learn to identify, remove, and install standard components of a PC style microcomputer, including motherboards, CPUs, RAM, hard drives, removable media drives, and power supplies. Additional topics include BIOS, CMOS, the boot process, video displays, printers, and home and business networking.	Portland Community Col	CIS-145	Micro Computer Hardware and Troubleshooting
☐	A471X	Information Technology 2	.5	10254	A semester long, introductory, admin course. This course covers installing and configuring operating systems including Windows, iOS, Android, Apple OS X and Linux and maintaining commonly used business applications, like the MS business suite. It also addresses security, the fundamentals of cloud computing and operational procedures. Prerequisite: Information Technology 1	Select College		
☐						Select College		
☐						Select College		
☐						Select College		
☐						Select College		
☐						Select College		
☐						Select College		
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						Select College		
☐						Select College		
☐						Select College		

*TSA required—Technical Skill Assessment required course—required courses that, when completed, trigger TSA assessment eligibility for the student

CTE POS Course Lists—Post-Secondary

Post-secondary Core CTE Courses:
- *Enter the name of the college program that is the postsecondary component of this POS*
- *Select the highest level of this component offered by the college*
- *List only the courses included in the Course/Skill Set crosswalk matrix*

Name of Certificate or Degree Program	Computer Information Systems		
Highest award available in Program:	AAS		
College Course #	**Post-Secondary Course Name**	**Number of Credits**	**Accelerated College Credit/College Now?**
CIS 122	Introduction to Programming Logic	4	☒
CIS 145	Microcomputer Hardware and Troubleshooting	4	☒
CIS 120	Computer Concepts I	4	☐
CIS 120	Computer Concepts II	4	☐
CIS 179	Data Communication Concepts I	4	☐
CIS244	Systems Analysis	4	☐
CIS275	Data Modeling SQL Introduction	4	☐
			☐
			☐
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			☐
			☐
			☐
			☐
			☐

Course-to-Skill Set Crosswalk/Matrix

Please use one of the Excel spreadsheets posted online at (http://www.ode.state.or.us/search/page/?=3584) (**or** use one you've created locally) to crosswalk the identified skill set to the listed secondary and post-secondary courses.
- You should use the same matrix for both secondary and post-secondary courses.
- It is only required to map courses to the standards (Knowledge and Skill Statements); it is not necessary to map the performance indicators, duties, or tasks.
- Be sure to identify the selected skill set in your matrix, the secondary and postsecondary components.
- If your selected skill set is not from the Oregon Skill Sets website, please identify its origin and how it was industry validated.

☒ **Secondary:** *(check this box to indicate secondary course-to-skills crosswalk is complete and attached)*
☒ **Post-secondary:** *(check this box to indicate post-secondary course-to-skills crosswalk is complete and attached)*

CTE POS Design Elements

There are <u>five Elements</u> necessary for a robust Career and Technical Education Program of Study—all are critical to being State approved in Oregon

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GENERAL DIRECTIONS FOR COMPLETING THE *ELEMENTS* SECTIONS:

➤ **In the first part of each Element section, click on each checkbox for criteria that applies to your Program of Study**
➤ **For those criteria that don't apply at this time, explain in the Comments box at the end of the section why those criteria are not met and how you will address them before the program is up for revision (POSs are usually approved for four years) Programs that do not meet all elements at the time of application may be temporarily approved as a "State Recognized Program" (SRP) until missing elements are completed; SRP's can convert to POS anytime and be immediately eligible for Perkins funds, per local grant administrator's budget.**
➤ **In the second part of each Element section, there is the expandable space provided for Comments, as mentioned above. Use this box to explain missing check marks in the criteria statements above, point out strengths of your program, or identify special circumstances you need to have considered during ODE review of this application**
➤ **If you already have documents or files that help demonstrate the strength or potential of each Element, simply attach those documents or files in the appropriate Addendum folder, or provide links to online documents, when submitting this application, rather than write lengthy responses in the Comment box. (Consult the *Guide to Using the Oregon CTE Program of Study Application 2017* for details about how to use Addenda if submitting supporting documents or files.)**

