

# Information Technology AAS

## Animation and Game Developer – Concentration

Career & Technical Division

### Program Description:

Students who receive an A.A.S. in Information Technology (IT) will possess a broad base of computer skills and knowledge. The curriculum is designed to maintain maximum flexibility in order to compete in the changing workforce. Today's games are very complex. They require teams of programmers, designers, artists, testers, advertisers, and producers to organize and develop them. Training needed for game development is enormous, warranting a complex education of multiple courses in multiple fields. The Animation and Game Developer curriculum is designed to provide training in principles and techniques used to create interactive 2D and 3D computer games.

Students can learn:

- Design Software
- Programming Languages
- Modeling and Animation Skills
- Web graphic design
- Game Engines used to Design and Develop Games

IT 298, an internship course taken over the course of a student's four semesters, requires the student to apply knowledge and skills acquired in the classroom to a real-world employment environment.

### Career Outlook:

According to the U.S. Dept. of Labor Occupational Outlook Handbook, 2008-09, employment in professional, scientific, and technical services will grow by 28.8 percent and add 2.1 million new jobs by 2016. Employment in computer systems design and related services will grow by 38.3 percent and add nearly one-fourth of all new jobs in professional, scientific, and technical services. Employment growth will be driven by the increasing reliance of businesses on information technology and the continuing importance of maintaining system and network security. Management, scientific, and technical consulting services also will grow at a staggering 78 percent and account for another third of growth in this super sector. Demand for these services will be spurred by the increased use of new technology and computer software and the growing complexity of business.

One of the most important requirement needs as an IT student is the willingness to learn and to keep on learning throughout one's professional career. The IT Division can provide students with the knowledge and skills to start on that path. The successful student will provide the energy, enthusiasm, and drive to continue to acquire new knowledge and skills in order to succeed in the rapidly changing world of Information Technology.

### Employment Opportunities:

- Programmer
- Web /game designer
- Product tester
- Animation designer
- Project manager
- Software publishers
- Educational support services

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Contact Information:

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*Our mission is to prepare students for careers, civic responsibility and life-long learning.*

**Information Technology Major Code – CI20 • Animation and Game Developer Concentration Code – CI28**

<b>Name:</b>			<b>ID Number 942-</b>	
<b>CAPS SCORES:</b>	<b>MATH:</b>	<b>ENGLISH:</b>	<b>READ:</b>	<b>DOE:</b>
<b>COL 101 Faculty:</b>				
<b>Educational Counselor:</b>				
<b>Faculty Advisor:</b>				

**COURSE REQUIRED**

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
ENL 111	Written Communication <sup>1</sup>		3				
IT 101 or IT 102	Fundamentals of Computers <sup>2</sup> (EDGE) Advanced Computer Applications <sup>2</sup>		3				
IT 110	Computer Skills for Designers		3				
IT 171	Introduction to Gaming I <sup>3</sup>		3				
IT 298	Game & Design Internship/Coop <sup>4</sup>		1				
	Approved Math Elective <sup>5</sup>		3				
COM 112 or COM 125	Oral Communication <sup>6</sup> Interpersonal Communication <sup>6</sup>		3				
IT 107	Fundamentals of the Internet		3				
IT 115	Introduction to Programming <sup>7</sup>		3				
IT 212	Publishing on the Internet <sup>8,9</sup>		3				
IT 271	Introduction to Gaming II <sup>10,11</sup>		3				
IT 298	Game & Design Internship/Coop <sup>4</sup>		1				
ENL 231	Technical Report Writing <sup>11</sup>		3				
IT 213	Web Graphic Design <sup>3,8</sup>		3				
IT 215	Advanced Programming <sup>3,12</sup>		3				
IT 250	Applications to Database <sup>3,7</sup>		3				
IT 298	Game & Design Internship/Coop <sup>4</sup>		1				
	IT Elective <sup>13</sup>		3				
IT 242	Emerging Web Technologies <sup>11,14</sup>		3				
IT 272	Intro to 3D Modular Programming <sup>11,15</sup>		3				
IT 277	Management Information Systems <sup>16</sup>		3				
IT 298	Game & Design Internship/Coop <sup>4</sup>		1				
	IT Elective <sup>13</sup>		3				

**DEVELOPMENTAL COURSES REQUIRED**

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
	Hours Required for Graduation: 61						

**Earn A Degree Graduate Early (EDGE):**

This program provides students the opportunity to receive credit for their high school EDGE courses.

<sup>1</sup> ENL 111 has a prerequisite of placement in 100-level English, and placement in 100-level reading.

<sup>2</sup> Students are expected to have basic knowledge of computers including operating systems such as Window XP or Vista and Microsoft Office 2003 or Office 2007 before entering this program. The student must register for IT 101 during his or her first semester or successfully pass a challenge exam for IT 101.

<sup>3</sup> IT 171, IT 213, IT 215, and IT 250 are offered fall semesters only.

<sup>4</sup> Permission of Program Coordinator is required in order to enroll in IT 298.

<sup>5</sup> Approved Math electives are MAT 145, MAT 146, MAT 205, and MAT 215 (select one based on program track – see advisor)

<sup>6</sup> COM 112 and COM 125 have a prerequisite of placement in 100-level reading.

<sup>7</sup> IT 115, and IT 250 have a prerequisite of IT 101 or IT 102.

<sup>8</sup> IT 212 and IT 213 have a prerequisite of IT 107.

<sup>9</sup> IT 212, IT 242, IT 271, and IT 272 are offered spring semesters only.

<sup>10</sup> IT 271 has a prerequisite of IT 171 with a "C" or better.

<sup>11</sup> ENL 231 has a prerequisite of placement in 100-level English, and placement in 100-level reading.

<sup>12</sup> IT 215 has a prerequisite of a "C" or better in IT 115.

<sup>13</sup> Choose from one of the following: IT 111, IT 112, IT 113, IT 120, IT 141, IT 150, IT 160, IT 165, IT 210, IT 211, IT 216, IT 217, IT 219, IT 221, IT 222, IT 223, IT 224, IT 225, IT 226, IT 227, IT 230, IT 231, IT 240, IT 241, IT 245, IT 252, IT 255, IT 260, IT 266, IT 270, IT 276, IT 278, IT 279, or IT 293.

<sup>14</sup> IT 242 has a prerequisite of IT 212.

<sup>15</sup> IT 272 has a prerequisite of IT 215 with a "C" or better.

<sup>16</sup> IT 277 to be taken in last semester or permission.

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