DIS STUDY ABROAD IN SCANDINAVIA

Updated March 2024
For Spring 2024, Summer 2024, Fall 2024

Environmental Engineering in Stockholm

Overview

DIS - Study Abroad in Scandinavia offers Environmental Engineering in Stockholm during both the semester (spring and fall) and summer. The curriculum approaches the academic content from a Scandinavian lens and is integrated with experiential learning concepts. During the spring or fall, students enroll in one core course (with course-integrated study tours within Sweden and in different locations throughout the Nordic Region) and three or four electives. Students in the summer enroll in one class at a time and can stay for one or up to three classes in either Copenhagen or Stockholm or a mix of both.

Why Study Environmental Engineering in Stockholm?

Sweden is on the cutting edge of technical innovation in bioenergy, smart grids, green building, waste and recycling, and water and forestry resource management.

A world leader in sustainability, Sweden has committed to 100% fossil fuel-free vehicles by 2030 and 100% renewable electricity production by 2040.

Environmental Engineering Core Course

Students enroll in the “Engineering Sustainable Environments in Scandinavia” Core Course. The Core Course includes two faculty-led Tours in the Nordic Region.

Engineering Sustainable Environments in Scandinavia
Prerequisites: Two courses in math, plus a total of five courses within engineering, basic science (biology, chemistry, physics), and/or computer science, all at university level. At least one of these courses should be an engineering course.

- Week-Long Study Tour: Finland (Fall) or Iceland (Spring)
- Short Study Tour: Sweden

Engineering Elective Courses

Students choose three to four electives to complete their schedules. Students are free to combine electives from across many disciplines, including engineering elective courses. All engineering courses include Field Studies outside the classroom, providing opportunities to meet with experts in industry, academia, and the public sector, and to witness the latest developments within the field.

- Energy Cloud: Engineering Localized, Digitized, Sustainable Networks
  Prerequisites: Two courses in math, plus a total of five courses within engineering, basic science (biology, chemistry, physics), and/or computer science, all at university level. At least one of these courses should be an engineering course.
- Smart and Sustainable Cities
- Statistics
  Prerequisites: Two courses in mathematics, at university level.
- Data Visualization
  Prerequisite: One mathematics course at university level.
- Design Thinking
- Engineering Biomaterials
  Prerequisites: Two courses in math, plus a total of five courses within engineering, basic science (biology, chemistry, physics), and/or computer science, all at university level. At least one of these courses should be an engineering course.
- Medical Diagnostics
  Prerequisites: One year of chemistry and one year of either biology or bioengineering, all at university level.
- Philosophy of Technology and Human Values

Summer 2024 Engineering Courses

Session 1 (May 21-June 12, 2024)

- Medical Diagnostics (Stockholm)
  Prerequisites: One year of chemistry and one year of either biology or bioengineering, all at university level.
- Statistics (Stockholm)
  Prerequisites: Two courses in mathematics, at university level.

Session 2 (June 16-July 5, 2024)

- Engineering Sustainable Environments in Scandinavia (Stockholm)
  Prerequisites: Two courses in math, plus a total of five courses within engineering, basic science (biology, chemistry, physics), and/or computer science, all at university level. At least one of these courses should be an engineering course.

Program Director

Natalia Landázuri Sáenz
Ph.D., Department of Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA, USA (2005).

- Postdoctoral fellow, Emory University, Atlanta, GA, USA.
- Associate Professor Biomedicine, Karolinska Institutet, Stockholm, Sweden.
- Fulbright scholar (1999-2001).

Research in genetic engineering, cell and gene delivery vehicles, mathematical modeling, bioengineering approaches for cardiovascular disease, and cancer. Has created, designed, implemented, and evaluated courses at university level. Acted as Pedagogical Advisor, Development and Regeneration Doctoral Program, Karolinska Institutet. Has participated in national and international committees to evaluate and promote scientific and academic advancements. With DIS since 2017.

Engineering Faculty

Amari Claudia Enzi
MSc./graduate engineer, Energy and Environmental Engineering, FH Pinkafeld, 2012.
MSc. Environmental System Science with focus on Business Administration, University of Graz, 2013
Senior Sustainability Specialist, Sandvik Coromant, 2022-present.

Director Subject Matter Expert Sustainability, Prime Weber Shandwick, 2022. Nordic Sustainabilty & Corporate Affairs Manager, Samsung Electronics, 2017-2022. Senior Consultant for Climate Change & Sustainability Services, EY, 2013-2016. With DIS since 2023

Jonathan Geib
Ph.D., Department of Architecture and Civil Engineering, Chalmers University of Technology, Gothenburg, Sweden (2020).

