

## ABOUT THE MAJOR

Our BS in Computer Science program offers students a focused and progressive curriculum that provides the the knowledge needed to succeed as software developers in today's information technology job market.

The program is offered face-to-face at the UWG Carrollton campus and is accredited by the Computing Accreditation Commission of ABET.

## ABOUT THIS MAP

This program map is intended ONLY as a guide for students to plan their course of study. It does NOT replace any information in the Undergraduate Catalog, which is the official guide for completing degree requirements. Use this map to help plan and guide your experience at UWG, including academic, co-curricular, and discovery opportunities. Everyone's experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

### WHERE CAN YOU GO WITH THIS DEGREE?

- AI Engineer
- Computer Hardware Engineer
- Information Security Analyst
- IT Project Manager
- Mobile App Developer
- Software Developer
- Systems Architect
- UX Designer
- Video Game Developer
- Web Developer

### ADD A CERTIFICATE

- Communication in the Workplace
- Data Analytics
- Data Analytics & Evaluation Methods
- Data Science

# COMPUTER SCIENCE

## ALGEBRA START

*Bachelor of Science*

# 60

CORE CREDIT HOURS

# 61

MAJOR CREDIT HOURS

# 3

ELECTIVE CREDIT HOURS

Visit [westga.edu/program-maps](https://westga.edu/program-maps) for the latest version of this major map.



VISIT WOLFWATCH  
FOR MORE  
INFORMATION.



HAVE A QUESTION?  
CHECK IN WITH  
YOUR ADVISOR!



UNIVERSITY OF WEST GEORGIA

2023-2024

**TERM 1: FALL**

**A1: ENGL 1101** 3 CREDIT HOURS  
English Composition I

**A2: MATH 1111** 3 CREDIT HOURS  
College Algebra

**B2: XIDS 2002** 2 CREDIT HOURS  
(Recommended) First-Year Seminar

**E3: POLS 1101** 3 CREDIT HOURS  
American Government

**E4: SOCIAL SCIENCE** 3 CREDIT HOURS

- MILESTONES:**
- COMPLETE ENGL 1101 WITH C OR BETTER.
  - COMPLETE MATH 1111 WITH C OR HIGHER.

**TERM 2: SPRING**

**A1: ENGL 1102** 3 CREDIT HOURS  
English Composition II

**MATH 1112 OR 1113** 3/4 CREDIT HOURS  
Trig & Analytic Geometry or Precalculus

**E1: HIST 1111 OR 1112** 3 CREDIT HOURS  
World History

**C1: FINE ARTS** 3 CREDIT HOURS

**B1: WRITTEN AND ORAL COMMUNICATION** 3 CREDIT HOURS

- MILESTONES:**
- COMPLETE ENGL 1102 WITH C OR BETTER.
  - COMPLETE MATH 1112 OR MATH 1113 WITH C OR BETTER.

**14 FALL CREDIT HOURS + 15/16 SPRING CREDIT HOURS = 29/30 CREDIT HOURS**

**CRUSH YOUR COURSEWORK**

- Complete CS 1301 with an A or B: this is the prerequisite to all your CS courses.
- Complete MATH 1113 or MATH 1112 (with a C or better) to stay on top of your Mathematics requirements.
- Complete ENGL 1101 & 1102.

**FIND YOUR PLACE**

- Join ACM and/or ACM-W for networking and connection with your computing peers.
- Join another student organization to have a balanced life outside of computing.
- Talk with your advisor (or other computing faculty) about what you love about computing.

**BROADEN YOUR PERSPECTIVES**

- Explore diversity, equity, and inclusion resources and opportunities across campus.
- Check out the education abroad office.

**CONNECT OFF-CAMPUS**

- Visit Wolves Vote to learn about the voting process and registration.
- Consider volunteering for a campaign or organization in your community.

**TAKE CARE OF YOURSELF**

- Visit the UWG Wellness Hub to find all the resources available to you!
- Visit Health Services.
- Get fit! Visit URec to see all your options.
- Visit the Center for Economic Education and Financial Literacy.

**PAVE YOUR PATH**

- Complete a self-assessment to see what careers and majors are right for you.
- Visit Office of Career and Graduate School Connections.
- Create your profile on Handshake.
- Consider applying for an on-campus job.

**TERM 1: FALL**

**F: CS 1301** 4 CREDIT HOURS  
Computer Science I

**D2: MATH 1634** 4 CREDIT HOURS  
Calculus I

**ENGL 3405** 3 CREDIT HOURS  
Professional and Technical Writing

**D1: SCIENCE + LAB** 4 CREDIT HOURS

- MILESTONES:**
- COMPLETE CS 1301 WITH B OR BETTER.
  - COMPLETE MATH 1634 WITH C OR BETTER.
  - OPTIONS FOR D1 ARE BELOW.

**TERM 2: SPRING**

**F: CS 1302** 4 CREDIT HOURS  
Computer Science II

**F: MATH 1401** 3 CREDIT HOURS  
Elementary Statistics

**C2: HUMANITIES** 3 CREDIT HOURS

**D1: SCIENCE + LAB** 4 CREDIT HOURS

- MILESTONES:**
- COMPLETE CS 1302 WITH B OR BETTER.
  - OPTIONS FOR D1 ARE BELOW.

