

# Voortgezet Programmeren (FEB23007-12)

## 1. Exercise

Deadline for submission: 2012-01-13 23:59 CET

### Instructions

Include in each source file (in class documentation, @author) your names and student numbers. Submit the exercise as a zip file containing `_only_` the source files in root of the zip. Submit via blackboard. Note that incorrectly submitted or non-compiling exercises are automatically awarded 0 points. Remember to document your code with Javadoc-annotations.

### Exercise

Write three classes for modeling the university course structure: `Student`, `Course`, and `Program`:

- Students should contain information on their names and student numbers.
- Courses should contain information on the name and code, the course year, block, and students currently enrolled to it. Courses should have mutator methods for enrolling to and removing students from it, a mutator method for changing the block it is given in, and accessor methods for all attributes including for obtaining the registered Students. Once a `Course` is constructed its code and year should not be allowed to be changed.
- Programs should have information on their name, and contain a list of `Courses` within the program. Include mutator methods to modify the program attributes, including the ability to register and deregister a `Course` in the `Program`.

Write a tester class that demonstrates use of these classes by constructing an `Econometrics Bachelor Program` including some `Students` and `Courses`, and registers the `Students` to the `Courses` and the `Courses` to the `Program`. Print out the program information, the contained courses, and the amounts of students registered to the program in total as well as to the individual courses.