

B.S. in Meteorology

Program-Level Student Learning Outcomes

Students will:

- Analyze meteorological and climatological data using relevant statistical methods and tools.
- Demonstrate integrated understanding of the linked Earth–atmosphere–ocean system.
- Effectively communicate scientific information and its uncertainties in oral, written, and visual form while adhering to the principles of proper ethical behavior within the atmospheric sciences.
- Use one or more computer programming languages to investigate problems in the atmospheric sciences, analyze data, and create relevant visualizations.
- Apply numerical methods, guidance, and manual techniques to predict the future state of the atmosphere.
- Apply equations that govern physical atmospheric processes and responses to explain fundamental principles and behaviors of the atmosphere across spatial and temporal scale.
- Evaluate atmospheric processes, features, and phenomena across a multitude of spatial scales by utilizing diagnostic, prognostic, and technological tools such as surface observations (including METARs and TAFs), satellite data, upper air data, radar data, thermodynamic soundings, numerical weather model output, etc.