If you are a supervisor with various different roles, remember to check that you are logged in with the right permission.

To create an ISP click STUDY PLANS

Choose language

You will be able to choose your doctoral student if you click “new study plan”
For an already admitted doctoral student you'll have to tick the box 'admission exists' and a button labelled 'Click here to obtain new data' appears in the top right corner. When clicking that button, information from Ladok will appear in the eISP form.

The specialization is **Electrical Engineering for everyone except doctoral students on the SETS programme.**

Choose **ELSYTEKN** if the doctoral student is not on the SETS programme.
The boxes marked with red indicate mandatory information.
For a regular position as a doctoral student, 3.1 and 3.3 add up to 100%.

In 3.2, you fill in how you fund 3.1. No matter what percent activity is reported in 3.1, all of it has to be funded 100%.

The Swedish version of planned funding (3.2) looks slightly different from the English one (as you can see in the boxes below, which show your options).

If the student is employed as a doctoral student at KTH, you should choose “Doctoral studentship.”

If the doctoral student for instance is funded with a CSC scholarship, the choice would be “Scholarships.”
All four mandatory courses have to be added under 4.1 from the start. To make it easier to copy and paste, this information is written separately on page 6.

**NB!**

If you want to transfer credits from master courses the doctoral student took *before* applying for admittance to the doctoral program you must hand in the form “FO-TRAK” to the Doctoral Studies Coordinator and write the courses here.
## 4.1

Mandatory courses to copy and paste:

<table>
<thead>
<tr>
<th>Course</th>
<th>HEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH3000 Basic Communication and Teaching</td>
<td>3</td>
</tr>
<tr>
<td>AK3014 The Theory and Methodology of Science - Minor Course</td>
<td>3</td>
</tr>
<tr>
<td>or AK3012 Supplementary Course in Theory and Methodology of Science</td>
<td>3</td>
</tr>
<tr>
<td>AK3015 The Sustainable Scientist</td>
<td>2</td>
</tr>
<tr>
<td>DS3103 Introduction to Scientific Writing</td>
<td>2</td>
</tr>
</tbody>
</table>

(SETS has no mandatory courses)
When you start to write a name a box with supervisors will turn up and you can choose one. If the supervisor is from another school at KTH, choose the school from the list on the right hand side, and supervisors from that school will appear in the box. If you are missing a person, contact the coordinator for Doctoral Studies. You will need to provide the name of the person, email address, company (if not KTH) and department.
Since the doctoral program at EES only has one PA the task as Program Director/Director of Studies for the eISP is divided between the members of the Council for Third Cycle Education according to which Track each member represents.

The table shows which member you should choose as the Program Director/Director of Studies for your eISP.

Håkan Hjalmarsson is Director of Third Cycle Education (FA) for all doctoral students except for those he supervises himself. For them, the Dean of the school will act as FA.

<table>
<thead>
<tr>
<th></th>
<th>Program director/director of studies</th>
<th>When PA is supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>Fusion Plasma Physics</td>
<td>Jan Schefel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peter Händel</td>
</tr>
<tr>
<td>LF</td>
<td>Space and Plasma Physics</td>
<td>Jan Schefel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peter Händel</td>
</tr>
<tr>
<td>FK</td>
<td>Micro and Nanosystems</td>
<td>Göran Stemme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lars Jonsson</td>
</tr>
<tr>
<td>EL</td>
<td>Elektromagnetic Engineering</td>
<td>Lars Jonsson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hans-Peter Nee</td>
</tr>
<tr>
<td>EN</td>
<td>Electric Power and Energy Systems</td>
<td>Hans-Peter Nee/Mehrdad Ghandhari (former EG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mehrdad Ghandhari/Hans-Peter Nee (former EG)</td>
</tr>
<tr>
<td>EL</td>
<td>Automatic Control</td>
<td>Håkan Hjalmarsson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Göran Stemme</td>
</tr>
<tr>
<td>EO</td>
<td>Information Science and Engineering</td>
<td>Peter Händel (former EM)/Lars Kildehøj</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lars Kildehøj (former EM)/Peter Händel</td>
</tr>
<tr>
<td>EP</td>
<td>Network and Systems Engineering</td>
<td>Lars Kildehøj</td>
</tr>
</tbody>
</table>
The tabs 7, 8, and 11 are optional. Tab 9 is used only if relevant.

Tab 10 is mandatory information.

The same text that is written in the boxes on the next page is also written separately on page 12, to make it easier to copy and paste.
### 10 Degree objectives

**Degree of Doctor**

**Scope**: A Degree of Doctor is awarded after the third-cycle student has completed a study programme of 240 credits in a subject in which third-cycle teaching is offered.

**General Qualifications**: Degree of Doctor, The Higher Education Ordinance, Annex 2, Qualifications Ordinance (2006:1053): The connection between the third-cycle studies and the objectives of the Higher Education Ordinance are documented here together with the particular activities planned and realized in order to fulfill each objective. See also the aims stated in the third cycle subject study plan. On each occasion for revision new realized activities should be entered.

#### A. Knowledge and understanding – for the Degree of Doctor the third-cycle student shall

A1. Demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialized knowledge in a limited area of this field.