Element 1: Standards & Content

Standards and Content are the foundational elements for designing and improving Perkins-eligible Programs of Study

This POS design includes:

☒ A. Relevant, rigorous technical skill standards-based content, including or aligned with challenging academic standards
☒ B. Shared secondary and post-secondary technical content which incorporates the knowledge and skills identified in the Oregon Skill Sets or other industry-based standards, which are validated through national and state employer input
☒ C. Sufficient size, scope and sequence to include curriculum and instruction leading to student attainment of academic and technical knowledge and skills for high school graduation, college entry, and careers within high wage, high demand fields
☒ D. A systemic approach to instructional delivery of academic and technical knowledge and skills where student performance is demonstrated through valid and reliable technical skill assessments (TSA) aligned to industry standards
☒ E. A plan for continuous improvement of program design and instructional delivery that provides the opportunity for each CTE POS student to:
    ☒ Meet diploma requirements, post-secondary entry requirements, and/or certificate/degree requirements
    ☒ Demonstrate mastery of academic and technical content that is aligned with industry standards
    ☒ Apply learning through authentic experiences
    ☒ Develop skills and build confidence to compete in high wage, high skill, and/or high demand occupations.

➤ **Directions for using the Comment box**—Expandable space is provided for comments. This Box is intended for explanations for missing checks above, or notes regarding program strengths worth consideration during POS review. <u>If you already have documents or files that do this more quickly</u>, simply attach those documents or files (or links to them) to this application in an appropriate Addendum folder. (Consult the *Guide to Using the Oregon CTE Program of Study Application 2017*, for more details.)

Please address these questions through your comments in **Element 1 Comment Box** below (or attach documentation in an appropriately identified file/folder)**:**
- Address any unchecked box above
- Explain how this POS is aligned with challenging academic standards at the HS and CC levels
- Identify those who participated in the decision of which skill set to use for this POS
- Who participated in the crosswalk of the skill sets to HS and CC courses

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Element 1 Comment Box: Secondary Course Catelog:
https://drive.google.com/drive/folders/0B_8BmbrdRaPgYlV1Q2R5V0hQckE
The POS is aligned with state standards as outlined in the course catelog (link above). The participants in the decision of skill set for this POS and crosswalk of the skill sets were: Beth

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Molenkamp (regional coordinator), Dr. LaKisha Clark (AHS administration), the AHS CS Advisory Board and Terry Richesin (AHS Computer Science and Technology instructor) At the community college level, the highest degree available is an AAS. In order to receive this award a student must pass a math competency test or course, an English Composition course, History course and a Public Speaking course (these requirements can be found at
http://catalog.pcc.edu/programsanddisciplines/electronicengineeringtechnology/#degreestext
http://catalog.pcc.edu/programsanddisciplines/civilengineeringtechnology/#degreestext.

Element 2: Alignment and Articulation

Alignment and Articulation are key to getting Program of Study partners working together to build career pathways for CTE students

The alignment of this POS includes:

☒ A. A unified, cohesive sequence of content among secondary and post-secondary partners contained in a non-duplicative sequence of courses or learning experiences.

☒ B. Alignment of content between secondary and post-secondary education partners may include course articulation or other ways to acquire post-secondary education credits (e.g. Oregon's Credit for Proficiency, Dual Credit, Oregon Transfer credit, etc.).

☒ C. Articulation agreements are developed, implemented and supported at the institutional level to ensure long-term sustainability and cross-sector cooperation.

☒ D. Based on the program design and instructional plan, each student will:
  ☒ Continually progress in knowledge and skills when ready;
  ☒ Earn high school or college credit based on performance; and
  ☒ Make the connection between educational preparation and entry into a care**e**r.

