

Leadership Skills for Engineers (TPM019A)

2021-2022 Q1, 35 students, collaboration between Honours Programme Delft and Politecnico di Milano

Introduction course

Why this programme?

Today's age knows many challenges, such as:

- How can we bundle forces globally to fight climate change?
- How can we protect human rights while simultaneously benefiting from new technologies?
- How can we effectively fight disinformation?

The world of today is becoming increasingly complex. Hence, there is an ever-growing need for leadership that understands all the possibilities that technological innovation has to offer and can translate these into action. We need technology-adapted leaders that can effectuate collaboration in complex settings with diverse stakeholders while attending to pressing ethical concerns and cultural differences. These are leaders that have expertise on all levels: strategic and managerial - but also on the operational level of organizations.

There are four mindsets that form the guideline for this programme. These are mindsets that every tech-savvy leader should master:

1. The strategic mindset
2. The political mindset
3. The people mindset
4. The operational mindset

Every person has experienced being a leader in some way and has thereby developed capabilities in each mindset. In this course, we aim to extend on this experience and bring one's competences in each mindset to their full potential. Special attention is geared towards the personal development and future goals of students.

Activities

In this honours programme, students will get acquainted with key concepts and skills for technology-adapted leadership in a complex world. In mini-lectures, today's key leadership concepts are presented and engaged with.

Next to that, students will learn how to put this knowledge into practice in skill modules in which they will develop their leadership skills in real-world settings with the assistance of professional actors.

There five specialized skill modules offered in this course are:

- (1) Pitching
- (2) Debating
- (3) Negotiation
- (4) Giving and receiving feedback
- (5) Effective one-to-one communication

International group

What makes this particular programme special is that it aims to bring together a diverse group of students from different cultural backgrounds. In order to lead in a networked and globalised context, it is essential for prospective effective leaders to develop themselves in a cross-cultural environment. We are therefore proud to give participants of our programme the opportunity to bring out their full potential in an international group of ambitious students.

In groups of 5, students will work together on a final group project that runs throughout the programme. In this project, students will put the insights from the course into practice by diving into a specific issue from the world of leadership.

Assessment

There are three assignments for this course:

Students are asked to write three short reflections about the skill modules. Throughout the course, students get five training sessions about skills that are essential for a good leader. Following the sessions, students are asked to write a one-pager in which they give answer to one or more questions about the training session(s).

At the end of the programme, students present their group project to the rest of the students and the staff members. This final project takes the form of a slide deck, for which groups are required to conduct fieldwork, analyze leadership-related issues in light of current academic insights, and formulate recommendations for real-world actors.

Moreover, students write an argumentative essay (+/- 2000 words) geared towards a broader audience, in which they are asked to express themselves creatively about a key leadership issue.

Lectures

Lecture	Topic	Related skill module
<i>Kick-off</i>	<i>Getting to know each other Introduction to leadership</i>	-
Lecture 1	Professionalism & Decision-making (1/2)	Feedback
Lecture 2	Professionalism & Decision-making (2/2)	
Lecture 3	Strategic management	Negotiation
Lecture 4	Performance management	
Lecture 5	Human Resources	Pitching
Lecture 6	Sense-making	
Lecture 7	Persuasive communication	Debating
Lecture 8	Knowledge and innovation management	
Lecture 9	Coordination and cooperation	
<i>Wrap-up</i>	<i>Presentation group projects Concluding remarks</i>	-
-	-	Personal efficacy