Quality and quality assurance

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Why quality assurance?

- Increasing competition nationally and internationally
- Expectations from stakeholders
- The rapid growth of Higher Education and investment in HE demands that quality must be shown
- International mobility and recognition of degrees

Quality?

- Quality of a course
- Quality of a programme
- Quality of a degree
- Quality of an institution

HOW CAN YOU PROVE QUALITY?

 Quality assurance' is a generic term in higher education which lends itself to many interpretations: It is not possible to use one definition to cover all circumstances

- It is you as a HEI that have the responsibility to develop your own quality assurance system.
- To prove quality you must show that you have developed an internal quality assurance process.
- You must show that your institution has a contiuning work with quality assurance questions and
- That this work is developed at all levels in the institution

- What is the purpose of the program/course?
- What needs in society and/or science is it expected to fulfil?

- Competences, skills and values of the graduates
- The design and content of the program

Design

- Mandatory courses
- Voluntary courses
- Working life experience
- International experience
- Degree project

Graduates competence and skills

Knowledge and understanding

For a Degree of Master of Science in Engineering the student shall

- demonstrate knowledge of the disciplinary foundation of and proven experience in his or her chosen field of technology as well as insight into current research and development work, and
- demonstrate both broad knowledge of his or her chosen field of technology, including knowledge of mathematics and the natural sciences, as well as a considerable degree of specialised knowledge in certain areas of the field.

- Competence and skills
- For a Degree of Master of Science in Engineering the student shall
- demonstrate the ability to identify, formulate and deal with complex issues autonomously and critically and with a holistic approach and also to participate in research and development work and so contribute to the formation of knowledge
- demonstrate the ability to create, analyse and critically evaluate various technological solutions
- demonstrate the ability to plan and use appropriate methods to undertake advanced tasks within predetermined parameters

- demonstrate the ability to integrate knowledge critically and systematically as well as the ability to model, simulate, predict and evaluate sequences of events even with limited information
- demonstrate the ability to develop and design products, processes and systems while taking into account the circumstances and needs of individuals and the targets for economically, socially and ecologically sustainable development set by the community
- demonstrate the capacity for teamwork and collaboration with various constellations, and
- demonstrate the ability to clearly present his or her conclusions and the knowledge and arguments on which they are based in speech and writing to different audiences in both national and international contexts.

- Judgement and approach
- For a Degree of Master of Science in Engineering the student shall
- demonstrate the ability to make assessments informed by relevant disciplinary, social and ethical aspects as well as awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of technology,
 its role in society and the responsibility of the individual for how it is
 used, including both social and economic aspects and also
 environmental and occupational health and safety considerations, and
- demonstrate the ability to identify the personal need for further knowledge and undertake ongoing development of his or her skills.

How to reach the above goals?

- Teaching methods teaching hours
- Teachers competence and experience
- Examination methods

The students

- Admission demands and procedure
- Student performance
- Examination rate
- Average study time
- Student experience

Quality assurance system

- Annual analysis of the activities
- Suggestions for improvements
- Dialogue with stakeholders
- Follow up system of graduates
- Recurrent evaluation of external evaluators (5th? year). Based on selfevaluation, and peer review.