Attachment B: Bachelor of Science in Computer Science---Associate in Applied Science in Game Design and Development

Bachelor of Science in Computer Science, Game and Simulation
Programming Concentration – Associate in Applied Science in Game Design & Development
Joliet Junior College total credits = 107-108 Lewis University total credits = 31

First Semester	Hours	Second Semester	Hours
CIS 122 Computer Information System Fundamentals	4	CIS 236 Programming in C	4
ENG 101 Rhetoric	3	GAME 202 3D Modeling	4
GAME 200 Game Design	4	MATH 139 Pre-Calculus II or MATH 142 Accelerated Trigonometry/Pre-Calculus	4 – 5
GAME 203 Game Production	3	Fine Arts or Literature	3
CIS 135 CIS 135 Introduction to Programming	4	Social Science	3
Total Hours	**18**		**18 – 19**

Third Semester	Hours	Fourth Semester	Hours
GAME 211 Game Development I	4	GAME 212 Game Development II	4
GAME 213 Role Playing Game Programming	4	CIS 246 Advanced C using C++	4
GAME 232 Advanced 3D Modeling	4	GAME 214 Multi-Platform Game Development	4
CIS 223 JavaScript	3	MATH 137 Discrete Mathematics	4
CIS 211 Database Management Systems	3		
Total Hours	**18**		**16**

Fifth Semester	Hours	Sixth Semester	Hours
CIS 145 Fundamentals of Networking or CIS 263 Networking Essentials	3	Humanities & Fine Arts	3
Social Science	3	Social Science	3
COMM 101 Principles of Speech Communication	3	Science	3
Science	3	ENG 102 Rhetoric II	3
Humanities & Fine Arts	3	CIS 123 Linux Essentials Network Development Group	3
THEO 10000 Search for Faith	3	*SOCI 29000 Diversity and Social Justice*	3
Total Hours	**18**		**18**

Seventh Semester	Hours	Eighth Semester	Hours
PHIL 103 Introduction to Ethics	3	*MATH 30500 Linear Algebra*	3
CIS 269 Data Structures	4	*CPSC 35000 Operating Systems*	3
MATH 20600 Applied Calculus OR MATH 20900 Calculus I	4	*CPSC 47000 Artificial Intelligence*	3
CPSC 30000 Computer Organization	3	*CPSC 49200 Software Systems Capstone*	3
CPSC 42000 Cybersecurity Essentials	3	*Theoretical Principles***	3
Total Hours	**17**		**15**

Courses listed in italics are Lewis courses; all other courses are JJC courses.

**Theoretical Principles (3): Choose one of the following.

CPSC 42500 Encryption and Authentication
CPSC 46000 Programming Languages
CPSC 46500 Theory of Computation
DATA 47100 Machine Learning
MATH 30600 Advanced Linear Algebra
MATH 35000 Numerical Analysis