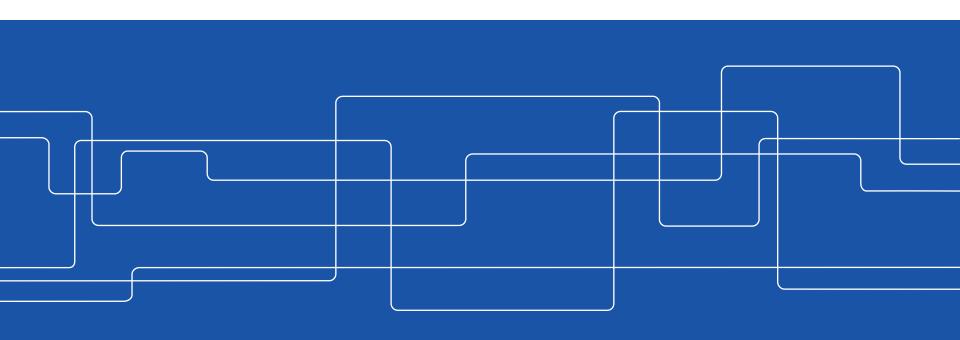


# **ERASMUS**<sup>+</sup> - Establishing Quality Assurance Centers (EQAC)

28 August 2018





### A short glimpse about KTH and Sweden:

- Swedish law, national and local rules and regulations
- KTH's organisation
- university administration-Planning and Evaluation Office
- steering
- some facts and figures

#### Presented by

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 Planning and Evaluation Office



### HEI in Sweden – main tasks – the Higher Education Act

- Organize educational programmes based on scientific or artistic foundations and proven experience.
- Carry out research and artistic development work.
- Work together with the surrounding community and provide information about their activities, as well as take action to ensure that the results of research carried out at the institution are put to good use.
- HEI are to always observe and promote gender equality in their activities and promote understanding for other countries and for international conditions.



#### more about the tasks

- Close connection between research and education
- Science and good research is to be safeguarded
- High quality must be achieved in education and research
- Available resources should be utilized efficiently in order to maintain a high operational quality
- Quality work is a common concern for university staff and students
- Students should have the right to exercise influence over the education

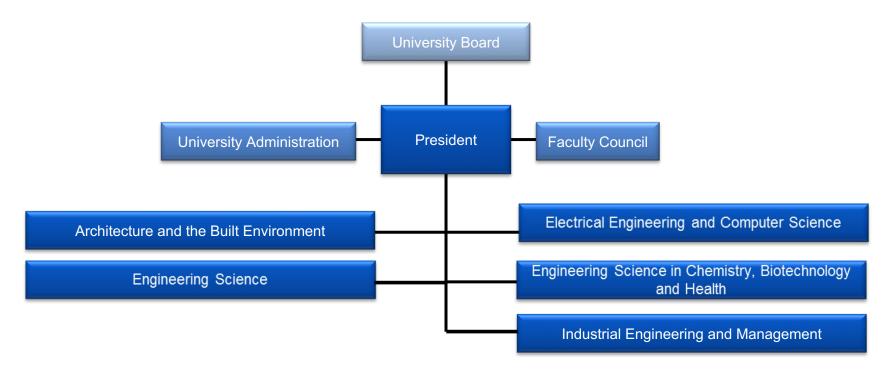


## Decisions to be made by an university, examples

- Significant questions about the overall direction and university organisation range of offered programs research focus and orientation
- admission arrangements
- rules of procedure, the delegation of decision rights, handling of matters
- appointment rules
- suggestions for new president



#### **Organisation**





## Planning and Evaluation Office – an University Administration division

- operational planning and monitoring
- budget documents, draft budget and allocations
- reports to the government
- preparation of KTH management decisions
- respond to referrals, internal and external investigations
- quality coordination and quality evaluations
- overall educational issues
- ranking questions and follow-up questionnaires



### Operational steering: Government-KTH-Schools

The Government allocates yearly, via the Budget Bill, direct government funding for Education and Research\* incl Research Education

\*In addition: student fees; purchased courses; commissioned courses and research; research grants based on application

