

Meteorology track for AOS major

- This track is closely aligned with the meteorology certificate, described in more detail on the [AOS website](#)
- Lower division classes
 - Math, physics, and chemistry requirements
 - *Required for Meteorology Certification:* Phys 1A/B/C
 - *Strongly recommended for Meteorology Certification:* Chem 20 A/B, Math 31 A/B, 32 A/B, 33 A/B
 - *Suggested for Meteorology Certification:* Phys 4AL, 4BL
 - AOS M71. Introduction to Computing for Geoscientists (normally taught in Fall)
 - Or PiC 10A (taught all quarters), but AOS M71 strongly recommended
 - AOS 51. Fundamentals of climate science (*recommended for Meteorology Certification*)
 - AOS 90. Introduction to undergraduate research (normally taught in Winter) (*recommended for Meteorology Certification*)
 - Recommended (not required): Statistics 12 or 13. Introduction to Statistical Methods.
 - Suggested (not required): Statistics 20. Statistical Programming (requires Stats 12 or 13).
 - Suggested (not required): Geography 7: Introduction to GIS
- Recommended core courses (4 required):
 - 101. Fundamentals of Atmospheric Dynamics and Thermodynamics (recommended to take in Fall of JR year) (*required for Meteorology Certification*)
 - 103. Physical Oceanography
 - 104. Fundamentals of Air and Water Pollution (*required for Meteorology Certification*)
 - 112: Climate Change Assessment (101 recommended) (*recommended for Meteorology Certification*)
- Advanced upper division courses (3 required)
 - Recommended:
 - C110. Advanced Dynamic and Synoptic Meteorology (101 required) (*required for Meteorology Certification*)
 - 113. Introduction to Geophysical Fluid Dynamics (101, 103, or equivalent course in fluid mechanics or transport phenomena required) (*recommended for Meteorology Certification*)
 - C144. Atmospheric Boundary Layer (101 required) (*recommended for Meteorology Certification*)
 - 145. Atmospheric Physics: Radiation, Clouds, and Aerosols (101 recommended) (*required for Meteorology Certification*)
 - C160. Remote Sensing of Atmosphere and Oceans) (*required for Meteorology Certification*)
 - 181. Analysis and Prediction of Weather Systems (C110 required) (*required for Meteorology Certification*)
 - Suggested:
 - C111. Introduction to Machine Learning for Physical Sciences
 - M120. Introduction to Fluid Dynamics
 - M171. Advanced Computing in Geosciences (M71 required)
 - 180. Numerical Methods in Atmospheric Sciences (*recommended for Meteorology Certification*)
 - C182. Data Analysis in Atmospheric and Oceanic Sciences
 - 210. Planetary Atmospheres and Climates (requires petition to enroll) (*recommended for Meteorology Certification*)

- UCLA's AOS Meteorology track program is aligned with the individual occupational requirements for the Federal General [Schedule 1340 \(Meteorology\) Series basic educational requirements](#). Upon completion of the specific courses, students will receive a certification of completion endorsed by the National Oceanic and Atmospheric Administration's National Weather Service, proving that they have fulfilled the basic requirements for employment as a meteorologist at the National Weather Service.
- Upper division courses from other science departments (2 required)
 - Recommended:
 - CEE 103. Applied Numerical Computing and Modeling in Civil & Env. Engineering
 - EPSS 153 Oceans and Atmospheres (*recommended for Meteorology Certification*)
 - Geog 116 Climatology (*recommended for Meteorology Certification*)
 - MAE 103. Elementary Fluid Mechanics
 - Math 135. Ordinary Differential Equations (*recommended for Meteorology Certification*)
 - Math 136. Partial Differential Equations (*recommended for Meteorology Certification*)
 - Phys 131. Mathematical methods of physics
 - Suggested:
 - Chem 103. Environmental Chemistry (*recommended for Meteorology Certification*)
 - CEE 110. Introduction to Probability and Statistics for Engineers
 - CEE 150. Introduction to Hydrology
 - Math 142. Mathematical Modeling
 - Phys 110A. Electricity and Magnetism (*recommended for Meteorology Certification*)
 - Phys 110B. Electricity and Magnetism (*recommended for Meteorology Certification*)
 - Stats 101A. Introduction to Data Analysis and Regression