## SOFTWARE ENGINEERING

College of Engineering and Mines Department of Computer Science 907-474-2777 www.dms.uaf.edu

## M.S.E. Degree

Minimum Requirements for Degree: 30 credits

Software engineering is defined as "the application of a systematic, disciplined, quantifiable approach to the development, operation and maintenance of software" (IEEE Standard Glossary of Software Engineering Terminology).

Graduates of the UAF M.S.E. program will be prepared to develop high-quality software products which meet required deadlines within budget constraints, understand complex software-intensive systems and to participate in their development and application while adopting different process roles. Those roles include software architecture, design, construction, test and project management.

Local, national and international employment opportunities for software engineers continue to be numerous.

## Graduate Program — M.S.E. Degree

- $1. \quad \text{Complete the UAF admission process including the following:} \\$
- a. Submit GRE general scores.
- b. Complete at least a bachelor's degree at an accredited institution with a GPA of at least 3.0. Complete course work or possess practical knowledge at the advanced undergraduate level in each of the following areas: computer organization, discrete mathematics, algorithms and data structures, object-oriented programming (e.g., C++, FORTRAN95, or Java), and an in-depth knowledge of at least two of the following topics; compiler techniques, comparative programming languages, operating systems or database systems.
- c. Have at least two years of relevant software development experience or equivalent.
- 2. Complete the general university requirements (page 198).
- 3. Complete the master's degree requirements (page 202).

See Computer Science.

