



**LUND**  
UNIVERSITY

Faculty of Engineering  
*The Dean*

MEMORANDUM

1

May 8, 2007

Reg-No. LTH 2007/549

Non-official translation!

## **Lund University, Faculty of Engineering Strategic Plan 2007-2011**

The Strategic Plan for the Faculty of Engineering is based on four main tasks for the Faculty; education at the undergraduate and graduate levels, PhD programmes, research and interaction with society. This strategic plan is a complement to the Lund University Strategic Plan. The Strategic Plan for the Faculty of Engineering will be supplemented by plans of action at all levels within the Faculty.

### **Overall conditions**

The Faculty of Engineering has the comprehensive responsibility for engineering education and research at Lund University.

The Faculty of Engineering aims to give its academic staff the prerequisites with which to attract research funding in competition with others and, thereby, contribute to healthy development of research in engineering. In recent years, the Faculty has been involved in approximately 20 percent of the national funding allocated for excellence in research. This generates a solid foundation on which to establish high-quality education.

The Faculty of Engineering stresses the importance of good leadership. In education and research the departments are operative units, where proper conditions for good education and cooperation are created. The departments cover a number of fields of research in which research teams guarantee research and education in sustainable environments. Advanced administrative functions are organized on the basis of initiatives for cooperation that involve several departments.

The Faculty of Engineering contributes to the further development of an attractive and lively campus, which offers a work environment suitably adapted to the needs of the faculty. The Faculty of Engineering is also involved in the future expansion of the Helsingborg Campus.

## Education at undergraduate and graduate levels

*The goals of the Faculty of Engineering are to:*

- *offer its students research-based, professional education, which will enable individual development and will satisfy the demands of commerce and industry, and society at large;*
- *ensure that a minimum of 70 percent of the students who begin a study programme at the Faculty of Engineering complete their degree within six years;*
- *ensure, in addition, that a minimum of 75 percent of the students enrolled on each study programme complete 40 ECTS during their first year; and*
- *ensure that a minimum of 25 percent of graduates from the Master of Science programmes in Engineering, the Master of Architecture programme or the Master of Industrial Design programme will have spent some period of study abroad.*

*The strategy adopted by the Faculty of Engineering to achieve these goals is to:*

- *offer high-quality education leading to professional degrees in Engineering, Architecture and Industrial Design; and*
- *provide potential students with fair and correct information about the study programmes available and, thereby, contribute to the recruitment of students with the best potential to succeed.*

*To achieve these goals the Faculty of Engineering will:*

- *continue its commitment to the training of its teaching staff;*
- *develop courses in entrepreneurial skills, innovation and the environment;*
- *develop cooperation with commerce and industry by e.g. giving courses in "engineering training";*
- *raise the threshold for admission to study programmes; and*
- *analyse and improve the system of quality assessment.*

Education at the Faculty of Engineering is to achieve the highest standards by being designed and organized by lecturers with research training, and senior lectures and professors who are actively engaged in research or artistic developments. Members of the academic staff with extensive professional experience contribute to the interaction of the Faculty with society. Heads of Departments are expected to support academic staff in their efforts to keep abreast of developments in their field. The guiding principles for education at the Faculty of Engineering are: quality, employability and entrepreneurial skills.

All development initiatives are to adopt the approach to learning that is characteristic of the Faculty of Engineering. This means that teaching is to be strengthened by a commitment to pedagogical development, cooperation in teaching teams, clarity of information, a variety of forms of teaching and learning, various methods of examination, and quality assessment of teaching and learning at the Faculty.

The marketing initiatives at the Faculty of Engineering will be aimed at recruiting students. More extensive cooperation with upper secondary schools will be established and developed. Students who are recruited to the Faculty of Engineering will be offered courses and programmes of the highest quality and with great flexibility.

Measures introduced to improve the recruitment of students will include efforts to provide potential students with fair and correct information about the education at the Faculty and, thereby, attract students with the best potential to succeed. Structural changes and pedagogical initiatives that include active student involvement in the learning process are designed to counteract the drop-out phenomenon that currently occurs during the first years of a programme and to improve the ability of students to take responsibility for their own studies.

One long-term aim for the Faculty of Engineering is to achieve gender equality in its study programmes.

The Faculty of Engineering will extend its strategic international network and its partnerships with universities of high repute. Alliances that support education at the undergraduate and graduate levels, PhD programmes and cooperation in research will be given the highest priority. International master programmes will be developed in cooperation with universities abroad.

The link between higher education and working life is to be made more apparent in all education. The measures for this can include company mentors, credit-earning courses based on real-life situations at a place of work, improved information about vocational experience placements, career services etc., but also the expansion of contracted education in cooperation with commerce and industry.

