# GAME SYSTEMS CONCENTRATION, COMPUTER SCIENCE (BS)

# **Major Requirements**

First Year		
Course	Title	Quarter Hours
CSC 241	INTRODUCTION TO COMPUTER SCIENCE I	4
CSC 242	INTRODUCTION TO COMPUTER SCIENCE II	4
CSC 300	DATA STRUCTURES I	4
MAT 140	DISCRETE MATHEMATICS I	4
MAT 141	DISCRETE MATHEMATICS II	4

Students with one (1) semester programming experience may take CSC 243 and one (1) additional Major Elective.

#### **Second Year**

Course	Title	Quarter Hours
CSC 301	DATA STRUCTURES II	4
CSC 321	DESIGN AND ANALYSIS OF ALGORITHMS	4
CSC 347	CONCEPTS OF PROGRAMMING LANGUAGES	4
CSC 361	OPTIMIZED C++	4
CSC 373	COMPUTER SYSTEMS I	4
CSC 374	COMPUTER SYSTEMS II	4
WRD 204	TECHNICAL WRITING	4

## **Third Year**

Course	Title	Quarter Hours
CSC 386	REAL-TIME NETWORKING (FORMERLY GAM 390)	4
GAM 325	APPLIED 3D GEOMETRY	4
GAM 372	OBJECT-ORIENTED GAME DEVELOPMENT	4
GAM 374	GAME ENGINE PROGRAMMING I	4
GAM 377	GAME ENGINE PROGRAMMING II	4
GPH 329	COMPUTER GRAPHICS DEVELOPMENT II	4
or GAM 370	RENDERING AND GRAPHICS PROGRAMMING	
One (1) Major Ele	ctive	4

#### **Fourth Year**

Course	Title	Quarter Hours
GAM 394	GAME DEVELOPMENT PROJECT I	8
& GAM 395	and GAME DEVELOPMENT PROJECT II	

	CSC 394	SOFTWARE PROJECTS (and one (1) Major	
		Elective)	
Three (3) Major Flectives		12	

#### **Major Electives**

Major Electives may be selected from 300-level CSC, CSE, SE, or GAM courses or from the list of courses below:

Course	Title	Quarter Hours
ANI 230	3D DESIGN & MODELING	
CSE 314	NETWORKING FOR CYBER-PHYSICAL SYSTEMS	
CSE 316	CYBER-PHYSICAL SYSTEM SECURITY	
CSE 331	CYBER-PHYSICAL SYSTEM ENGINEERING I	
CSE 332	ANALOG AND DIGITAL CIRCUITS	
CSE 333	DIGITAL SIGNAL PROCESSING	
CSE 351	EMBEDDED SYSTEMS I	
CSE 352	EMBEDDED SYSTEMS II	
CSE 361	MATHEMATICAL FOUNDATIONS OF AUTONOMOUS SYSTEMS	
CSE 362	FOUNDATIONS OF CYBER-PHYSICAL COMPUTING	
GAM 226	FUNDAMENTALS OF GAME DESIGN	
GPH 389	REAL-TIME GRAPHICS TECHNIQUES	

### **Open Electives**

Open Elective Credit Hours are required to meet the minimum graduation requirements of 192 hours. Open Electives may be taken from any unit at DePaul.