Meteorology track for AOES major

• Topic-area undergraduate advisor: Prof. Marcelo Chamecki (chamecki@ucla.edu)
• Lower division classes
  o Math, physics, and chemistry requirements
  o EPSS 71. Introduction to Computing for Geoscientists (normally taught in Fall)
    ▪ Or CEE M20 or PiC 10A (both taught all quarters)
  o AOS 51. Fundamentals of climate science (normally taught in Winter or Spring)
  o AOS 90. Introduction to undergraduate research (normally taught in Winter or Spring)
  o Recommended (not required): Statistics 12 or 13. Introduction to Statistical Methods.
  o Suggested (not required): Geography 7: Introduction to GIS
• Recommended core courses (4 required):
  o 101. Fundamentals of Atmospheric Dynamics and Thermodynamics (recommended to take take in Fall of JR year)
  o 103. Physical Oceanography
  o 104. Fundamentals of Air and Water Pollution
  o 112: Climate Change Assessment (101 recommended)
• Advanced upper division courses (3 required)
  o Recommended:
    ▪ C110. Advanced Dynamic and Synoptic Meteorology (101 required)
    ▪ C115. Mesometeorology (101 required)
    ▪ C144. Atmospheric Boundary Layer (101 required)
    ▪ 145. Atmospheric Physics: Radiation, Clouds, and Aerosols (101 recommended)
    ▪ 186. Operational Meteorology (C110 required)
  o Suggested:
    ▪ M120. Introduction to Fluid Dynamics (Corequisite: Physics 131)
    ▪ C160. Remote Sensing of Atmosphere and Oceans
    ▪ 180. Numerical Methods in Atmospheric Sciences
    ▪ 210. Planetary Atmospheres and Climates (requires petition to enroll)
  o To meet the degree requirements for employment at the National Weather Service or government agency as a meteorologist, you’d need to take 110, 145, C160, 186, and C115 or C144, among other classes. For exact requirements, see https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1300/meteorology-series-1340/:
• Upper division courses from other science departments (2 required)
  o Recommended:
    ▪ C&EE 103. Applied Numerical Computing and Modeling in Civil & Env. Engineering
    ▪ EPSS 153 Oceans and Atmospheres
    ▪ MAE 103. Elementary Fluid Mechanics
    ▪ Math 142. Mathematical Modeling
    ▪ Phys 131. Mathematical methods of physics
  o Suggested:
    ▪ C&EE 110. Introduction to probability and statistics for engineers
    ▪ C&EE 150. Introduction to Hydrology
    ▪ Geog 104. Climatology
    ▪ Math 136. Partial differential equations
    ▪ Math 151A. Applied numerical methods
    ▪ Stats 101A. Introduction to data analysis and regression