

ASTRONOMY AND ASTROPHYSICS, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Program Learning Objectives

- Accurately apply mathematical tools to real physical problems.
- Use sophisticated and varying techniques in problem solving.
- Explain the physical meaning of mathematical expressions and operations used in quantitative problem solving.
- Clearly communicate both technical and descriptive content while following the conventions of scientific writing.
- Distinguish between scientific theories and other kinds of (non scientific) explanations.
- collect and analyze real astronomical data.
- Give clear oral presentations of technical material.
- Write original computer code to accomplish a computational task, such as analyzing data, displaying astronomical images, or performing calculations.