

ATOC 517. BOUNDARY LAYER METEOROLOGY

Credits: 3

Offered by: Atmospheric & Oceanic Sciences (Faculty of Science)

Terms offered: Winter 2026

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Description

Turbulence and turbulent fluxes, atmospheric stability, Monin-Obukhov similarity theory, surface roughness and surface fluxes, power law and logarithmic wind profiles including their application in wind energy and engineering sectors, convective and stably stratified boundary layers, internal boundary layer development, large-eddy simulations, fundamentals of boundary-layer parameterization in numerical models, and introduction to urban boundary layers.

- Prerequisites: MATH 314, MATH 315, and one of ATOC 312 or ATOC 315 or ATOC 512, or permission of the instructor.

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