Undergraduate Research in Physics and Astronomy

You have many opportunities to get involved in research and can start any time, even in your first semester.

Research with GMU faculty

Course credit: ASTR 408 or PHYS 408. Contact Brooke Vaughn (bvaughn4@gmu.edu) for help registering, once your research advisor has approved.

Pay: through your research advisor's grant or through OSCAR (Office of Student Scholarship, Creative Activities, & Research) URSP (Undergraduate Research Scholarship Program): https://oscar.gmu.edu/students/ursp/

You can get either credit or pay for a research project, but not both. You can also just do it as a volunteer.

Joe Weingartner (jweinga1@gmu.edu) can help you find a research advisor. You can also peruse the department's faculty directory: https://science.gmu.edu/academics/departments-units/physics-and-astronomy-department/faculty-and-staff

Once you've found faculty whose research looks interesting, email them to request a meeting to discuss research opportunities. Here's a sample email:

Dear Dr. X,

I'm a sophomore physics major and am interested in starting a research project, either next semester or in the summer. This semester, I'm taking MATH 213 and PHYS 251, 260, and 261. Would you have any openings for a research student at my level in the above time frame? If so, could we schedule a meeting to discuss? Thank you for your consideration.

Sincerely,
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Research at nearby labs:

We have connections with scientists at nearby facilities and can make informal arrangements for you to do research projects there. This can be a good option if you're unable to find a project here in your area of interest or to gain experience and establish relationships beyond GMU. Any faculty members, including your academic advisor, course instructors, or professors who you contacted about research but who didn't have openings, can help you with these opportunities.

Summer internships:

You can work with GMU faculty over the summer, but you can also pursue internships at other universities and labs.

REU (Research Experiences for Undergraduates): https://www.nsf.gov/crssprgm/reu/

Astronomy opportunities: https://aas.org/careers/internships-summer-jobs

Physics opportunities: https://www.aps.org/careers/employment/internships.cfm