

Chemical Physics

Program Coordinators

Chair of the Department of Chemistry

A. J. Vreugdenhil, BSc (Queen's), PhD (McGill)

Chair of the Department of Physics & Astronomy

R. Wortis, BSc (Harvard), MSc, PhD (Illinois)

Professors

See faculty listings in Chemistry, Mathematics, and Physics & Astronomy

The Chemical Physics program is designed for students who are interested in the study of the physics and physical chemistry of molecular and atomic-scale systems, and condensed matter. Course emphasis is on the physics and physical chemistry of atomic, molecular, and bulk systems, as well as the mathematical techniques and approaches needed to do quantitative work in these areas. A Chemical Physics education at Trent involves working closely with faculty and staff in formal lecture and informal laboratory and tutorial/workshop settings. Students enrol in either a General or an Honours program. Honours research projects offer an opportunity for students to obtain first-hand experience in modern chemical physics research design and methods.

Bachelor of Science Program in Chemical Physics

- In addition to the program requirements listed below, students must satisfy the University degree requirements (see p. 14).
- The Chemical Physics program is a sequence of courses that compose an integrated whole and are offered by the Departments of Chemistry, Mathematics, and Physics & Astronomy. For information on individual courses see Calendar entries for these departments.
- 60% or higher in MATH 1120H is required for upper-level Physics courses; MATH 1350H is a prerequisite for upper-level Mathematics courses.

The single-major Honours program. 20.0 credits including the following 14.0 credits:

- 3.0 CHEM credits consisting of CHEM 1000H, 1010H, 2500H, 3520H, 4500H, and 4515H
- 4.0 PHYS credits consisting of PHYS 1001H, 1002H, 2610H, 2620H, 3200Y, 3610H and 4610H
- 3.0 MATH credits consisting of MATH 1110H, 1120H, 2110H, 2120H, 2150H, and 3150H
- 0.5 COIS credit consisting of COIS 1020H
- 1.0 CHEM credit from CHEM 3120H, 4220H, 4400H, or 4520H
- 2.0 CHEM, PHYS, or MATH credits at the 4000 level in addition to the above
- 0.5 CHEM, PHYS, or MATH credit at the 2000 level or beyond in addition to the above

The single-major General program. 15.0 credits including the following 10.0 credits:

- 2.0 CHEM credits consisting of CHEM 1000H, 1010H, 2500H, and 3520H
- 3.0 PHYS credits consisting of PHYS 1001H, 1002H, 2610H, 2620H, and 3200Y
- 3.0 MATH credits consisting of MATH 1110H, 1120H, 2110H, 2120H, 2150H, and 3150H
- 0.5 COIS credit consisting of COIS 1020H
- 1.0 CHEM credit from CHEM 3120H, 4220H, 4400H, 4500H, 4520H, or 4515H
- 0.5 CHEM, PHYS, or MATH credit at the 2000 level or beyond in addition to the above
- 11.0 science credits are required for the General degree