



# 3+1

## A.A.S. in Computer Programming to BS in Computer Science, Mobile Computing Concentration

### Year One, First Semester - JJC

CIS 122	Computer Information System Fundamentals
CIS 126 or CIS 124	Microsoft Office or Beginning Microcomputer Applications
CIS 145	Fundamentals of Networking
ENG 101	Rhetoric
CIS 135	Computer Programming

### Year One, Second Semester - JJC

CIS 236	Programming in C
CIS 216	World Wide Web Homepage Authoring
CIS 211	Database Management Systems
MATH 139 or MATH 142	Precalculus II or Accelerated Trigonometry/Pre-Calculus
GEN ED	Fine Arts or Literature or Philosophy (consult advisor)*

### Year Two, Third Semester - JJC

CIS 223	Java Script
CIS 246	Advanced C using C++
CIS 230	Visual Basic
CIS 2XX	Program Elective (consult advisor)
CIS 2XX	Program Elective (consult advisor)

### Year Two, Fourth Semester - JJC

CIS 261	Java Programming
CIS 269	Data Structures
CIS 250	System Analysis & Design
GEN ED	Social Science (consult advisor)
GEN ED	Fine Arts or Literature or Philosophy (consult advisor)*

JJC Faculty Advisor: Pam Dunn

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Lewis Advisor: Office of Admissions

[admissions@lewisu.edu](mailto:admissions@lewisu.edu)

\*Two different disciplines

### Year Three, Fifth Semester - JJC

MATH 137	Introduction to Discrete Math
ECON 103	Principles of Economics 1
COMM 101	Principles of Speech Communication
GEN ED	Lab Science (consult advisor)
PHIL 103	Introduction to Ethics

### Year Three, Sixth Semester - JJC/Lewis

HIST 105	History of Civilization I
MATH 170	Calculus with Analytic Geometry I
ENG 102	Rhetoric II
GEN ED	Social Science (consult advisor)
<b>Seminar</b>	<b>Interdisciplinary Seminar (Lewis)</b>
<b>UNIV 10100</b>	<b>Cornerstone (Lewis)</b>

### Year Four, Seventh Semester - Lewis

THEO 10000	Search for Faith (Lewis)
MATH 30500	Linear Algebra (Lewis)
CPSC 44000	Software Engineering (Lewis)
CPSC 30000	Computer Organization (Lewis)
CPSC 42000	Computer Security (Lewis)
CPSC 46500	Theory of Algorithms and Computation (Lewis)

### Year Four, Eighth Semester - Lewis

MATH 31400	Applied Probability and Statistics (Lewis)
CPCS 35000	Operating Systems (Lewis)
CPSC 46000	Programming Languages (Lewis)
CPSC 49200	Software Systems Capstone (Lewis)
SOCI 29000	Diversity and Social Justice (Lewis)

**Total JJC Credits: 100\*\***

**Total Lewis Credits: 37\*\***

**Total Credits: 137 (as written)\* \***





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\*\*This transfer guide is a sample curriculum. Additional courses may be required based on placement test scores. Please work with your faculty advisor or success coach prior to course registration.

#### Notes:

1. Students will be required to complete a minimum of 128 credit hours for the Bachelor of Science degree.
2. Graduates of JJC must complete a minimum of 32 credit hours from Lewis to be awarded the Bachelor of Science degree. All other program requirements apply.
3. Students should ideally submit interest in the program to Lewis in their first semester at JJC in order to receive appropriate advising to maximize their semesters at JJC. The admissions application must be submitted in the last semester of JJC courses before enrolling at Lewis University.
4. Students completing the Associates in Computer Programming degree with a minimum cumulative grade point average of 2.0 will be guaranteed admissions to Lewis.
5. Lewis will charge tuition for their courses at a 35% discount from the published per credit hour.

#### About Lewis's Program:

Computer Science majors at Lewis have opportunities to learn every aspect of today's most influential field. Whether your interest is software development, cyber security, big data, cloud computing, artificial intelligence, robotics, or video game programming, you can learn it at Lewis and position yourself for a great career in which you will shape the future.

The Bachelor of Science in Computer Science at Lewis University offers six distinct concentrations:

- Applied Programming
- Secure Programming
- Artificial Intelligence
- Game and Simulation Programming
- Mobile Application Development
- Systems Programming

A student may elect not to choose a concentration, as well. In addition, students may choose to minor in a closely related field, such as Cybersecurity Operations, Data Science, and Information Technology.

#### About JJC's Program:

Computer programming is the process of writing instructions that get executed by computers. The instructions, also known as code, are written in a programming language which the computer can understand and use to perform a task or solve a problem. Software analysts and engineers provide designs for computer programmers to follow.

You'll explore a variety of programming languages, including Python, C, C++, Java, and JavaScript. In each course, you'll write 8-10 programs that solve real-world problems, and along the way, you'll develop a portfolio of marketable skills.

JJC is proud to offer this degree to students completely online!

#### Questions:

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