ABOUT THE MAJOR

Physics is a fundamental physical science. Its essentials form the foundation of all sciences as well as engineering and technology. The world of physics ranges from the smallest particles of subatomic matter to the galaxies. Physicists conduct research into the basic laws of nature or use existing knowledge about the physical world to develop applications and to design new products. A degree in physics prepares the student for a career in physics or related job industry, a governmental lab, teaching, as well as for further graduate study.

Plan A is designed for students who desire to pursue graduate study in physics or career options for which physics is an excellent gateway.

WHERE CAN YOU GO WITH THIS DEGREE?

- Aerospace Engineer
- Astronomer
- Data Scientist
- Geophysicist
- Lab Manager
- Medical Physicist
- Optical Engineer
- Physics Teacher
- Professor
- Research Scientist

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.

HONORS COLLEGE

Consider joining if you have an Overall GPA of 3.2 and earned 15 college credit hours!

WHERE CAN YOU GO WITH THIS DEGREE?

- Aerospace Engineer
- Astronomer
- Data Scientist
- Geophysicist
- Lab Manager
- Medical Physicist
- Optical Engineer
- Physics Teacher
- Professor
- Research Scientist

60
CORE CREDIT HOURS

47
MAJOR CREDIT HOURS

13
ELECTIVE CREDIT HOURS

Visit 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!
**TERM 1: FALL**

**C1:** ENGL 1101  
English Composition I  
3 CREDIT HOURS

**M:** MATH 1113  
Precalculus  
4 CREDIT HOURS

**I2:** XIDS 2001  
The Physical Universe  
1 CREDIT HOUR

**T1:** CHEM 1211/1211L  
Principles of Chemistry I  
4 CREDIT HOURS

**MILESTONES:**  
• Complete ENGL 1101 with C or better  
• Complete MATH 1113

**TERM 2: SPRING**

**C2:** ENGL 1102  
English Composition II  
3 CREDIT HOURS

**T3:** MATH 1634  
Calculus I  
4 CREDIT HOURS

**T2:** CHEM 1212/1212L  
Principles of Chemistry II  
4 CREDIT HOURS

**I1:** ORAL COMMUNICATIONS  
3 CREDIT HOURS

**TERM 1: FALL**

**F:** PHYS 2211/2211L  
Principles of Physics I  
4 CREDIT HOURS

**F:** MATH 2644  
Calculus II  
4 CREDIT HOURS

**A:** HUMANITIES  
3 CREDIT HOURS

**P:** CITIZENSHIP  
3 CREDIT HOURS

**MILESTONES:**  
• Complete Introductory Physics Sequence  
• Complete Math up to Calculus III

**TERM 2: SPRING**

**F:** PHYS 2212/2212L  
Principles of Physics II  
4 CREDIT HOURS

**F:** MATH 2654  
Calculus III  
4 CREDIT HOURS

**MATH 3303**  
Ordinary Differential Equations  
3 CREDIT HOURS

**A:** HUMANITIES  
3 CREDIT HOURS

**P:** CITIZENSHIP  
3 CREDIT HOURS

**MILESTONES:**  
• Complete Principles of Physics  
• Take Modern, Mathematical, Mechanics, E&M and Therm  
• Establish your pathway/concentration  
• Take core and electives to balance upper-level coursework

14 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS  
= 28 CREDIT HOURS

**CRUSH YOUR COURSEWORK**

• Enroll in XIDS 2001: Physical Universe and Core IMPACTS course  
• Complete math courses through Calculus II  
• Take Principles of Physics I (or ASTR 2313) in your second semester  
• Attend physics workshops  
• Meet with your Physics mentor

**FIND YOUR PLACE**

• Meet Physics faculty and learn about their research and scholarship opportunities  
• Join the Physics Engineering club  
• Connect with junior/senior Physics students and ambassadors

**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  
• Visit Health Services  
• Visit the UWG Wellness Hub to find all the resources available to you  
• Visit the Center for Economic Education and Financial Literacy

**TAKE CARE OF YOURSELF**

• 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

**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

14 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS  
= 28 CREDIT HOURS
## YEAR 3

### TERM 1: FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHYS 3503</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3113</td>
<td>Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4513 OR 4523</td>
<td>Mathematical Physics or Computational Physics</td>
<td>3</td>
</tr>
<tr>
<td>MATH OR FL ELECTIVE</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>P: CITIZENSHIP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CRUSH YOUR COURSEWORK

- Complete Principles of Physics.
- Take Modern, Mathematical, Mechanics, E&M and Therm.
- Establish your pathway/concentration.
- Take core and electives to balance upper-level coursework.

### FIND YOUR PLACE

- Become a Student Assistant for a physics lab, workshops or the Observatory.
- Get involved in research or an internship.
- Apply for summer internships or REUs.
- Attend a scientific conference.

### 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

- 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.

### TAKE CARE OF YOURSELF

- Draft your resume and attend a resume blitz.
- Visit the graduate school to find out about graduate programs and admission requirements.

### PAVE YOUR PATH

- Complete 15 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 30 CREDIT HOURS

## YEAR 4

### TERM 1: FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHYS 4513 OR 4523</td>
<td>Mathematical Physics or Computational Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3511</td>
<td>Experimental Physics I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS ELECTIVE</td>
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<td>3</td>
</tr>
<tr>
<td>S: SOCIAL SCIENCE</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHYS ELECTIVE</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### CRUSH YOUR COURSEWORK

- Become a Physics Ambassador.
- Expand your professional network.
- Apply for internships in local industries or graduate programs.
- Attend career fairs. Send your resume to one of our alumni.

### FIND YOUR PLACE

- Become a Physics Ambassador.
- Expand your professional network.
- Apply for internships in local industries or graduate programs.
- Attend career fairs. Send your resume to one of our alumni.

### 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 review it with career services.
- Attend business fairs and career fairs at UWG and across the state.
- Attend an interview workshop.
- Apply for graduate programs.

- Complete 16 FALL CREDIT HOURS + 18 SPRING CREDIT HOURS = 34 CREDIT HOURS