



<b>TU Delft</b>	<b>Creative Problem Solving and Decision (UD9001A)</b>		
<b>Course description</b>	1. Learn how to solve complex problems with analysis based decision-making and solution designs.		
<b>Domain</b>	Engineering, policy analysis		
<b>Prerequisites</b>	Participants in this course are expected to be enrolled in or have completed a bachelor in science, technology, engineering or maths.		
<b>Level</b>	2/3 year bachelor, start master		
<b>Language</b>	English		
<b>Number of credits and workload</b>	3 ECTS	ca 10 hours per week	84 hours in total
<b>Semester period and Start date course</b>	February Semester	Start date: March 2019	
<b>Application deadline</b>	February 1, 2019		

<p><b>Full course description</b></p>	<p>Explore complex, multi-actor systems in which one factor influences all other factors. For instance, how innovative energy technologies merge into the existing energy system, or how new transport possibilities impact current processes. Armed with this information, learn to decide whether they should be further developed, consider possible negative results and weigh associated costs.</p> <p>There are multiple ways to make decisions, but one way proven to be very useful is the analytical approach - a methodology for making the problem explicit and rationalising the different potential solutions. In short: analysis based support of decision making, design and implementation of solutions.</p> <p>Creative Problem Solving and Decision Making as a course teaches you this method.</p> <p>This course explores and evaluates tools and problem solving methods such as:          Actor analysis          Causal modeling          Goal trees and means-end diagrams          Problem diagrams          Uncertainty          Decision support          Score cards          This course introduces each technique and applies each technique to a case. Ultimately, the combination of these techniques provides a coherent analysis of the problem.</p>	
<p><b>Platform and link to course description</b></p>	<p>EdX</p>	<p><a href="https://www.edx.org/course/creative-problem-solving-and-decision-making">https://www.edx.org/course/creative-problem-solving-and-decision-making</a></p>
<p><b>Course description in study guide</b></p>	<p><a href="http://studiegids.tudelft.nl/a101_displayCourse.do?course_id=48617">http://studiegids.tudelft.nl/a101_displayCourse.do?course_id=48617</a></p>	
<p><b>Lecturer(s)</b></p>	<p>Dr.ir. C. van Daalen</p>	
<p><b>Extra Course information</b></p>	<p>What you'll learn</p> <ul style="list-style-type: none"> <li>• Analytically based support of decision-making, design and implementation of solutions.</li> <li>• How to apply tools like actor analysis, causal modeling, goal trees and means-end diagrams, problem diagrams, uncertainty, decision support and score cards.</li> </ul>	

# Virtual Exchange Global Alliance

Picture of course			
Final examination date and time /period	First exam opportunity: Mid-May, 2019.	Starting-time will be 9am CEST	Examination period in case date is not yet known
Examination registration deadline or drop-out deadline	Examination registration before: There is no drop-out deadline.		
Type of examination	Assignments during the course, Final exam: Written exam		
Midterm examination?	<input type="checkbox"/> no		
Previous exam papers available	<input type="checkbox"/> yes <input type="checkbox"/> no		
Specific rules for examinations			
Resit? and date	<input type="checkbox"/> yes	Second exam opportunity: June, 2019.	
Grade release and transcript release	TBA		