

Techno-Economic Paradigms and Technological Transitions

Subject area: Other subject area

University:	TalTech
Level:	MA1, MA2, MA all years
Teaching mode:	completely online, lectures not time-specific, but seminars at specific time
Instructor(s):	Prof. Carlota Perez; Jaanus Müür (teaching assistant)

Short description

This course provides a set of tools for understanding and analyzing technical change, from the minor and frequent incremental innovations constantly incorporated into products and services, to the major surges of transformation that change the techno-economic paradigm for the whole economy. The course discusses the nature, genesis and different stages of diffusion of techno-economic paradigms, their impact on socio-economic institutions and on the changing windows of opportunity for development.

Full description

https://ois.ttu.ee/portal/page?_pageid=37,674581&_dad=portal&_schema=PORTAL&p_action=view&p_id=116708&p_session_id=80269890&p_public=1&p_mode=1&keel=EN

Learning outcomes

After successfully passing the subject the student:

- is able to survey the relationships between science, technology and economic development from a historical perspective;
- demonstrates the main technological and economic developments from the first scientific and industrial revolutions to the present;
- evaluates the impacts of innovation processes and technological as well as socio-economic changes on individuals and enterprises;
- places current issues and debates about technology-economy relationships into a broader historical perspective;
- outlines the meaning of innovation systems' framework and clustering, and indicates their applicability in policy-design;
- puts the developments in markets and organizations into the context of technology systems and changes;

- demonstrates basic knowledge and skills in solving project-based assignments.

General information

Contact hours per week: 3h 45min per session; 10 sessions in total
Total workload: 156 (in student hours for the whole course)
ECTS credits: 6
Language: English

Course start date: 12 September 2022

Course end date: 14 October 2022

Add. info about start date: The course starts either on the 12th or 19th of September, and ends respectively, on the 7th or 14th of October

Weekly teaching day/time: There will be online classes in the evening times, starting from 17:15

Time zone: CET +1 (Estonia, Israel)

Further information:

Prerequisites: None

Activities and methods: Lectures, Seminars, Self-study

Presence on campus:

Final examination

Form: assignment

Date: 10 July 2022

Location/format: online

Re-sit possibility: yes

Transcript available: end of semester

Add. info/requirements: The course ends with pass or fail and all it requires is:
Attending all ten lectures (if missing 3, fails)
Participating in asking and answering questions (about 10/12 times) and
Making an oral presentation on a topic chosen from a provided list

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

Number of places:	Max 5 students for EuroTeQ students
Minimum participants:	
Internal course code:	MNI5130
Contact:	Jaanus M��ur (teaching assistant) - jaanus.muur@taltech.ee

This course is part of the EuroTeQ Engineering University joint course catalogue 2022/2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.