
Computational Science

In the College of Sciences

Courses (COMP)

Refer to Curricula and Courses and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES

COMP 526. Computational Methods for Scientists (3)

Prerequisites: Mathematics 252 and 254.

Translating mathematical problem descriptions to computer programs. Introduction to Unix system.

COMP 589. Computational Imaging (3)

Prerequisites: Mathematics 150 and 254.

Mathematical techniques used for image processing and analysis. Emphasis on variational techniques which lead to PDE based image processing algorithms, most are known as diffusion filters, and interface propagation techniques for which emphasis will be implicit representation (level-set methods). Representation and properties of curves and surfaces, statistical (PCA/ICA), and multi-resolution image analysis techniques.

COMP

GRADUATE COURSES

Refer to the *Graduate Bulletin*.
