

Project PAKETH (Prüfungen und akademischer Kalender an der ETH), Information about the project status

"Directional decisions" for further project work based on the outcome of the teaching retreat of 7/8 June 2023

Summary:

To ensure the high quality of teaching at ETH in the long term, teaching must be adapted to current and future requirements. The aim is to achieve simplifications, more balanced workloads and more freedom and flexibility for all involved.

Based on the work in the pre-project and the extremely positive discussions at the teaching retreat on 7/8 June, the Rector wants to focus the PAKETH project on the following elements:

- Consistent integration of course units and performance assessments (enrolment = registration for performance assessment); performance assessment optionally composed of performances during the semester, final exam and repetition of final exam
- Adjustments to the academic calendar:
 - Semester dates unchanged; option: use of calendar week 37
 - Final exams in exam periods with three or two weeks interval after the semester.
 - Inclusion of a one-week break in the autumn semester and a two-week break between the examination period and the start of the spring semester.
 - Creation of a longer summer break at the students' free disposal, among other things for industrial and/or research internships as well as also as a space for special teaching and continuing education offers.
- Demand for realistic workload planning based on the Bologna guidelines
- Structural standardisation and simplification of the study regulations at Bachelor's level:
 - o Conversion of the regulations into a unified and simplified form
 - Split of first years exams in all degree programmes
 - Elimination of exam blocks (replacement by another instrument for compensation in compulsory subjects)
 - o Elimination of 2-semester-courses («Jahreskurse")
 - Extension of the maximum permitted duration of studies
- Option: additional clustering of degree programmes in the first year with common basic courses (75% joint, 25% degree programme-specific).
- Standardisation and simplification of the study regulations at Master's level is to be tackled at a later stage.

The rollout of these changes (excl. last point) is targeted for autumn 2026.

In the next phase of the project, the proposals will be worked out in detail and combined into an overall concept. It is only then that the final decisions on the implementation of the reform will be taken, after consultation with the professional associations and the departments concerned. However, the departments will be involved in the further development of solutions after the summer break.

1. Initial situation

Teaching at ETH Zurich is very successful. The graduates enjoy an excellent reputation in science and business. The strength lies primarily in the fact that our students are taught by the best scientists in their field and are close to research. The degree programmes are well designed and based on solid foundations. At the same time, the demanding first year ensures the necessary selection of suitable students. The forms of teaching are innovatively adapted to the needs of the content and continuously developed.

But it is precisely this further development that often proves difficult. Our teaching has grown historically. On the one hand, it is based on the Bologna model, but on the other hand, it still contains elements of the previous diploma programme. The structures have thus become complicated and inflexible. It is difficult for everyone to cope, especially if you are new to ETH.

The academic calendar fills the whole year and is very dense. The commitment demanded of students, as well as the stress caused by the permanent high workload, are disproportionate and in extreme cases even cause mental health problems. The use of resources is also very high among lecturers, assistants and administrative staff. In this respect, ETH differs significantly from other universities, including those that enjoy a high international reputation and whose graduates are at least as successful as those of ETH.

The excellent position of our university is to be secured in the long term. This requires the cultivation of proven values that are relevant to success, but also the constant dealing with and response to the changing needs of the economy and society. Our structures are increasingly proving to be a burden here and an obstacle to future developments.

Against this background, and in view of the strong growth in student numbers forecast for the coming years, we need to initiate changes. On the one hand, the system is to be simplified, on the other hand, the study conditions are to be adapted to current and future societal expectations. In addition, freedom and flexibility must be created so that lecturers and study programmes can develop teaching as unhindered as possible in terms of content and methodology.

It is obvious to strive for convergence with other internationally successful universities. In this way, it can be assumed that the framework conditions for high-quality and successful teaching will at least be maintained. In addition, cooperation with these universities (joint teaching programmes, student exchanges, etc.), which is becoming increasingly important, will be simplified.

2. The PAKETH project

The PAKETH project addresses this issue. Its aim is to develop and implement the structural adjustments that are necessary for the success of teaching in the medium to long term. The focus is on simplifying our examination system and streamlining the academic calendar.

As a first step, a preliminary project was launched at the beginning of this year. A project team from the Rectorate, supported by a broad-based advising group, was tasked with drawing up an outline and formulating initial proposals for changes. This was to enable a constructive and targeted discussion at the teaching retreat on 7/8 June.

3. The teaching retreat of 7/8 June in Bern

A total of 104 people from all departments and the central administration took part in the teaching retreat: directors of studies, other professors, study coordinators, teaching specialists, students, prorectors and members of the rectorate. In one and a half days, the topic was discussed in a committed and focused manner. The preliminary work from the pre-project turned out to be an excellent basis.

The understanding of the need for change and the will to tackle it was evident among the participants. The concrete proposals for change developed during the pre-project met with a very high level of approval, especially the "basic proposals" which were considered central by the project team. In the individual rating carried out, they were classified by over 90% of the participants as "absolutely purposeful" or "purposeful".

