

2024

Advanced Mathematics (TIC10051)

Praktische informatie

Cursuscode

TIC10051

Studiepunten

4 ECTS

Voertaal

Engels

Thema's

- MSc of Philosophy in Economics (research)
- Research Master Business Data Science (joint degree)
- Tinbergen Institute Research Master in Economics joint degree

Cursusbeschrijving

Inhoud

Instructors: Dr. ir. F.O.O. Wagener (UvA)

Short subject description:

This course is aimed at students with a quantitative background, like econometrics, mathematics, physics etc.

Course contents:

Students will learn to work with the main results of the following areas:

1. Real analysis, especially different notions of convergence
2. Fixed point theorems
3. Differential equations
4. Static optimization
5. Calculus of variations and optimal control
6. Discrete time dynamic optimization

Leerdoelen

Learning goals for this course:

Being able to work with main results of the following areas:

1. Real analysis, especially different notions of convergence;
2. Fixed point theorems;
3. Dynamical systems;
4. Static optimization;
5. Calculus of variations and optimal control;
6. Discrete time dynamic optimization.

Studiematerialen

Verplicht materiaal

- Reader

Lecture notes, to be distributed at the beginning of the course.

Ingangseisen

Vereiste voorkennis

Only accessible for Master's students who are registered at TI. For further information please contact Tinbergen Institute

<https://www.tinbergen.nl>

Ingangseisen cursusinschrijving

Je moet voldoen aan de volgende eisen

- Ingeschreven voor één van de volgende opleidingen
 - Economics (Research)
 - M.Phil. in Economics
 - Research Master Business Data Science (joint degree)
 - Tinbergen Institute Research Master in Economics (JD)

Werkvormen

Werkvormen

- Lecture

Onderwijsperiode

Inschrijfperiodes

- Blok TI-BLOK1
 - Inschrijfperiode
1 augustus 2024 t/m 20 oktober 2024 23:59
 - Uitschrijfperiode
t/m 20 oktober 2024 23:59
 - Start onderwijs
2 september 2024

Docenten

Contactpersoon

- KP Mc Grane

Coördinator

- C Deurloo, MSc
- KP Mc Grane

Practicumdocent

- N van den Heuvel

Toetsen

Toetsvorm

Sit-in written examination (85%) and 6 individual assignments (15%)

Tentamenstof

Pen, paper, ruler, compass, eraser

Toetsen (resultaat in OSIRIS)

- Written examination

Weging

100

Toetsinschrijving

Written examination

- Blok TI-BLOK1