Who can join?

Motivated by the chance to do excellent research in the life sciences and by the opportunity to work at the interface of policy, society and science? Positioning yourself for an academic career and/or one oriented towards policy, governmental institutions or NGOs? This PhD program may be the right choice for you.

You may join the program once accepted for a PhD position in a research group based at the Faculty of Science (University of Zurich), the Department of Environmental System Sciences, the Department of Biology or the Department of Earth Sciences (ETH Zurich), or the Department of Environmental Sciences (University of Basel). During your ongoing enrollment at these universities, you can apply directly for the program at: **psc_phdprogram@ethz.ch**.

You must hold a Master's degree or equivalent in natural sciences (i.e. Earth Sciences, Life Sciences or Geography) and state your motivation in joining the program. Qualification or previous experiences in policy work are not mandatory. For the registration form and further details, please visit:
www.plantsciences.ch/education/science_policy

For students in the plant sciences, we offer a limited number of open PhD positions at the plant science and policy interface. Submit online applications at **www.lifescience-graduateschool.ch**. Deadlines: December 1st and July 1st

"Having real practitioners, such as politicians, members of the press and stakeholder facilitators teaching courses from their respective professions, made a large difference."
Dzaeman Dzulkifli, PhD student at University of Zurich

General Information

The Zurich-Basel Plant Science Center is a competence center linking and supporting the plant science research community of the University of Zurich, ETH Zurich and the University of Basel. The center promotes fundamental and applied research in the plant sciences. We seek creative approaches to research mentoring and coursework for students and postdocs, and we provide platforms for interactions with peers, policymakers, industry, stakeholders and the general public.

Organizers
Zurich-Basel Plant Science Center, Universitätstrasse 2, 8092 Zurich, Switzerland
www.plantsciences.ch

Degree
Students will obtain their PhD from the University of Zurich, ETH Zurich or the University of Basel and will receive an additional Program Certification from the Zurich-Basel Plant Science Center.

Length of program
2–3 years

Registration
www.plantsciences.ch/education/science_policy

Contact
Dr Andrea Pfisterer, Program Coordinator
andreapf@ethz.ch / +41 632 02 71

"I liked the links made between science and policy, and the opportunity to learn to communicate our science to the public, to raise awareness and even funding for research. These assets are useful not only in academia, but also for those who would like to work for international or non-profit organizations."
Theofania Patsiou, PhD student at University of Basel

Cover photo: Satellite image of crops growing in Kansas, USA (NASA)
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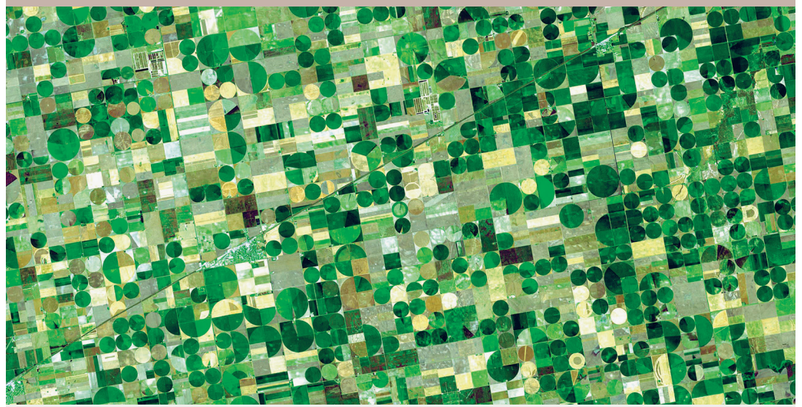
Universität Zürich[UZH] | ETH zürich | UNI BASEL

Zurich-Basel Plant Science Center

Specialized PhD Program
for Life Sciences, Earth Sciences and Agricultural Sciences



Science and Policy

Sciences and Policy
Specialized PhD Program

How can scientists bridge the gap between the scientific community and the policy world? How can they increase the impact of their research on decision-making? And how can the dialog with policy-makers, politicians and the wider public be improved? The PhD program Science & Policy deals with the interface of science and policy and helps students to elaborate tools and skills for engaging with institutions active in decision-making and implementation.