Many participants also expressed the wish to make use of the positive momentum and to move the reform forward quickly. At the same time, the need to involve the departments and professors in the process broadly and at an early stage was also emphasised. This document is a first step in this direction.

4. Directional decisions

The aim of the retreat was to concretise the direction of PAKETH and thus create the basis for the next step of deepening the solutions envisaged and combining them into a balanced overall concept. The very clear outcome of the discussions implies that this step should now be taken.

Together with the Rector, the project team and the advising group have formulated a set of "directional decisions" which shall guide the further project. The directional decisions are also intended to help the departments in particular to initiate internal discussions about upcoming changes and thus to take an active role in the reform process at an early stage.

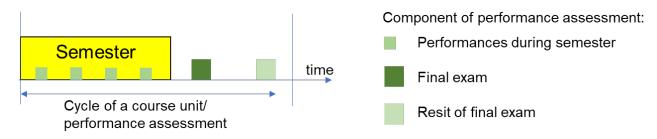
Based on the clear results of the teaching retreat, most of the directional decisions have been formulated in an unambiguous way. Some points, on the other hand, require further reflection and discussion and will only be developed into a definitive proposal during the next phase of the project.

For all directional decisions, detailed and follow-up questions have to be analysed and solved in the context of the next project phase. However, we do not expect any insurmountable hurdles to arise from this.

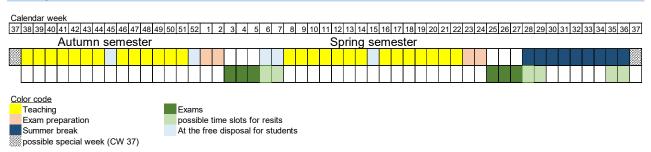
The directional decisions do not mean that any final decisions have been taken about the implementation of a reform and its content. Only when the overall concept is available and the individual proposals have been worked out in detail, an overall assessment will be made and finally the implementation will be decided by the school management. Prior to this, the departments and university groups will be given the opportunity to express their views within a consultation process ("Vernehmlassung"). This will probably be the case in the first half of 2024. The directional decisions are listed in detail below:

- a. Standardisation and integration of learning units and performance assessments
- b. Adjustments to the academic calendar
- c. Workload planning
- d. Standardisation of the study regulations for Bachelor
- e. OPTION: Clustering of study programmes in the first year with common basic courses (according to the principle 75% joint courses, 25% individual).
- f. Standardisation of study regulations Master
- g. Timing of the rollout

a. Standardisation and integration of learning units and performance assessments



- The course unit and the performance assessment are now considered an integral unit. Enrolment in the course unit (after a deregistration period still to be determined) is equivalent to registering for the performance assessment.
- There is no longer a distinction between types of performance assessments; however, the performance assessment can optionally consist of various components performances during the semester, a final exam, a resit opportunity for the final exam -, see chart.
- The performance assessment must be taken within the cycle of the current academic year; otherwise the course unit must be enrolled again in a subsequent year and repeated in full.
- 2-semester-courses («Jahreskurse») are eliminated.
- The current "Directive on performance elements (Leistungselemente)" is to be substantially simplified and transformed into guidelines for split performance assessments.



b. Adjustments to the academic calendar

- The academic calendar still consists of autumn and spring semesters, see graphic.
- The spring semester remains unchanged.
- In the autumn semester, a break of one week will be introduced. No teaching will take place during this week. This reduces the teaching time to 13 weeks (comparison: in the spring semester, due to the various holidays, there are also no more than 13 weeks available).

- All final examinations take place in examination periods which are scheduled in calendar weeks 3 to 5 (Jan./Feb.) and 25 to 27 (June/July); the preparation time after the end of the semester is therefore three weeks including the Christmas break in winter and two weeks in summer.
- The examination periods are shortened to three weeks.
- In winter, there is a break of two weeks between the end of the exams and the beginning of the spring semester which shall serve as a recovery break.
- In the summer, a longer summer break is created, which is available to students for individual activities within and outside of their studies (e.g. industrial and/or research internships). This free space can also be used by ETH for special and voluntary teaching offers (summer schools, etc.).

Still to be worked out:

 Timing and modalities of repetition exams; these should be temporally separated from the first-time exams.

Options:

- at the end of the examination periods
- separate exam period at the end of the summer
- in the first weeks of the new semester
- change of exam mode for repetition possible
- Role of the week before the start of the autumn semester (calendar week 37);
 - Options:
 - regular teaching week (so that there are 14 teaching weeks are preserved in the autumn semester); requires arrangement with the universities of Zurich and Basel.
 - special week (on a voluntary basis) for onboarding, skills training and other special purposes
 - no institutionalised use of the calendar week 37

c. Workload planning

The implementation of points a and b can only succeed if the allocation of credit points to the course units within the curricula is based on a realistic workload planning in accordance with the Bologna guidelines (1 ECTS corresponds to 25 to 30 working hours, including assessments) and the content of the course units is aligned with this. Students must be able to continuously absorb and process course content so that they can successfully complete the performance assessment even without a subsequent long preparation period (as is already the case today in winter). In the design of the teaching content, "understanding" should take precedence over "quantity".