The President decides yearly upon annual operational plans with each school



### More internal steering: Board-President-Schools/Administration

Vision 2027

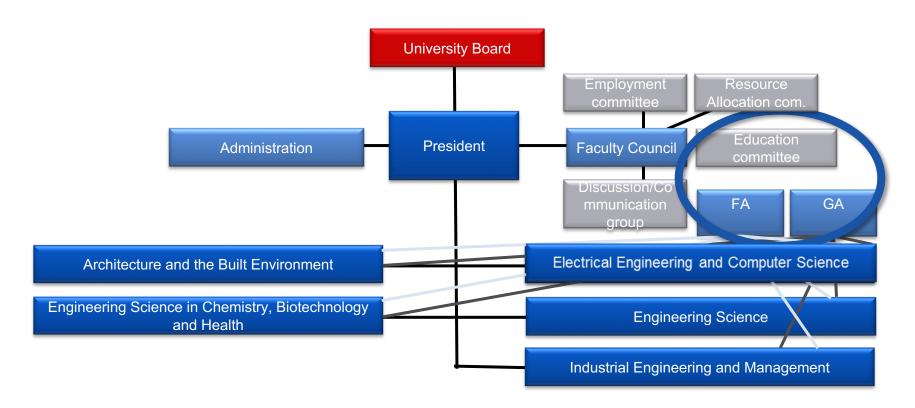
Development plan 2018-2023

Operational plan (annual)

Action plans (all levels) – connects to operational plans



## Channels for education issues in the organisation





### Educational organisation at KTH's schools

#### **KTH School**

- · Head of School, assistant head
- Director of first and second cycle education (GA)
  - Programme director (PA)
  - · Programme council
- Director of third cycle education (FA)
  - Program director (PA)
  - Programme council
- Administrative Education Manager, Coordinators, Counselors, Course Administrators



#### **Qualifications**

The Government issues regulations on the qualifications that may be taken and at what level they should be taken

There are decisions given about which higher education institutions that have the right to issue various degrees

As a university KTH has general degree awarding powers at

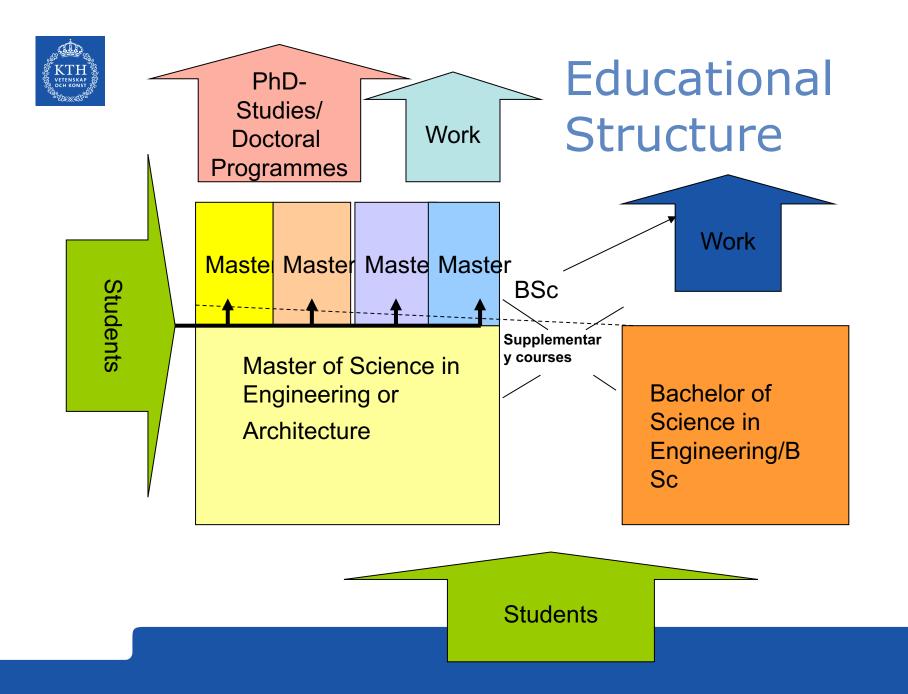
- first cycle (Higher Education diplomas and Bachelors' degrees)
- second cycle (one-year and two-year Masters' degrees) and
- third cycle (licentiate and doctoral degrees).



### **Educational levels** (cycle refers to the Bologna description of educational levels)

- Preparatory level
- First cycle
- Second cycle
- Third cycle

Courses, Educational Programs and Degrees are all referred to a level





#### Integration process towards Bologna

- Students enrolled in <u>5-year</u> Master of Architecture or Master of Science in Engineering programmes
- 1. Compulsory degree project work 1st cycle
- 2. Can apply for B Sc degree after completing year 1-3
- 3. Last two years together with other students admitted to Master of Science programmes 2nd cycle



#### Education at KTH 2018/2019

- Preparatory education (foundation year programme)
- 1 Higher Education Diploma programme
- 10 Bachelor of Science programmes in Engineering
- 3 Bachelor of Science programmes (one in English)
- 1 Master of Architecture programme
- 16 Master of Science programmes in Engineering
- 1 Master of Science programme in Engineering & Teacher Education Upper secondary School
- 3 Master of Science programmes (60 credits)
- 52 Master of Science programmes (120 credits)
- Bridging programmes for teachers, architects and engineers
- 41 Third cycle education subject areas



### Higher Education Ordinance, extracts

Education on first and second cycle must be organized in courses.

