

Curriculum Vitae

Jacob Christiaan Engwerda

Personal Dutch citizen, born June 9, 1958.
Married, three children.

Education Drs. degree (M.S. equivalent) in Mathematics, University of Groningen, 1982;
Thesis 1 : *Adaptive Control of Economic Systems*; advisors J.C. Willems and P.W. Otter.
Thesis 2 : *A Simulation Study on the Effect of Quick Service Cashiers on Waiting Queues for the P.T.T.*; advisor H.G. Sol.
Specialization : 1. Systems and Control Theory; 2. Bestuurlijke Informatica; 3. General Economics; 4. Statistics.
Ph.D. in Mathematics, Eindhoven Technical University, 1988; Dissertation :
Regulation of linear discrete time – varying systems; advisors M.L.J. Hautus and C. Praagman.

Employment

September 1995-present: Associate Professor (UHD) at the Department of Econometrics and O.R., Tilburg University.

September 1988-1995: Assistant Professor (UD) at the Department of Econometrics and O.R., Tilburg University.

September 1984-September 1988: Temporary staff member at the Department of Mathematics, Eindhoven Technical University.

January 1982-August 1984: Naval Research assistant at T.N.O., The Hague.

Research Areas

General: Mathematical systems and control theory.

Specifically: development of system-theoretic methods for control and identification problems in economics. Current emphasis: differential games and its use in modeling coordination problems in monetary unions.

Teaching qualifications: Mathematics and General Economics.

Teaching Experience

Undergraduate courses:

From August 1988 until now lectures calculus, linear algebra, statistics, (dynamic) optimization theory, asset liability management, topology, multifunctions, integrated micro-math to economic and econometric students at various levels at Tilburg University. First semester 2001, 2002, 2003 Introductory Econometrics at mathematical department Utrecht University. Supervision of theses.

From September 1984 until August 1988 instruction classes mathematics (analyses) to first year students of various Departments at the Technical University of Eindhoven.

Graduate courses:

CentER: Refresher course mathematics (1995-2000); Differential equations (2002); Optimal control of dynamical systems (2003,2005,2007);

CentER, NAKE, DISC, Gadjah Mada University, Yogyakarta, ISDG conference (2003-2007): course on "Linear quadratic differential games".

Hogeschool: 1981 half year internship Zernike College Groningen.

Average score course evaluations by students: 3.5 out of 5.

Co-supervisor for the Ph.D. projects of:

Dr. A.L. Rijkeboer (April 1994)

Dr. A.J.T.M. Weeren (September 1995)

Dr. R.C. Douven (September 1995)

Dr. B. van den Broek (June 2001)

Korreferent: Dr. D. Kremer, Aachen University (July 2002)

T. Michalak

Author of lecture notes:

1) Algebra 1 for first year econometric students (262 pp.)

2) Exercises Analyse 1 for first year econometric students (30 pp.)

3) Wiskundige Methoden, statische optimaliseringsmethoden, for second year econometric students (88 pp.)

4) Dynamische Optimalisering for second year economic students (34 pp.)

5) Lecture Notes Refresher Course in Mathematics: Algebra and Analysis for Management Masters students GPE (CentER) (223 pp.)

6) Lecture Notes Asset Liability Management for third year econometric students (42 pp.)

Some main organizational tasks:

1) Member of the daily-board of the econometric department from 89-91. Main task: Treasurer.

2) Member of the daily-board of the econometric department from 96-97. Main task: Vice-chairman.

Research qualifications:

1) Copromotor number of Ph.d. students (see teaching experience)

2) Initiator of externally funded projects:

SOBU: Regeling van Hierarchische Systemen (from 1-6-91 until 1-6-95).

NWO: post-doc project: Lineaire Impliciete Systemen (from 1-3-92 until 1-3-94).

NFWO: Endogenous Coalition Formation in a European Stabilization Policy Setting: Feasibility and Effects (from 1-1-2003 until 1-1-2007)

NFWO: post-doc project: Coalition Creation in Research and Development: Standardization and New Market Creation (from 1-1-2006 until 1-1-2008).

3) Organizer of symposia and special sessions at conferences.

4) Participant of International Projects: "System Identification" Science (EU); "Evolution of rules for a single Market" Cost (EU); Open-loop LQ Game Descriptor Systems and Application on Mon-

etary Cooperation in ASEAN (Indonesia)

5) Member of the "Graduate School in Economics" (CentER, Tilburg University) and of the "Dutch Institute of Systems and Control Theory" (DISC).

6) Author Scientific books (see Appendix).

7) Publications in various international scientific journals (see Appendix).

8) Referee of various international scientific journals (see Appendix).

9) Presentation of papers and participation in international workshops and conferences.

External Recognition:

1) Top-20 economist in 1994, 1995; Top-40 economist in 2005.

2) Invited speaker for tutorial on ISDG (2006) conference of the International Society of Dynamic Games.

3) Invited speaker SEAMS (2007) conference on Mathematics and its Applications.

4) Invited speaker for tutorial on Linear Quadratic Differential Games, Gadjah Mada University (2007).

5) Invited speaker for COMISEF tutorial on Complementary Skills and Optimization Methods (2008).

6) Invited speaker international conference on Differential Equations and Topology dedicated to the centennial anniversary of L.S. Pontryagin (2008).