Compiler Construction—WS 2011/2012

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Why to take a compiler course?

- ▶ to obtain 9 credit points cheaply
- ▶ to find a job later more easily
- ▶ to learn methods of eternal value
- ▶ to get experience with an interesting project

What are the eternal ideas in compilation?
"The Essence of Compilation" Andrei Ershov

Course Structure

Follows (more or less) the compiler structure:

1. Lexical analysis
2. Syntactic analysis
3. Semantic analysis
4. Optimizing transformations
5. Code Generation
   - for virtual machines
   - for real machines

The course will use material from
Wilhelm/Maurer: Compiler Design, Pearson,
Wilhelm/Maurer: Übersetzerbau, Springer, 2nd edition, 1997
Wilhelm/Seidl/Hack: Übersetzerbau, Vol. 2, Springer, 2012
Wilhelm/Seidl: Übersetzerbau – Virtuelle Maschinen –, Vol. 1,
Springer, 2007
Wilhelm/Seidl: Compiler Design — Virtual Machines —, Vol. 1,
Springer, 2010
Wilhelm/Seidl/Hack: Compiler Design — The Frontend —, Vol. 2,
Springer, 2012
Material from the latter book will be distributed, most of the time
before the lecture.