

Learning agreements for doctoral students of the D-ITET

(having joined after December 31, 2021)

December 2022

Doctoral Administration D-ITET

The learning agreement

During their [doctoral studies](#) at ETH Zurich, **students must acquire at least 12 credit points ECTS.**

All doctoral students having joined the D-ITET doctoral studies after December 31, 2021, must **agree with their supervisor on the courses** to be taken during doctoral studies (see Article 36(5) of the [ETH Zurich Ordinance on the Doctorate](#)).

This agreement is formalized as the **learning agreement** in [myStudies](#) which the student submits to the supervisor for approval.

A valid learning agreement is required before graduation at the very latest – we suggest submitting it in the first year of studies as students cannot move courses into the categories (see next pages) of their doctoral studies without a valid learning agreement. The course selection should also be part of the [annual status conversation](#).

The course catalogue

Most courses that you will take during doctoral studies can be found in the course catalogue (some exceptions are discussed later).

This offer will also show in [myStudies](#), when you edit your Learning Agreement.

Choose your semester – the course catalogue only shows what is offered in the selected semester.

Choose your programme ("Doctorate Information Technology and electrical Engineering"). A few courses particularly relevant for doctoral students of the D-ITET are listed here (see "subject specialization") but your choice may differ in agreement with your supervisor.

Choose a Category ("Section"): during doctoral studies a minimum of 1 credit point in each category (total 12 credit points) are required.

Regular courses and "placeholder units"

The courses are listed according to categories.

- In the category of *Subject specialization*, courses from the regular ETH offering, particularly useful for some of our doctoral students are usually listed.
- In the categories of *Transferable Skills* and *Integration into Scientific Community*, you will mostly find "placeholder units" which are supposed to convert non-regular-course-related content into credit points (e.g., conferences, or participation in committees).

The screenshot shows the ETH zürich Course Catalogue interface. The top table, titled 'Search result: Course units in Spring Semester 2023', lists regular courses under the category 'Doctorate Information Technology and Electrical Engineering'. The bottom table lists 'Placeholder units' under the category 'Integration into Scientific Community'.

Number	Title	Type	ECTS	Hours	Lecturers
151-0660-00L	Model Predictive Control	W	4 credits	2V + 1U	M. Zeilinger
151-0906-00L	Frontiers in Energy Research	W	2 credits	2S	
227-0150-00L	Semiconductor Devices: Quantum Transport at the Nanoscale	W	6 credits	2V + 2U	M. Luisier, A. Emiroso
227-0207-00L	Nonlinear Systems and Control	W	6 credits	4G	S. Gallstey Alvarez, P. F. Al Hokayem
227-0418-00L	Algebra and Error Correcting Codes	W	6 credits	4G	H. A. Loeliger
227-0420-00L	Information Theory II	W	6 credits	4G	A. Lapidoth, S. M. Moser
227-0427-10L	Model-Based Estimation and Signal Analysis	W	6 credits	4G	H. A. Loeliger
227-0432-00L	Learning, Classification and Compression	W	4 credits	2V + 1U	E. Riegler
227-0434-10L	Mathematics of Information	W	6 credits	3V + 2U + 2A	H. Bölcskei
227-0455-00L	Terahertz: Technology and Applications	W	5 credits	3G + 3A	K. Sanjaran
227-0558-00L	Principles of Distributed Computing	W	7 credits	2V + 2U + 2A	R. Wattenhofer
227-0559-00L	Seminar in Deep Neural Networks	W	2 credits	2S	R. Wattenhofer
227-0559-10L	Seminar in Sustainable Networking	W	2 credits	2S	L. Vanbever, R. Jacob
227-0662-00L	Organic and Nanostructured Optics and Electronics (Course)	W	3 credits	2G	V. Wood

Number	Title	Type	ECTS	Hours	Lecturers
900-0150-DRL	Summer School I (1-3 days)	W	1 credit	2K	Lecturers
900-0151-DRL	Summer School II (1-3 days)	W	1 credit	2K	Lecturers
900-0152-DRL	Summer School III (1-3 days)	W	1 credit	2K	Lecturers
900-0153-DRL	Summer School I (1-3 days, with Poster or Talk)	W	2 credits	4K	Lecturers
900-0154-DRL	Summer School II (1-3 days, with Poster or Talk)	W	2 credits	4K	Lecturers
900-0155-DRL	Summer School III (1-3 days, with Poster or Talk)	W	2 credits	4K	Lecturers
900-0156-DRL	Summer School I (1 week)	W	2 credits	4K	Lecturers
900-0157-DRL	Summer School II (1 week)	W	2 credits	4K	Lecturers
900-0158-DRL	Summer School III (1 week)	W	2 credits	4K	Lecturers
900-0159-DRL	Summer School I (1 week, with Poster or Talk)	W	3 credits	6K	Lecturers

