

# ASTRONOMY– PHYSICS, B.A.

## ADVISING AND CAREERS

### ADVISING

We encourage students to meet major advisors as early as possible. For major advising, students should contact the Undergraduate Advisor (<https://www.astro.wisc.edu/undergraduate-program/current-students/#preliminary-and-career-advising>). The undergraduate advisor (via Starfish) can assist students with curriculum and course scheduling, career planning, academic concerns, and overall performance and strategies.

To declare the astronomy–physics major, **first** meet with the undergraduate advisor, then contact the faculty Advisors: Professor Ke Zhang ([ke.zhang@wisc.edu](mailto:ke.zhang@wisc.edu) ([townsend@astro.wisc.edu](mailto:townsend@astro.wisc.edu))) or Professor Snezana Stanimirovic, ([ssstanimi@astro.wisc.edu](mailto:ssstanimi@astro.wisc.edu)).

### RECOMMENDED ADDITIONAL COURSES

**Math:** Mathematics courses other than those required as prerequisites for PHYSICS courses are not required for the major, but the following courses are recommended: MATH 320 Linear Algebra and Differential Equations OR MATH 319 Techniques in Ordinary Differential Equations and MATH 340 Elementary Matrix and Linear Algebra. If a student plans to work toward the Ph.D degree, the student should also take MATH 321 Applied Mathematical Analysis and MATH 322 Applied Mathematical Analysis. Additional mathematics (or statistics) courses should be chosen after consultation with the undergraduate advisor.

**Computing:** Computers are fundamental to astronomical research. An introduction through Introduction to Programming, or short courses run by the computing center should be considered. COMP SCI 220 Data Science Programming I is a good option.

**Chemistry:** A college course in physical or organic chemistry is useful for astronomy students. Physical chemistry is particularly valuable for those interested in the interstellar medium, comets, and planets.

**Statistics:** A background in statistics is valuable, particularly for students interested in observational astronomy. STAT 302 Accelerated Introduction to Statistical Methods, or STAT/MATH 309 Introduction to Probability and Mathematical Statistics I/STAT/MATH 310 Introduction to Probability and Mathematical Statistics II for a more solid foundation, are suggested.

**Languages:** Spanish but also, French, German and Russian are also useful foreign languages for astronomy students, but are not required.

### L&S CAREER RESOURCES

Every L&S major opens a world of possibilities. SuccessWorks (<https://successworks.wisc.edu/>) at the College of Letters & Science helps students turn the academic skills learned in their major, certificates, and other coursework into fulfilling lives after graduation, whether that means jobs, public service, graduate school or other career pursuits.

In addition to providing basic support like resume reviews and interview practice, SuccessWorks offers ways to explore interests and build career

skills from their very first semester/term at UW all the way through graduation and beyond.

Students can explore careers in one-on-one advising, try out different career paths, complete internships, prepare for the job search and/or graduate school applications, and connect with supportive alumni and even employers in the fields that inspire them.

- SuccessWorks (<https://careers.ls.wisc.edu/>)
- Set up a career advising appointment (<https://successworks.wisc.edu/make-an-appointment/>)
- Enroll in a Career Course (<https://successworks.wisc.edu/career-courses/>) – a great idea for first- and second-year students:
  - INTER-LS 210 L&S Career Development: Taking Initiative (1 credit)
  - INTER-LS 215 Communicating About Careers (3 credits, fulfills Comm B General Education Requirement)
- Learn about internships and internship funding (<https://successworks.wisc.edu/finding-a-job-or-internship/>)
  - INTER-LS 260 Internship in the Liberal Arts and Sciences
- Activate your Handshake account (<https://successworks.wisc.edu/handshake/>) to apply for jobs and internships from 200,000+ employers recruiting UW-Madison students
- Learn about the impact SuccessWorks has on students' lives (<https://successworks.wisc.edu/about/mission/>)