

International Market-Driven Engineering, Fall 2013

(Date: 2013-08-22)

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, no lectures
- 22/9: normal working day, lectures possible
- 29/9: normal working day, lectures possible
- 1/10-7/10: October 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, 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:

- Charlotta Johnsson (email: charlotta.johnsson@control.lth.se)
- Carl-Henric Nilsson (email: 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).

Week	Date	Lecture	Time	Content	Responsible teachers
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	Anders Warell, LTH Jun Jin (SoM, travelling) Qinmin Yang
	10/9	Lcc	2h afternoon	Chinese Culture: Survival Chinese	International College
	11/9	L2	9-12	Innovation-1 (Inspiration)	Anders Warell, LTH Jun Jin (SoM, travelling) Qinmin Yang
	12/9	Lcc	2h afternoon	Chinese Culture: Survival Chinese	International College
	13/9	Coaching	9-12	1 hour coaching per group	Anders Warell, LTH Jun Jin (SoM, travelling) Qinmin Yang Luo Shijian
38	16/9	L3	9-12	Innovation-2 (Ideation)	Anders Warell, LTH Jun Jin (SoM), Luo Shijian, ID
	17/9	Lcc	2h afternoon	Chinese culture: calligraphy and painting	International College
	18/9	L4	9-12	Innovation-3 (Implementation)	Anders Warell, LTH Jun Jin (SoM), Luo Shijian, ID
	18/9	Visit to company	Afternoon	Ali-pay	Luo Shijian, ID
	18/9	Lcc	2h afternoon	Chinese culture: Chinese characters in writing	International College
	19/9			Holiday in China	
	20/9			Holiday in China	
	Sunday 22/9			Working day in China	
39	23/9	L5	9-12	Innovation-4 (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	4h Afternoon	Chinese culture: visit to museum	International College
	25/9	L6	9-12	Product Development, Sourcing and Production	Damien Motte, LTH Jun Jin, SoM
	26/9	Lcc		No lecture	
	26/9	Visit to company	Morning	SupCon	Qinmin Yang, CSE
	27/9	Coaching	9-14	1 hour coaching per group and visit to Zijingang Campus	Damien Motte, LTH Jun Jin (SoM, travelling) Qinmin Yang, Luo Shijian
	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	2h afternoon	Chinese culture: History	International College
	9/10	L7	9-12	Business plans	Jun Jin, SoM Carl-Henric Nilsson, LUSEM
	10/10	Lcc	2h afternoon	Chinese culture: Customer behavior	International College
	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	2h afternoon	Chinese culture: Traditional health care and medicine	International College
	16/10	Lcc	2h afternoon	Chinese culture: Art and paper cutting	International College
	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	Tentativ ely 6/11		Final presentation in Sweden for the Swedish students. This event is held in con- junction with the final presentation in course TMAN50 (GTE)	All Swedish teachers