Processes for workload planning and control must be set up, ideally in existing bodies (lesson planning, teaching commission, etc.).

d. Standardisation of the study regulations for Bachelor

All study regulations at the Bachelor level will be converted into a standardised and simplified form. The aim is to make the following adjustments in all degree programmes:

- Transfer to a simplified, standardised structure.
- Split of the first year exams in all programmes (results from the implementation of the integration of course units and performance assessments described under point a).
- Elimination of 2-semester courses («Jahreskurse»).

- Elimination of exam blocks (both in the first year and in the higher semesters).
- Extension of the maximum permitted duration of studies for the Bachelor's degree (provides additional freedom for students' individual study planning).

Still to be worked out:

- New compensation mode for compulsory subjects to replace exam blocks.
- Size of the extension of the maximum permitted duration of study for the Bachelor's degree.

This is primarily a structural revision of the study regulations. It is up to the programmes to decide to what extent they also want to make adjustments to the content, especially because these are required by the changes in the academic calendar.

e. OPTION: Clustering of study programmes in the first year with common basic courses (according to the principle 75% common courses, 25% programme-specific).

This additional step offers great opportunities in terms of increased efficiency and flexibility with regard to coping with growing student numbers. The simultaneous revision of all Bachelor's regulations also represents the ideal starting point for implementing such a model. However, this would make the PAKETH project considerably more extensive and the effort for implementation, especially in the degree programmes, would be considerable. The revision of the study regulations would be more complex than just for the implementation of the elements listed in point c. The consistency of the content would have to be re-established. In addition, an intensive exchange between the study programmes would be necessary.

We intend to clarify in discussion with the departments whether there is willingness to include the principle of clustering in the first year in PAKETH.

f. Standardisation of study regulations Master

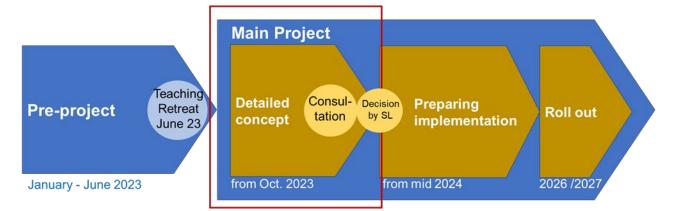
Standardisation and simplification of the study regulations is also being sought for the Master's programmes, but as a second priority and at a later stage. However, the adaptations of the course units and performance assessments as well as the academic calendar described above will also apply to the course units of the Master's programme from the time of their introduction.

g. Timing of the introduction

The introduction of PAKETH is targeted for autumn 2026. The new Bachelor's regulations should all come into force by this time. As an early measure, it is conceivable to implement the interruption in the autumn semester as early as 2024 or 2025.

6 Further steps in the PAKETH project

The graphic below shows the overall project plan for PAKETH:



With the successful retreat and the directional decisions derived from it, the pre-project comes to its end. The main project will proceed in three phases. First, a detailed elaboration of the envisaged solutions will take place, including the clarification of open points. The preparation of this phase will be worked out in the Rectorate over the summer and presented and discussed at the first study conference of the autumn semester on 5 Oct. 2023. The detailed concept phase is to last until spring 2024. At the end of this phase, there will be the mentioned consultation and - if successful - the school board's decision on implementation.

In the subsequent phase, the implementation will be prepared. According to current estimates, this will take two years. Parallel to this, the development of the first part of a new digital system support for teaching (Digital Campus project¹) must also take place. PAKETH and Digital Campus are closely linked and together can make a significant contribution to the efficiency of teaching processes.

The rollout is planned for autumn 2026. It must be ensured that an orderly transition to the new system is possible for students who are at any stage of their education at that time. Parallel processing of old and new should be avoided as far as possible.

The departments and study programmes will be heavily involved in the project work from next autumn. They will be given a central, self-responsible role in adapting their study programmes to the new circumstances, at the latest from the implementation phase onwards.

7. Further documents

The following additional documents are available on request on *Polybox*:

- Preliminary documentation for the teaching retreat of 7/8 June
- Description of the proposed solutions from the preliminary project, basic proposals and variants (Appendix B of the preliminary documentation)
- Introductory presentation PAKETH at the teaching retreat on 7/8 June
- Evaluation of the teaching retreat in tabular form (in German)

¹ Digital Campus: see <u>The Executive Board informs 2022 / 5 - Staffnet | ETH Zurich</u>