

Computer Engineering 259

Compilers

Fall 2002

Tuesdays and Thursdays
7:10 PM – 9:00 PM
DALY 202

Instructor

Instructor: Darren Atkinson
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Office hours: Tuesdays and Thursdays 2:00 PM – 3:00 PM, Tuesdays 4:00 PM – 5:00 PM
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Textbooks

Required: Aho, Sethi, and Ullman, *Compilers: Principles, Techniques, and Tools*, Addison-Wesley, 1986.
Recommended: Mason, Levine, and Brown, *lex & yacc*, 2nd edition, O'Reilly, 1992.

Grading

There will be a term project and two exams. The overall weighting is as follows:

First exam: 25%
Second exam: 25%
Project: 50%

Overview

This course will discuss the practice of building a compiler. The exams will mostly cover aspects of compiler design and optimization. The project will require you to build a simple compiler for a subset of the Pascal language. You may implement the compiler in any language you choose. However, resources and examples will be provided for the C, C++, and Java languages. The project will be delivered and graded in four stages: lexical analysis, syntax analysis, code generation, and optimized code generation.

Important Information

Please note that this course does not satisfy the theory requirement under the old (before 2001-2002) MSCE program. In the old catalog, COEN 257 (4 units) included compiler construction as well as formal languages and automata. COEN 258 (2 units) focused on additional aspects of compilers.

The theoretical component of COEN 257 is now included as part of COEN 271, one of the options for satisfying the new (2001-2002) CORE theory requirement. COEN 257 and COEN 258 have been dropped from the catalog. COEN 259 (4 units) includes only compiler construction and therefore does not satisfy the theory requirement. If you need to satisfy the theory requirement, COEN 271 is probably a good place to start.