

# BREE 217. HYDROLOGY AND WATER RESOURCES.

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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

Introduction to water resources and hydrologic cycle. Precipitation and hydrologic frequency analysis. Soil water processes, infiltration theory and modeling. Evapotranspiration estimation methods and crop water requirements. Surface runoff estimation as a function of land use modifications. Estimation of peak runoff rates. Unit hydrograph. Design of open channels and vegetated waterways.

- This course carries an additional course charge of \$36.75 to cover transportation costs for two field trips, which may include a visit to a national weather station and a trip to gain hands-on experience on monitoring water flow in streams.
- Three lectures, one 2-hour lab per week.
- This course carries an additional course charge for field trips.
- This course carries an additional course charge of \$20.01 to cover transportation costs for two field trips, which may include a visit to a national weather station and a trip to gain hands-on experience on monitoring water flow in streams.

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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