

# Industrial Engineering & Management

Course packages offered to international engineering students by Lund university.

*focus*

## Financial Engineering

*focus*

## Technology and Processes



LUND UNIVERSITY



# Industrial Engineering & Management

Course packages offered to international engineering students by Lund university.

The Industrial Engineering and Management programme at Lund Institute of Technology is proud to offer a range of interesting courses in English, starting in the spring semester of 2007. The courses are particularly suited for engineering students with an interest in management & economics. The importance of international experience and understanding of different cultures cannot be overstated in today's global economy. The programme has selected two course packages that will be offered to international engineering students.

*focus*  
Financial Engineering

*focus*  
Technology and Processes

The structure of these focus areas and the courses they contain will be described in the following. As a complement to the dedicated profile courses Lund university offers a wide range of other business and engineering courses. Thus we offer international engineering students to a Swedish smorgasbord of interesting courses in English.



## Lund University

Lund University was founded in 1666. With eight faculties and a multitude of research centres and specialized institutes, it is today the largest unit for research and higher education in Scandinavia.

The tradition of learning in Lund goes back to the Middle Ages, when the city was home to a seminary. As an archbishopric, Lund was the spiritual capital of mediaeval Scandinavia. The University was founded in

1666 to further the 'Swedification' of the provinces Sweden had captured from Denmark in 1658. It has since evolved into a modern centre of research and higher education and now enjoys a leading position, regionally, nationally and internationally.

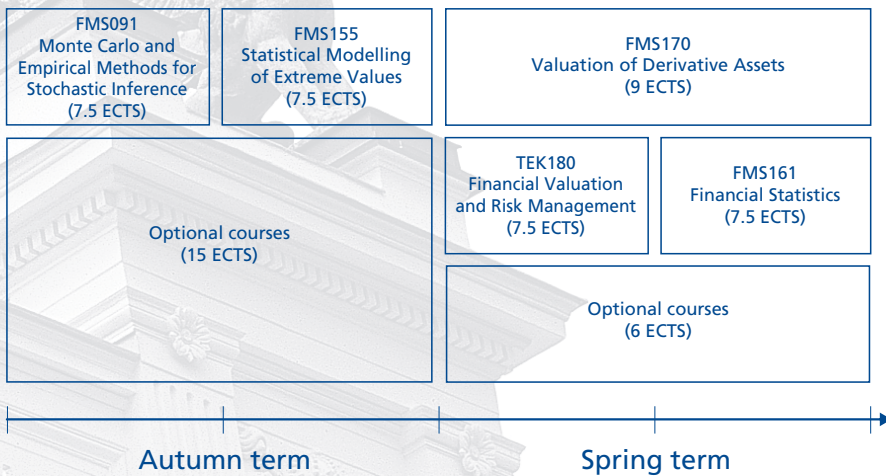
Approximately 42,500 students study within the 100 educational programmes, the eighteen international masters programmes or the 1,000 courses. Almost three hundred

# Financial Engineering

There is a growing awareness in companies and financial institutes of the need to account for risks and uncertainties. Typical questions are; how should financial assets, e.g. stock, be valued and how should portfolios of different assets be efficiently constituted? What do we mean by good insurance and how can risk be reduced by a good insurance structure? How should we set reserves in order to cover events during a long future time period?

Monte Carlo and Empirical Methods for Stochastic Inference deals with methods, primarily bootstrap and Markov Chain Monte Carlo, for analysis and simulation in complicated systems. Statistical Modelling of Extreme Values gives the tools for dealing with extreme values and rare events. Both courses are useful in various contexts, not just financial ones.

Financial Valuation and Risk Management focuses on criteria useful when evaluating financial risks. Valuation of Derivative Assets focuses on the relationship between the prices of different assets on an efficient financial market while Financial Statistics focuses on the methods needed to analyze collected data and, from these, construct models for pricing and risk assessment.



courses are, or can be, given in English for the benefit of our international exchange students.

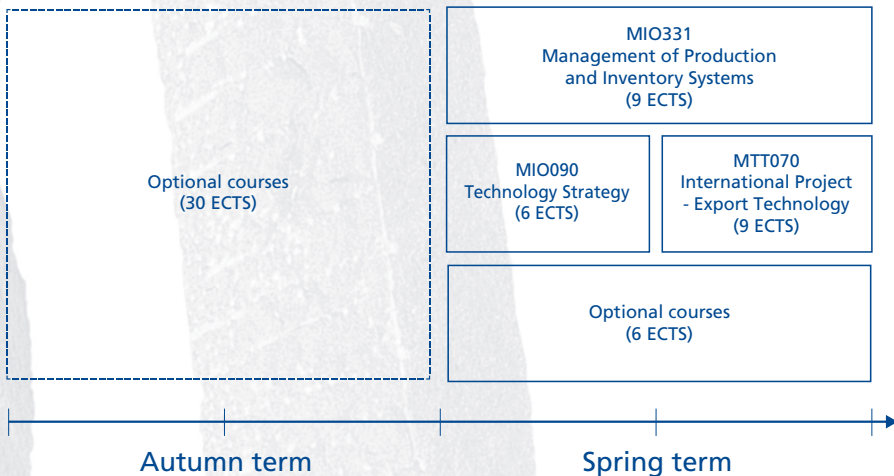
The Faculty of Engineering, Lunds Tekniska Högskola (LTH), is one of Sweden's largest higher educational institutes for the technical and engineering sciences. LTH is located on the northern campus, just five minutes' bicycle ride from the city centre. The buildings are set in a

park complete with a lake, which provides a pleasant, relaxing atmosphere. Close by is the IDEON Research Park, the School of Economics and Management and several student accommodation complexes such as Sparta & Delphi.

# Technology and Processes

Today's successful companies operate in a global market place and must embrace increasingly complex technologies in order to stay on the competitive edge. Inefficiencies in the production or distribution of products and service cannot be accepted.

With this as a starting point, the courses focused on Technology and Processes explore issues and implications for managing firms on strategic, tactical and operational levels. More precisely, Technology Strategy focuses on the strategic level with a special emphasis on the early technological innovation process. Management of Production and Inventory Systems focuses on operational management issues, including advanced project, production and inventory management. Finally, International Project – Export Technology takes the business logistics perspective, particularly emphasizing challenges emerging when operating in international markets. All three courses involve live industry projects to be carried out in small student groups.



## Complementary information

For more information about the focus areas or the applying process please visit our website or send us an e-mail:

<http://www.lth.se/international>  
[industriellekonomi@kansli.lth.se](mailto:industriellekonomi@kansli.lth.se)

Academic calendar:

Autumn term:

Beginning of September to mid December

Information for exchange students:

<http://www.lth.se/english>  
[inter@kansli.lth.se](mailto:inter@kansli.lth.se)

Spring term:

Mid January to the end of May