# PhD Curriculum and Collaboration Program for the

# Robert Bosch research group

### **Rationale**

As the faculties first "Graduiertenkolleg", officially acknowledged by the Ministry for Science and Culture in Lower Saxony, we use the opportunity to offer our own curriculum for our PhD's under the umbrella of the PhD curriculum of the graudate school. Thus, we added and designed our own specifically tailored courses to the module structure and second, we offer courses, which are open for faculty members and extend the program of the faculty.

In our curriculum, we try to provide the most beneficial input for the PhD students and their research without compromising their time to focus on the research work itself. Thus, we propose the following PhD curriculum and collaboration formats:

### **PhD Curriculum**

### Official Leuphana program

Writing the dissertation is central to Leuphana's doctoral programme (and this will be no different in our research group). Alongside the individual work, all doctoral candidates complete a total of four compulsory modules: Scientific Practice/Ethics, Philosophy of Science, Research Methods and Subject-specific Research Colloquium. In addition to the study programme, all doctoral candidates are obliged to present their research project in their second and third year.

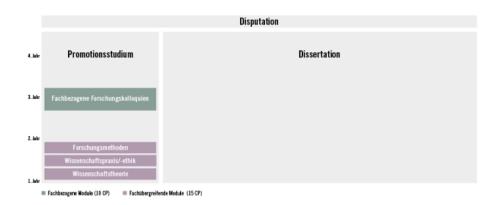


Fig 1: Leuphana's doctoral study program

The aim of the three cross-disciplinary modules Scientific Practice/Ethics, Philosophy of Science and Research Methods is to enable the doctoral students to embedd their research proposal in the global context of science and to provide them with deepened methodological insights. The modules are offered as seminars, partly as compact courses. It is advisable to visit the first and second module in the course of the first year.

Robert Bosch research group program (PhD curriculum)

To make the most out of the structured PhD program for the Robert Bosch research group we offer tailored formats within at least two of the three cross-disciplinary modules which are built into our overall collaboration formats (see below) and wherever possible might be open to other PhD students as well. Figure 2 gives an overview how this could look. Aims and objectives for the three core modules and the research colloquium will be detailed below:

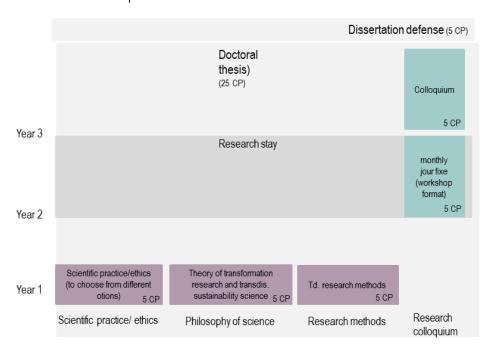


Fig 2: PhD program for the Robert Bosch research group

#### Scientific practice/ethics

Choice of one of seminars within this module, e.g. "Introduction to the Practice of Science" in March 2018 or e.g. "Intercultural and transdisciplinary cooperation and collaboration" (offered by PI of the research group open for PhDs of the faculty).

### Theory of transformation research and transdisciplinary sustainability science

The second module will be set up in a workshop-based, more interactive format. It is based on a thorough engagement with key publication on the topic, collaborative discussions and invited expert talks to foster these discussions. It start with a kick-off session as part of the orientation workshop in October, continues as part of the official inauguration event in December and continues with two further workshops (á 5 hours) during the first semester. This module is open for faculty members.