➢ **Directions for using the Comment box—**Expandable space is provided for comments. This Box is intended for explanations for missing checks above, or notes regarding program strengths worth consideration during POS review. If you already have documents or files that do this more quickly, simply attach those documents or files (or links to them) to this application in an appropriate Addendum folder. (Consult the ***Guide to Using the Oregon CTE Program of Study Application 2017***, for more details.)

Please address these questions through your comments in **Element 2 Comment Box** below (or attach documentation in an appropriately identified file/folder)**:**
- Address any unchecked box above
- Briefly describe the level of alignment and/or articulation that exists for this POS (you may also identify non-Perkins eligible alignments that exist with private schools, universities, etc.)
- Briefly describe the alignment and/or articulation activities that have occurred, and who participated from HS and CC levels

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Element 2 Comment Box: Two courses are articulated with PCC classes. C++ Programming is articulated to PCC CIS-122 and Information Technology 1 will be articulated to PCC CIS-145. CIS-145 articulation is pending an equipment audit. We have engaged in close collaboration with Marc Goodman and Larry Lam (CIS instructors) and Kate DePaolis (Dual Credit coordinator) to ensure course alignment. C++ Programming provides essential software design and problem solving skills to successfully enter the software industry. Information Technology 1 provides essential desktop and server computer hardware maintenance and administration skills needed to successfully begin a data center career. Our advisory board has reviewed both soft and hard skills expectations, with us and agree these skills are desirable in entry job applicants.

<table>
<tr><td>

Element 3: Accountability & Evaluation

</td><td>

Accountability and Evaluation are core elements for Perkins eligibility—they provide data illustrating the value of CTE to students' future plans

</td></tr>
</table>

In this POS design:

☒ A. Performance will be measured against the Perkins-required performance measures as described in Perkins IV Measurement Definitions identified in Oregon's State Plan (re: Data Collection)

☒ B. Business, community and education partners (specifically, an Advisory Committee) participate in CTE Program of Study design and development, including:
  ☒ Assistance in evaluating program vision, goals and priorities
  ☒ Validation of industry skill standards for curriculum content and technical skill assessment, where appropriate
  ☒ Participation in the CTE teacher recruitment, instructor appraisal process, and ongoing faculty professional development

☒ C. Perkins performance data is used for data-driven, CTE program of study design and improvement decisions

☒ D. Students have the opportunity to learn in a contextual career related environment that allows them to:
  ☒ Monitor their own progress through their demonstration of attaining technical and academic skill standards
  ☒ Demonstrate their technical and academic proficiency in meaningful ways, e.g., Technical Skill Assessment, etc.
  ☒ Adapt their program to meet personal goals based on industry requirements and performance outcomes

> **Directions for using the Comment box**—Expandable space is provided for comments. This Box is intended for explanations for missing checks above, or notes regarding program strengths worth consideration during POS review. If you already have documents or files that do this more quickly, simply attach those documents or files (or links to them) to this application in an appropriate Addendum folder. (Consult the ***Guide to Using the Oregon CTE Program of Study Application 2017***, for more details.)

Please address these questions through your comments in **Element 3 Comment Box** below (or attach documentation in an appropriately identified file/folder)**:**
- Address any unchecked box above
- Identify the data used in designing this POS, and the effect that the data had on the design
- Identify the members of the Business Advisory Committee
- How will the POS be evaluated, and by whom?
- How will you know if the POS is successful?
- What process will you use to decide any changes that need to occur because of the POS evaluation?
- Required: List the TSA(s) code used for this POS on Page 1 (ODE approved list)

Element 3 Comment Box: This POS was designed using input from other Computer Science and Engineering teachers in the region and current collegiate programs in the area. Also, information from PCC's Program of Study has been evaluated and used in the designing of the program. Several business owners and industry partners have been recruited to be members of the Industry Advisory Committee. These include: Brad Windecker (Orchestra Software), Sara Stiles (Intel Corporation) Thurman Miller (Intel Corporation), Chris May (Ndivia), Carlos Rodrigues (Finix Payments) and Paul Ottum (BSD CS TOSA).

