

Empirical Productivity Analysis (Advanced)

Module number: 15052

Lecturer: PD Dr. Christian Growitsch and Dr. Heike Wetzel

Location/Room	EWI, Vogelsanger Str. 321, 50827 Köln, KFR I
Time	November 28-29, 2012 and January 16, 2013, 9.00 am – 5.00 pm
Credit Points	6
Type of course	Lectures with integrated computer exercises, group work and student presentations
Course Language	English

1. Objectives

The course will give a theoretical and empirical overview on state-of-the-art efficiency and productivity analysis methods. The students learn to understand the theoretical foundations of empirical productivity analysis techniques and are able to apply them to practical problems.

2. Prerequisites

- Profound understanding of applied microeconomics
- Strong interest in empirical modelling
- Notebook with econometric software R

3. Relevance for study programmes

The course is open to all master and doctoral students.

4. Registration for master students

- The maximum number of participants is 20.
- If you are interested, please send your application including
 - the application form (see <http://www.energie.uni-koeln.de/14126.html>)
 - a transcript of records and
 - your CV

to Dr. Heike Wetzel
Chair of Energy Economics
Vogelsanger Str. 321
50827 Köln

- Only applications submitted by mail or in person during the opening times of the secretariat can be accepted.
- Students who are accepted for the seminar and registered at the examination office receive malus points for not attending the seminar or not handing in the paper.
- **Application deadline:** Friday, October 12, 2012

5. Contents

- Production theory (production functions, cost functions, distance functions, elasticities, duality, etc.)
- Data Envelopment Analysis (input orientation, output orientation, constant returns to scale, variable returns to scale, etc.)
- Stochastic Frontier Analysis (Cobb-Douglas functions, translog functions, unobserved heterogeneity, consideration of environmental factors, etc.)

6. Seminar Format

Lectures with integrated computer exercises, group work and student presentations

7. Working requirements and assessment method

- Active participation in the computer exercises, group work and discussions
- Preparation of a short paper (due January 9, 2013) and presentation (January 16, 2013)

8. Teaching staff

PD Dr. Christian Growitsch, Director of Applied Research at the EWI, and Dr. Heike Wetzel, post-doctoral researcher at the University of Cologne and affiliated researcher at the EWI

9. Co-ordination/Contact

Dr. Heike Wetzel, heike.wetzel@uni-koeln.de