

ISTANBUL TECHNICAL UNIVERSITY

Social Science Institute

Master of Arts

in

SCIENCE, TECHNOLOGY and SOCIETY

The European Master Programme in STS

jointly run with

**THE EUROPEAN INTER-UNIVERSITY ASSOCIATION
ON SOCIETY, SCIENCE & TECHNOLOGY**

Master Programme in Science, Technology and Society

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.

Course Structure

- This Master programme has a twelve-month curriculum which involves two terms of structured coursework followed by a period of independent study under supervision in which a term project is produced.
- The programme will be in English and open to all students from different disciplines with a diploma of an accredited college/university with a minimum of four years curriculum.
- The programme and the courses are jointly run with the European Inter-University Association on Society, Science & Technology (ESST) Master of Arts Programme. ESST is an association of universities who jointly teach and research in the field of social, scientific and technological developments. Presently 17 universities from across Europe are members of the association including Istanbul Technical University. All the member universities follow a common graduate course in the first term. Each university has a specialisation area within STS field in which offers a specialisation course for all ESST students in the second term.
- During the first term, five compulsory courses are offered to develop a common base for all the students coming from different educational backgrounds.
- All the courses are offered as three weeks modules that are taught 15 hours a week with total of 45 hours in three weeks.
- The classes are hold in the weekday-evenings and Saturday mornings.
- In the second term, the students who registered in ITU, choose five courses (modules) according to the area that they want specialise.
- In the third term that runs from June to October, the students are provided with the opportunity to work on a term project that they have chosen to become specialised.
- However, the students can choose any of the specialisation courses that are offered by the other ESST universities in the second term and continue their dissertation work at the same university during the third term. **Students who successfully complete the ESST programme are also given an ESST diploma.**

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In the 2000-2001 Academic year:

ITU / STS students who registered to the programme in the 2000/2001 academic year are now continuing their studies at the University of East London, Maastricht

University, Université Louis Pasteur and Linköping University according to their chosen field of specialisation, through **Garanti Bank Scholarships**.

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Curriculum

1. TERM

Compulsory Courses (Commonly taught in all ESST Universities)

- **Introduction to Science, Technology and Society Issues**
(Hacer Ansal, Wiebe Bijker - Maastricht University)
- **Interpreting the History of Science and Technology**
(Christoph K. Neumann, Kostas Gavroğlu – Athens University)
- **Science and Technology in the Making**
(Jessica Mesman- Maastricht University, Artemis Karaali)
- **Science and Technology Dynamics in the Economic Globalisation Process**
(Hacer Ansal)
- **Politics of Knowledge**
(Aydan Turanlı, Gürol Irzık- Boğaziçi University)

2. TERM

Elective Courses

- **Non-Western Modernities**
(İştar Gözaydın and Christoph K. Neumann)
- **Technology Management & Innovation in the Newly-Industrialising Country Environment**
(Hacer Ansal and Dilek Çetindamar-Sabancı University)
- **Environmental Issues in the Development Process**
(Fatoş Germirli Babuna and Barbara Pusch)
- **Social and Environmental Impact of Biotechnology**
(Benan Dinçtürk, Fatoş Germirli Babuna, Fatma Artemis Karaali, Ayşe Gözen)
- **Disasters, Science, Technology and Society**
(Engin Yıldırım- Sakarya University)

- **Housing, Technology and Society**
(Yıldız Sey, Şule Özükren)

ITU STS Programme

Specialisation Course - offered to all ESST students

BUILDING AND MAINTAINING LIFE IN THE DEVELOPMENT PROCESS

The course will focus on the different social, economic, political and cultural conditions of the “technology follower environments” and hence, the specificities of the science, technology and society inter-relations within these environments. It will study the specific impact of science & technology transferred from the industrialised world and the problems involved in adopting them to their “newly industrialising country” environment. It will also focus on the conditions of building scientific and technological capabilities for indigenous R&D activities in this environment in order to move forward to developing an innovation culture.

After taking the specialisation course, the students will start working on their dissertation on one of the topics related to the modules they take in the specialisation course under the supervision of one of the related teaching staff.

Specialisation Course Structure

The course involves six weeks of teaching and consists of taking 3 modules. After taking the first and second compulsory modules for two weeks each, students will choose the third module from the four optional modules offered on different issues that will also be taught for two weeks.

1. Module: Non -Western Modernities (İştar Gözaydın and Christoph K. Neumann)
The concept of modernity; Agricultural and industrial revolutions, their impacts on the non-Western world: comparing the cases of Anatolia and Egypt; Constitutionalism, secularism, and nationalism: India and Turkey; the 19 th century reforms of the education system; Reactions to the “new” science, technology and the law from the 19 th century Ottoman perspective; Non-Western modernity: a gendered issue?; The emergence of the “modern” Turkish Republic, the European community and the legal systems of peripheral countries.

