Computer Science - Game Development - B.S.

Degree Requirements

Total Academic Credits: 120
Major Credits: 78
Min. Upper-Level Credits: 45
Min. Cumulative GPA: 2.0

§ indicates Benchmark requirements
‡ indicates Gateway courses

Curriculum Notes

- This sample plan assumes no AP/IB/CLEP or transfer credit, foreign language proficiency up to the 201 level and a math placement level of MATH 151
- All students must complete a credit-bearing English and Mathematics course in the first year of study
- Gateway Course Information: advising.coeit.umbc.edu/gateway-information/computer-science-gateway

Year One

Fall Semester	Credits	Spring Semester	Credits
CMCS 201 Computer Science I (grade of B or better required) § ‡	4	CMSC 202 Computer Science II (grade of B or better required) § ‡	4
MATH 151 Calc. & Analytic Geom. I (MATH GEP)	4	MATH 152 Calculus & Analytic Geometry II	4
Foreign Language 201	4	CMSC 203 Discrete Structures (grade of C or better required) § ‡	3
ENGL GEP	3		
Total	**15**	AH GEP	3
		SS GEP	3
		Total	**17**

Year Two

Fall Semester	Credits	Spring Semester	Credits
CMSC 331 Principles of Programming Language	3	CMSC 313 Comp Org & Assembly §	3
CMSC 341 Data Structures §	3	MATH 221 Linear Algebra	3
PHYS 121 Introductory Physic I (S non-lab GEP)	4	Science (S non-lab GEP, see advisor)	4
SS GEP	3	Science Lab (GEP, see advisor, credit varies)	3
Total	**13**	Elective	3
		Total	**16**

Year Three

Fall Semester	Credits	Spring Semester	Credits
CMSC 304 Social & Ethical Issues in Information Technology (AH, WI)	3	CMSC 421 Principles of Operating Systems	3
		CMSC 4XX (437,445,461,481 or 483)	3
CMSC 411 Computer Architecture	3	CMSC 471 Artificial Intelligence	3
CMSC 435 Computer Graphics	3	AH GEP	3
STAT 355 Introduction to Probability & Statistics for Scientists & Engineers §	4	C GEP	3
		Total	**15**
SS GEP	3		
Total	**16**		

Year Four

Fall Semester	Credits	Spring Semester	Credits
CMSC 441 Design & Analysis of Algorithms	3	CMSC 493 Capstone Games Project	3
CMSC 447 Software Engineering I	3	CMSC 4XX (437, 445, 455, 461, 481 or 483)	3
Science III course (see advisor)	3	Electives (minimum of 7 credits, see advisor)	7
Upper-Level Elective	3	**Total**	**13**
Elective	3		
Total	**15**		

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