Regular courses

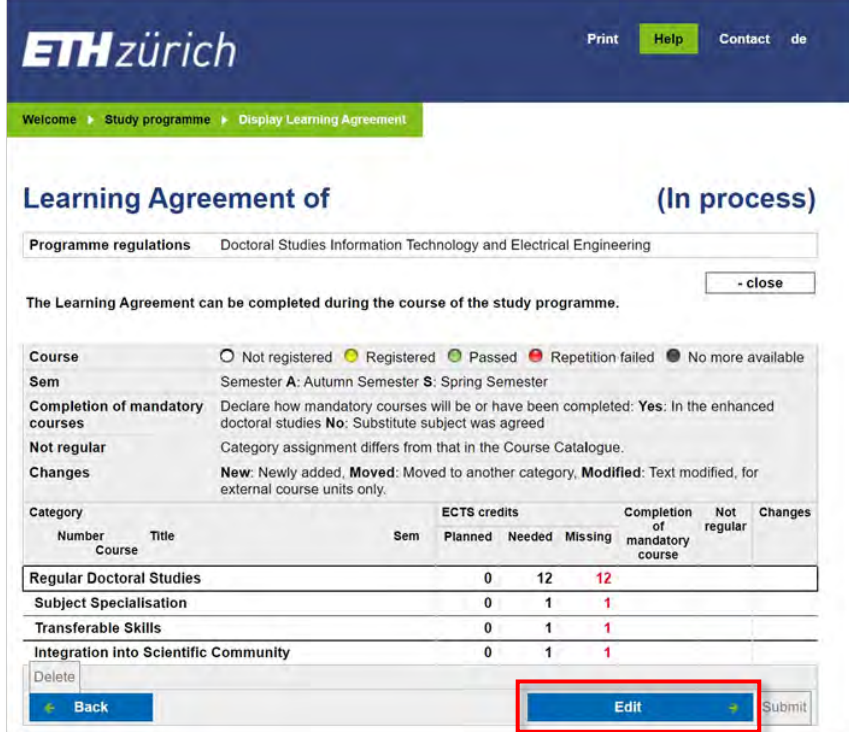
Placeholder units

Creating a learning agreement in myStudies

In principle, learning agreements should be drawn up for the entire duration of your doctoral studies, i.e., contain a minimum of 12 credit points, and submitted **during the first year of your studies**.

However, your thesis supervisor may give different instructions, e.g., only adding courses for each upcoming semester. Please make sure to discuss this with your supervisor.

But remember that, in any case, the learning agreement must be **final before the registration for the doctoral examination** and that courses or other performances included therein it must be completed by that time.



ETH zürich

Print Help Contact de

Welcome > Study programme > Display Learning Agreement

Learning Agreement of (In process)

Programme regulations Doctoral Studies Information Technology and Electrical Engineering

The Learning Agreement can be completed during the course of the study programme.

Course Not registered Registered Passed Repetition failed No more available

Sem Semester A: Autumn Semester S: Spring Semester

Completion of mandatory courses Declare how mandatory courses will be or have been completed: **Yes:** In the enhanced doctoral studies **No:** Substitute subject was agreed

Not regular Category assignment differs from that in the Course Catalogue.

Changes **New:** Newly added, **Moved:** Moved to another category, **Modified:** Text modified, for external course units only.

Category	Number	Title	Sem	ECTS credits			Completion of mandatory course	Not regular	Changes
				Planned	Needed	Missing			
Regular Doctoral Studies				0	12	12			
Subject Specialisation				0	1	1			
Transferable Skills				0	1	1			
Integration into Scientific Community				0	1	1			

Delete

Back Edit Submit

Editing the learning agreement

- Add courses by searching them in the ETH course catalogue.
- Note that only the current and previous semester are available at the beginning of each semester but the courses on offer only seldom change.
- Add courses to the learning agreement by ticking the box next to it.
- Submit your learning agreement when all courses have been added.

Edit Learning Agreement

Programme regulations: Doctoral Studies Information Technology and Electrical Engineering

Completion of mandatory courses: Declare how mandatory courses will be or have been completed. Yes: In the enhanced doctoral studies No: Substitute subject was agreed

Change category: Each course unit must be assigned to a category. If a course is assigned to a category other than that listed in the Course Catalogue, it will be marked with an "X" in the "Not regular" column. Courses without categories must either be assigned to a category or deleted before the Learning Agreement can be submitted.

Not regular: Category assignment differs from that in the Course Catalogue.

Category	Number	Title	Sem	ECTS credits		Completion of mandatory course	Not regular	Delete
				Planned	Needed			
Regular Doctoral Studies				0	12			
Subject Specialisation				0	1			
Transferable Skills				0	1			
Integration into Scientific Community				0	1			

Add course unit to the Learning Agreement

Programme regulations: Doctoral Studies Information Technology and Electrical Engineering

Courses at ETH Zurich

Semester: Spring Semester 2023 Search in both Autumn Semester and Spring Semester

Level: [dropdown]

Department: [dropdown]

Structure

Degree programme: Doctorate Information Technology and Electrical Engineering

Section: [dropdown]

Additional search criteria

Search [Reset]

Courses of other universities

If you can not find a course above, record it here. These are courses that are not any more or not yet listed in the Course Catalogue, or that you attend(ed) at another university.

