

COMPUTER GAMES AND SIMULATION DESIGN, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #8300

Effective May 2024

Library and eLearning Division

This program is designed to prepare individuals for transfer or employment in a variety of positions including game/simulation designer, programmer or developer. The focus of the program is development of multidisciplinary skills necessary for a career in game and simulation design with emphasis on creation of real games.

First Year

Fall Semester		Hours
CGSD 120	INTRODUCTION TO COMPUTER GAMES & SIMULATIONS	3
CGSD 271	DIGITAL IMAGING	3
CISS 160 or CMPR 166	INTRODUCTION TO PROGRAMMING IN C# ¹ or INTRODUCTION TO COMPUTER SCIENCE	3-4
ENGL 161	COLLEGE COMPOSITION I	3
MTHM 171	COLLEGE ALGEBRA ¹	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY ²	1
Hours		17-18

Spring Semester

CGSD 121	2D GAME PROGRAMMING ¹	3
CGSD 130	GAME APPLICATIONS FOR EMERGENT PLATFORMS	3
CGSD 272	DIGITAL ILLUSTRATION	3
PSYH 151 or SOCY 151G	INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY	3
Science Elective (with lab) ⁴		4
Hours		16

Second Year

Fall Semester

CGSD 221	3D GAME PROGRAMMING ¹	3
CGSD 276	3-D MODELING AND ANIMATIONS ¹	3
CMPR 168	OBJECT-ORIENTED PROGRAMMING ¹	4
ENTR 200	ENTREPRENEURSHIP ³	3
Hours		13

Spring Semester

CGSD 222	3D GAME LEVEL DESIGN	3
CGSD 223	SERIOUS GAMES AND SIMULATIONS	3
CGSD 225	ADVANCED GAME PROGRAMMING	3
Arts and Humanities Elective ⁵		3

General Elective	2
Hours	14
Total Hours	60-61

1

Indicates that this course has a prerequisite.

2

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3

This course offers an opportunity for experiential learning.

4

Select any Science with Lab Ohio Transfer 36 (<http://catalog.lorainccc.edu/academic-information/transfer-module-requirements/>) course. Students intending to transfer should consult with the intended transfer institution or with an LCCC advisor for transfer information.

5

Select any Arts and Humanities Ohio Transfer 36 (<http://catalog.lorainccc.edu/academic-information/transfer-module-requirements/>) course. Students intending to transfer should consult with the intended transfer institution or with an LCCC advisor for transfer information.

Students intending to transfer should select a course from the social science courses in the general education (<http://catalog.lorainccc.edu/academic-information/general-education-outcomes/>)/transfer module (<http://catalog.lorainccc.edu/academic-information/transfer-module-requirements/>). Students not intending to transfer should consult with LCCC counseling to ensure that they will meet the credit hour requirements for the AAS degree.

Program Contact(s):

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For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (<https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/>).

Credit for Prior Learning (PLA) options may be available for your program. For more information, please visit our website: www.lorainccc.edu/PLA/ (<http://www.lorainccc.edu/PLA/>)

Program Learning Outcomes

1. Students will demonstrate industry professional standards within their attitudes, conduct, ethics, and work. (including attendance, deadlines, copyright issues, and group interactions).

2. Students will demonstrate entry-level workplace competencies using game design and production software.
3. Students will access industry related resources for learning and current events and trends.
4. Students will demonstrate entry-level modeling, rendering, and animation using standard production software.
5. Students will demonstrate knowledge of basic principles of engaging human attention for entertainment and learning.
6. Students will critically analyze published games, games they produce, and games produced by their peers using professional concepts.
7. Students will demonstrate knowledge of skills and responsibilities in various industry roles and career paths, including that of independent game developer.
8. Students will produce both entertainment games and serious games for their a professional portfolios.
9. Students will demonstrate the ability to accept criticism and improve their work based on the critiques of their peers.