

## TMS150/MSN040 Stochastic Data Processing and Simulation, 5 credits

### Teacher/Examiner

Viktor Olsbo is responsible for the course, together with Patrik Albin.  
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### Homepage

<http://www.math.chalmers.se/Stat/Grundutb/CTH/tms150/0708/>

### Literature

Literature will be handed out during the lectures. It will also be available to download from the course home page. Manuals to computer programs may be borrowed.

### Examination

The course consists of 6 projects, which students are recommended to carry out in pairs of 2 students (but other configurations are also possible). Written reports on the project are to be handed in to Erik or Viktor. Examination and grading is done on basis of the reports. If all projects are well done highest grade will be given. (There is no written exam.) The grading works as follows: Each project will be given a grading between 0 and 15 points and the final grade of the course will be based on the mean of these 6 individual project points. Below follows tables for the grading at Chalmers and GU, respectively.

Chalmers		GU	
0-5	Failure	0-5	Failure
6-8	3	6-9	G
9-11	4	10-15	VG
12-15	5		

The reports are to be written in Latex, using pre-prepared Latex files. Further, the reports shall contain the computer code used, preferably inside the actual report and not in an appendix. The projects are to be handed in within 2 weeks after they have been presented at lectures. However, there is no real deadline for when reports can be handed in (except that the computer accounts for the course will cease to function at the end of the year). It should be note though that reports that are handed in after more than two weeks can only get at most 6 points (see the information about grading above).

Students with low attendance at lectures and computer labs may have to take an oral exam, just to control that they have done their project reports themselves. (Actually, this has never happened.) Albeit the projects usually are done

in groups, it is recommended that each group members does his/her own report on the project. Otherwise, it might again be necessary with an oral exam, just to check that students have learned the projects well enough.

### **Lectures**

Lectures will be Tuesdays 10.00-11.45 am in Euler. At the lectures the projects are presented.

### **Projects**

The Computer room MV:F25 is booked on Mondays and Fridays 8.15-12 am, weeks 36-42, beginning Tuesday 5 September 2006. Preferably, the projects are solved during these times. Viktor will be at MV:F25 at 10.00 to answer questions. Students are most welcome to phone, e-mail or come to our offices if they have any questions regarding the projects.

Students at GU without a computer account at Chalmers are recommended to contact the computer support.

### **Selfstudies**

The course can be taken without taking part in the scheduled lectures and labo-rations, provided that one keeps in contact (e.g., via email) with the teacher, to discuss possible problems that occurs. (Such email contact is also recommended for students that take part in teaching.)

### **Goal of the course**

The goal of the course is that students should learn to solve (more or less) real-world mathematical and mathematical statistical problems on a computer.