Practice and norms for teaching at the Department of Materials and Production

Considering the new norm for trade in teaching between the faculties, the norm for resource allocation in study programme as well as several years of cost reductions there are presently fewer resources to perform the same tasks. These reductions are not proportionally reflected in teaching and supervision of the students, which means that research time is under pressure.

| Coursework | | | | |
|-------------------------|------------|------------|--|--|
| | Old norm | New norm | | |
| Basic Rate per 5 ECTS | 140 hours | 120 hours | | |
| Recurring rate | 50% | 50% | | |
| Hours per student | 1.5 hours | 0.8 hour | | |
| Examination per student | 0.333 hour | 0.333 hour | | |
| Censorship per student | 0.333 hour | 0.333 hour | | |

| Project activities | | | | |
|------------------------------------|-----------|----------|--|--|
| | Old norm | Old norm | | |
| Supervision per student per 1 ECTS | 0.97 hour | 0.7 hour | | |
| Max supervision for 15 ECTS Group | 100 hours | 65 hours | | |
| Max supervision for 20 ECTS Group | 100 hours | 80 hours | | |
| Censorship per student | 2 hours | 2 hours | | |
| Minimum censorship per group | 8 hours | 8 hours | | |

| Administration | | | | |
|-------------------------------------|----------|----------|--|--|
| | Old norm | Old norm | | |
| Semester coordination 12. semester | 60 hours | 60 hours | | |
| Semester coordination 39. semester | 40 hours | 40 hours | | |
| Semester coordination 109. semester | 25 hours | 25 hours | | |
| Programme coordination | 0 hours | 25 hours | | |
| Course coordination | 0 hours | 10 hours | | |

In addition to this norm, we are bound by general requirements on minimum hours of teaching and student guidance:

- Semesters on BA: 120 hours of Teaching plus 30 hours of student guidance, total 150 hours.
- Semesters on MA: 90 hours of teaching plus 20 hours of student guidance, total 110 hours.

The management does not want a definite norm/hour agreement, as it is important to have the freedom to plan teaching and guidance.

This issue was discussed at a meeting with Research Group Coordinators on December 3rd – 2019.

We agreed upon the following at the meeting:

- It is necessary to adjust the teaching, but freedom of implementation and planning is important.
- We need to have each other's backs, but that does not mean that we all have to do things the same way.
- We need to optimize, what we already are doing, but it may also be necessary to change the way we teach and supervise our students. Fundamental changes in the structure and content of the study programme may be necessary.

- It is important that we share knowledge in terms of developing the use of alternative forms of teaching.
- A change to the 3 x 5 + 15 model could provide some options for reducing the time we spent. It is discussed whether or not this is an option.

Coursework

- A course of 5 ECTS consists of minimum 10 and normally maximum 12 scheduled activities of 4 hours.
 - o It must be assessed whether or not time spent on mandatory assignment and other special activities during the courses adds additional knowledge equal to the time used.
 - The examination also has to be considered, especially if it consists of several different activities.
- Scheduled activity:
 - o Activity where students and teachers are physically or virtually present.
 - Lecture, solving assignments, workshop and lab exercises where the lecturer attends.

Project activities:

- The way in which supervision is carried out varies between semesters and between supervisors. Therefore, it is difficult to establish clear guidelines for this.
- It is important to match expectation between supervisor and the students at the first meeting.
 - Supervision/meetings, how and how often
 - o Drafts, how, when and what could be expected.
- It is the responsibility of the semester coordinator to ensure that the groups are filled to the max.
 - Will provide better time for supervision, reduce the number of supervisors and at the same time it saves money for external examiners.
 - The semester coordinator can approve smaller groups, if there is a good reason. Will typically be on 3rd and 4th semester on master programmes.
 - o Students have the right to work alone but it should be avoided.
 - Will result in limited guidance, especially 1. 8. Semester.
 - Approximately 10 hours equivalent to 2 meetings and examination.
 - In terms of learning, it is also advantageous to have a minimum of 2 students in each group on 3. and 4. semester of the masters. Normally not possible if the students do a project oriented stay in a company.
- Group sizes
 - o Bachelor
 - 1. 2. semester: 8 students per group (normally 7 students per group).
 - 3. 5. semester: 6 students per group
 - 6. semester: 5 6 students per group
 - 7. semester bachelor of engineering projects are normally done individually
 - o **Master**
 - 1. 2. semester: 5 6 students per group
 - 3. Semester: 3 4 students per group

- 4. semester master thesis or long master thesis max. 3 students per group
- Maximum number of pages in the reports

| Semester | Old model | New |
|------------------------------------|-----------|--------|
| Bachelor 1. semester PO/P1 | 45/90 | 20/60 |
| Bachelor 2 5. semester | 110 | 80 |
| Bachelor 6. semester | 165 | 80 |
| Master 1 2. semester | 120 | 80 |
| Master 3. semester 1/more students | 60 - 200 | 60/80 |
| Master 4. semester 1/more students | 75 - 165 | 60/100 |

- Appendices are not included when counting pages and the report should be readable without those.
- The semester coordinator and group of supervisors at a given semester may agree on lower number of pages if there are good reasons for that.
- Another option is that the students hand in an article with supporting appendices.
- Proposals to limit the time spent on counselling
 - o Limit the participation in company visits with individual groups.
 - o Generic projects that are not tied up in a given company.
 - Use the same projects several times and for several groups if the companies agree.
 - Limit the reading of drafts.
 - The same material is not read more than once.
 - You cannot expect the entire report to be read during the semester.
 - A clear framework for supervision meetings. It is important to match expectation between supervisor and students in the very beginning of the semester.
 - o Projects related to the research we do.