CROSSING BORDERS

INTERNATIONAL GRAND CHALLENGES AND STRATEGIES FOR TECHNOLOGY, SUSTAINABILITY AND DEVELOPMENT

This minor offers students opportunities to gain international competencies by going abroad for a field study, or by working from the Netherlands with international partners. International competencies will help students navigate well in a global context. The job market has become truly global, and the firms and organizations for which graduates work have become increasingly international in their orientation. In their project work for the minor, students will engage in interactions with international partners with the intent to enhance their personal development, get a good understanding of different cultures and actively network with people from different cultures and backgrounds. Students will be encouraged to apply their disciplinary specialisation to an international research project defined largely by themselves.

The design of the minor is framed around international Grand Challenges - in particular the United Nations' Sustainable Development Goals. Students will learn about these challenges and the strategies employed to address them. They are able to frame their project work in the context of issues of sustainability, development and technology. The minor Crossing Borders is grounded on the belief that the key issues of today's world are crossdisciplinary in nature and require innovate approaches. Its students will be prepared to work and live in an international context, where they develop and implement innovations that will enhance their organization's capacity to address the challenges.

SUSTAINABLE GALS DEVELOPMENT GALS

















16 PEACE, JUSTICE AND STRONG







6 CLEAN WATER AND SANITATION



GRAND CHALLENGES

Examples of Grand Challenges are (note: the UN has identified 17 in total):

- In 2050, how can we feed 9 billion people on a planet that is heavily pressured by climate change, a lack of natural resources, acidified oceans, and a shortage of fresh water?
- How to improve energy security that reduces both political tensions and environmental impacts?
- How to raise a firm's productivity in an environmentally friendly and socially equitable way, while keeping an eye on its competitiveness?
- What role is to be played by governments national, regional and international – to enhance responsible innovative solutions?

Addressing these challenges calls for innovative technological and business solutions, smart policies and – overall – responsible transitions to a sustainable future. Such solutions are not just technological in nature, but also have an important social (human) dimension.

CHALLENGES FOR STUDENTS

For students in this minor – particularly the ones going abroad for an internship – the biggest challenges are

- finding an organization where they will carry out their field work.
- actively network with (and adapt to) people from different cultures and academic backgrounds
- taking initiative to carry out the field work and, where possible/needed, connect it to one's disciplinary specialization
- show flexibility and explore possible solutions in an innovative and creative way
- write up the results of the field study in a report

Some quotes from alumni of this minor:

- "This minor was a great experience for me and probably the best module of my whole study program." (Student Psychology)
- "I had an amazing time and I will never forget this great experience. I can absolutely recommend it to everybody!" (Student Health Sciences)
- "The Crossing Borders minor is a marvelous minor. It was perfect for me. Is a perfect fit with my personality and with my studies creative technology because it is all about being independent and organizing your own project." (Student Creative Technology)
- "The internship and the adventure in Australia was amazing. I learned a lot and met several different and interesting people. It has definitely become an experience that I will carry along with me." (Student International Business Administration)

THE STRUCTURE OF THE MINOR PROGRAMME

The minor consists of two modules, each 15 credits (FC), and offers a lot of choice for students. Students can do a 15 EC version or a 30 EC version.

Module 1

This module 1 (offered in quartile 3.1) has three distinct elements:

- 1. thematic sessions offering multi-disciplinary perspectives and theories for tackling the international grand challenges;
- 2. self-quided cooperative learning by teams of students from different disciplinary backgrounds;
- 3. a project an individual or group assignment under the guidance of supervisors

Module 1 allows a choice between two versions (A and C) in order to cover the practical component of the minor.

Version A: Virtual Project. Students work on an international project with a foreign partner organization. Students work from the University of Twente, thus experiencing 'internationalization at home'. To communicate with the international partner they will make use of Zoom/MS-Teams/email/ (hence the term 'virtual'). The project work requires students to solve a practical problem (linked to one of the International Grand Challenges), proposed by the organization abroad.

Version C: Field Study (part one). Students go abroad to do a field study in a host organization. The field study starts in the second part of Module 1 and continues throughout Module 2. Student are assigned a tutor with whom they will discuss their plans.



















Together with their tutor, students choose an organization (business, non-profit organization, health institute, school) from the Crossing Borders database that contains a large number of potential host organizations from Asia, Africa, Latin America and other parts of the world.

Students themselves are responsible for finding and approaching a suitable host organization. They can also choose an organization that is not in this database. Preparations for the field study already start before Module 1. Towards the end of Module 1, students deliver a preparatory report describing the proposal for their field work, the host organization and its context. Students continue their field study in Module 2.

Module 2

Students can take Module 2 (in quartile 3.2) either in combination with Module 1 or as a separate module. In all cases they will go abroad to carry out a field study. The length of the stay abroad depends on the version chosen by the student in Module 1. There are three versions:

- Version C: (part two): Students continuing the field study they started in Module 1.
- Version D: Students that either took Version A (VirtualProject) in Module 1.
- Version E: Students that did not take Module 1.

Version D and Version E students will go abroad for about 10, respectively 9 weeks, after having done the required preparation work in the first week(s) of Module 2. They will choose a host organization (business,non-profit organization, health institute, school) from the Crossing Borders database and agree with their tutor on the contents of the field study. They regularly communicate with their tutor during their field study and deliver their field study report at the end of the second quartile - upon their return.

In all cases there is the option, depending on the size of the project, to have students carry out their field work in a team of (at most two) students. In case of a team project, the students need to show they've made an equal contribution to all aspects of the field study. During the field study, students will carry out practical activities for the host organization and will combine this with the work on the project. Upon their return to the Netherlands, students in Versions C, D and E deliver the field study report to their tutor. It presents the outcomes of their work, discussing its relevance for the host organization and connecting it to the grand challenges our world is facing.

PLANNING, FINANCE AND OTHER ISSUES

Going abroad and Crossing Borders requires quite a bit of planning and preparation. During a number of special sessions, practicalities such as finding a host organization, travel arrangements, sending field study application emails and applying for a scholarship will be explained. There is a student handbook and there are examples of field study reports that students can consult. Students considering to go abroad are encouraged to start planning their stay abroad as soon as possible.

Please note that a limited number of students can participate in Crossing Borders. For more information, consult the Canvas course: "Crossing Borders.

Our university's International Office provides support for students going abroad, for example through scholarships (e.g. the Twente Mobility Fund)

Further information on this minor can be found on the university's minor website **www.utwente.nl/minor**, the Canvas course "Crossing Borders", as well as from the Crossing Borders coordination team:

Laura Franco-Garcia (CSTM) m.l.francogarcia@utwente.nl

Renze Kolster (CHEPS) r.kolster@utwente.nl

Martin Stienstra (NIKOS) m.r.stienstra@utwente.nl