### **Education at PhD level**

*The goals of the Faculty of Engineering are to:*

- *contribute to the provision of skilled and qualified graduates at Lund University, the academic community in Sweden and abroad and, above all, to society at large where focus will be on commerce and industry; and*
- *provide PhD graduates with a high degree of employability and the skills and qualifications to make success entrepreneurs.*

*The strategy adopted by the Faculty of Engineering to achieve these goals is to:*

- *ensure that education at the PhD level will offer a wide range of courses;*
- *ensure that all students at the PhD level will be given the opportunity to participate in international cooperation either through periods of study/research of various lengths at educational institutions abroad and by participating in international networks;*
- *ensure that all PhD students will contribute to the tuition at the undergraduate and graduate levels; and*
- *develop the exchange between the academic community and commerce and industry.*

*To achieve these goals the Faculty of Engineering will:*

- *make available funding from the Faculty;*
- *cooperate with other faculties both within and outside Lund University and with society at large;*
- *work actively to ensure that all students at the PhD level are in environments conducive to cooperation with other PhD students; and*
- *carry out annual, independent follow-up studies on the status of all PhD students.*

Tuition at the PhD level is the operative responsibility of units of the departments. The management of each department is responsible for ensuring that supervisors at the PhD level have successfully completed a compulsory training course for supervisors and that they thereafter continue to enhance their skills and qualifications on a regular basis.

## **Research**

*The goals of the Faculty of Engineering in research are to:*

- *create a stable foundation for high-quality education at the undergraduate and graduate levels;*
- *provide the proper conditions for sustainability in the role of the academic staff; and*
- *contribute to the development of commerce and industry, and to society as a whole.*

*The strategy adopted by the Faculty of Engineering for research is to:*

- *carry out internationally outstanding research in a wide field that includes several areas of excellence at the very forefront of research often in cooperation with other faculties at Lund University – “from a broad foundation excellence will emerge”,*
- *identify research environments that have excellent potential to attract research funding in competition with others, and*
- *make known and available the research funding of the Faculty.*

*To achieve these goals the Faculty of Engineering will:*

- *actively strengthen the external competitiveness of research environments that are identified as potentially valuable;*
- *make young researchers a priority by committing resources to post-doctoral grants with a special focus on increasing the proportion of female lecturers;*
- *enable smooth cooperation among the departments;*
- *develop the “triple helix” model by cooperating with commerce and industry and society at large;*
- *work actively for improved security of employment for all members of staff;*
- *work actively for an increase in Faculty resources and for access to the EU structural funding for regional development; and*
- *be active in the forthcoming quality assessment at Lund University.*

The Faculty of Engineering draws its strength from its variety and pluralism – from a broad foundation excellence will emerge. Science is being transformed continuously by new discoveries and by changes in the needs of society. Research at the Faculty of Engineering covers a wide spectrum from basic to applied sciences. This variety enables the Faculty to meet the demands of society and industry, whilst at the same time allowing it to cultivate the most dynamic fields of research. This wide research spectrum at the Faculty of Engineering creates a stable foundation for high-quality education and sustainability in the role of academic staff.

The broad-based research at the Faculty of Engineering also makes it possible for research teams to cooperate both within and outside Lund University and, thereby, to create strong research environments well suited to meet the needs of society. A basic environment of successful research groups in relevant areas of research is a necessary prerequisite to be considered for major, external financial support. This basis is further facilitated by clear support from the Faculty management which decides the priorities of the Faculty and also by active co-financing where deemed relevant.

### **Interaction with society**

*The goals of the Faculty of Engineering are to:*

- *supply the workforce with skilled and qualified individuals;*
- *be an important partner to companies in the region and to society in the provision of contract courses, research and development; and*
- *distribute information about research findings and take part in public debates.*

*The strategy of the Faculty of Engineering is to:*

- *develop further cooperation with commerce and industry and with society.*

*To achieve these goals the Faculty of Engineering will:*

- *expand contracted courses in cooperation with commerce and industry so that they become a vital part of the work of the Faculty;*
- *develop “one stop LTH” (meeting places on the web etc.);*
- *develop alumni activities by ensuring that the future involvement of students in alumni activities begins during their time as students at the Faculty; and*
- 
- *look into the attitude of society to the Faculty of Engineering in a follow-up review with two-year intervals.*

The Faculty of Engineering will expand its cooperation with commerce and industry in Sweden, with the consortium of universities and university colleges that constitute the Öresund University, and with Region Skåne, in order to create the right conditions for the future development of both education and research at the Faculty. The increased involvement in EU-financed projects means that an extensive network in the European research community will be established. The Faculty will also increase its involvement and cooperation in global networks.

In order to influence the future for research and education at the Faculty, the Faculty of Engineering will try to be represented on the management bodies of institutions providing research funding and in coordinating organizations such as academies. Participation in such organizations will be considered important at both central and departmental levels.

### **The Way Ahead**

The Faculty management boards, committees and departments will work to ensure that the strategies proposed are converted into concrete plans of action. Everyone in a managerial position has a responsibility to ensure that the plan is realized in his/her area of responsibility. The successful realization of this plan is dependent on the active involvement of staff and students.

Departments, boards and committees are to submit annual reports, in addition to that of the Faculty management, to the Faculty Board demonstrating the progress made in implementing this Strategic Plan.