

**Undergraduate program in
Atmospheric Science/Meteorology/Severe Weather
at the University of Alabama in Huntsville.**

The Department of Atmospheric Science offers a B.S. degree in Earth System Science with a specialization in Atmospheric Science/Meteorology. Students who are interested in **Severe Weather** follow a program structured to prepare for careers in Atmospheric Science/Meteorology at the National Weather Service or elsewhere. These students are also well prepared to pursue graduate studies in Atmospheric Science or related fields.

Students typically follow a set of courses that culminates in a capstone research experience that integrates the coursework across the various Atmospheric Science thematic areas. For further information contact chair@nsstc.uah.edu

The following is the structure of the program. (See department website for further details.)

1. Take General Education Requirement Courses
2. Take ancillary courses that support the core classes including Physics, Chemistry, Computer Science, and Mathematics.
3. Take core courses in Climate, Earth System Science, Hydrology, Air Pollution, Severe Weather, and Climate.
4. Take specific courses in Atmospheric Science track including (but not limited to) Thermodynamics, Atmospheric Dynamics, Operational Weather Forecasting, Synoptic Meteorology, Mesoscale Meteorology, and Radar Meteorology.
5. Conduct Capstone research in area of interest.

Highlights of this degree with Atmospheric Science/Meteorology Focus include:

1. Study of **severe weather** using state of the art research instrumentation such as the Mobile Integrated Profiling system (MIPS), the Mobile Alabama X-band dual polarization radar (MAX), the Advanced Radar for Meteorological and Operational Research (ARMOR) and other mobile and ground-based instruments.
2. The Department of Atmospheric Science is ranked in the top ten by the *Chronicle of Higher Education*.
3. Work with faculty of national/international reputation who conduct leading edge research (including severe weather) and bring that research into the classroom.
4. UAH is one of very few programs that integrate studies and research in severe weather, radar, *and* lightning.
5. The department is colocated with the National Weather Service with opportunities for collaboration and internship.
6. The department is colocated with NASA's Earth Science division with access to satellite and other data sets and programs such as Short-term Prediction Research and Transition Center (SPoRT), SERVIR and DEVELOP with collaborative opportunities and internships.
7. Opportunities for Study Abroad research of weather and climate.
8. Preparation for wide range of careers in National Weather Service or other GS positions and graduate school.

Students interested in severe weather research also have opportunities to conduct research in
SWIRLL
Severe Weather Institute and Radar & Lightning Laboratories.



Severe Weather instrumentation (left panel) and an artist's rendering of the new \$7 million Severe Weather Institute and Radar & Lightning Laboratories (SWIRLL) at UAH that is scheduled to be completed in December 2014.