## "SCIENCE, TECHNOLOGY and SOCIETY"

## The European Master of Art Programme in STS

(Jointly run with European Inter-University Association on Society, Science & Technology)

The Graduate Field of Science, Technology and Society (STS) is devoted to training and research in one of the most exciting of contemporary academic disciplines. STS is concerned with understanding science and technology as historical and cultural productions. Social Science Institute of Istanbul Technical University has developed this Master of Arts programme in STS with the following approaches and concerns:

- The new inter-disciplinary programme promotes a strong, in-depth integration
  of technology with applied social science. This bridging between disciplines is
  the characteristic that distinguishes it from programmes confined to a single
  disciplinary perspective. It emphasises the historical, economic, political, social
  and cultural dimensions of technological society.
- The field of STS asks fundamental questions about the role of science and technology in social change. It integrates insights from the humanities and social sciences with engineering fields into a coherent body of knowledge on politics and institutions of technology, as well as in the role of technology on every day life.
- At the same time, there is growing concern about the "misuse" of science and technology that calls for greater public control. Since we can not take science and technology or their impact on society as "given", we have to concern about the complex political, economic and other social forces that together shape science and technology.
- Hence, this programme aims to create new paradigms for understanding both the historical and contemporary faces of science and technology.
- The programme is also established with the belief that today's engineering students need a view of professional engineering broader than traditional models of purely technical or science-based expertise. These students need an appreciation for the diverse roles engineers play and a deep understanding of engineering cultures and their effects on design. They also need preparation in working in groups and critical thinking and argumentation across disciplines.
- The programme, however, aims to equip people to grapple with the pressing issues surrounding technology not only as engineers but also as researchers, designers, policy makers, managers and users. This requires new combination of knowledge, bridging technical fields and social sciences in order to further awareness of the increasingly pervasive and dynamic role of technology in modern life.

My contributions to this program are in the form of giving lectures under the scope of the following courses:

#### Fall semester:

### Science and Technology in the Making

(Jessica Mesman- Maastricht University, Artemis Karaali)

The laboratory and the fieldwork in historical perspective; constructing facts; Exploring the languages of scientific accounts in different disciplines; visualisation and interpretation of scientific knowledge; local and global levels of scientific reality; popularisation of science; ethical controversies, social tensions and career pressures; competition and hierarchy in research field; transmission of scientific knowledge and the role of scientific networks, the distinction between center and periphery; environment and experiment; the institutional diversity of scientific research; interests and motivation in private/public research areas; practices of science and law.

# Spring semester:

### **Social and Environmental Impact of Biotechnology**

(Benan Dinçtürk, Artemis Karaali, Ayşe Gözen)

Applications of biotechnology in environmental pollution control; Application of biotechnology in food sciences; Genetically modified agricultural commodities; Genetically modified food ingredients, consumer concerns; Ethical discussion of gene cloning, human genome project and gene therapy; Biotechnology and international law.