Tick the course units you want to add to the Learning Agreement

Number	Title	Type	ECTS	Hours	Lecturers
Doctorate Information Technology and Electrical Engineering					
Subject Specialisation					
<input checked="" type="checkbox"/>	151-0660-00L Model Predictive Control	W	4 credits	2V + 1U	M. Zellinger
<input type="checkbox"/>	151-0906-00L Frontiers in Energy Research	W	2 credits	2S	
<input type="checkbox"/>	227-0159-00L Semiconductor Devices: Quantum Transport at the Nanoscale	W	6 credits	2V + 2U	M. Luisier, A. Emboos
<input type="checkbox"/>	227-0207-00L Nonlinear Systems, and Control	W	6 credits	4G	E. Gallestey Alvarez, P. F. Al Hakayem
<input type="checkbox"/>	227-0419-00L Algebra and Error Correcting Codes	W	6 credits	4G	H. Loeliger
<input type="checkbox"/>	227-0420-00L Information Theory II	W	6 credits	4G	A. Lapidoth, S. M. Moser
<input type="checkbox"/>	227-0427-10L Model-Based Estimation and Signal Analysis	W	6 credits	4G	H. Loeliger
<input type="checkbox"/>	227-0432-00L Learning, Classification and Compression	W	4 credits	2V + 1U	E. Riegler
<input type="checkbox"/>	227-0434-10L Mathematics of Information	W	8 credits	3V + 2U + 2A	H. Bölcskei

Editing the learning agreement (contd.)

- Courses that are not offered by ETH or cannot be covered by "placeholder units" can be added to the learning agreement manually by doctoral students.

Note that this does not have any effect on the transcript of records. The study administration only adds courses upon prior discussion and presentation of official documents proving participation in external courses.

The image displays two screenshots of a web application interface for managing learning agreements. The top screenshot shows a section titled "Courses of other universities" with a sub-header: "If you can not find a course above, record it here. These are courses that are not any more or not yet listed in the Course Catalogue, or that you attended) at another university." A blue "Add" button is highlighted with a red box. Below it is a "Cancel" button. The bottom screenshot shows a breadcrumb trail: "Welcome > Study programme > Edit Learning Agreement > Course unit from another university". Below this is a red-bordered box containing the text "Add or edit course unit(s) of another university". Underneath is a form with four fields: "Number*", "Title*", "University and locality*", and "Credits*". At the bottom left of the form is a "Cancel" button, and at the bottom right is a "Save and return" button.

Modifying a learning agreement

Learning agreements can be changed at any time. This is triggered by the supervisor (= "Tutor") in eDoz, e.g., because:

- the supervisor prefers to update the learning agreement each semester (see above);
- the doctoral student did not discuss the learning agreement with the supervisor before submitting it and he/she does not agree with it;
- the original learning agreement can no longer be fulfilled, e.g., because a course is no longer offered, or an exam has been failed twice;
- etc.

The screenshot displays the 'myStudies' interface for a Learning Agreement. The title is 'Learning Agreement of Christof Vadini' with a red box around the text '(Changes requested by tutor)'. The 'Programme regulations' section indicates the Master's Programme in Electrical Engineering and Information Technology. The 'Tutor' is Prof. Dr. G. Blau. The 'Changes required' section shows a message from G. Blau dated 16.09.2022. The 'Programme Information' section contains instructions for the student to discuss the agreement with their tutor. Below this is a table of courses with columns for 'Number', 'Course Title', 'Sem', 'ECTS credits', 'Planned', 'Required', 'Missing', 'Completion of mandatory course', 'Not regular', and 'Changes'. The table is divided into 'Core Courses' and 'Specialisation Courses'. The 'Core Courses' table shows 27 planned and 24 required credits. The 'Specialisation Courses' table shows 41 planned and 40 required credits. At the bottom, there are buttons for 'Back', 'Edit', and 'Submit'.

Number	Course Title	Sem	ECTS credits	Planned	Required	Missing	Completion of mandatory course	Not regular	Changes
Core Courses									
227-0104-00L	Communication and Detection Theory	S	6						
227-2210-00L	Computer Architecture	A	8						
227-0579-00L	Hardware Security	A	7						
227-0125-00L	Optics and Photonics	S	6						
Specialisation Courses									
227-0459-00L	Analog Signal Processing and Filtering	A	6						
227-0622-00L	Applications of Thermal Modeling: From Hot Atoms to Heated Tissues	S	4						
227-0652-00L	Maxwell, Einstein, and the GPS	A	6						
227-0652-10L	Organic and Nanostructured Optics and Electronics (Project)	S	3						
252-0526-00L	Statistical Learning Theory	S	6						
227-0664-00L	Technology and Policy of Electrical Energy Storage	S	3						
227-0455-00L	Terahertz: Technology and Applications	S	5						
227-0438-00L	Wireless Communications	S	6						
Electives				0	0				