METEOROLOGY (DIP.) (30 CREDITS)

Offered by: Atmospheric & Oceanic Sciences (Faculty of Science)
Degree: Diploma in Meteorology
Program credit weight: 30

Program Description

The Department offers an intensive, one-year program in theoretical and applied meteorology to B.Sc. or B.Eng. graduates of suitable standing in physics, applied mathematics or other appropriate disciplines, leading to a Diploma in Meteorology. The program is designed for students with little or no previous background in meteorology who wish to direct their experience to atmospheric or environmental applications, or who need to fulfill academic prerequisites in meteorology to qualify for employment. For further information, contact the Undergraduate Program Director (https://www.mcgill.ca/meteo/facultystaff/staff

An exemption of up to 6 credits may be allowed for courses already taken. Students granted such exemptions are required to add complementary courses from an approved list to maintain a total credit count of 30 completed at McGill.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses (15 credits)

Expand allContract all

Course	Title	Credits
ATOC 512	Atmospheric and Oceanic Dynamics.	3
ATOC 521	Cloud Physics.	3
ATOC 531	Dynamics of Current Climates.	3
ATOC 540	Synoptic Meteorology 1.	3
ATOC 541	Synoptic Meteorology 2.	3

Complementary Courses (15 credits)

6 credits selected from the courses below.

Expand allContract all

Course	Title	Credits
ATOC 309	Weather Radars and Satellites.	3
ATOC 315	Thermodynamics and Convection.	3
ATOC 519	Advances in Chemistry of Atmosphere.	3
or CHEM 519	Advances in Chemistry of Atmosphere.	

9 credits ordinarily selected from:

Expand allContract all

Course	Title	Credits
ATOC 513	Waves and Stability.	3
ATOC 515	Turbulence in Atmosphere and Oceans.	3
ATOC 517	Boundary Layer Meteorology .	3
ATOC 525	Atmospheric Radiation.	3
ATOC 548	Mesoscale Meteorology.	3
ATOC 557	Research Methods: Atmospheric and Oceanic Science.	3
MATH 317	Numerical Analysis.	3
MATH 319	Partial Differential Equations .	3
MATH 555	Fluid Dynamics.[1]	4
PHYS 331	Topics in Classical Mechanics.	3
PHYS 340	Majors Electricity and Magnetism.	3
PHYS 342	Majors Electromagnetic Waves.	3
PHYS 432	Physics of Fluids.[1]	3

[1] Students take either PHYS 432 Physics of Fluids. or MATH 555 Fluid Dynamics..