

Chalmers University of Technology

Chalmers University of Technology is one of the most respected technical universities in Europe. Chalmers offers qualitative education and since Sweden is a small country the culture is and has to be international in order to be competitive. Here follows some quotes from the University's home page (www.chalmers.se) which verifies the previous statement.

“The Chalmers Bachelor’s and Master’s level programs are competitive on both national and international levels and will increasingly become more closely linked to the university’s research agenda. Our goal is to make recent Chalmers graduates highly sought after on the labor market, as well as prepared for lifelong learning. During their years of study, students should have acquired the tools of critical thinking and analysis and the ability to put the knowledge they have acquired into a broader perspective. In other words, our graduates should be well on their way towards the acquisition of wisdom and knowledge.”

“The educational programs at Chalmers will be conducted at an advanced international level in terms of content, structure and teaching methodology. The connection between research and teaching must be clearly articulated on all levels and will gradually be adapted to the progress of individual students. These educational programs will give Chalmers’ students the tools to work in a variety of international environments by providing them with access to exchange programs with other universities all over the globe, as well as concluding course work at the Master’s level that has a strong international flavor.”

“Collaboration between Chalmers and other universities, as well as with the corporate sector, will offer increased opportunities for attractive educational programs highly relevant to the region surrounding the university. The cooperative agreement with Göteborg University in general and its IT University in particular is of special significance to Chalmers.”

Please do not hesitate to contact us if you consider hosting a trainee or have any questions.

Sincerely yours,
The USA 2009 Summer Trainee Program

Industrial Engineering and Business Management

Wide engineering-, economics- and management skills in one student

All students at Chalmers University of Technology with a B.Sc. degree in Industrial Engineering and Business Management have got extensive experience in problem solving; within practical cases that touches several economic and technical areas but also within more technically advanced subjects like multiple variables analysis and statistical modeling. The core competencies of IEBM-students is doubtlessly the width of their education, subject areas like physics and math are combined with e.g. logistics, marketing, operations management and accounting. Personal social skills, knowledge of modeling possibilities and limitations and experience of group work are also strong abilities of an IEBM-student.

In addition to the basis of the education the student will also have an alignment within bioengineering, chemical engineering, mathematics, mechanical engineering or information technology. Real work life cases are also a frequent element of the education. The educational structure is the same as in the USA in the sense that it consists of a 3 year long bachelor and a 2 year long Master. One difference is that this education is deeper than the general American education within the same subject.

Here follows some subject areas that the students have treated during their education:

- o Data analysis and statistics
- o External and Internal economic analysis
- o Industrial activity development
- o Industrial marketing
- o Logistics
- o Mathematics
- o Ex Linear algebra, several variable analysis and statistical analysis
- o Operations management
- o The basis of physics:
- o Ex. Thermodynamics, Material physics and Particles

Please do not hesitate to contact us if you consider hosting a trainee or have any questions.

Sincerely yours,
The USA 2009 Summer Trainee Program

Mechanical Engineering

A competence that is needed in almost every manufacturing company

Virtually all man-made products have mechanical features that are designed and developed by mechanical engineers. Hence companies that make such diverse products as mobile phones, shoes, musical instruments and tennis rackets employ mechanical engineers. In all cases, they are employed to apply the scientific knowledge, design expertise and problem-solving skills they have acquired at the university. Most courses therefore focus on the fundamental engineering knowledge and transferable skills that will allow graduates to pursue careers in virtually any industry.

Mechanical engineering is a B.Sc program where students get to choose within a broad variety of specializations. During the undergraduate program the students are undertaking courses in mathematics, applied mechanics, product development, production, manufacturing, material science, programming and automation and mechatronics. The student learns to see the product from all perspectives through a problem-solving approach. Many engineering graduates go to positions of management, while others prefer a career within the technical area. After three years of undergraduate studies students choose from among the following two-year long masters programmes:

- Product development
- Production engineering
- Advanced engineering materials
- Applied mechanics
- Automotive engineering
- Industrial ecology
- Naval architecture
- Sustainable energy system

Please do not hesitate to contact us if you consider hosting a trainee or have any questions.

Sincerely yours,
The USA 2008 Summer Trainee Program

Civil Engineering

Designing the society of tomorrow

Civil engineers play a major roll in developing infrastructures and supporting human development, while contributing to the sustainable development of society. Contamination of soil and water, and unsustainable use of land and water resources remain major obstacles, while new challenges include threats from climate change and rapid urbanisation. The content of the Civil engineering programme also reflects the conceptualisation and design of new constructions and buildings as well as the maintenance and assessment of existing ones.

Civil engineering is a B.Sc program where students get to choose within a broad variety of specializations. During the undergraduate program the students are undertaking courses in mathematics, building physics, sustainable development, geology, geo technology, project management, hydrology, urban planning and road construction. The student learns to see the project from all perspectives through a problem-solving approach. All engineering students have also been taught to think in a resource efficient and sustainable way whether their specific field is construction, infrastructure or geo and water engineering. After three years of undergraduate studies students choose from among the following two-year long masters programmes:

- Structural Engineering and Building Performance Design
- Geo and Water Engineering
- Design and Construction Project Management
- Environmental Measurements and Assessments
- Sound and Vibration

Please do not hesitate to contact us if you consider hosting a trainee or have any questions.

Sincerely yours,
The USA 2008 Summer Trainee Program