B.S. Game Design and Development
2020-21 Catalog Checklist

UA GENERAL EDUCATION

COMPOSITION (Select ONE pair)
ENGL 101 & ENGL 102 &
ENGL 107 & 108 or &
ENGL 109H

MATH
MATH 113, MATH 116, MATH 122B, or higher

TIER ONE (select two courses from each)
Individuals and Societies (150):
____________________
____________________
Natural Sciences (170):
____________________
____________________
Traditions & Cultures (160):
____________________
____________________

TIER TWO (select one course from each)
Arts: ___________
Humanities: ___________
Individuals & Societies: ___________
Diversity (can be fulfilled with GE course):

2nd Semester of SECOND LANGUAGE:

B.S. GAME DESIGN &
DEVELOPMENT

CORE (TAKE ALL NINE):
ISTA 251: Introduction to Game Design
ISTA 116: Statistical Foundations of the Information
Age*
*Requires MATH 107 or higher or equivalent
Math placement
ISTA 161: Ethics in a Digital World
ISTA 130*: Computational Thinking and Doing
* CSC 110 approved substitute for ISTA 130
ISTA 131: Dealing with Data
*Requires CSC 110 or ISTA 130
ISTA 350: Programming for Informatics Applications
*Ghosted (not advertised to students): CSC 210
*Requires ISTA 116, 130, 131
ISTA 416: Introduction to Human Computer Interaction

*Requires ISTA 130 or CSC 110
ISTA 425: Algorithms for Games
*Requires ISTA 350 or CSC 210
ISTA 451: Game Development
*Requires ISTA 350 or ISTA 303 or CSC 210

As long as a student abides by the stated pre-requisites, they can be flexible about the order in which they complete the core!

ENGAGEMENT: (TAKE ONE)
ISTA 498: Senior Capstone

GAMES ELECTIVES: (CHOOSE FIVE)
Choose from:
GAME 310: Gamification in Society
GAME 311: eSports Industries
GAME 312: Monetizing Independent Games
GAME 452: Advanced Game Development
*Requires ISTA 451
ESOC 300 Digital Storytelling
ESOC 316: Digital Commerce
ESOC 318: Disruptive Technologies
ESOC 340: Information, Multimedia Design and the Moving Image
ISTA 301: Computing and the Arts
ISTA 302: Technology of Sounds
ISTA 303: Creative Coding
*Requires ISTA 130
ISTA 350
ISTA 421: Machine Learning
*Requires Math 129, MATH 313 and ISTA 311
ISTA 424: Virtual reality
*Requires ISTA 350 or CSC 210
ISTA 450: Artificial Intelligence
*Requires ISTA 350 or CSC 245
ISTA 457: Neural Networks
*Requires ISTA 350
LIS 484: Introduction to Copyright.

- 45 Total Units required for major *48 with ISTA 130, 131, and 350 but I find keeping it at 45 makes it easier in case of transfer credit or other unique situations (that’s
how it’s set up for ISTA
- 18 UD Units required for major
- 18 minimum units in Residence
- 2.0 GPA required overall, in major, and minor

**MINOR OR 2ND MAJOR**

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<tr>
<th>Completed</th>
<th>In Progress</th>
<th>End of _____ Term</th>
<th>Needed</th>
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**ADDITIONAL ELECTIVES**

(Needed to reach 120/42 UD units)

**GAMES ELECTIVES**

Choose any Five Courses

**INTENSIVE GAME PROGRAMMING**
- ISTA 424: Virtual Reality
- GAME 452: Advanced Game Development

**GAME FUTURES**
- GAME 310: Gamification in Society
- GAME 311: eSports Industries
- GAME 312: Monetizing Independent Gaming
- LIS 484: Introduction to Copyright
- ESOC 316: Digital Commerce
- ESOC 318: Disruptive Technologies

**ARTIFICIAL INTELLIGENCE AND GAMES**
- ISTA 450: Artificial Intelligence
- ISTA 421: Introduction to Machine Learning
- ISTA 457: Neural Networks

**ART OF GAMES**
- ISTA 301: Computing and the Arts
- ISTA 302: Technology of Sound
- ISTA 303: Introduction to Creative Coding
- ESOC 300: Digital Storytelling and Culture
- ESOC 340: Information, Multimedia Design & the Moving Image