- Courses may be combined into educational programmes
- 2. Courses must have a course syllabus
- 3. Programmes must have programme syllabus
- 4. Students must fulfil national and local qualification requirements in order to receive degree certificate



#### Cont.

- 6. Third cycle education is coupled to research education areas. The subject areas are decided on university level.
- 7. Each subject area must have a study plan.
- Each PhD student must have an individual study plan (ISP).
   The ISP is based on the study plan for the subject area.
- The individual study plan should be reviewed regularly, at least once a year at KTH.
- 10. PhD students can only be accepted if there is study financing secured for the full study period, four years.
- 11. All open positions should be announced.
- 12. All PhD students should have at least two supervisors, one is the main supervisor.



### Setting up programmes on first and second cycle, application and decisions

- Schools apply for new programmes or may develop upon assignment from the President (or Government)
- Discussions are initiated within the GA-group and the President's strategic council (points of contact and consequences)
- If "Go-ahead" an appointed project-group develops the application which is then handled by the Education Committee and thereafter by the Faculty Council
- The President decides to establish programme (or not)
- Head of school determines the programme syllabus
- The President decides number of students to be admitted to each programme
- Program development is followed up by the Education Committee (in close contact with the programme director)



## Application, necessary information (a selection)

- Added value for KTH
- Planned student target group
- Eligibility, selection of students
- Existing teaching resources, exists need for recruitment
- Needs from the labor market and preparation future career
- Contextual analysis of competing programs
- Overall program objectives
- Course list, main course contents
- How the program meets the qualification regulations
- Supposed student exchange incl. appropriate institutions



### **Setting up courses**

- Departments/units apply for new courses
- The application is handled within the school(s)
- Decision to establish a course is made by the Head of school
- Head of school also:
  - 1. determines the syllabus
  - 2. appoints examiner (can be delegated to GA/FA)



## Demands for starting a new doctoral programme

- Planned number of PhD students: 15 or more
- Available supervisors: 10 or more
- Marked difference to existing programmes/subject areas
- Programme description
- Courses included
- Study plan for subject area(s)



### eISP- electronic Individual study plan,

Should give a brief outline of the whole four year period for the student and the project.

Should give a high level of detail for the upcoming year.

Should include a plan for the student and the supervision.

Should provide information about the benefits for the student.

Should include courses taken and courses planned to be taken and when.

ISP is drawn up by student and supervisor(s). It is formally decided by FA.



### Student facts and figures 2017

- 12476 full year students (registered on 60 ECTS/year)
- 10461 full year performances
- 1171 fee-paying students, 644(523) newly admitted
- 2000 active research-students (>50 % of full-time)
- 2711/1336/355 newly admitted students cycle 1/2/3
- 88/1161/337/1112/2000/307/71 issued degrees:
   Master of Architecture; Master of Sc in Engineering;
   Bachelor of Sc in Enginering; Bachelor of Sc; Master of Sc; Doctorate; Licentiate



#### **An International University**

- 937 incoming exchange-students, 40 % from universities outside EU/EES/Switzerland
- 667 outgoing exchange-students, 51 % to universities outside EU/EES/Switzerland
- 153 incoming students within joint degree collaborations
- Joint Master's and Graduate schools with other Swedish and/or Nordic Universities; Erasmus\*/Erasmus Mundus/ EIT (European Institute of Innovation and Technology)
- 50 % of newly admitted doctoral students had second cycle degree from other country than Sweden
- 22 % of doctoral graduates (2016) had spent time abroad during their studies



#### At last

Thank you for your attention!

Contact <a href="mailto:carinak@kth.se">carinak@kth.se</a>



### Advanced course, for the inquisitive®

Programme analysis for first and second cycle

Grades, examiner, academic cycle

Local degree regulation

Accepting PhD-student, supervisors

Decision making and delegation



## Programme analysis for first and second cycle education

Part of annual continuous follow-up

The programme director is responsible

Guidance and template

Results forms the basis for the school report in the annual quality dialogue



### Programme analysis – template (under revision)

- Programme status, analysis based on quantitative data regarding admission, throughput and examination (data provided from university administration)
- Analysis of feedback from students, teachers and other staff
- Analysis of one or two of the assessment criterias included in the national quality assurance system
- Description of the quality development in the program during the year
- Analysis of development areas