**Activities realized in order to fulfill the objective**

By taking courses in the field of Electrical Engineering, and thesis work.

#### A2. Demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.

**Activities realized in order to fulfill the objective**

**Activities planned in order to fulfill the objective**

By taking the course AK3014 with the learning outcome: “Account for and apply fundamental concepts from the theory and methodology of science on problem areas within the theory and methodology of science”, “identify and critically discuss, both orally and in writing, fundamental theoretical and methodological issues in the technical, natural and social sciences”, “identify and critically discuss, both orally and in writing, specific methodological problems in a study, the design of an experiment, the use of a particular method of measurement.

#### B. Competence and skills – for the Degree of Doctor the third-cycle student shall

B1. Demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically.

**Activities realized in order to fulfill the objective**

**Activities planned in order to fulfill the objective**

By taking the course AK3014 with the learning outcome: “Account for fundamental theories concerning the epistemological and explanatory status of science”.

B2. Demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work.

**Activities realized in order to fulfill the objective**

**Activities planned in order to fulfill the objective**

By taking the course AK3014 with the learning outcome: “The fundamental problems common to the natural sciences and on the general strategies, methods and concepts that modern science has developed to address these problems” and “analyze the relationship between the basic results of a study and the conclusions that legitimately can be drawn on the basis of the results.”
B3. Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective

By taking the course DM3105 with the learning outcome: “Know how to apply the INSE structure in the production of a research article”, “argue persuasively for a research idea using references to published research” and “correctly use and reference source material according to journal standards.”

B4. Demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective

By taking the course LH3000 with the learning outcome: “Present and explain topics and perform activating assignments within your own field of study” and “Show an ability to use and apply basic concepts, material and methods in, and conditions for, teaching and learning within higher education”.
And the course DES103 with the learning outcome: “Understand basic principles of scientific writing for both specialized and non-specialized audiences” and “Popular Science writing”.

B5. Demonstrate the ability to identify the need for further knowledge.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective

By taking the course LH3000 with the learning outcome: “Give and receive feedback” and “preparation, practice, reflection, and acquisition of knowledge together with sharing experiences and ideas with others.”

B6. Demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective


C. Judgement and approach – for the Degree of Doctor the third-cycle student shall

C1. Demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective

By taking the course AR3015 with the learning outcome: “Key ethical issues and concepts (such as autonomy and informed consent). Research misconduct. The relevance of the research norms of basic ethical theories. Ethical review and research ethics committees, the new law on research ethics review.”

C2. Demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

Activities realized in order to fulfill the objective

Activities planned in order to fulfill the objective

By taking the course AR3015 with the learning outcome: “The researcher’s responsibility for the consequences of research.” And “conceptual and practical tools that a researcher needs in order to – on a long term basis – interact with society.”
10 Degree objectives

A1. By taking courses in the field of Electrical Engineering, and thesis work.

A2. By taking the course AK3014 with the learning outcome: “Account for and apply fundamental concepts from the theory and methodology of science on problem areas within the theory and methodology of science”, “identify and critically discuss, both orally and in writing, fundamental theoretical and methodological issues in the technical, natural and social sciences”, “identify and critically discuss, both orally and in writing, specific methodological problems in a study, the design of an experiment, the use of a particular method of measurement, or the use of a particular model”.

B1. By taking the course AK3014 with the learning outcome: “Account for fundamental theories concerning the epistemological and explanatory status of science”.

B2. By taking the course AK3014 with the learning outcome: “The fundamental problems common to the natural sciences and on the general strategies, methods and concepts that modern science has developed to address these problems” and “analyze the relationship between the basic results of a study and the conclusions that legitimately can be drawn on the basis of the results.”

B3. By taking the course DS3103 with the learning outcome: “Know how to apply the IMRD structure in the production of a research article”, “argue persuasively for a research idea using references to published research” and “correctly use and reference source material according to journal standards”.

B4. By taking the course LH3000 with the learning outcome: “Present and explain topics and perform activating assignments within your own field of study” and “Show an ability to use and apply basic concepts, material and methods in, and conditions for, teaching and learning within higher education”, and the course DS3103 with the learning outcome: “Understand basic principles of scientific writing for both specialized and non-specialized audiences” and “Popular Science writing”.

B5. By taking the course LH3000 with the learning outcome: “Give and receive feedback” and “preparation, practice, reflection, and acquisition of knowledge together with sharing experiences and ideas with others.”


C1. By taking the course AK3015 with the learning outcome: “Key ethical issues and concepts (such as autonomy and informed consent). Research misconduct. The relevance of the research norms of basic ethical theories. Ethical review and research ethics committees, the new law on research ethics review.”

C2. By taking the course AK3015 with the learning outcome: “The researcher’s responsibility for the consequences of research.” And “conceptual and practical tools that a researcher needs in order to - on a long term basis - interact with society.”
10 Degree objectives (SETS)

A1:

Objectives A1-A2, B1-B6 and C1-C2, are achieved for the SETS specialization by

• Training activities which consist of courses (at least 60 ECTS) that cover research, discipline and generic skills.

• Research activities which include research work per se and the dissemination and publication of the findings.

• The mandatory mobility to other HEIs

The rest of the boxes are left blank.