10-29-2014 Draft

AS/OT-CS
HECC Questions

1.   Identify the institutions participating and the full title of the degree.

Institutions: Oregon's community colleges and public universities.   Potential for the degree to be adopted by Oregon private institutions offering computer science also exists. See attached letters of support from the statewide Provosts Council, the community college Council of Institutional Administrators, Oregon Council of Computing Chairs, and industry partners.

Title: Associate of Science/Oregon Transfer Degree-Computer Science.

2.   Describe the purpose and relationship of the proposed degree to statewide initiatives and goals.

The primary purpose of the degree is to enable seamless transition between Oregon community colleges and Oregon universities for students studying computer science through creation of a streamlined degree pathway. Secondary purposes of the degree include promoting visibility of computer science as a degree program and career pathway at community colleges, increase access to computer science baccalaureate instruction to students throughout the state, and to help with financial aid issues for community college students.

Currently, many community college students intending to transfer into a program in computer science, pursue a general transfer degree (AAOT) and then take the math, computer science and other courses they need to finish lower division university program requirements. A defined CS transfer degree is needed to increase the success of these transfer students by clearly laying out a program of study with the correct coursework needed to successfully transfer in an efficient, affordable manner, and to increase access for these students to financial aid throughout their time at the community college.

The proposed degree responds directly to HB 2970, which directs the State to develop standards for transfer degree programs in specific areas of study, including those in technology disciplines.

**3.	Describe the partnership between the community colleges and universities in developing the degree. How will implementation be coordinated?**

AS/OT-CS (Associate of Science Oregon Transfer degree in Computer Science) was designed in 2013-2014 through collaboration between members of Oregon Council of Computing Chairs (OCCC) which includes Oregon community college faculty and administration and Oregon public university computer science chairs and faculty. The proposed degree builds upon work originally started in 2002 to explore offering statewide Associate of Science degrees. Like the AAOT (Associate of Arts Oregon Transfer degree), the intention is to recognize lower division coursework and enable smooth transfer of students to junior level at the university-- in this case for students majoring in computer science.

OCCC will assume the lead role in coordinating the implementation of the degree, will maintain current advising materials for program advisors, and a course access list showing courses and schools offering online lower division CS courses to improve access to students at smaller/rural community colleges. OCCC will also take responsibility for shared course numbers, course descriptions and learning outcomes for the CS core courses in the proposed program.

These materials will be made available on the OCCC web site (http://occcwiki.org).

4.	**What evidence of need does the group have to support the need for the proposed statewide degree**?

Computer Science is an area of critical workforce shortage in Oregon, in many employment sectors. Employers cite the need for more computer scientists and software professionals, at many levels. See attached support letters from industry partners offering initial support for this proposal.

**5.	Are there similar degrees in the state? If so, how does the proposed degree supplement, complement, or collaborate with those degrees?**

The program is modeled upon the existing Associate of Science/Oregon Transfer degree in Business, originally approved in 2001. The AS/OT-CS complements that degree as a second statewide Associate of Science transfer degree, pursuant to HB 2970, for students in the field of computer science.

The proposed degree supplements the Associate of Arts Oregon Transfer degree, defining a set of advanced mathematics, science and computer science courses needed for successful baccalaureate study in computer science at the state's public universities.

Establishing a statewide AS/OT-CS degree will enable students at Oregon community colleges to transfer smoothly to any of the state's public universities in computer science. Each community college will not need to articulate CS transfer degrees with each of the 7 different public universities.

There are no other similar state wide degrees, although some community colleges offer transfer associates of science degrees that are articulated with a particular university partner. Some of these degrees that are highly specialized for particular university programs will likely remain as alternatives to the general AS/OT-CS. However, the AS/OT-CS will ensure that 17 community colleges do not each need to separately articulate general CS transfer degrees with each of the 7 different universities and their various computer science programs.

6.   What new resources will be needed initially and on a recurring basis to implement the degree? How will the institutions provide these resources? What efficiencies or revenue enhancements are achieved with this degree, including consolidation or elimination of programs over time, if any?

Many community colleges already offer the courses required by the AS/OT-CS. Those that do not offer all of the courses, offer all of the general education courses, and some of the math and computer science courses, so the implementation is manageable for most schools. Through online offerings at the different community colleges, it is expected that students would have access to all the courses they need to complete this degree either solely at one school or with some supplemental online courses at another community college.

With OCCC coordinating the implementation of this degree, better lower division curriculum coordination will result via shared learning outcomes, curriculum materials, course access listings, advising materials, and semi-annual coordination meetings.