The POS will be evaluated at the end of every academic year by the instructor(s) and the Industry Advisory Committee to determine if the curriculum contains relevant and current learning opportunities and experiences. The POS will be evaluated on relevance to "real world" engineering projects and employment opportunities along with how well the students successfully complete the program. As the tools and programs used in engineering advance and improve the POS will be examined to determine how it can be changed to reflect those changes and advancements.

Post Secondary TSA: 2AREG029
Secondary TSA: 2AREG038

CTE Program Of Study …. <u>2017</u> **Application** (continued)

Oregon Department of Education | Oregon Department of Community Colleges and Workforce Development | Revised September 2016
2017 CTE Program of Study Application Form   Page 11 of 18

Element 4: Student Support Services

Student Support Services include the ways that all students are made aware of the career and education opportunities available in the CTE career Pathway that is the focus of this POS.

In this POS design:

☒ A. All CTE students will have informational guidance support and advising to assist them in progressing through a CTE program of study in an efficient and seamless manner (e.g. Career Pathway Templates, Education Plan and Profile, POS visual guides, Career Information System, etc.).

☒ B. Each student will be able to:
    ☒ Identify the career path options he/she can follow to a chosen career;
    ☒ Receive consistent and informed messages about career and possible financial options for post-secondary education;
    ☒ Take ownership of their education through maintaining a current education plan;

☒ C. Compliance is evident with Federal regulations, including Title VI- Civil Rights Act of 1964; Title IX – Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; Vocational Education Programs Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, Sex, Religion, National Origin, Age or Disability; Title II of the Americans with Disabilities Acts of 1990; therefore, this POS provides:
    ☒ Appropriate access for all students, including non-traditional and special populations.
    ☒ A non-biased and non-discriminating learning environment (with respect to race, color, national origin, gender and disability status).
    ☒ Program facilities with physical access and instruction that accommodates students with disabilities, including various learning styles (e.g. the use of visual, auditory, tactile, and kinesthetic teaching methods, and other appropriate forms of instruction).
    ☒ Responsiveness to the needs of students for whom English is a second language.

☒ D. Opportunities for structured student leadership are a program component and integrated into CTE POS instruction. This POS integrates either:
    ☐ 1) One of the state chartered CTSO's: ☐ DECA, ☐ FBLA, ☐ FCCLA, ☐ FFA, ☐ FNRL, ☐ HOSA, or ☐ SkillsUSA **or**
    ☒ 2) Another local or national organization that meets the criteria listed in the ODE Student Leadership criteria document.
       • The locally developed student organization or experience provides leadership development opportunities that meet the following expectations (see details in linked document above):
          ☒ Context related instruction, career development , and practical assessment
          ☒ Community-based learning experiences
          ☒ Organizational management and administrative experiences

➢ **Directions for using the Comment box—**Expandable space is provided for comments. This Box is intended for explanations for missing checks above, or notes regarding program strengths worth consideration during POS review. If you already have documents or files that do this more quickly, simply attach those documents or files (or links to them) to this application in an appropriate Addendum folder. (Consult the ***Guide to Using the Oregon CTE Program of Study Application 2017***, for more details.)

Please address these questions through your comments in **Element 4 Comment Box** below (or attach documentation in an appropriately identified file/folder)**:**
- Address any unchecked box above
- Briefly describe the POS-specific student support services that HS and CC students will receive in this POS that will support their success in the courses
- How will those student support services help inform and prepare HS and CC students for their next educational and career steps?
- Briefly describe the specific efforts that will be made to recruit all types of students into this POS (both HS and CC levels)
- Briefly describe any student leadership opportunities that will be available for both HS and CC

Element 4 Comment Box:
We will be creating a school based program and connect with other local organizations and work to integrate one of them into our POS.

