Ekosystemteknik
Utlandsstudier ÅK 3 ht 2012

Lunds universitet
2012-02-21

Utbytesstudier termin 5 hösten 2012

- LTH erbjuder möjlighet för W att läsa termin 5 på University of Waterloo, Kanada
- Fixt kursprogram, som tillgodoräknas vid hemkomsten
- Ansökan senast 15 mars 2012
- Mer information på http://www.lth.se/internationellt/studera_utomlands/femte_terminen_paa_university_of_waterloo_foer_d_w/
- Frågor? Kontakta programledare eller internationella eller någon av de två studenter var där förra året:
  - SASKIA TEGNELL saskia.tegnell.977@student.lu.se
  - REBECKA KARLSSON rebecka.karlsson.743@student.lu.se

Waterloo: kurser ÅK 3 hösten 2012

Waterloo

- SYDE 212 Probability and Statistics
- CHE 200 Equilibrium Stage Operations
- CHE 311 Chemical Reaction Engineering
- CHE 211 Fluid Mechanics
- ENVE 292 Economics for Environmental Engineering

Lund (motsvarar)

- FMS140 Matematisk statistik, ak
- KTE170 Masstransport i naturliga och tekniska system
- VVR120 Strömningslära
- MIO012 Industriell ekonomi, ak

Preliminary schedule Fall 2012

	Mon	Tue	Wed	Thur	Fri
CHE 200	Lec 1:30-3:20			Lec 11:30-12:20 Tut 12:20-1:20	
CHE 211		Lec 10:30-12:20		Lec 9:30-10:20 Tut 10:30-11:20	
CHE 311		Lec 2:30-4:20			Lec 9:30-10:20 Tut 10:30-11:20
ENV 292	Lec 9:30-10:20	Tut 9:30-10:20	Lec 12:30-1:20	Lec 9:30-10:20	
SYDE 212			Lec 9:30-11:20		Lec 12:30-1:20 Tut 1:30-2:20

Lund university, Faculty of engineering
Environmental engineering
Charlotte Malmgren

February, 2012

University of Waterloo
Preliminary list of courses and schedule for 3rd year students in Environmental Engineering from Lund university at Waterloo university, fall 2012.

CHE 200 LEC,TUT 0.50
Course ID: 003949

Equilibrium Stage Operations

Equilibrium between phases; the equilibrium stage concept. Cascades of stages with and without reflux; group methods and stage-by-stage approaches; graphical solutions. Applications in the separation of components by distillation, absorption, stripping, extraction and leaching. [Offered: F, W]

Prereq: 2A Chemical Engineering

CHE 211 LEC,TUT 0.50
Course ID: 003952

Fluid Mechanics

Fundamentals of fluid flow. Conservation laws for mass, momentum and mechanical energy. Flow of fluids in conduits. Flow past immersed bodies. Flow through beds of solids, fluidization. Transportation and metering of fluids. Dimensional analysis. [Offered: F, S]

Prereq: 2B Chemical Engineering

CHE 311 LEC,TUT 0.50
Course ID: 003960

Chemical Reaction Engineering

Review of stoichiometry and chemical kinetics. Homogeneous reactors: isothermal operation; batch; semi-batch; continuous tank; plug flow reactor design. CSTRs in series; plug flow reactor with recycle. Multiple reactions in reactor networks. Temperature effects in adiabatic and non-isothermal reactors. Yield, selectivity and optimal operation of reactors. Heterogeneous catalysis and effectiveness factors in two-phase reactors. [Offered: F, W]

Prereq: 3B Chemical Engineering

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ENVE 292 LEC,TST,TUT 0.50
Course ID: 005242

Economics for Environmental Engineering

An introductory course on the principles of engineering economics. Basic concepts, capital, interest, present worth, taxes and depreciation, profitability, return on investment. Evaluating alternative investments, evaluation of environmental risk, and a study of the linkages between economics, systems and the environment. [Offered: F]

Prereq: MATH 117; 2A Environmental or Geological Engineering students only.

Antireq: MSCI 261, CIVE 292/392, SYDE 262/331

SYDE 212 LEC,TUT 0.50 Course ID: 013145

Probability and Statistics

Elementary probability theory. Random variables and distributions. Binomial, Poisson, and normal distributions. Elementary sampling. Statistical estimation. Tests of hypotheses and significance. Regression. Goodness-of-fit tests. Analysis of experimental measurements. [Offered: F]

Prereq: Level at least 2B Systems Design Engineering.

Antireq: CIVE 224, ECE 316, NE 115

(This course replaces CHE 220 Process Data Analysis, which had timetable clashes with CHE 211 last year)

Schedule (based on preliminary schedule of classes)

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CHE 200	Lec 1:30-3:20			Lec 11:30-12:20 Tut 12:20-1:20	
CHE 211		Lec 10:30-12:20		Lec 9:30-10:20 Tut 10:30-11:20	
CHE 311		Lec 2:30-4:20			Lec 9:30-10:20 Tut 10:30-11:20
ENV 292	Lec 9:30-10:20	Tut 9:30-10:20	Lec 12:30-1:20	Lec 9:30-10:20	
SYDE 212			Lec 9:30-11:20		Lec 12:30-1:20 Tut 1:30-2:20