**15 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 29 CREDIT HOURS**

- Additional Information:**
- One of the following lab sciences must be taken for **Core Area D.1**: BIOL 1107+1107L (Principles of Biology I), BIOL 1108+1108L (Principles of Biology II), CHEM 1211+1211L (Principles of Chemistry I), CHEM 1212+1212L (Principles of Chemistry II), PHYS 2211+2211L (Principles of Physics I), or PHYS 2212+2212L (Principles of Physics II)

**CRUSH YOUR COURSEWORK**

- Take a MATH course every semester until you complete your MATH requirements. Get these out of the way early! (MATH 1634, MATH 1401, MATH 2853, and MATH 3003).
- Take your two science lab courses as soon as possible (BIOL 1107, BIOL 1108, CHEM 1211, CHEM 1212, PHYS 2221 and/ or PHYS 2222, plus the associated lab sections).

**FIND YOUR PLACE**

- Regularly hang out in the 24/7 Mitchell Clifton Computing Center to work on class projects and socialize with friends.
- Apply to be a lab assistant in the csX tutoring lab.
- Work on a side project in the Innovation Lab.
- Maintain a school/life balance, e.g., eat out with friends and family, attend a concert or play, make time for your hobbies.

**BROADEN YOUR PERSPECTIVES**

- In a student organization? Suggest you all complete an implicit bias workshop.
- Consider a study abroad program. Check out students' stories of their experiences.

**CONNECT OFF-CAMPUS**

- Complete an internship in your field.
- Consider a summer or part-time job.
- Ask your department about networking opportunities with alumni.

**TAKE CARE OF YOURSELF**

- Take a fitness class, climb the rock wall, or join an intramural team.
- Consider whether counseling is right for you: take a mental health screening.

**PAVE YOUR PATH**

- Draft your resume and attend a resume blitz.
- Learn about how to network on social media and update your Handshake profile.
- Draft your personal statement.
- Visit the graduate school to find out about graduate programs and admission requirements.

**TERM 1: FALL**

<b>F: CS 2100</b> Introduction to Web Development	<b>3</b> CREDIT HOURS
<b>CS 3201</b> Program Construction I	<b>3</b> CREDIT HOURS
<b>CS 3211</b> Software Engineering I	<b>3</b> CREDIT HOURS
<b>CS 3110</b> System Architecture	<b>3</b> CREDIT HOURS
<b>F: MATH 2853</b> Elementary Linear Algebra	<b>3</b> CREDIT HOURS

MILESTONE:  
• COMPLETE MATH 2853 C OR BETTER.

**TERM 2: SPRING**

<b>CS 3202</b> Program Construction II	<b>3</b> CREDIT HOURS
<b>CS 3212</b> Software Engineering II	<b>3</b> CREDIT HOURS
<b>CS 3151</b> Data Structures and Discrete Math I	<b>4</b> CREDIT HOURS
<b>CS 3270</b> Intelligent Systems	<b>3</b> CREDIT HOURS
<b>MATH 3003</b> Transition to Advanced Mathematics	<b>3</b> CREDIT HOURS

**15 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS  
= 31 CREDIT HOURS**

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**PAVE YOUR PATH**

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**TERM 1: FALL**

<b>CS 3280</b> Systems Programming	<b>3</b> CREDIT HOURS
<b>CS 3230</b> Information Management	<b>3</b> CREDIT HOURS
<b>CS 3152</b> Data Structures and Discrete Math II	<b>4</b> CREDIT HOURS
<b>E2: HIST 2111 OR 2112</b> US History	<b>3</b> CREDIT HOURS
<b>CS/COMP ELECTIVE</b>	<b>3</b> CREDIT HOURS

**TERM 2: SPRING**

<b>CS 4986</b> Computing Internship	<b>3</b> CREDIT HOURS
<b>CS 4982</b> Computing Capstone	<b>3</b> CREDIT HOURS
<b>CS 4225</b> Distributed and Cloud Computing	<b>3</b> CREDIT HOURS
<b>CS/COMP ELECTIVE</b>	<b>3</b> CREDIT HOURS
<b>GENERAL ELECTIVE</b>	<b>3</b> CREDIT HOURS

**16 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS  
= 31 CREDIT HOURS**

**CRUSH YOUR COURSEWORK**

- Complete your required internship experience (CS 4986).
- Complete your required Computing Capstone project course (CS 4982).

**FIND YOUR PLACE**

- Volunteer as an ACM or ACM-W officer
- Work on an independent study or directed research project with a faculty mentor

**BROADEN YOUR PERSPECTIVES**

- Assess your cultural competency.
- Consider working abroad and research visa regulations.
- Explore practices of creating more inclusive careers.

**CONNECT OFF-CAMPUS**

- Ask for advice from professionals in your field of interest.
- Explore career shadowing opportunities.

**TAKE CARE OF YOURSELF**

- Explore a farmer's market for fresh produce.
- Develop a post-graduation exercise plan.
- Explore your loan repayment options and complete your exit counseling.

**PAVE YOUR PATH**

- Request references from professors and supervisors.
- Draft your resume cover letter and personal statement and revise it with career services.
- Attend business fairs and career fairs at UWG and across the state.
- Attend an interview workshop.
- Apply for graduate programs.