Comments:

All students at Aloha are made aware of the classes in this POS during the forecasting process. The catalog is available on the website, discussed in homeroom, and with students' counselors. In addition, we advertise our POS during school hours, at parent nights (including back-to-school, curriculum night, and latino parents' night). Student tracking is also completed through the CIS system.

In particular, we try to recruit non-traditional students at various events such as Latino Parents' Night, and our after school clubs, like Empowher (a club focusing on female empowerment).

All students are welcome in our intro classes. There are no prerequisites, meaning they are available to students of all ability levels. ELL, IEP, and 504 students are very welcome in our classes. Our gradebook software, Synergy, identifies these students so that teachers can easily access and check their accomodations, modifying classes and assessments as needed. Extra language support is available for ELL students through our ELL department; study skills and assessment support are availble to IEP and 504 students through their case managers.

1. Relevent Links:
PCC WEBSITES OF PROGRAMS http://www.pcc.edu/programs/
http://www.pcc.edu/programs/computer-info/
ADVISING SERVICES http://www.pcc.edu/resources/advising/
COUNSELING SERVICES http://www.pcc.edu/resources/counseling/
CAREER COUNSELING http://www.pcc.edu/resources/careers/resource-centers/career-exploration.html
CAREER CENTER http://www.pcc.edu/resources/careers/resource-centers/
START LAB https://www.pcc.edu/resources/orientation/documents/orientation-schedule.pdf
ESOL PROGRAM ADVISORS http://www.pcc.edu/prepare/esol/sylvania/
ESOL PROGRAM http://www.pcc.edu/prepare/esol/
INTERNATIONAL ADVISORS http://www.pcc.edu/about/international/
DISABILITY SERVICES http://www.pcc.edu/resources/disability/
OFFICE OF AFFIRMATIVE ACTION AND EQUITY http://www.pcc.edu/about/affirmative-action/
DIVERSITY TRAINING http://www.pcc.edu/about/affirmative-action/training.html
TRANSFER INFORMATION http://www.pcc.edu/programs/university-transfer/
SOU BAS BUSINESS MANAGEMENT TRANSFER INFORMATION
http://www.pcc.edu/programs/university-transfer/transfer-guides/SOUBAS.html
OIT BAS TECHNOLOGY AND MANAGMENT TRANSFER INFORMATION
http://www.oit.edu/distance-education/programs/technology-management
OREGON TRANSFER GUIDES http://www.pcc.edu/programs/university-transfer/transfer-guides/
OUT OF STATE TRANSFER GUIDES http://www.pcc.edu/programs/university-transfer/transfer-guides/out-of-state.html

2. Technical Skill Assessment: http://www.ode.state.or.us/search/page/?id=3230

3. All expectations have been met.The following information provides supporting evidence for the Expectations: Student Support Services per each original statement.

A. Students receive information, guidance, and/or counseling specific to this CTE Program of Study, including career and job market information, and college program information. Evidence: Students in the Civil Engineering Tech program at PCC have a specialized advisor who is knowledgeable about PCC systems as well the nuances of the field and the program. The PCC website shows the many diverse CTE programs available as well as how to get started in one, a career center as well as offers advising and career counseling services. The Civil Engineering Technology degree program has their own website and advising guides which details how students can get started and get support.

B. Students participate in CTE POS specific career related learning experiences or related work experience. Evidence: Students are required to take CMET 280 CE: Civil/Mechanical Engineering Technology 1-5cr. to meet their required degree elective requirements. This is an internship experience that is offered in a real world setting.

C. Students' education planning is developed around information specific to this CTE Program of Study. Evidence: Students and advisors work with the GRAD PLAN program to create a personalized degree plan based on the students' level of entry at PCC and the program requirements. In addition, the catalog of programs and degrees offers guidance on educational planning.

