

CHEM 593. STATISTICAL MECHANICS AND MACHINE LEARNING FOR CHEMISTRY.

Credits: 3

Offered by: Chemistry (Faculty of Science)

Terms offered: Winter 2026

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

Description

Intermediate topics in statistical mechanics and related machine learning: ensemble theory, critical phenomena, static and time-dependent phenomena, linear response and fluctuations, Monte Carlo and molecular dynamics simulation methods, data driven simulation methods: MaxEnt modeling, generative machine learning, active learning.

- Prerequisite: CHEM 345. Recommended: CHEM 365
- Winter
- Term paper
- Recommended: CHEM 345 and CHEM 365

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

[Launch Visual Schedule Builder](#)