#### **Grades at KTH**

- Criterion-referenced grading scale A-F A-E approved grades (A highest)
- Fx is used when there is a chance to supplementary examination – must be done within 6 weeks
- Grading scale P/F (Pass/Fail) used for degree projects, and courses where individual examination is difficult to implement
- Students are allowed to retake exams in order to receive a better grade – when appropriate



#### **Examiner at KTH**

- Grades can only be decided by an appointed teacher, examiner
- Who can be examiner?
   Professors, adjunct professors, visiting professors, associate professors, assistant professors, lecturers
   at least employed 20 % of full-time at KTH



### The Academic Cycle

- Begins in early September ends in June
- 40 weeks divided into four study periods
- Examination period after each study period



#### **Local Degree Regulation**

- Master of Science in Engineering having completed courses comprising 300 credits, of which
- At least 45 credits in mathematics/natural science subjects, in addition at least 180 credits (including a 30credits degree project) in subjects within framework of the engineering area;
- 2. At least 90 credits at second level, of which at least 60 credits in subjects within framework of the engineering area



### Cont. Local Degree Regulation

- Bachelor of Science in Engineering having completed courses comprising 180 credits, of which
- At least 25 credits in mathematics/natural science subjects, in addition at least 90 credits (including a 15credits degree project) in subjects within framework of the engineering area
- Master of Science (120 credits)
- 1. At least 90 credits at second level, of which at least 60 credits (including a 30-credits degree project) with indepth studies in the main field of study



### Third cycle, or research, education

- Two different degrees, licentiate and doctor
- Licientiate requires two years of full time study (120 credits), including a thesis of at least 60 credits.
- Doctor requires four years of full time study (240 credits), including a thesis of at least 120 credits.
- Licentiate degree can be taken as a part of the full doctors degree.
- KTH requires course work, at least 30 credits for licentiate and at least 60 credits for doctor.



### Accepting a new PhD student at KTH

- All open positions are announced. This is done five times per year at KTH.
- The selected candidate should meet general and specific entry requirements given by law and the subject area in question.
- The selected candidate should also be the candidate "best suited" for research education.
- Two supervisors are appointed, one as the main supervisor
- The first ISP is written.



### Who can be a supervisor?

- Main supervisor
  - Professors or guest professors employed at KTH.
  - Adjunct professors, if docent and employed at KTH.
  - Other person, if docent and employed at KTH.
  - Employment should cover at least 20%.
- Assistant supervisor
  - A person who holds at least a doctorate or has equivalent competence
- Either main or assistant supervisor must have undergone KTH's supervisor training or have equivalent competence http://www.kth.se/student/kurser/kurs/LH207V?l=en



### What qualifies a docent?

Eligibility as docent at KTH applies to those who

- hold a doctorate or have equivalent scientific expertise, and
- 2. have demonstrated scientific and teaching skills.

Even if the eligibility requirements are met, an applicant may only be admitted as a docent if the school has showed that this specific docentship is useful for KTH's research and education at second and third cycle.



#### To be decided by the President, examples

- Decisions with comprehensive and far-reaching economic and other effects on the overall situation of the university and the university's responsibility as a public authority which are not to be decided by the university board
- Overall cooperation agreement, agreements on strategic research; joint degree programmes; commissioned education
- Operational plans, allocation of funds for education and research
- Rules, regulations and guidelines for KTH's operational activities
- Hiring of professors
- Termination of permanent employment
- Designate Head of School and assistant head at KTH's schools
- Appoint Dean and Vice Dean of the Faculty Council, on proposal from the Nomination Committee
- The shape of the KTH management and how tasks and decision-making powers are distributed among executives in management
- Setting up and dismantling programs on first and second cycle



## To be decided by the Faculty Council (FC), examples

- strategic questions about education and research
- guidelines and instructions for overall quality system
- establish and dismantle main field of study for education on first and second cycle, subject areas for third cycle
- decisions on description of main field of studies and syllabus for subject areas
- requirements for syllabi templates for courses, programmes and subject areas
- employment profiles for recruiting faculty members
- suggestions to the President when hiring professors and promoting lecturer to professor
- suggestions to Head of school when hiring lecturer



## Further delegation from President to Head of school, examples

- agreement on contract education
- contracts for adjunct professor
- hiring of lecturers
- appointing GA and FA (after consulting the President)
- appointing program directors
- setting up and dismantling courses
- syllabus for courses and programmes



### Decisions normally taken by Director of first and second cycle (GA), examples

- decisions on admission of students
- assess specific entry requirements for admission
- decisions on credit transfer
- appoint examiner
- study break for students



### Decisions normally taken by Director of third cycle (FA), examples

- admission of graduate student
- individual study plan for graduate student
- appoint supervisors for graduate student
- appoint an examiner
- decisions on credit transfer