Course Descriptions None 2026-2027

Course Title	Systems Modelling
Course Code	SSP4013
ECTS Credits	1,0
Assessment	Pass / Fail

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	31-8-2026	16-10-2026		X			

Level	no level
Coordinator	Joana Wensing For more information:joana.wensing@maastrichtuniversity.nl
Language of instruction	English
Goals	Course objectives: * understand the key principles of Systems Thinking; * apply systems modelling to a sustainability challenge; * discuss the strengths and weaknesses of different modelling methods.
Description	Sustainability Assessment (SA) can be defined as a structured process dealing with a sustainability issue, using knowledge from various scientific disciplines and/or stakeholders, such that integrated insights are made available to decision makers. Applying SA in practice requires specific skills. The aim of this skills course is that students learn to apply some widely-used methods/tools of SA, and become familiar with its rules of application, strengths, and pitfalls. Sustainability Assessment involves a process of untangling the complex interactions between ecological, social, and economic factors underlying sustainability issues. Models act as valuable tools providing a simplified representation of reality to analyse these interactions, to better define the problem and to identify potential solutions. This hands-on skills course therefore introduces you to various modelling approaches, including system dynamics approaches, regression analysis and agent-based modelling. Each technique offers unique insights and has its own advantages and limitations. Please note that the course focuses primarily on the practical application and conceptual foundations of these approaches, rather than on coding and the mathematics.
Literature	
Prerequisites	Exchange students should refer to the International Relations Office via email in case they would like to register for this course: iro-incoming-sbe@maastrichtuniversity.nl. Only limited spots available, first-come first-serve principle.
Keywords	
Transitional Regulations	
Teaching methods	
Assessment methods	
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

Master Sustainability Science in Transforming Societies - Business for Sustainability	Compulsory Skills
Master Sustainability Science in Transforming Societies - Policy for Sustainability	Compulsory Skills
SBE Exchange Master	Master Exchange Courses