Portland Community College
Transfer Center
2009-2010

Transfer Guide for:
Oregon State University
Computer Science Major

Lower Division Department Requirements for the Pre-Computer Science Major:

OSU Courses	Quarter Credits	PCC Course Equivalents	Quarter Credits
WR 121 English Composition	3	**WR** 121 English Composition	4
WR 327 Technical Writing	3	**WR** 227 Technical Writing (professional core)	4
WR 214 or WR 222 Writing in Business or English Composition	3	**WR** 123 = OSU WR 222	3
COMM 111 Public Speaking or COMM 114 Argument & Critical Discourse	3	**SP** 111 Fundamentals of Speech or **SP** 112 Persuasion/Argument/Debate	4
CS 160 Computer Science Orientation	4	**CS** 160 Exploring Computer Science	4
CS 161 Introduction to Computer Science I	4	**CS** 161 Computer Science I	4
CS 162 Introduction to Computer Science II	4	**CS** 162 Computer Science II	4
CS 261 Data Structures	4	**CS** 260 Data Structures	4
CS 275 Introduction to Databases	4	No PCC Equivalent	-
MTH 231 & 232 Elem. of Discrete Math I & II	8	**MTH** 231 & 232 Discrete Mathematics I & II	8
MTH 251 & 252 Differential & Integral Calc.	8	**MTH** 251 & 252 Calculus I & II	9

Additional Required Courses for Specific Options:
IS - Information Systems option **ACS** - Applied Computer Science option **CS** - Computer Systems option

ECON 201 Intro to Microeconomics	4	**EC** 201 Intro to Microeconomics (IS)	4
CS 271 Comp. Architecture & Assembly Lang.	4	**CS** 171 Assembler Language (IS, ACS)	4
PHY 221, 222, & 223 General Physics	15	**PHY** 211, 212, & 213 General Physics (CS)	15
ECE 271 Digital Logic Design	3	**ENGR** 171 Intro to Logic Design (CS) *Prerequisite ENGR 221*	4
ECE 375 Computer Organization & Computer Design	4	**ENGR** 275 Microprocessor Systems (CS) *Prerequisite ENGR 171*	4
MTH 254 Vector Calculus I	4	**MTH** 254 Vector Calculus I (CS)	5

The **Information Systems Option** includes the core classes in computer science, but also incorporates a minor in business administration. In addition to providing a solid grounding in both fields, this program can position the student for entry into the four-term MBA program offered by Oregon State's College of Business. By following both these programs, the student can complete both a BS in computer science and an MBA in five years. (Note: admission into the MBA or any graduate program is predicated by acceptable grades in undergraduate coursework, an acceptable score on a standardized graduate school admissions test, and letters of reference.)

The **Applied Computer Science Option** is designed for students who wish to combine the study of computer science with an in-depth examination of a related field. This option may include a major or minor from that related field. Examples of approved programs include the multimedia minor and pre-medicine. **Students must have an approved applied program before the end of their first term in the professional program**.

The **Computer Systems Option** is for those students who wish to take up computer science as a career, and seek an in-depth understanding of computer science as an academic discipline. This option provides excellent preparation for those who plan to further their studies by pursing an advanced degree (masters or Ph.D.) in computer science, or for working for companies that require advanced mathematics, computing theory, or hardware design. This option is ABET/CAC accredited.

School of Electrical Engineering and Computer Science

http://eecs.oregonstate.edu/undergraduate/cs/advising.html#precs
1148 Kelley Engineering Center
Phone: (541) 737-3101
TOLL-FREE: 1(877) 257-5182

Pre-Computer Science Program
The undergraduate program is divided into two halves. Lower-division (freshman and sophomore) courses comprise a program of pre-computer science study that a student completes before applying for entry into the upper-division "professional program" of computer science. The pre-computer science courses may be taken at Oregon State University or at any accredited college or university that offers equivalent courses transferable to Oregon State.

Some pre-computer science courses are the same for students in all three tracks: computer systems, information systems, and applied computer science. Some pre-computer science courses are required only for students in the computer systems track, and some pre-computer science courses are required only for students in the applied computer science track.

Students must apply to the College of Engineering for admission into the upper-division "professional program" in computer science. The College accepts professional program applications in the spring term for admission the following fall term. It also accepts applications fall term for winter term admission.

Most students apply to the professional program during the spring term of their sophomore year, asking for fall admission to the program. Students applying for fall admission must demonstrate that they will have completed all (or all but one) of the required courses in the pre-computer science program by the beginning of fall term. In addition, students must demonstrate that they will have completed at least 80 hours of coursework by the beginning of fall term.

In order to qualify for admission to the professional program, a grade of C- or better must be earned in every pre-computer science course. A course in which a grade of D+ or lower is received may be repeated once.
Applicants for admission are evaluated by the School and are ranked according to GPA in pre-computer science courses.

Computer Science (Professional) Program
The professional program in computer science consists of junior and senior level courses. Enrollment in the program is limited to the number of students who can be served by the faculty and facilities available. Some courses in the computer science program are common to students in all three options: computer systems, information systems, and applied computer science. In addition, each option has its own set of additional course requirements.

The Senior Software Engineering Project
The Senior Software Engineering Project is a requirement designed to give students a computer science project like they will experience in the real world, taken completely through the software creation cycle. As a team, the students formulate, design, implement, document, and test the product.

Due to the rapid changes in computer technology some CS courses have made changes in their content. We strongly encourage you to work with a PCC CS Department Advisor to develop your transfer plan.

PCC Computer Science Department
Sylvania Campus 503-977-4393 or 503-977-4287
Rock Creek Campus 503-614-7331 or 503-614-7604

PCC DEGREE/TRANSFER INFORMATION:
Please meet with an Academic Advisor for an individualized plan of study.

PCC endeavors to create accurate transfer guides for students; however, requirements may change without notice. Students are responsible for working with PCC advisors and their transfer institution to ensure that their academic plan will meet requirements and timelines.