

## MA in Technology Governance, Tallinn University of Technology, Estonia

The Technology Governance Masters program is a technology-focused special graduate degree in Innovation Policy, Industrial Policy and Development Economics. Theoretically, it presents a realistic alternative to mainstream ("Standard Textbook") Economics. It is taught entirely in English – partially in modules (intensive two-week long classes) and partially by overarching courses and workshops. Because of its specific focus and trans-disciplinary approach, it is interesting for those working in technology government fields, such as ministries, development and promotion authorities, and private companies and NGOs dealing with the subject matter.

Five reasons to study on the program:

- studying in one of the top "funky towns" of the world, a UNESCO world heritage site & the European Capital of Culture 2011;
- studying at one of the leading technical universities in the region on a specialized, recognized MA program;
- lectures by top international scholars, thinkers and authors in the field – Carlota Perez, Erik S. Reinert, Jan A. Kregel, and Wolfgang Drechsler among them;
- classes are always rated highly by incoming Erasmus and other international students;
- low tuition (3 440 euros for the whole program), scholarships available to cover tuition&travel costs.

For further information, please visit us on Facebook and:  
[www.technologygovernance.eu](http://www.technologygovernance.eu)  
[www.ttu.ee/admissions](http://www.ttu.ee/admissions)

### NEW FULL-TIME SCHOLARSHIP FOR INTERNATIONAL STUDENTS!

The program provides two state-commissioned places for studies, which exempts from tuition fee (deadline for applying for state-commissioned place is 1 July, 2013).

All international students are encouraged to apply for the Ragnar Nurkse scholarship, named after probably the most internationally recognized Estonian scientist of the 20<sup>th</sup> century. The scholarship **7 200 euros** will be financed through the budget of TUT Ragnar Nurkse School of Innovation and Governance and it will be awarded to a student who will start studies at the MA in Technology Governance programme in the academic year 2013/2014.



Ragnar Nurkse, copy Vladimir Taiger, Eesti Post

The scholarship recipient will be selected on the basis of candidates' previous professional and academic accomplishments (minimum GPA to be considered for selection is 3.5). The application should also include a recommendation letter from one of student's previous professors. Finally, student's MA thesis proposal will be evaluated to determine whether it has the potential to create new knowledge and could be converted into a journal article.

Please send scholarship applications (a 1-2 page letter describing your thesis proposal and previous professional experience; proof of previous academic results; CV; academic recommendation letter) and other inquiries to Rainer Kattel at [rainer.kattel@ttu.ee](mailto:rainer.kattel@ttu.ee)

**no later than May 31<sup>st</sup> 2013.** Please use .pdf files.

In addition, 6 foreign students can apply for reimbursement of costs, related to obtaining visa, arranging health insurance and travelling to Estonia.

More information:  
[http://technologygovernance.eu/eng/admissions/graduate\\_scholarships/](http://technologygovernance.eu/eng/admissions/graduate_scholarships/)

### STATE AND GOVERNANCE PROF. WOLFGANG DRECHSLER

This course will first discuss the State, as a theoretical and historical phenomenon, from its origins in the Greek polis to its contemporary existence in a globalized world and its European form, as the basis and source of any policy as well as of authority, decision, and the manifestation of the common will and weal. Then, the concept of governance is investigated: its relation to Staatswissenschaften, its origins, its difference from corporate governance, the place of government within governance, and the specific case of "Good Governance". Special attention is given to the role of the state, and to the concept of governance, in the formulation and implementation of Technology Governance.

**Credit: 3 ECTS; Grade: yes**

### INTRODUCTION TO TYPES OF CAPITALISM PROF. ERIK S. REINERT

This introductory section is based on four case studies developed at Harvard Business School on different types of capitalism: English, American, German and Japanese. What are the technological and geographical dynamics of capitalism? When does capitalism cause peripheral poverty and when does it produce sequential upgrading?

**Credit: 2 ECTS; Grade: no (pass/fail)**

### INTERNATIONAL ORGANISATIONS PROF. MICHAEL KULL

This course discusses the growing and necessary role of international organizations in international financial stability, in innovation and in economic development.

**Credit: 2 ECTS; Grade: no (pass/fail)**

### EMPIRICAL-HISTORICAL ECONOMICS PROF. WOLFGANG DRECHSLER

The German Historical School of Economics (GHS), especially its younger and youngest part, whose eminence in Continental Europe can roughly be dated from 1860 to 1940, was in its time the main competitor to the neoclassical approach that seems to have won the day, in the form of Standard Textbook Economics (STE), today. Historically, the GHS also formed the basis of the Social Market Economy, arguably the foundation of the economic order of the EU, as well as of much of the thinking on Innovation (because static stability is not its goal), even though Schumpeter denied this. In the context of Technology Governance, it is therefore particularly relevant to deal with this type of "Reality Economics", which this course sets out to do.