This PhD program developed from an initiative directed at plant scientists; it has been expanded to include PhD students from several disciplines of natural sciences. It is accepted as a structured training program by the Universities of Zurich, Basel and ETH Zurich as well as the Life Science Zurich Graduate School.

"The better scientists understand political decision processes, the better they are able to formulate research projects that will advance political decisions. That's why this program is a unique opportunity."
Andreas Hauser, FOEN

Lecturers and case study supervisors
Carefully selected top scientists, national and international experts from governmental offices, NGOs, private organisations and politicians contribute to lectures, workshops, interviews or case studies. With their practical expertise, they add to the hands-on course experience. Students get direct insight into the world of policy-making.

Competencies
- Improve your communication of scientific evidence with policymakers, the media and the public
- Learn to involve different stakeholder groups in a participative process
- Understand the general process of policy development and endorsement
- Increase your network of peers and policy implementing organizations in your own field of research

Program structure
The program accredits 12 ECTS, which can be aquired with:
- Policy Workshops A – E: choose 4 out of 5
- Basics of Policy Sciences: choose 1 course
- Courses on Research Skills
- Courses on Transferable Skills
- Poster or oral presentation at an international conference

The Policy Workshops are block courses, each providing 2 credit points and repeated every 1.5 years. Each course consists of:
- Two workshop days with lectures and group exercices
- Individual studies
- Literature research
- Group work on real-life case studies between workshop days

"This PhD program fills a gap for those who already know before or during the thesis that they will later on work at the science and policy or science and society interface."
Prof. Nina Buchmann, ETH Zurich

Course A: Evidence-based policy-making
Facilitating the use of science in policy-making
- Discuss the concepts of evidence-based policies and environmental governance
- Analyze real-life examples of regional or national policies and explore how policy-relevant evidence is produced and incorporated in practice

Evidence-based policy-making involves a balance between professional judgment and expertise, on the one hand, and the use of valid, reliable and relevant research evidence, on the other.

Course B: Stakeholder engagement
Exercise multi-stakeholder approaches
- Gain a basic understanding of stakeholder engagement
- Identify and analyze stakeholders
- Apply different levels of involvement; understand their strengths and weaknesses

Implementing policy programs often involves changing habits and adopting new techniques. The obvious way to convince people of the benefits of proposed changes is to involve them as equal partners in the process of analysis of the issue and the development of policy proposals.

Course C: Communicating science
Talking to the media, reaching the public and policy-makers
- Identify and communicate aspects of ones' research to different stakeholder groups
- Know and adequately use different communication tools
- Comprehend science communication as an ongoing dialog

Communicating with the media is increasingly seen as an important aspect of facilitating dialog between scientists and policy-makers. In this course, students will practice how to communicate science in an effective way to the media, policy-makers and a wider public.

Course D: Building political support
Identify the institutions, procedures and agenda of public policy
- Know the relevant policy- and decision-making sectors in Switzerland
- Understand the common procedures for establishing and monitoring measurable national goals and targets
- Know ways to build political support existing in Switzerland

In recent decades different ways of bridging science and policy have been explored. In this course the students shall learn what kind of actions are necessary to implement policies in different sectors, such as public agencies, the civil society or the private sector.

Course E: Contributing to a policy action plan
Improve joint knowledge production
- Formulate the steps necessary to develop a policy action plan
- Appreciate joint knowledge production as as a useful approach for policy development of "wicked" problems
- Apply the perspectives score card as a tool for dealing with social complexity

Policy action planning involves the formulation of objectives, indicators, assumptions, means of verification and and risks. However, in dealing with "wicked" problems we often see policy plans that are confronted with societal opposition. One way to deal with this is to apply joint knowledge production processes.