# Transdisciplinary research methods

This course aims at giving an introduction into different research approaches, designs and challenges with regard to knowledge integration. It also starts as part of the orientation workshop and continues as part of the official inauguration event in December. It then will be finalized with one more one-day workshop on reflecting and planning the individual studies. (intern)

### Research colloquium

The two presentations that are required within the doctoral thesis should be part of the monthly jour fixe in year 2 and of the colloquium in year 3. In year 2 the exchange between the scholars and professors is going to take place in monthly online conferences. In each session, at least one scholar reports on the progress of his/her PhD. Depending on which scholar is going to present current questions and developments, the involved professors of the perspective takes part, of course all Pls are invited to attend. In year 3 the scholars should take part in the faculties overall colloquium. (intern)

### **Collaboration formats**

Beside the structured PhD program we want to strengthen collaboration in-between the group with a number of collaboration formats — always having in mind to balance the individual time for each individual PhD and time for "collaboration spaces". The following formats we propose:

## Workshop on research methods (optional)

To complement the research workshop on transdisciplinary research methods with more disciplinary oriented research methods, sveral options for workshops on research methods are offered for the PhD students as part of Leuphana's general PhD curriculum. Based on students' feedback we might offer an additional workshop specifically for case study research.

### Synthesis workshop (non-optional)

The synthesis workshop should help planning the fruitful combination of the research results and should interactively help to prepare and conduct the integration of the scholars' ideas and plans, guided by experienced researchers. (intern)

### Jour fixe (non-optional)

The jour fixe of the research group is a bi-weekly meeting for presentation, exchange and discussion among the scholars of the research group. Structurally, this is part of the collaboration formats in the first year and continues analogous in the second and third year as part of the curriculum. Every scholar presents his/her work with regard to research approach, recruitment, developments etc. semi-annually. The speaker and senior researcher attend and moderate the colloquium. Depending on which scholar is going to present current questions and developments, the involved professors of this perspective take part. In this way the scholars learn to reflect their own and the others' projects, get insights in different research approaches and are inspired to deepen the exchange. (intern)

### Research workshops (optional)

For additional support research workshops as rather flexible meetings within the first and the third year are foreseen. This format provides space for discussion of theoretical, practical, methodological questions among the scholars of the research group. Experts, senior researchers of the faculty will be invited if needed and upon scholars' own decisions.

#### **Additional events**

In an *orientation workshop*, PhD students are welcomed and get a first orientation on how to work on the project and within the university.

A two day *kick-off event* will be held with the official inauguration of the research group in December. It is an open event for university members, the partner institutions and all other interested people. (open to the public)

The *retreat* is a two-day internal meeting of all scholars and involved (guest) professors to present, discuss, and develop the different projects. Staying at an external venue should give the possibility for intensive exchange and discussion with regard to a systematic synthesis of the results. Guest professors enrich the discussion with an input and their perspective from the outside. Additional input e.g. on strategic publication planning will be agreed upon with the scholars as needed. (intern)

An *expert conference* is planned for the beginning of the third year in order to present first results for international and interdisciplinary guest researchers. The scholars and all involved (guest) professors take part. The scholars have the possibility to participate actively in the preparation, organization and reflection. The goal is to reflect the work of the research group against the background of external impulses, to emphasize the synthesis of results and to draw up an interim balance. (open to the public)

proposal

# **Coordinated activities**

Bringing the PhD curriculum and the collaboration formats together will form a set of coordinated activities in which collaboration and exchange both within and across perspectives is foreseen from the very beginning and in which at the same time intense work on the individual case studies will be supported:

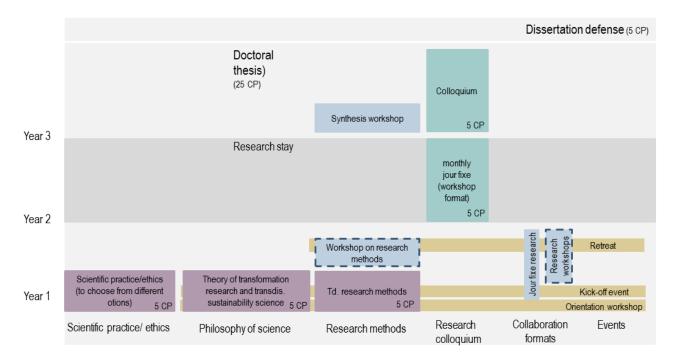


Fig 3: Coordinated activities with the Robert Bosch research group