

# **International Market-Driven Engineering, Fall 2013**

**(Date: 2013-09-13)**

## **Administration**

Responsible for the course in Sweden is associate professor Charlotta Johnsson (+46 46 222 87 89) at the Department of Automatic Control, LTH, Lund University.

## **Prerequisites**

The Swedish students should be accepted to Technology Management at Lund University. The Chinese students have to apply to the course.

## **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 practiced 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 in China on Monday September 9th 2012 and end no later than Friday October 18th 2013. For the Swedish students there will be lectures in Sweden in the period of Monday 26/8-Wednesday 4/9 (Note: no lecture on Tuesday 27/8 since there are other assignments for the students this day).

Preliminary special dates in China (to be confirmed):

- 19/9-21/9: mid-autumn festival, (Moon festival) no lectures
- 22/9: normal working day, lectures possible
- 29/9: normal working day, lectures possible
- 1/10: National day (P.R.China founded 1/10 1949)
- 1/10-7/10: October festival (national day festival), no lectures
- 12/10: working day in China, lectures possible

The course will contain lectures and a project. The project will be performed in groups of 7-10 students, i.e., 4-5 Swedish students and 3-5 Chinese students. For the Swedish students there will also be a set of lectures concerning Chinese culture (Lcc).

The course schedule is shown in the chapter Weekly Schedule.

- The first day, Monday Sept 9th in the morning, at 9-11 am, an introduction to ZJU will be given by International College. All Swedish students will meet at 09.00 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 9th when the lecture time will be 13.00-16.00 (start 13:15).
- Each teacher will arrange the coaching sessions 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 most probably be in the lecture hall.
- 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 on 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. The groups are encouraged to contact companies for support of the project and possible commercialization. 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, 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:

- Charlotta Johnsson (email: [charlotta.johnsson@control.lth.se](mailto:charlotta.johnsson@control.lth.se))
- Carl-Henric Nilsson (email: [carl-henric.nilsson@gmail.com](mailto:carl-henric.nilsson@gmail.com))

### **Weekly schedule**

L=Lecture

- Lecture hall: Classroom D:201, Art Building, Xixi Campus, Zhejiang University.
- Lecture time: 09.00-12.00, except Monday Sept 9th when it will be 13.00-16.00 (start 13:15).

Lcc= Lecture on Chinese Culture (Swedish students only)

- Lecture hall: International College at Yuquan campus
- Lecture time: 14.40-16.40 (tentative).

<i>Week</i>	<i>Date</i>	<i>Lecture</i>	<i>Time</i>	<i>Content</i>	<i>Responsible teachers</i>
35	In conjunction with the TMAN50 (GTE) course.	L-intro	See TMAN50 for more info regarding time and lecturehall.	Introduction to iMDE for the Swedish students  Please note that this course starts 1 week prior to other courses at LU.	TM-responsible
36	2-6/9				
37	9/9	Lcc	9-11	Introduction to ZJU	International College
	9/9	L1	13-16	Introduction	Charlotta Johnsson Anders Warell, LTH Qinmin Yang, CSE
	10/9	Lcc	2h afternoon	Chinese Culture: Survival Chinese	International College
	11/9	L2	9-12	Innovation-1 (Inspiration)	Anders Warell, LTH Charlotta Johnsson, LTH
	12/9	Lcc	2h afternoon	Chinese Culture: Survival Chinese	International College
	13/9	Coaching	9-12	1 hour coaching per group	Anders Warell, LTH Charlotta Johnsson , LTH Qinmin Yang, CSE
38	16/9	L3	9-12	Innovation-2 (Ideation)	Anders Warell, LTH Jun Jin, SoM,
	17/9	Lcc	13:30-15:00	Chinese Culture: Interesting Chinese characters	International College (Ms. Mao Xiaopai) Room 120, No. 31 Dorm Building
	18/9	L4	9-12	Innovation-3 (Implementation)	Anders Warell, LTH Jun Jin, SoM,
	18/9	Visit to company	Afternoon	Ali-pay	Luo Shijian, ID
	19/9			Holliday in China	
	20/9			Holliday in China	
				Holliday in China	
	Sunday 22/9			Working day in China	
39	23/9	L5	9-12	Innovation-4 (Innovation Cultures and Examples)	Anders Warell, LTH Jun Jin, SoM, Qinmin Yang, CSE
	23/9	Coaching (extra)	afternoon		Anders Warell (since not available Friday 27/9) and Damien Motte
	24/9	Lcc	Leave at 13:00	Chinese Culture: Visit to Museums by Grand Canal	International College
	25/9	L6	9-12	Product Development, Sourcing and Production	Damien Motte, LTH Jun Jin, SoM
	26/9	Visit to company	Morning	SupCon	Qinmin Yang, CSE
	26/9	Lcc	13:00-15:00	Chinese Culture: New Media and Chinese Society	International College (Dr. Gao Fangfang ) Room 120, No. 31 Dorm Building

	27/9	Coaching	9-14	1 hour coaching per group and visit to Zijingang Campus	Damien Motte, LTH Jun Jin, SoM Qinmin Yang, CSE
	Sunday 29/9			Working day in China	
40	30/9				
	1/10			Holliday in China	
	2/10			Holliday in China	
	3/10			Holliday in China	
	4/10			Holliday in China	
41	7/10			Holiday in China	
	8/10	Lcc	13 : 00- 14 : 30 (half class)	Chinese culture: Traditional Chinese Painting	International College (by Ms. Ren Sai) Room 115, No. 31 Dorm Building
	8/10	Lcc	14 : 40- 16 : 10 (half class)	Chinese culture: Traditional Chinese Painting	International College (by Ms. Ren Sai) Room 115, No. 31 Dorm Building
	9/10	L7	9-12	Business plans	Jun Jin, SoM Carl-Henric Nilsson, LUSEM
	10/10	Lcc	13:30-15:00	Chinese culture: Chinese Consumer Behavior	International College (by Dr. Liu Liyun) Room 120, No. 31 Dorm Building
	11/10	L8	9-12	Marketing and Sales	Weiqing XU, SoM Carl-Henric Nilsson, LUSEM
	Saturday 12/10			Working day in China	
42	14/10	Coaching	9-12	1 hour coaching per group	
	15/10	Lcc	13:30-15:00	Chinese culture: Chinese Paper Cutting	International College (by Ms Mao Xiaopai) Room 120, No. 31 Dorm Building
	17/10	L9	9-17 (All day)	Final presentations	All teachers Note: to be coordinated with LU-ZJU-days
	18/10	L10	9-13	End of course	All teachers
43	21/10 - 25/10			Week of examinations in Lund	
44	28/10 - 1/11			Swedish students back in Lund	
45	4/11 - 8/11	Tentatively 6/11		Final presentation in Sweden for the Swedish students.  This event is held in conjunction with the final	All Swedish teachers

				presentation in course TMAN50 (GTE)	