

EXHIBIT A
AAS Software Development – Waubensee Community College (WCC)
BA Data Science – Lewis University (LU)

First Semester		
BUS 100 Introduction to Business	3 (WCC)	
ENG 101 First-Year Composition 1	3 (WCC)	(LU – ENGL 11100)
CIS 110 Business Information Systems	3 (WCC)	
COM 100 Fundamentals of Speech Communication	3 (WCC)	(LU – COMM 11200)
MTH 129 Precalculus 1	3 (WCC)	
Total	15 hours	
Second Semester		
ENG 102 First Year Composition 2	3 (WCC)	(LU – ENGL 11200)
CIS 115 Introduction to Programming	3 (WCC)	(LU – CPSC 20000)
CIS 116 Development Tools & Structured Program Design	3 (WCC)	
CIS 122 Networking Essentials (Program Elective)	3 (WCC)	(LU – CPSC 28100)
CIS 123 Web Development I	3 (WCC)	
Total	15 hours	
Third Semester		
CIS 130/150 Computer Science I (C++ or Java)	3 (WCC)	(LU – CPSC 21000)
CIS 151 Management Systems	3 (WCC)	
CIS 202 Database Management	3 (WCC)	(LU – CPSC 33000)
CIS 238 CMS Plugin Development	3 (WCC)	
Social and Behavioral Science Elective 1	3 (WCC)	(LU – Social Science Gen Ed)
Total	15 hours	
Fourth Semester		
CIS 230/250 Computer Science II (C++ or Java)	3 (WCC)	(LU – CPSC 24500)
CIS 259 Client-Side Development	3 (WCC)	(LU – CPSC 41700)
CIS 261 Server-Side Development	3 (WCC)	(LU – CPSC 48000)
CIS 265 Full Stack Development	3 (WCC)	(LU – CPSC 36000)
CIS 272 Capstone	3 (WCC)	
Total	15 hours	
If receiving Financial Aid, students must be awarded the AAS and change their major to a transfer associate degree before taking additional courses.		
Fifth Semester		
MTH 130 Precalculus II	3 (WCC)	
Humanities and Fine Arts Elective 1	3 (WCC)	(LU – Humanities Gen Ed)
Social and Behavioral Sciences Elective 2	3 (WCC)	(LU- Social Science Gen Ed)
Physical and Life Sciences Elective 1	4 (WCC)	(LU – Science Gen Ed)
PHL 105 Introduction to Ethics	3 (WCC)	(LU – PHIL 21500)

Total	16 hours	
Sixth Semester		
MATH 131 Calculus with Analytical Geometry	4 (WCC)	(LU – MATH 20900)
Social and Behavioral Sciences Elective 3	3 (WCC)	(LU- Social Science Gen Ed)
Physical and Life Sciences Elective 2	3 (WCC)	(LU – Science Gen Ed)
Humanities and Fine Arts Elective 2	3 (WCC)	(LU – Humanities Gen Ed)
CIS 117 Discrete Structures	3 (WCC)	(LU – MATH 21000)
Total	16 hours	
Seventh Semester		
DATA 20000 Introduction to Data Science	3 (LU)	
DATA 23500 Programming for Data Analysis	3 (LU)	
DATA 30000 Visualizing and Communicating Data Knowledge	3 (LU)	
DATA 47100 Machine Learning	3 (LU)	
THEO 10000 Search for Faith	3 (LU)	
MATH 22000 Applied Probability and Statistics	3 (LU)	
Total	18 hours	
Eighth Semester		
DATA 40000 Big Data Systems	3 (LU)	
DATA 47200 Introduction to Data Mining	3 (LU)	
DATA 49000 Data Science Undergraduate Capstone	3 (LU)	
MATH 30500 Linear Algebra	3 (LU)	
Diversity and Social Justice OR Theology 20000-level	3 (LU)	
Total	15 hours	
Total for Program	125 hours	92 hours at Waubonsee Community College 33 hours at Lewis University