



# ME2708 Economic Growth: Technology, Investments and Society 7.5 credits

**Ekonomisk tillväxt: teknologi, investeringar och samhälle**

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for ME2708 valid from Spring 2016

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Industrial Management, Technology and Economics

## Specific prerequisites

Completed and documented upper secondary education including documented proficiency in English B or equivalent (TOEFL, IELTS e g) and at least 30 higher education credits in mathematics/economics.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After completed course, the participants shall be able to:

- understand the relationship between technological development and economic growth
- use basic theoretical and mathematical tools to analyze long-term economic growth
- understand and reflect on the four main growth paradigms' implications for economic policy
- use mathematical models to analyze the role of physical capital, human capital, R&D, institutions, entrepreneurship and innovation for economic growth
- analyze the role of natural resources in sustainable economic growth
- read, interpret and assess both basic and highly technical theoretical and empirical research on economic growth

## Course contents

The aim of the course is to give students both broad and deep knowledge of the facts and the theories of economic growth. A special emphasis is placed on the relationship between technological development and economic growth.

The course starts with presenting facts about economic growth and then the four main growth paradigms are introduced: the neoclassical model, the Romer product variety model, the Schumpeterian model and the AK model.

The study of economic growth requires highly theoretical models in order to understand how different factors affect the development of the economy and a large part of the course is devoted to develop students' ability to use mathematics in solving these models. Group work and seminars are essential parts of the course, where students will develop good working skills in using relevant mathematical tools for analyzing economic growth and designing growth policies.

## Course literature

Jones, C. and Vollrath, D. (2013), Introduction to Economic Growth (3rd edition), Norton & Co: UK/USA.

Additional articles

## Examination

- ÖVN1 - Assignments, 1.5 credits, grading scale: P, F
- TEN1 - Exam, 6.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.