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.