Integrating Communication into Engineering Education

The Centre for Engineering Education and Genombrottet are pleased to invite you to explore engineering communication in a lecture and a workshop by Dr. Robert Irish.

Dr. Robert Irish
Associate Professor, Teaching Stream
Engineering Communication Program
University of Toronto

Robert Irish started University of Toronto’s Engineering Communication Program and served as its director from 1995-2008. The program is widely regarded as a leading communication program in North America. From the beginning, the program aimed to integrate communication into engineering education as an essential skill not only for professional work, but also for engineering thinking, research, and design. Through his work, he has taught in every department of Engineering. For the past seven years, most of his teaching has been in Engineering Science, U of T’s enriched engineering curriculum, where he co-teaches a large first-year design and communication course and a course in engineering ethics. He also teaches an upper-year elective, Language and Power, and advises students on thesis writing. He also regularly teaches communication to professional engineers for a range of companies and organizations. He is author of two textbooks: Engineering Communication: From Principles to Practice (Oxford, 2nd edition, 2013, co-authored with Peter Eliot Weiss) and Engineering Writing: A Brief Guide (Oxford, 2016).

Lecture
Writing to Get Things Done
The Role of Communication in Engineering Education

Although it can often be an afterthought in engineering education, writing is an essential activity for engineers. It not only makes engineering work possible but also shapes its order, logic, and potential.

In nearly two decades of experiment and practice at the Faculty of Applied Science and Engineering at the University of Toronto, we have discovered the value of integrating communication as a means to deepen students’ learning and shape their thinking.

This lecture will define the specific shape of engineering writing (as opposed to scientific writing more generally) and explore its relationship to engineering design work. In addition, we will discuss possible models and approaches for integrating communication into engineering courses and curricula to gain the benefit offered by such integration.

All are welcome!

When: Tuesday 24 October, 10:30 – 12:00
Where: E:1406
Registration: Not required

Workshop
Using Communication in the Engineering Classroom
Assignment Design for Engineering Teachers

In this workshop you will develop one or more modules to integrate communication (writing or oral communication) into a specific course or set of courses that you teach.

The workshop will guide you through four activities:
1. Finding significant learning moments to design communication assignments
2. Developing successful communication assignments
3. Using writing as a learning activity to learn engineering
4. Providing feedback to students to enhance thinking and writing (with some ideas about training teaching assistants to give the feedback)

By the end of the workshop, you will have a first draft of an assignment and a preliminary implementation plan. You will find it useful to come to the workshop with a course in mind, and probably with a course outline or syllabus in hand.

Teachers and teaching assistants are welcome. Come with your teaching team! Space is limited. Sign up early!

When: Tuesday 24 October, 13:15 – 16:00
Where: location will be announced to participants
Registration: sign up at www.lth.se/genombrottet