EMSD: European Master in System Dynamics

Two-year international Master's programme

Get ready for a career in analyzing complex dynamics systems, designing robust policies, helping decision makers make better decisions and initiating strategic change in organizations. If you want to solve real world problems in an international setting, EMSD is the programme for you.

A Unique Programme

The European master programme in System Dynamics (EMSD) builds on the strengths of four leading universities: the University of Bergen (Norway), the New University of Lisbon (Portugal), the University of Palermo (Italy) and Radboud University Nijmegen (the Netherlands). The programme is specifically designed for students who are interested in learning how to initiate strategic change in organizations through the use of computer simulation models. EMSD is the first international master programme in System Dynamics in Europe. Our goal is to teach you everything that you need for starting an international career in strategic modeling with System Dynamics. After you have finished our master programme, you will know how to build a System Dynamics model, how to apply it to a variety of real life problems and how to facilitate the model building process with the client. You will be able to initiate strategic change in organizations. No other programme in System Dynamics in the world offers you this combination of model building and group facilitation skills in a dynamic international setting.

An International Experience

The two-year EMSD programme builds on the strengths universities involved: you will start with learning the System Dynamics model building in Bergen (30 EC); on to the application of System Dynamics in either Sustainability Issues in Lisbon or Management, Planning and Control (30 EC) and Organisational consultation and Group Nijmegen (30 EC). You will finish our programme in universities by conducting an original research project present in a full-fledged master thesis (30 EC).

When, what, where?

- In the first semester you will follow courses in the theme of Foundations of System Dynamics model building in Bergen, Norway.
- In the second semester you will either follow courses in the theme of Sustainability Issues in Lisbon, Portugal or in the theme of Management Planning and Control in Palermo, Italy.
- In the third semester you will follow courses in the theme of Organizational consultation and Group Model Building in Nijmegen, the Netherlands.
- In the fourth and final semester you will write your thesis at one of the four universities or associated partners.

The curriculum is designed in such a way that you will study at at least three out of four European universities in different countries. You will spend a semester in each of these universities together with other international students from all over the world. Living and learning across different campuses and cultures will be enriching experience on both the academic and personal level that will help you develop the intercultural and personal skills that are needed for starting your international career. After our two-year programme you will have built up a network of international friends and colleagues to kick-start your career with.



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Career Perspectives

EMSD will provide you with numerous skills that will enable you to develop the flexibility required to be successful within European and global organizations, whether it be major consultancy firms, strategic planning departments of larger corporations, public administrations or NGOs. 75% of graduated EMSD students found a job within one month after graduation. After half a year, all of the graduated EMSD students were employed. EMSD students find employment in the working fields of research, energy, consulting, logistics or government, automotive or jade production. Some former EMSD students are currently employed at such renowned institutions as PricewaterhouseCoopers, UMG Myanmar Co. , the Ministry of Business, Innovation and Employment in New Zealand or the Norwegian Institute of International Affairs.

Admission Requirements

- You should have a University bachelor degree (BSc), equal to the educational standards set by the European Higher Education Area and higher education partners in the programme and consortium, in 'social sciences', 'management sciences', 'natural sciences' or 'engineering sciences'.
- Your grade average must be between an A and B.
- You must be able to hand over proof of proficiency in English:
 a legally certified copy of an IELTS with a minimum overall score
 6.5 with all sub scores 5.5 or more, or a TOEFL of 90 or a
 CAE/CPE certificate which may at the time of application not be
 taken longer than two years ago.
- Your CV, including a short summary of your Bachelor thesis (in English).
- A letter of motivation, describing why you feel you should be admitted to the programme (in English).
- 3 letters of recommendation (in English).
- Legally certified copies of your diplomas and transcripts.
- Legally certified translations of your diplomas and transcripts by a sworn translator (in English).
- Legally certified copy of your passport.

Participation Costs and Scholarships

For EEA-students the participation costs (including tuition fees to the four universities and insurance costs) are currently set at €8.000 for the two-year during programme. Participation costs for non-EEA students are currently set at €16.000 for the two-year during programme.

Each year EMSD has a limited number of Erasmus + or company scholarships for excellent students available. Students can apply for these scholarships via the application and selection procedure as described on our website www.emsd.eu

Host Universities









Guido Veldhuis Innovator/quantitative Analyst TNO, The Netherlands

"Studying in the EMSD programme is about more than getting your MSc, it is about exploring Europe, learning how people from around the world and from different disciplines solve problems. The EMSD programme changes the way you approach problems as well as people. Besides studying cutting edge materials from the academic community, you also get ample opportunity to work with companies on real world problems. The programme is one of the most rewarding experiences I have had in my life."

Contact Information

For more information please visit our website www.emsd.eu

If you have any questions, please feel free to write to our EMSD Team at info@europeansystemdynamics.eu

WWW.EMSD.EU