

**METEOROLOGY PROGRAM****Department of Earth and Atmospheric Sciences**

Meteorology is the science of the atmosphere. Meteorologists are employed in operational meteorology, meteorological research, applied meteorology, and the media. Meteorologists study global weather and climate, and investigate the influence that human beings exert on earth's climate. The Meteorology Computer Laboratory provides access to real-time weather data and analysis software supported by the UNIDATA Program. Contact the Earth and Atmospheric Sciences Department for additional information: [www.msudenver.edu/eas](http://www.msudenver.edu/eas) or <https://msudenver.edu/eas/meteorology-program/>.

**Minor in Meteorology**

Required Meteorology Courses – 7 hours	Prerequisites	Semester	Credit Hours
____ MTR 1400 Weather and Climate	(none)	F, S, Su	3
____ MTR 2020 Weather and Climate Lab	Pre/Coreq MTR 1400*	F, S	1 (lab)
____ MTR 3400 Synoptic Meteorology	MTR 2020	F	3

\*Successful completion of *Quantitative Literacy* is required; *MTH 1110 College Algebra* is recommended

**Approved Electives\* – 12 hours**

____ MTR 1600 Global Climate Change	(None)	F, S, Su	3
____ MTR 2410 Weather Observing Systems	MTR 2020	S	3 (with lab)
____ MTR 3100 Air Pollution	MTR 2020 OR ENV 1200	F19, some falls	3
____ MTR 3330 Climatology	MTR 2020	S	3 (with lab)
____ MTR 3410 Weather Analysis Techniques	MTR 3400	S	3 (with lab)
____ MTR 3420 Radar and Satellite Meteorology	MTR 2020 and MTH 1110	F20, ?	3 (with lab)
____ MTR 3500 Hazardous Weather	MTR 1400 or MTR 2020 or AES 1400	some springs	3
____ MTR 3710 Meteorology Internship	See MTR Advisor	F, S, Su	3 – 6
____ MTR 3777 Field Observations of Severe Weather	MTR 2410, MTR 3410	Su (May)	3 (field)
____ MTR 4210 Forecasting Laboratory (repeatable)	MTR 3410	F, S	1 (lab)
____ MTR 4500 Mesometeorology	MTR 3410 and MTH 1410	S21	3
____ AES 3460 Weather and Aircrews**	see AES Dept.	F, S	3

\*Some Calculus-based courses are also available (see below).

\*\*This course is required for some aviation technology majors. For this course to count towards the meteorology minor, students must consult with an advisor in the Aviation and Aerospace Science Department.

The following courses may also be used as electives, but have additional Math and Physics pre-requisites:

____ MTR 3430 Atmospheric Thermodynamics	MTR 2020, MTH 2410, PHY 2311/21	F20,S22	3
____ MTR 3440 Physical Meteorology	MTR 2020, MTH 2410, PHY 2311/12	S20,S21	3
____ MTR 3450 Dynamic Meteorology	MTR 2020, MTH 2420, PHY 2331/41	F	3
____ MTR 4400 Advanced Synoptic Meteorology	MTR 3450, MTH 3420, PHY 2331	S	4 (with lab)

**TOTAL HOURS – 19****IMPORTANT CONSIDERATIONS FOR METEOROLOGY MINORS:**

- Students considering a Meteorology Minor must consult with a Meteorology advisor to develop an academic plan.
- The normal time for completion of the Meteorology Minor is two years (4 semesters). This may vary depending on a student's Meteorology background such as approved transfer courses, professional experience or military training.
- AES 1400 Aviation Weather is *not* an approved Meteorology Minor elective.
- AES 3460 Weather for Aircrews is an approved Meteorology Minor elective. See note above.