

Simulation and Game Development

Offered by the Computer Information Technology Department

Two-Year Associate of Applied Science Degree

Purpose To prepare students for entry-level positions in the simulation and game development industries or to transfer to a four year school for additional education.

Learning Outcomes The graduate will:

- develop programming knowledge and skills with a current commercial programming language
- design, program, test, debug and document computer simulation or game programs using a variety of current tools and technologies
- create computer simulation or game programs using industry standard development tools
- develop skills and knowledge in computer animation using industry standard tools
- learn mathematical concepts related to simulation and game development and use those concepts in class projects
- use appropriate library and information resources to research simulation and game development issues, programming tools and technologies and to support lifelong technical learning.

Employment Trends The Oregon Labor Market Information System projects statewide 129 annual openings for Computer Programmer, and 12 annual openings for Lane County. For the decade ending in 2012, the statewide projected increase is 19.7 % and for Lane County 17.5 %. Related job categories such as Software Engineers show similar employment trends.

Wages Statewide average hourly wage is \$28.90. Lane County average hourly wage is \$27.72.

Costs in Addition to Tuition (estimates)*

Books and Materials	\$2,500
CIT Lab Fees.....	\$ 168
Total.....	\$2,668

* Subject to change without notice.

Prerequisites Students must qualify for MTH 111 and WR 121 either by placement testing or completing prerequisite courses. Students should consult with a counselor or advisor to plan a program of study.

Cooperative Education (Co-op) Co-op is a required and important part of the Simulation and Game Development Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Contact Larry Scott, Simulation and Game Development Co-op Coordinator, Bldg. 19, Rm. 154, (541) 463-5458.

Program Lead Jim Bailey, (541) 463-3148

Program Counselor Rich Freund, (541) 463-5435

Program Academic Advisor Shirley Lukacs, (541) 463-3244

First Year	Fall
CIS 100 Computing Careers Exploration ^{D,G}	2
CS 160 Orientation to Computer Science ^{D,G,S}	4
CS 133G Beginning C++ Programming for Games ^{D,G,S}	4
WR 121 English Composition: Exposition and Introduction to Argument ^{*W}	4
Total Credits	14

FA 221 Computer Animation ^{*D,G}	3
CS 233G Intermediate C++ Programming for Games ^{*D,G,S}	4
MTH 111 College Algebra ^{*D,S}	5
Elective Course ¹	3
Total Credits	15

Spring	
FA 199 Computer Animation 2 ^{*D,G}	3
CS 125G Software Tools 1: Game Development ^{D,G,S}	4
CS 260 Data Structures ^{*D,G,S}	4
PE/Health requirement ^R	3
Elective Course ¹	3
Total Credits	17

Fall	
CS 135G Software Tools 2: Game Development ^{*D,G,S}	4
CS 234G Advanced C++ Programming for Games ^{*D,G,S}	4
ART 245 Drawing for Media ^{D,G}	4
MTH 231 Discrete Math 1 ^{*D,G,S}	4
Total Credits	16

Winter	
CS 235G Software Tools 3: Game Development ^{*D,G,S}	4
WR 227 Technical Writing ^{*A}	4
FA 261 Writing for Interactive Media ^{*D,G}	4
MTH 232 Discrete Math 2 ^{*D,G,S}	4
Total Credits	16

Spring	
CS 297 Simulation and Game Development Capstone ^{*D,G,S}	4
CS 280SGD Co-op Ed: Simulation and Game Development (second-year standing required) ^{D,G}	3
CG 203 Human Relations at Work ^H	3
MTH 233 Discrete Math 3 ^{*D,G,S}	4
Total Credits	14

1 Elective courses: See program counselor or advisor for course suggestions.

Speech-Language Pathology Assistant (SLPA)

A collaboration between Chemeketa Community College and Lane Community College

Lane now partners with Chemeketa so that students may take classes at both institutions to become eligible for the Speech-Language Pathology Assistant (SLPA) certification through Chemeketa Community College. Chemeketa offers the required coursework for an individual to be eligible for certification as a Speech-Language Pathology Assistant with the Oregon State Board of Examiners for Speech-Language Pathology and Audiology. Chemeketa also offers students the option to obtain an Associate of Applied Science Degree (in Speech Language Pathology Assistant) with the completion of an additional 45 general education credits.

Lane students may complete most of the required SLPA courses online, with the exception of two courses offered at Lane, ED 258 Multicultural Education, ED 130 Comprehensive Classroom Management, and the two practicum courses. Since all of Chemeketa's SLPA courses are offered on-line and the practicum is arranged locally, students are able to complete an AAS degree from Chemeketa. and become eligible for the SLPA certification without the need to travel out of the Lane County area.