



METEOROLOGY

Bachelor of Science

School of Mathematics, Science & Engineering

Program Overview

The Meteorology degree program provides students with a comprehensive education research into the dynamics of the Earth's atmosphere, weather analysis, and weather forecasting. This science includes a study of the impact of air pollution on people and the environment, the threat of changing climate due to global warming, severe weather, and world climates.

Capstone work is available in both field experimentation and meteorological analysis utilizing the fixed and deployable weather stations and nine Apple workstations in the Climate and Data Analysis Laboratory. The UIW graduate will obtain the educational training to qualify for the American Meteorological Society Certified Consulting Meteorologist examination after completing 5 years in industry.

Professional School Opportunities

The Meteorology program prepares students for entering a wide variety of professional careers in the research, industrial meteorology, and weather forecasting. Our graduates are prepared to step in and work immediately in industry and government sectors or continue to pursue their career with graduate work.

Career Opportunities

A student graduating from the Meteorology program can find employment with a number of private-sector companies that provide weather service to ocean shipping firms and port operators, electric and gas utilities, farmers, ranchers, highway departments or the National Weather Service as an applied or operational meteorologist. The military may provide opportunities with forecasting centers that include flight and airborne operations, ground support for the army, and naval meteorology. Employment with research laboratories includes studies in global climate change such as remote sensing and air pollution applications.

Contact

Dr. Gerald J. Mulvey
Department of Atmospheric Science and Physics
School of Mathematics, Science & Engineering
University of the Incarnate Word
4301 Broadway, CPO # 311, San Antonio, TX 78209
Telephone: (210) 805-3099 Fax: (210) 829-3153
E-mail: mulvey@uiwtx.edu

Website

www.uiw.edu/meteorology

Bachelor of Science in Meteorology
SCHOOL OF MATH, SCIENCE, & ENGINEERING
2015-2017

Freshman Year: Fall		Hrs.
ENGL 1311 Composition I	3	
CHEM 1301 Chemical Principles I	3	
MATH 1311 Precalculus	3	
CIS 2330 Programming I, CIS 3660 Computer Science or ENGR 2340 Computer Programming	3	
SPAN 1311 Elementary Spanish I, or language other than English	3	
Total hours		15

Sophomore Year: Fall		Hrs.
METR 1360 Climatology	3	
METR 3360 Satellite Meteorology	3	
PHYS 2305 Physics I	3	
PHYS 2105 Physics I Lab	1	
ENGL 2310 World Literature Studies	3	
MATH 2313 Calculus II	3	
Total hours		16

Junior Year: Fall		Hrs.
MATH 2314 Differential Equations	3	
METR 3376 Atmospheric Dynamics	3	
METR 3310 Radar Meteorology	3	
PHIL/RELS 3000-4000	3	
METR 3340 Hydrology	3	
History Core	3	
Total hours		18

Senior Year: Fall		Hrs.
MATH Advanced Elective	3	
METR 3330 Forecasting II	3	
METR 4315 Air Pollution Meteorology	3	
DWHP 1200 Dimensions of Wellness or DWHP 3200	2	
METR 3365 Atmospheric Physics	3	
METR 3356 Synoptic Meteorology	3	
Total hours		17

Freshman Year: Spring		Hrs.
ENGL 1312 Composition II	3	
CHEM 1302 Chemical Principles II	3	
CHEM 1203L General Chemistry Lab	3	
MATH 2312 Calculus I	3	
METR 1430 Meteorology	4	
SPAN 1312 Elementary Spanish II, or language other than English	3	
Total hours		18

Sophomore Year: Spring		Hrs.
METR 1325 Natural Hazards	3	
MATH 3314 Calculus III	3	
PHYS 2306 Physics II	3	
PHYS 2106 Physics II Lab	1	
PEHP Physical Education Activity	1	
Religious Core	3	
Fine Arts Core	3	
Total hours		17

Junior Year: Spring		Hrs.
METR 3320 Forecasting I	3	
METR 3325 Thermodynamic Meteorology	3	
MATH Advanced Elective	3	
PHIL 1381 Introduction to Philosophy	3	
GEOL 1420 Oceanography	4	
Total hours		16

Senior Year: Spring		Hrs.
METR 3391 Instrumentation	3	
METR 3190 Meteorological Instrumentation Lab	1	
METR 3335 Severe Weather	3	
METR Advanced Elective	3	
Social Science Core	3	
METR 4220 Capstone Meteorology	2	
Total hours		15

Core Curriculum - Total Hours 43
Major - Total Hours 89
Degree - Total Hours 132