Academic Plan - Associate of Applied Science Game Design

**Catalog Year: 2019/2020**

**Total Credits:60**

The Game Design and Development A.A.S. Degree prepare students for a broad range of careers in the Gaming industry, including independent game developer, computer programmer and game artist. Graduates of the degree may also elect to work in multimedia or graphic design capacities. Students will develop 2D and 3D digital modeling, digital animation, and programming skills using an industry standard gaming engine. Course electives allow students to gain experience with art concepts, digital sound editing and additional 3D modeling tools. Students will develop a Portfolio while completing the degree to show to prospective employers.

The number of local companies in Game development in Colorado is increasing; please check the Colorado Game developer association website for more information: https://www.igda.org/colorado. However, as U.S. game studios tend to be concentrated in specific cities, graduates may need to relocate to pursue a career in this field. Students can pursue a 4-year degree by transferring their courses to the University of Denver’s Animation and Game Development degree. Please see an advisor for more details.

# General Education Courses

3 Credits, ART 121 - Drawing I, available fall spring summer

3 Credits, BUS 217 - Business Communication & Report Writing, available fall spring summer

3 Credits, COM 115 - Public Speaking\* OR COM 125 - Interpersonal Communication, available fall spring summer

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\*, available fall spring summer

3-4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher\*, available fall spring summer

# Major Courses

3 Credits, CIS 289 - Capstone, available spring

3 Credits, CSC 119 - Introduction to Programming OR CSC 116 - Programming Logic, available fall spring summer

3 Credits, CSC 126 - Game Design and Development, available fall spring

3 Credits, CSC 200 - Game Programming I, available fall

3 Credits, CSC 227 - 3D Game Programming, available spring

3 Credits, Major Elective (See Notes for specific requirements), available fall spring summer

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3 Credits, MGD 111 - Adobe Photoshop I, available fall spring summer

3 Credits, MGD 143 - Motion Graphic Design I, available fall spring

3 Credits, MGD 153 - 3D Animation I, available spring

4 Credits, CSC 160 - Computer Science I: Java\*, available fall spring

4 Credits, CSC 161 - Computer Science II: Java, available fall

# Pre-Requisites, Co-Requisites, and Recommendations

CSC 160 - Computer Science I: Java\*

Pre-Requisite: CSC 119 - Introduction to Programming: Java

CSC 161 - Computer Science II: Java

Pre-Requisite: CSC 160 - Computer Science I: Java

CSC 200 - Game Programming I

Pre-Requisite: MGD 143 - Motion Graphic Design I

CSC 227 - 3D Game Programming

Pre-Requisite: CSC 200 - Game Programming I

Pre-Requisite: MGD 153 - 3D Animation I

# Program Outcomes

Apply game design concepts to new environments.

Understand the syntax of a computer language.

Demonstrate ability to create a complete game.

# Notes

Major Electives: Any approved class with a prefix of CSC or MGD.

Course availability is subject to change.

Refer to 19/20 catalog for specific requirements and important information about this degree.

Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.

\*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.

AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.

# Graduation Requirements

To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

3 Credits, ART 121 - Drawing I

3 Credits, CSC 119 - Introduction to Programming

3 Credits, CSC 126 - Game Design and Development

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

3-4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher

## Year 1: Spring

3 Credits, BUS 217 - Business Communication & Report Writing

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

4 Credits, CSC 160 - Computer Science I: Java

3 Credits, MGD 111 - Adobe Photoshop I

3 Credits, MGD 143 - Motion Graphic Design I

## Year 2: Fall

4 Credits, CSC 161 - Computer Science II: Java

3 Credits, CSC 200 - Game Programming I

3 Credits, Major Elective

3 Credits, Major Elective

## Year 2: Spring

3 Credits, CIS 289 - Capstone

3 Credits, CSC 227 - 3D Game Programming

3 Credits, Major Elective

3 Credits, Major Elective

3 Credits, MGD 153 - 3D Animation I

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

3 Credits, CSC 119 - Introduction to Programming

3 Credits, CSC 126 - Game Design and Development

3-4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher

## Year 1: Spring

3 Credits, ART 121 - Drawing I

4 Credits, CSC 160 - Computer Science I: Java

3 Credits, MGD 143 - Motion Graphic Design I

## Year 1: Summer

3 Credits, BUS 217 - Business Communication & Report Writing

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

## Year 2: Fall

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

3 Credits, CSC 200 - Game Programming I

3 Credits, MGD 111 - Adobe Photoshop I

## Year 2: Spring

3 Credits, CSC 227 - 3D Game Programming

3 Credits, MGD 153 - 3D Animation I

## Year 2: Summer

3 Credits, Major Elective

3 Credits, Major Elective

## Year 3: Fall

4 Credits, CSC 161 - Computer Science II: Java

3 Credits, Major Elective

## Year 3: Spring

3 Credits, CIS 289 - Capstone

3 Credits, Major Elective