Research work on complexities of engagement with urban participatory processes involving public sector institutions and art and design practitioners. MSc, KU Leuven, Belgium (2013) in Urbanism and Strategic Planning. MSc, KU Leuven, in Human Settlements (2010). BSc in Architecture, University of Texas at Austin, USA (2002). Research Fellow at the International Youth Think Tank, Gothenburg, Sweden (2020–present). Motivated by pluralistic approaches to research and design practice, criticality, and creativity. With DIS since 2021.

Christopher Grigsby
Ph.D. Biomedical Engineering, Duke University, USA (2014).

Postdoctoral Fellow and Researcher, Division of Medical Systems Bioengineering, Karolinska Institutet (2016-present). Postdoctoral Fellow, Columbia University, New York, USA (2015-2016). Staff Research Associate, University California San Francisco, San Francisco, USA (2005-2007). B.S. Bioengineering, UC Berkeley, USA (2005). With DIS since 2021.

Reshmi Ghosh
Certification in Child Psychology, New Skills Academy UK, 2020.

P.G Diploma Patents Law, NALSAR University of Law, 2010. Bachelor of Technology-Biotechnology, Amity University , 2007. Market Analyst and Business Development Manager at BioXcel Corporation, 2007-2009. Senior Sales Executive Life Science at Marcus Evans Scandinavia Limited, 2010-2013. Teacher at Internationella Engelska Skolan, 2015-2021. With DIS since 2023.

Angie Hjort
Head of software at Gapminder Foundation, Stockholm, Sweden.

- M.Sc. in Human Computer Interaction with minor in Innovation and Entrepreneurship, KTH (Royal Institute of Technology), Sweden and Aalto, Finland (2014).
- M.Eng. Industrial Automation and Control Systems, URFU, Russia (2011).

Responsible for software efforts of gapminder.org/tools, and for developing interactive data pictures. d3.js data graphics developer. Has built data-intense visualizations for oil platform safety monitoring (ABB Research, Sweden), user interfaces for online payment aggregator (Robokassa, Russia), control systems and operator user interfaces for ore processing factory (Realtime Software, Russia). With DIS since 2022.

Jan Holmgaard
Associate professor at the Department of Culture and Aesthetics at Stockholm University.

- PhD in Comparative Literature at Stockholm University.

Visiting researcher at Oxford University and the Søren Kierkegaard Research Centre at the University of Copenhagen. Most recent publication: *Filosofen och vargen* (*The Philosopher and the Wolf*) (2015), which deals with the intricate relationship between philosophy and literature, from Plato to Derrida. Current research project: *Radical Mimesis: Writing the Other*. With DIS since 2017.

Kateryna Morozovska
KTH Royal Institute of Technology, PhD in Electrical Engineering, 2020.

CEO DTR1tech AB, Researcher KTH Royal Institute of Technology. With DIS since 2023.

Asterios Papageorgiou
Ph.D. student, Department of Sustainable Development, Environmental Sciences and Engineering (SEED), KTH (Royal Institute of Technology), Stockholm, Sweden (2018-present).

- Licentiate, Industrial Ecology, KTH (2021).
- MSc, Sustainable Technology, KTH (2018).
- MSc, Sustainable Waste Management, School of Civil Engineering, Leeds University, UK (2006).
- BSc, Physics, Aristotle University of Thessaloniki, Greece (2005).

Environmental researcher, Aristotle University of Thessaloniki (2008-2009). Physics tutor, Epikentro tuition centre (2008-2012). Physics Tutor and co-owner, Aristeia tuition centre (2012-2016). With DIS since 2021.

María de la Paz Celorio
Ph.D., University of California, Davis, USA (2008).

Postdoctoral researcher at Max Planck Institute of Chemical Ecology, Jena, Germany (2008-2010), and at Stockholm University, Sweden. Researcher and Research Analyst at Stockholm University. Has contributed to the understanding of gene-expression plasticity in butterflies and genetic differentiation of populations of wild fish using genome-wide data. Has taught courses and led practical laboratories on statistics, biotechnology, and population genetics for American and Swedish students. With DIS since 2021.

Georgios Sotiriou
Associate Professor in Biomaterial Science, Karolinska Institutet, Stockholm, Sweden (2020-present).

- Ph.D., Mechanical and Process Engineering, ETH Zurich, Switzerland (2011).

Postdoctoral Researcher, Center for nanotechnology and nanotoxicology, Harvard University, USA (2013-2015). Research focus on nanoscale functional materials and devices for biomedical applications.