At the completion of the program, students will be knowledgeable in the underlying principles of software engineering and will have acquired solid practical skills. They will be able to effectively participate in large-scale software development efforts by applying a range of techniques for design, development, validation, and verification of high-quality software.

The program consists of four thrusts:

(1) programming breadth, provided by a set of courses whose purpose is to solidify and broaden the students’ knowledge of the computing landscape through programming;

(2) software engineering principles, introduced via a set of courses covering the fundamental technical knowledge in software engineering;

(3) professional development, covered by a pair of courses discussing topics related to career and professional development; and

(4) practice, included pervasively throughout the program and emphasized strongly by two courses focused on practical applications of the principled material in the program.

http://catalogue.uci.edu/donaldbrenschooolofinformationandcomputersciences/departmentofinformatics/softwareengineering_master/