

BREE 509. HYDROLOGIC SYSTEMS AND MODELLING.

Credits: 3

Offered by: Bioresource Engineering (Faculty of Agric Environ Sci)

Terms Offered: Winter 2026

[View offerings for Winter 2026 in Visual Schedule Builder.](#)

Description

Hydrologic cycle in the nature and how to quantitatively describe those processes using models. The fundamentals of hydrology including basic concepts, precipitation, snow and snowmelt, evapotranspiration, subsurface flow, infiltration and soil water movement, and runoff and streamflow. Equivalent attention to theories and hands-on practices on model application. How to set up and execute weather data driven physical based models, both at a point-scale and a watershed scale, to predict snowmelt, evapotranspiration, infiltration, soil water redistribution, subsurface drainage, runoff, and stream flow in hydrologic systems.

- 3 hour lectures
- Prerequisite: BREE 217 or equivalent.

Most students use Visual Schedule Builder (VSB) to organize their schedules. VSB helps you plan class schedules, travel time, and more.

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