Formal Languages and Automata Theory

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- Welcome

- Handouts
  - Syllabus
  - Prerequisite forms
  - Course Calendar
Foundation

Part of the *scientific foundation of computer science* (Formal logic is another)

- What is computation?
  - Computing a function — relating input and output
  - Generating or enumerating a language
  - Accepting or recognizing an input

- Models of computation
  - Regular expressions
  - Grammars — context-free and otherwise
  - Automata
Foundation (Continued)

Mathematical Science

- Precise definitions
- Prove properties
- Simplified models

Applications

- Parsing
- String searching
- Specifying protocols