

# **International Market-Driven Engineering, TMAF05, fall 2012**

**(date: 2012-09-09)**

## **Administration**

Responsible for the course is associate professor Charlotta Johnsson (046-222 87 89) at the Department of Automatic Control, LTH.

## **Prerequisites**

Accepted to Technology Management at Lund University

## **Course Description**

The course is a joint course with Zhejiang university in China. It will intertwine the two disciplines Technology and Management, in Sweden and in China, in four ways; Students, Teachers, Subjects and Cultures.

- **Subject:** the focus will be on Innovation and Product Development , a subject that is of great relevance from both the technical aspect as well as the economical and management aspect. The course will contain both lectures and a project. For the Swedish students the course will also contain a few lectures on Chinese culture. At the end of the course the students should present their project through a written project report and an oral presentation.
- **Students:** The course should be given to the 40 Swedish students from the Technology Management (20 from LUSEM and 20 from LTH) together with, a minimum of 20 Chinese students (10 from SoM and 10 from the technical departments (ID and CSE)).
- **Teachers:** Teachers from both Sweden and China and from both Engineering (LTH, ID and CSE) and Management (LUSEM and SoM) will be involved in the lectures. A minimum of two teachers with different aspects of the subject matter will be present at each lecture.
- **Cultures:** The cultural aspects of project management and business behavior will be treated in the course and practised in real life through the course project.

Course homepage: <http://www.control.lth.se/Education/EngineeringProgram/TMAF05.html>

## **Course Material**

The course material will consist of lecture notes, articles and chapters from various books.

## **Lectures and Projects**

The course will start on Monday September 10th 2012 and end on Friday October 19 2012. There will be no course activities in the week October 1-7, 2012 since this is a holiday in China. The course will contain lectures and a project. The project will be performed in groups of 7-8 students, i.e., 4-5 Swedish students and 3-4 Chinese students. For the Swedish students there will also be a set of lectures concerning Chinese culture.

The course schedule is shown in the chapter Weekly Schedule.

- The first day, Monday Sept 10th at 9-11 am, an introduction to ZJU will be given by International College. All Swedish students will meet in the entrance hall of International College, Yuquan campus.
- All course-lectures will be given at Xixi campus, classroom D:201, Art Building, Xixi Campus, Zhejiang University. The lecture time will be 9.00-12.00 except Monday Sept 10th when the lecture time will be 13.00-16.00 (start 13:15).
- The coaching sessions will be arranged by each teacher individually. Coaching slots, that the groups can book, will be made available from 9.00 to 12.00 the respective days. The location for the coaching sessions will be determined by each teacher individually but will most probably be in the office of the teacher.

- The Chinese-Culture lectures (Lcc), for the Swedish students only, will be given by International College at Yuquan campus. The lecture time will be 14.40-16.40 (tentative).

The project will be centered around a theme. The student should try to make a small prototype of the "product" and to document (by filming) their work along the way. The students should write a market-and-business-plan for their product. At the end of the course the students should make an oral presentation of their market-and-business plan. They should also hand in a report containing the market and business plan in a written format. Their work during the project should result in a short film that they can include in their presentation. The film should highlight their working procedure as well as their product. Each group will have a budget of max 1000 Yuan. The students need to apply for money from the teachers. Possible themes are: toys,, services/devices for elder people, convenience for students, communication, helping-everyday-life, booking/service systems, traffic planning

### Examination

The examination is the written project-report and the oral presentation.

- A written report should be handed in. This report should also contain the Business plan.
- An oral presentation should be made, presenting the prototype and its business plan. The oral presentation should also show the film.

The grade will be pass or fail. For the Swedish students the course will result in 7 hp.

### Additional information

For more information please contact:

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### Weekly schedule

<i>Week</i>	<i>Date</i>	<i>Lecture</i>	<i>Time</i>	<i>Content</i>	<i>Responsible teachers</i>
35	27/8	L-intro Lecturehall M:L1-L2	9-10	Introduction to iMDE for the Swedish students  Please note that this course starts 1 week prior to other courses at LU.	Charlotta Johnsson
36	3-7/9				
37	10/9	Lcc	9-11	Introduction to ZJU	International College Charlotta Johnsson
	10/9	L1	13-16	Introduction	All teachers
	11/9	Lcc	2h afternoon	Chinese Culture: Survival chinese	International College
	12/9	L2	9-12	Innovation-1 (Inspiration)	Andreas Larsson, LTH Jun Jin (SoM)
	13/9	Lcc	2h afternoon	Chinese Culture: Survival chinese	International College
	14/9	Coaching	9-12	1 hour coaching per group	
38	17/9	L3	9-12	Innovation-2 (Ideation)	Andreas Larsson, LTH Jun Jin (SoM), Luo Shijan, ID
	18/9	Lcc	2h afternoon	Chinese culture: calligraphy and painting	International College

	19/9	Company visit	afternoon	Ali-pay	Luo Shijan, ID
	20/9	Lcc	2h afternoon	Chinese culture: Chinese characters in writing	International College
	21/9	L4	9-12	Innovation-3 (Implementation)	Andreas Larsson, LTH Jun Jin (SoM), Luo Shijan, ID
39	24/9	L5	9-12	Innovation-4 (Examples)	Andreas Larsson, LTH Jun Jin, SoM, Charlotta Johnsson, LTH Qinmin Yang, CSE
	25/9	Lcc	4h afternoon	Chinese culture: visit to museum	International College
	26/9	Coaching	9-12	1 hour coaching per group	
	27/9	Lcc		No activity	
	28/9	L6	9-12	Business plans	Jun Jin, SoM
40	1/10			Holliday in China	
	2/10			Holliday in China	
	3/10			Holliday in China	
	4/10			Holliday in China	
	5/10			Holliday in China	
41	8/10	L7	9-12	Product Development, Sourcing and Produccion	Jun Jin, SoM Damien Motte/Robert Bjärnemo, LTH
	9/10	Lcc	2h afternoon	Chinese culture: History	International College
	10/10	Visit to company		Sup-Con	Qinmin Yang, CSE
	11/10	Lcc	2h afternoon	Chinese culture: Customer behaviour	International College
	12/10	L8	9-12	Marketing and Sales	Weiqing XU, SoM Carl-Henric Nilsson, LUSEM
42	15/10	Coaching	9-12	1 hour coaching per group	
	16/10	Lcc	2h afternoon	Chinese culture: Traditional health care and medicine	International College
	17/10	L9	9-13	Final presentations	All teachers
	18/10	Lcc	2h afternoon	Chinese culture: Art and paper cutting	International College
	19/10	L10	9-13	Final presentations. End of course	All teachers
43	22/10 - 26/10			Week for examinations in Lund	
44	29/10 - 2/11			Swedish students back in Lund	
45	5/11 - 9/11			Course presentation in Sweden (preliminary date 6/11, in conjunction to the TM-project course conference)	All Swedish teachers