2. Module: Technology Management & Innovation in the Newly-Industrialising

Country Environment (Hacer Ansal and Dilek Çetindamar-Sabancı University)

From Tradition to Modernity: a critical assessment of the ideas and ideologies associated with “development”, “modernisation” and “underdevelopment”; Technology and Late Industrialisation; Concept of Technology Follower Environment, Technology Transfer & Diffusion of Innovations, Building Indigenous Technological Capabilities; New Technologies: Opportunities & Threats, Innovative Cultures and Adaptive Organisations; Industrial Innovation, Size of Firm, Market Structure and Innovation; Building an Innovation Culture; National Organisational and Strategic Factors Associated with Success in Systems of Innovation.

3.Module will be selected from the following options:

A) Environmental Issues in the Development Process

(Fatoş Germirli Babuna and Barbara Pusch)

Fundamentals of ecology; Population increase, food and hunger; Energy alternatives and the environment; Mineral resources; Impact of human activities on the environment; Global change and ecological crisis; Environmental sociology; Ecological risks and modern society; The environmental issue in developing countries; Environmental movements; Environmental ethics; Environmental law; Environmental politics.

B) Social and Environmental Impact of Biotechnology

(Benan Dinçtürk, Fatoş Germirli Babuna, Fatma 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.

C) Disasters, Science, Technology and Society(Engin Yıldırım-Sakarya University)

Concepts of reflexive modernization and risk society developed by Beck, Giddens and Lash; Major theoretical approaches in the field of disaster studies: technological determinism and vulnerability; Within this framework, disasters as a social phenomena, human attitudes and behaviour in the face of disasters, Interaction between, human, nature and society; Scientific and traditional mentality in the interpretation of disasters; Examining Chernobly disaster, Lisbon and Marmara earthquakes as case studies.

D) Housing, Technology and Society (Yıldız Sey, Şule Özüekren)

Interdisciplinism, housing and social theory; Epistemological grounds of housing studies; What is a housing problem?; Political science and housing research; The convergence thesis in comparative housing research; Housing and comparative welfare research; Economics of housing; Social structures and housing; The social construction of housing; Residence as a socio-spatial focus; Housing culture and technology; Historical perspective of housing development in western and non-western countries.

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In the 2000-2001 Academic year:

ITU / STS programme has been offering this specialisation course to the students who came from University of Oslo, Ecole Polytechnique Federal de Lausanne and Maastricht University.

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Application

For the 2001-2002 Academic year: 28 May – 27 July 2001

All applicants are expected to fill out an application form and submit the following documents:

- a. Undergraduate degree diploma from an accredited college/university*,
- b. Transcript*,
- c. Post Graduate Study Entrance Exam Score (LES) more than 45*,
- d. Language Proficiency – minimum score of :
TOEFL- 550, Computerised TOEFL- 210*, KPDS- 70, English Proficiency- 70.
- e. Two reference letters *(written by an academician under whom the applicant has studied or pursued research or by someone who supervised the applicant in her/his career)
- f. Application fee.

*** To be submitted before 7 August 2001.**

For further information:

ITU, Social Science Institute, Taşkışla Building, Taksim, Istanbul Tel: 0 212 245 66
31 - 243 31 81 Internet: <http://www3.itu.edu.tr/~sosbil/>

İSTANBUL TEKNİK ÜNİVERSİTESİ
Sosyal Bilimler Enstitüsü

Yüksek Lisans / İkinci Öğretim

SCIENCE, TECHNOLOGY and SOCIETY

Başvuru Formu

ADAY NO:

2001-2002 Kış yarıyılından başlayarak STS Yüksek Lisans öğrenimimi İTÜ Sosyal Bilimler Enstitüsünde yapmak istiyorum. Gereği için aday kaydımın yapılmasını izninizle arz ederim.

Tarih: / / 2001

İmza:

ADI, SOYADI:		
EV ADRESİ:		
İŞ ADRESİ (varsa):		
EV TEL:	İŞ TEL:	CEP TEL:
DOĞUM YERİ:	DOĞUM YILI:	
CİNSİYETİ:	UYRUĞU:	
MEZUN OLDUĞU ÜNİVERSİTE:		
FAKÜLTE:	BÖLÜM:	
MEZUNİYET YILI:	MEZUNİYET NOTU:	

2001/2002 İTÜ – SOSYAL BİLİMLER ENSTİTÜSÜ

MÜLAKAT SINAVI GİRİŞ KİMLİK KARTI

ADAY NO:

ADI SOYADI:

BABA ADI:

DOĞUMYERİ VE YILI:

UYRUĞU:

ADRESİ:

Tarih: / / 2001

İmza:

