Symbolic-Numeric Computing (CSc 85200)

**Instructor:** Alexey Ovchinnikov  
**Time:** Thursdays, 9:30-11:30 am  
**Format:** online synchronous lectures  
**Office hours:** TBD

**Course text:** lecture notes, prepared as the class goes; additional reading if necessary, will be chosen from online sources that are available at no cost to the GC students

**Prerequisites:** linear algebra, calculus, and basic programming

**Course topics:** theory and practice in symbolic computation, with emphasis on Groebner bases; homotopy-based polynomial system solving; applications to cryptography, circuit design, computer vision, statistics (the coverage of the applications will depend on the students' interests and progress).

**Assessment:** pop quizzes (10%), midterm (40%), final project with live oral presentation (50%).