University of the Incarnate Word®

Bachelor of Science in Meteorology

School of Mathematics, Science and Engineering

Meteorology

PROGRAM OVERVIEW

The Bachelor of Science (B.S.) in Meteorology in the School of Mathematics, Science and Engineering at the University of the Incarnate Word prepares students for successful and impactful careers in the diverse fields of weather science, forecasting and atmospheric conservation and for advanced degrees in pursuit of researcher or educator positions. UIW offers the only B.S. Meteorology and Broadcast Meteorology program in San Antonio and throughout South Texas.

The B.S. in Meteorology is a 130-hour interdisciplinary degree program that offers a comprehensive education that prepares students to enter a wide variety of professional careers as well as graduate programs in weather modeling and forecasting, air pollution studies, broadcast meteorology, hydrology, Geographic Information Systems (GIS) applications in meteorology and education.

The Meteorology program philosophy seeks to develop in the student an appreciation of the Earth's fragile atmosphere through education and understanding of the Earth's atmosphere. Students learn to critically analyze and evaluate the interactions of the atmosphere with the oceans and biosphere and recognize the problems and issues of local and regional air pollution, the profound implications and long-term effects of global warming on the planet, the effects of severe weather, as well as the long-term effects of human impact on weather and climate. Students can also expect to research, model and investigate global weather events and their causes and impacts.

Meteorology courses taken in these majors are applicable toward partially fulfilling the academic requirements to earn the AMS or NWA Seal of Approval.

ADMISSION REQUIREMENTS

The requirements for admission to the B.S. in Meteorology program are the same as the requirements for admission to the University of the Incarnate Word.

CONTACT

UIW Admissions
(210) 829-6005
admission@uiwtx.edu

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DEGREE PLAN

B.S. in Meteorology

FRESHMAN YEAR

Fall

FYES 1211: First Year Experience Seminar (2 hours)
ENGL 1311: Composition I (3 hours)
CHEM 1301: Chemical Principles I (3 hours)
CHEM 1101: Chemical Principles I Lab (1 hour)
MATH 1311: Pre-Calculus* (3 hours)
METR 1430: Intro Meteorology & Lab (4 hours)
Total Hours: 16

*MATH 1311 may not be required if student Comps out.

Spring

Fine Arts Core (3 hours)
ENGL 1312: Composition II (3 hours)
CHEM 1302: Chemical Principles II (3 hours)
CHEM 1102: Chemical Principles II Lab (1 hour)
CIS 2330: Prgm 1, CIS 3360: Comp Sci, or
ENGR 2340: Comp Prgm (3 hours)**
MATH 2312: Calculus I (3 hours)
Total Hours: 16

SOPHOMORE YEAR

Fall

SPAN 1311 or other Foreign Language (3 hours)
ENGL 2310: World Literature (3 hours)
PHYS 2305: Physics I (3 hours)
PHYS 2105: Physics I Lab (1 hour)
MATH 2313: Calculus II (3 hours)
METR 3310: Radar Meteorology* or METR 3360:
Satellite Meteorology** (3 hours)
Total Hours: 16

*taught in odd years
**taught in even years

Spring

SPAN 1312 or other Foreign Lang (3 hours)
PHYS 2306: Physics II (3 hours)
PHYS 2106: Physics Lab II (1 hour)
MATH 2314: Differential Equation (3 hours)
METR 1325/1125: Natural Hazard & Lab (4 hours)
METR 1360: Climatology (3 hours)
Total Hours: 17

JUNIOR YEAR

Fall

PHIL 1381: Intro to Philosophy (3 hours)
Religious Core (3 hours)
MATH 3314: Calculus 3 (3 hours)
MATH 33XX: Advanced Math Elective*** (3 hours)
METR 3310: Radar Meteorology* or METR 3360:
Satellite Meteorology** (3 hours)
METR 3356: Synoptic Meteorology (3 hours)
Total Hours: 18

*taught in odd years
**taught in even years
***from approved MATH selections

Spring

PHIL/RELS 3000-4000 (3 hours)
PEHP Physical Activity Course (1 hour)
METR 3340: Hydrology (3 hours)
METR 3320: Forecasting 1 (3 hours)
METR 3325: Thermodynamic Meteorology* or
METR 3335: Severe Weather** (3 hours)
METR 3376: Atmospheric Dynamics* or
METR 3365: Atmospheric Physics** (3 hours)
Total Hours: 16

*taught in odd years
**taught in even years

SENIOR YEAR

Fall

History Core (3 hours)
GEOL 1420: Oceanography & Lab (4 hours)
METR 3330: Forecasting II (3 hours)
METR 3390: Met Instrumentation (3 hours)
METR 3190: Met Instrumentation Lab (1 hour)
METR 4315: Air Pollution (3 hours)
Total Hours: 17

Spring

Social Studies (3 hours)
MATH 33xx: Advanced Math Elective (3 hours)
METR 3325: Thermodynamic Meteorology* or
METR 3335: Severe Weather** (3 hours)
METR xxxx: Advanced METR elective (3 hours)
METR 4220: Capstone Meteorology (2 hours)
Total Hours: 14

*taught in odd years
**taught in even years

130 hours needed to complete the B.S. in Meteorology.

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