**Credit: 2 ECTS; Grade: no (pass/fail)**



TECHNOLOGY GOVERNANCE



## SPRING TERM

### CASE STUDIES IN BUSINESS, TECHNOLOGIES AND INDUSTRIES PROF. RAINER KATTEL

Technology Governance and public policies that support innovation are highly context-specific. Many successful policies become unsuccessful in a new context, many not reach goals etc. Thus, learning from specific real case studies of historically and/or currently successful policies, and from failures, constitutes a crucial skill. This course is based on case method developed and at Harvard Business Schools.

**Credit: 3 + 2 ECTS; Grade: yes**

### DEVELOPMENT POLICIES AND GLOBALIZATION PROF. RAINER KATTEL, ERIK S. REINERT

Globalization creates numerous challenges for development policies. In globalizing economy a country may be locked into specialization in technological dead-ends, but also specialize in being cost-cutting process innovations and in both cases create vicious circles of poverty while innovating. This course discusses development policies, in particular the challenge of globalization in the context of development policies.

**Credit: 3 ECTS; Grade: yes**

### E-GOVERNANCE PROF. WOLFGANG DRECHSLER

This course introduces the main theories and practice relating to ICT in public administration and governance, with a special focus on Estonia and its achievements and challenges. It covers topics such as the current state and development of the information society and e-Governance (including issues such as e-voting, Web 2.0 governance, and cyber security); the impact of the information society on public service delivery (such as e-Health, e-Learning); the impact of e-Government on the private sector; and the critique of e-governance.

**Credit: 3 ECTS; Grade: yes**

### TECHNOLOGY & SOCIETY PROF. WOLFGANG DRECHSLER

The goal of this class is to see what can be learned for technology primarily from dealing with the critique thereof, as a sophisticated understanding of technology – and technology governance – requires that one look at, and understands, its "dark side" and its existence-changing, epochal power in the modern world. We will deal in detail with ICT as the paradigmatic technology of our time, and here with a focus on the Web 2.0.

**Credit: 3 ECTS; Grade: yes**

### NON-WESTERN PUBLIC ADMINISTRATION PROF. WOLFGANG DRECHSLER

This course introduces the two main systems of Public Administration that evolved independently of the "Western", now globalized system, the Chinese and "Islamic" (especially Ottoman) ones, which are studied in detail. The idea is to look at PA in the context of governance and to see whether similar problems have been addressed in different but maybe even better ways. The goal of the class is both the familiarization with the two systems and the reflection of the "Western" one through the comparative mirror.

**Credit: 2 ECTS; Grade: yes**

### SMALL STATES PROF. TIINA RANDMA-LIIV

Small states face often highly different problems than larger states, both in terms of the nature of problems (size of the market) and in potential solutions (limited human capital). Innovation and industrial development often depend on long-term and large-scale investments and growing markets, both lacking by nature in small states. Thus, the specific innovation and industrial policy context of small states build a special focus of the course.

**Credit: 3 ECTS; Grade: yes**

## AUTUMN TERM

### HISTORY OF ECONOMIC POLICY AND THE THEORY OF UNEVEN DEVELOPMENT PROF. ERIK S. REINERT

The course gives an overview of economic and development policies that have made rich countries rich, while at the same time introducing the elements of a theory of uneven economic development. The course discusses policies from the Renaissance, mercantilism and cameralism of continental Europe, and the successful policies of development and industrialization from the rise of the USA, Germany and Japan to the success of Ireland and Finland in the late 20th century

**Credit: 4 ECTS; Grade: yes**

### TECHNICAL CHANGE AND TECHNO-ECONOMIC PARADIGMS PROF. CARLOTA PEREZ

The course discusses the nature, sources and forms of evolution and diffusion of technical change at various levels, the changing windows of opportunity for companies and countries and the impact on socio-economic institutions of the different stages of diffusion of each of the five technological revolutions experienced from the "Industrial Revolution". The object is to understand the current Information Technology Revolution, its impact and the possibilities it opens, within a wider historical framework. The course combines theory with analysis of case studies and involves several exercises that help connect the subject matter with current developments

**Credit: 4 ECTS; Grade: yes**

### FINANCIAL POLICIES, INNOVATION AND ECONOMIC DEVELOPMENT PROF. JAN A. KREGEL

Any economy can be seen as consisting of two different spheres, the financial/monetary economy and the "real economy" of production and distribution of goods and services. This section covers the financial aspects of economic growth and development and the synchronization of the financial and the real economies: The role of a financial sector and a financial policy as necessary scaffolding supporting the real economy and financing innovations. Financial theory of growth and development is presented, as well as the role of financial institutions, central banks, and the Bretton Woods Institutions. Keynesian theory and the mechanisms causing financial fragility and financial crises, like the Asian Crisis and the current one, are explained.

**Credit: 4 ECTS; Grade: yes**