D. Extended application projects or capstone experiences are developed within the context of this CTE Program of Study. Evidence: Students complete a series of extensive applied projects throughout the program starting in their first year. They will experiment and understand a variety of materials as well as complete projects from the preplanning phase through completion.

E. Written information is provided to all students in this CTE Program of Study informing them of available articulated college (or university) credits, dual credit, expanded options, scholarships, and other postsecondary opportunities. Evidence: PCC has extensive and detailed information available in their transfer website and in the transfer guides that are available showing the paths of articulation from PCC CTE programs to university programs. Currently there is a direct transfer program with Southern Oregon University for a BAS Business Management, Oregon Institute of Technology, BAS Business and Technology or a BS Operations Management that AAS students can transfer directly into. The program advising specialist reaches out to students through email, class visits and one-on-one meetings about transfer options, scholarships, extra0curricular opportunities, and available college resources. .

F. Efforts are made to provide information to students who are considered non-traditional by gender to the occupations resulting from this CTE Program of Study. Evidence: PCC is committed to reaching out to all students regardless of their gender. The CTE program advisors are empowered to reach out to high school students through high school visits, annual student preview day, and career fairs. In addition, the program participates biennially in the NW Career Youth expo and participates in the event "Girls in Technology," which is aimed solely at high school girls and CTE/technology programs.

G. Access and recruitment to courses in this CTE POS are provided for all students including, but not limited to all Oregon and federal protected classes. Evidence: PCC is firmly committed to creating a diverse student body through continued and regular education of staff and faculty as well as by offering ongoing support to students and staff through the Office of Affirmative Action and Equity.

H. Accommodations are made to assure students with special needs can participate in this CTE POS. Evidence: The Disability Services office at PCC is able to help accommodate students with documented disabilities receive services they may qualify for.

I. Assistance is provided for students wishing to participate in this CTE POS for whom English is not their native language. Evidence: Most CTE programs require an English and Reading level minimum placement of WR 115 and/or RD 115. PCC offers ESOL courses for students who wish to improve their English language proficiency prior to entering into their CTE program of choice. For students who are studying on an international visa, international advisors that specialize in helping non-native speakers enter into the ESOL program are available.https://www.beaverton.k12.or.us/schools/aloha/academics/Pages/Counseling.aspx
https://www.beaverton.k12.or.us/schools/aloha/academics/Pages/College-and-Career-Center.aspx
https://www.beaverton.k12.or.us/schools/aloha/academics/Documents/20172018ProgramGuide.pdf
https://www.beaverton.k12.or.us/schools/sunset/academics/college-careers/Documents/2016-2017%20Files%20and%20Docs/Hillsboro%20Chamber%20of%20Commerce%20CRLE%20Opportunities%20(2).pdf#search=CRLE
https://www.beaverton.k12.or.us/schools/aloha/academics/Documents/EAPacket%202016.pdf#search=senior%20project
http://www.pcc.edu/resources/mypcc.html
http://www.pcc.edu/prepare/head-start/dual-credit/
https://www.pdx.edu/challenge-program/
https://www.scholarships.com/financial-aid/college-scholarships/scholarships-by-state/oregon-scholarships/
http://www.oregonstudentaid.gov/oregon-promise.aspx
http://www.oregon.gov/ode/learning-options/CTE/FedFund/Pages/CTE-Nontraditional.aspx
http://www.ode.state.or.us/search/page/?id=3394
https://www.livecareer.com/quintessential/non-traditional-careers
https://www.beaverton.k12.or.us/depts/tchlrn/sped
https://www.beaverton.k12.or.us/schools/aloha/academics/Pages/AVID.aspx

At Aloha High School, students have access to many different important resoureces for a wide scope of student support:
Curicululm night
Advanced program night
Program guide
College and career center
Counseling office
SPED office and staff
Oregon Promise
Scholarships
Senior Project
CRLE .

Element 5: Professional Development

> *Professional Development for POS teachers should be designed on the needs identified by data, and should focus on continuous improvement of student opportunities within this POS.*

The planned professional development for this POS will:

- ☐ A. Connect to teacher effectiveness evaluations.
- ☒ B. Help teachers and administrators develop and improve standards-based curriculum and learning experiences that promote the integration of coherent and challenging academic content and industry-based technical standards, including opportunities for the appropriate academic and CTE instructors to jointly develop and implement classroom-based curriculum and instructional strategies.
- ☒ C. Include professional development that is high quality, sustained, intensive, and focused on instruction designed to increase the academic knowledge and understanding of industry standards
- ☒ D. Encourage applied learning methodology that contributes to the academic and CTE knowledge of the student
- ☒ E. Provide research and training opportunities that help teachers develop appropriate and useful assessment tools and strategies.
- ☒ F. Provide training and guidance geared to help improve instructional delivery methodology that helps improve student performance and skill acquisition, particularly skills needed to work with and improve instruction for special populations.
- ☒ G. Assist teachers in accessing and utilizing CTE accountability data, student achievement data, and data from assessments

> ➢ **Directions for using the Comment box—**Expandable space is provided for comments. This Box is intended for explanations for missing checks above, or notes regarding program strengths worth consideration during POS review. If you already have documents or files that do this more quickly, simply attach those documents or files (or links to them) to this application in an appropriate Addendum folder. (Consult the ***Guide to Using the Oregon CTE Program of Study Application 2017***, for more details.)

Please address these questions through your comments in **Element 5 Comment Box** below (or attach documentation in an appropriately identified file/folder)**:**
- Address any unchecked box above
- Briefly describe how PD will be planned and implemented, based on the needs of the POS
- Briefly describe any planned joint PD ventures for HS and CC teachers, as well as regional trainings

Element 5 Comment Box: The instructors will continue to seek out and take classes, courses and other learning opportunities in order to maintain their knowledge of the advancements in the field of engineering, such as available at PCC, OTI, etc. In addition, instructors maintain close relationships with our industry partners, including periodic interships to learn specific industry skills or stay appraised on industry standards. Teachers and Administrators will be given the opportunity to attend the regional and national CTE conferences. High school and community college teachers work together to update and align curriculum, including meeting at least once a year. Evidence: Terry Richesin attended two conferences (ACTE and NCCE) two OCSTA Super Quests and was active in four OCSTA sponsored Professional Learning Communites (PLCs) covering curriculum development, CS for all, regional outreach and LEGO robotics.

CTE Teacher: Submit complete electronic application materials to your CTE Regional Coordinator.
Regional Coordinator: Email application and addenda to this mailbox-- POS.Application@state.or.us), or follow an alternative process described in Step 8 of the *Submission Process* on the last page of this application*. DEADLINE for submission: June 30, 2017*

Certification of Assurance

Directions: **After filling in all the appropriate fields in this form**, print out a copy of this Certification of Assurance page and acquire all the appropriate signatures. <u>All signatures must be on one form</u>. Email completed COA with ALL signatures to **POS.Application@ode.state.or.us**.

Name of CTE POS	Software Design and Information Technology
Name of Secondary School	Aloha High School
Name of Community College	Portland Community College

SECONDARY LOCAL SUPPORT and CERTIFICATE OF ASSURANCE	I have reviewed this program application document for clarity, completeness and adherence to program quality standards, and support its approval. I agree that the CTE program area requirements for secondary CTE programs, including appropriate CTE certification for teachers, the rules and regulations for Public Law 109-270, and the requirements contained in the Oregon State Plan for Career and Technical Education will be complied with in the operation of the CTE programs and services offered by the district or through contract between the district and other agencies, institutions, or individuals. I agree to furnish CTE program data as requested by the Oregon Department of Education.	
Secondary School District Administrator Signature		**Date:**
Administrator's Name	Enter Local Administrator's Name	

LOCAL SUPPORT and CERTIFICATE OF ASSURANCE	The program advisory committee has been involved in the design and development of this program.	
Advisory Committee Signature		**Date:**
Advisory Committee Member's name	Enter Advisory Committee Member's Name	

POST-SECONDARY LOCAL SUPPORT AND CERTIFICATE OF ASSURANCE	This community college has been involved in the design and development of this CTE program of study and agrees to continue collaboration meeting all 5 Core Elements, especially alignment and articulation and reliable and valid technical skills assessment.	
Community College Administrator's Signature		**Date:**
CC Administrator's Name	Enter CC Administrator's Name	

For Regional Coordinator Use Only

Recommended Status:
☐ **RECOMMENDED FOR STATE APPROVAL (Perkins Eligible)**
☐ **DISAPPROVED (and returned for revision)**

_____   **Date:** _____
Regional Coordinator Signature

For ODE Use Only

Approval Status:

☐ **FINAL STATE APPROVAL (Perkins Eligible)**   **Expiration Date:** _____

_____   **Date:** _____
Education Specialist Signature

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Submission Process

Instructions

Submit <u>complete</u> electronic copies of the application materials by following this procedure:

1. <u>**Do not send PDF applications**</u>. **Please send in original Word format.**
2. **Be sure you are using the correct year's application from <u>ODE's website</u>.**
3. **Create a file (main folder) for storing all documents to be submitted**
4. **Title the folder using the name of the secondary school, the name of the Program of Study, and the year of submission, e.g., "OregonTownHSAccounting2016."**
5. **Create subfolders clearly named for each Element's Addendum that you are including with the application, e.g., "OregonTownHSAccounting2016Addendum1, "OregonTownHSAccounting2016Element1,"" or "OregonTownHSAccounting20161StandardsContent."**
6. **If submitting unique documents for individual schools in a Regional Application, create subfolders for each school within the appropriate Element's Addendum folder, e.g., "OregonTownHSAddendum1."**
7. **Place the completed POS Application and a scanned copy of the completed Assurance document in the main folder; put any other documents included with the application in their appropriate subfolders. <u>(Please name documents and folders so that they are clearly identified.)</u>**
8. **Each application needs to include a completed Assurance page with all signatures included on one page—please, no duplicate Assurance pages with partial signatures.**
   (For Regional Programs of Study, however, each secondary institution will need to have its own Assurance page; for those Regional applications, please secure Community College signatures first, then photocopy for each secondary partner and acquire secondary signatures; then scan and place all originals in the main POS folder with the application.)
9. **Please be sure all required documents, links, and examples are in their appropriate folders before performing Step 8.**
10. **Prepare files for submission:**
    a. **Submit each POS application main folder with its subfolders one POS at a time.**
    b. **Use the electronic download process using ODE's FTP portal. Go to the ODE Secure File Transfer site (<u>https://district.ode.state.or.us/apps/xfers/</u>) and follow the online directions for sending your POS folder to** POS.Application@state.or.us**. For technical help with this procedure, call Kenzie Mozejko—503-947-5636.**
    c. **Alternatively, you may save folders on a Jump Drive or CD-ROM and send to ODE, in care of: Kenzie Mozejko, Oregon Department of Education, PSB 2ⁿᵈ Floor, 255 Capitol St. NE, Salem, OR 97310.**

<u>CTE Teacher</u>: Submit <u>complete</u> electronic application materials to your CTE Regional Coordinator.
<u>Regional Coordinator</u>: Submit application and addenda using the FTP process described in 10 above, to this mailbox:
POS.Application@state.or.us). (Alternatively, using Step 10(c) above, a jump drive or CD ROM can be used to send files to ODE.)

DEADLINE for submission: June 30, 2017
Early Bird deadline (assures feedback before teachers leave for summer): April 28, 2017

(You may delete this page before submitting this application.)