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.

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

ADD A CERTIFICATE
- Atmospheric Science
- Forensic Sciences
- Health and Society
- Microbiology

Visit westga.edu/program-maps for the latest version of this major map.

HONORS COLLEGE

Consider joining if you have an Overall GPA of 3.2 and earned 15 college credit hours!
### YEAR 1

**TERM 1: FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1: ENGL 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1111</td>
<td>Precalculus</td>
<td>3</td>
</tr>
<tr>
<td>T1: XIDS 2001</td>
<td>The Physical Universe</td>
<td>4</td>
</tr>
<tr>
<td>I1: ORAL COMMUNICATIONS</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**MILESTONES:**
- Complete ENGL 1101 with C or better

**FIND YOUR PLACE**
- Enroll in XIDS 2001: Physical Universe and Core IMPACTS courses.
- Complete math courses through Calculus I.
- Complete Principles of Physics I (or ASTR 2313) in your second semester.
- Attend physics workshops.
- Meet with your Physics mentor.

**FIND YOUR COURSEWORK**
- Meet Physics faculty and learn about their research and scholarship opportunities.
- Join the Physics Engineering club.
- Connect with junior/senior Physics students and ambassadors.

**FIND YOUR OPPORTUNITIES**
- Enroll in XIDS 2001: Physical Universe and Core IMPACTS courses.
- Visit Office of Career and Graduate School.
- Apply for an on-campus job.
- Consider volunteering for a campaign or registration.
- Complete a self-assessment to see what careers are right for you.
- Attend physics workshops.
- Visit the UWG Wellness Hub to find all the resources available to you!
- Take the IMC Wellness Hub to find all the resources available to you!
- Visit Health Services.
- Complete IMPACTS courses.
- Complete Principles of Physics.
- Take Modern, Mathematical, Mechanics, E&M and Therm.
- Complete Principles of Chemistry.
- Establish your pathway/concentration.
- Take core and electives to balance upper-level 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.

**PAVE YOUR PATH**
- 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.

**12 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS + 4 SUMMER CREDIT HOURS = 30 CREDIT HOURS**

### YEAR 2

**TERM 2: SPRING**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>C2: ENGL 1102</td>
<td>English Composition I</td>
<td>3</td>
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<tr>
<td>M: MATH 1113</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>T1: CHEM 1211/1211L</td>
<td>Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>A: HUMANITIES</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**MILESTONES:**
- Complete ENGL 1102 with C or better
- Complete Calculus I

**FIND YOUR PLACE**
- Explore diversity, equity, and inclusion resources and opportunities across campus.
- Meet with your Physics mentor.

**FIND YOUR COURSEWORK**
- Visit Wolves Vote to learn about the voting process and registration.
- Complete IMPACTS courses.
- Consider volunteering for a campaign or organization in your community.
- Consider volunteering for a campaign or organization in your community.

**FIND YOUR OPPORTUNITIES**
- 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.
- 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.

**PAVE YOUR PATH**
- 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.

**15 FALL CREDIT HOURS + 13 SPRING CREDIT HOURS = 28 CREDIT HOURS**
<table>
<thead>
<tr>
<th>TERM 1: FALL</th>
<th>TERM 2: SPRING</th>
<th>TERM 4: FALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 3503 Modern Physics</td>
<td>PHYS 3213 Thermodynamics</td>
<td>PHYS 4513 OR 4523 Mathematical Physics or Computational Physics</td>
</tr>
<tr>
<td>PHYS 3113 Mechanics</td>
<td>PHYS 3313 Electricity and Magnetism</td>
<td>PHYS 3511 Experimental Physics I</td>
</tr>
<tr>
<td>PHYS 4513 OR 4523 Mathematical Physics or Computational Physics</td>
<td>MATH OR FL ELECTIVE</td>
<td>ELECTIVE</td>
</tr>
<tr>
<td>F: MATH 2654 Calculus III</td>
<td>PHYS ELECTIVE</td>
<td>PHYS ELECTIVE</td>
</tr>
<tr>
<td>P: CITIZENSHIP</td>
<td>PHYS ELECTIVE</td>
<td>ELECTIVE</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.
- Attend a scientific conference.

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

**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.
- 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.

**PAVE YOUR PATH**
- Finish your degree requirements.
- Complete your research/internships.
- Present at a conference.
- Write a scientific paper.
- Finish strong.

**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.

**YEAR 3**

**TERM 1: FALL**

**YEAR 4**

**TERM 1: FALL**

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