## **Course Description**

### Background:

The course consists of participation in the annual Study Group with Industry.

A Study Group is a 1-week workshop where academic mathematicians work on problems directly related to industry. Meetings of this nature have taken place in Great Britain for a number of years, going back to 1968 when Prof. Alan Tayler started the Oxford Study Group with Industry. The coordination of Study Groups is now in the hands of European Consortium for Mathematics in Industry (ECMI), and the name is currently European Study Group with Industry (ESGI).

#### Format:

A Study Group runs five work days (Monday - Friday). On the first day of the meeting the participating companies present research problems they believe to be of a mathematical nature. Each such problem is taken up by a group of mathematicians who, together with the company representative, work towards the solution of the problem, through Thursday afternoon. Friday is used to present in a plenary session the results from each of the problem groups.

After the meeting, the groups finish the written report. At the latest two months after the meeting, the final report on the results of all the groups is sent out to all participants.

### Content:

Participation in a Study Group with Industry will give students first-hand experience in mathematical modelling, working with international experts in the field trying to find solutions to real-world problems. A wide range of problem types are brought to Study Groups and a wide range of mathematical skills are assembled to solve them.

#### Coursework:

Students taking the course for credit are expected to be active in their problem solving groups, active in the solution presentation and also to participate after the work week in the preparation of the final report.

The Study Group organisers will assign credit on a pass/fail basis.

#### Credit

The course carries a weight of 5 ECTS points.

## **Registration and Deadline**

Registration:

Mail to: esgi@mat.dtu.dk

Deadline:

July 31, 2006.

Participation is free for ph.d. students and university staff.

## TECHNICAL UNIVERSITY OF DENMARK

# Department of Mathematics

Technical University of Denmark



## For further information about the course:

See:

http://www.mat.dtu.dk/ESGI/57

or contact the organizers

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## **WWW**

For general information about Study Groups with Industry in Denmark and abroad, see:

http://www.mat.dtu.dk/ESGI

# **DTU Ph.D.-course 01819:**

# EUROPEAN STUDY GROUP WITH INDUSTRY



Department of Mathematics **Technical University of Denmark**Matematiktorvet B-303, DK-2800

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DENMARK

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