Student's advice to prospective students: if you plan to review high school material to be extra prepared for the first semester of CSE, what topics might you focus on?

## **Chemistry/Physics**

- Basic chemical calculations (including use of units such as mol, kcal, ...)
- pH
- Nomenclature (naming a molecule from its structural formula)
- Periodic table
- Atomic orbitals, spin, Aufbau
- Lewis structures
- Redox reactions

## Mathematics

- Functions (simplifying and solving equations): linear, polynomial, exponential, logarithmic, goniometric, and power functions (including root functions)
- Differentiation, Partial derivatives
- Integrals, Integration by parts, Integration by substitution
- Indefinite integrals vs. Definite integrals
- Area between curves
- Vectors (dot and cross products)
- Limits, extreme values

This is an unofficial, non-exhaustive list that has no bearing on the admissions process. It is only an advice about additional self-study given by students, to students.