

# Introduction to the M.Sc. Applied Economics and Data Science

Orientation Week, 6. October 2025

Responsible for the degree program

Prof. Dr. Jürgen Bitzer

and

Dr. Bernhard C. Dannemann



### Structure of the program

- Relatively new master program (start 2021/22)!
- Master program (4 semesters, 120 CP)
- Degree: Master of Science (M.Sc.)
- 25 places in degree program, about 350 applications
- Opportunity for a term abroad in 2nd or 4th term
- Mentor program



### Study plan

| 4. Semester<br>Summer term | Master Thesis 24 CP                  |   |   |   | Research<br>Colloquium<br>6 CP |
|----------------------------|--------------------------------------|---|---|---|--------------------------------|
|                            | Possibility for a term abroad        |   |   |   |                                |
| 3. Semester<br>Winter term | wir873 Applied Economics 6 CP        | wir895<br>Industrial Organization<br>6 CP       | Specialization II* 6 CP                       | Specialization III* 6 CP                  | Data Science III*<br>6 CP      |
| 2. Semester<br>Summer term | Economics II* 6 CP                   | Economics III* 6 CP                             | Specialization I* 6 CP                        | Empirical Methods II* 6 CP                | Data Science II*<br>6 CP       |
|                            | Possibility for a term abroad        |   |   |   |                                |
| 1. Semester<br>Winter term | Economics I* 6 CP                    | wir874 Advanced Microeconomics 6 CP             | wir894 Econometrics of Policy Evaluation 6 CP | Empirical Methods I* 6 CP                 | Data Science I*<br>6 CP        |
| _                          |                                      |   |   |   |                                |
|                            | Economics Modules,<br>in total 36 CP | Empirical Methods<br>Modules,<br>in total 18 CP | Data Science modules,<br>in total 18 CP       | Specialization Modules,<br>in total 18 CP |                                |

Please note that the study plan is nonbinding and for guidance only. It illustrates the recommended course of studies based on the legally binding examination regulations (2023).



### Study plan

#### (1) Economics Modules (in total 36 credit points)

wir874 Advanced Microeconomics Wt (compulsory)

wir895 Industrial Organization Wt (compulsory)

wir873 Applied Economics Wt (compulsory)

wir760 Computable General Equilibrium Analysis Wt (elective)

wir889 Applied Environmental Economics St (elective)

wir893 Development Economics St (elective)

wir821 International Trade, Production and Change St (elective)

wir823 International Finance and Exchange Rate Economics Wt (elective)

wir901 Environmental Economics Wt (elective)

wir890 Climate Economics Wt (elective)

wir878 Public Economics and Market Design St (elective)

#### (3) Data Science modules (in total 18 credit points)

inf040 Introduction to Data Science irregular interval (elective)

inf604 Business Intelligence I Wt (elective)

inf607 Business Intelligence II St (elective)

inf535 Computational Intelligence I Wt (elective)

inf536 Computational Intelligence II St (elective)

inf962 Fundamental Competences in Computing Science III: Algorithms and

computational Problem Solving Wt (elective)

#### (2) Empirical Methods Modules (in total 18 credit points)

wir894 Econometrics of Policy Evaluation Wt (compulsory)

wir875 Forecasting Methods Wt (elective)

wir892 Computational Economics St (elective)

wir897 Spatial Econometrics St (elective)

wir888 Applied Econometrics Using GIS Techniques Wt (elective)

wir887 Advanced Econometrics St (elective)

wir891 Complex Data Analysis St (elective)

#### (4) Specialization Modules (in total 18 credit points)

wir896 Operations Management Wt, every two years (elective)

wir899 Supply Chain Management Wt, every two years (elective)

wir921 Sustainable Supply Chain Management St (elective)

wir842 Banking St (elective)

wir843 Financial Risk Management St (elective)

wir886 Digital Transformation: Strategies and Sustainability St (elective)

inf510 Energy Information Systems Wt (elective)

wir806 Information Technology Law Wt (elective)

wir898 Strategic Sustainability Management St or Wt (elective)

wir751 Study Abroad I \*\*

wir752 Study Abroad II \*\*

wir753 Study Abroad III \*\*

wt: module is regularly offered in the winter terms

st: module is regularly offered in the summer terms

<sup>\*\*:</sup> modules for recognition of examinations abroad (cf. examination regulations)



### Information on the study plan

- 1. Sticking to the study plan is reasonable from an organizational perspective, however, it is not a must
- 2. Specialization I-III should be used to create an individual profile:
  - 1. For future jobs,
  - 2. for personal development,
  - 3. for a Ph.D.
- 3. A term abroad can be realized most simply in the 2nd or 4th term.



### Organization of exams

- 1. Binding registration to exams via the e-learning platform stud.IP
- 2. Each module and the corresponding exam is held once a year
- 3. You have maximum three attempts to pass a module. If you are registered and do not show up, the attempt counts as failed if you present no medical certificate.

For further information please visit:

https://uol.de/en/course-of-study/exams/applied-economics-and-data-science-master-619



# Information and advice on the degree program

Website of the University ⇒ Studies ⇒ Study decision ⇒ Degree programmes ⇒ Master's Programme ⇒ Applied Economics and Data Science

- Advisory services for students:
  - https://uol.de/en/students/service-advice/students
- Subject Advisory Service Business Administration, Economics and Law
  - Dr. Mareike Junker-Michel (<u>fsb.wire@uni-oldenburg.de</u>)



### **Departmental Consultation for International Studies**

Would you like to build intercultural competence, to collect international experience and to **go abroad** during your second cycle studies in Applied Economics and Data Science?

We will find a way (out)

advisory service hours for students: every Tuesday from 10.00 to 12.30

#### some first suggestions:

- o follow informative meetings for new students immediately in fall 2025
- o subscribe to the newsletter of the central International Office "study abroad" now
- o join StudIP-study group "UOL International Students Economics" in October 2025
- o seek individual advice and benefit from UOL and Departmental networking early on
- keep in mind the closing date for applications for international exchange programmes and grants

**Kerstin Groscurth** 

phone +49 (0)441/798-4146

kerstin.groscurth@uol.de

https://uol.de/en/study-in-oldenburg





### Mentor program

- Discussion of problems as well as hints and tricks for the M.Sc. A&D
- Two meetings per term with all students of one cohort of the M.Sc. A&D
- One pub meeting with all students of the M.Sc. A&D
- Information on the meeting can be found on studIP.
  Sign up to the lecture "M. Sc. Applied Economics and
  Data Science mentor program, cohort 5 (WS 25/26)"



# Mentor program: Appointments!

First mentor program meeting:

Thursday, 30<sup>th</sup> October 2025, 10 o'clock, room A5 1-158!

 Pub meeting: Tuesday, 11<sup>th</sup> November 2025 at the pub "Patio" (Bahnhofstr. 11, 26122 Oldenburg), starting at 19 o'clock



### **Student representation**



# Fachschaftsrat Wirtschafts- und Rechtswissenschaften (student council business, economics and law)

- 1. Participation and representation in University committees (e.g. commission of study affairs, department and faculty board)
- 2. Collection of problems during the study life and mediation of solutions
- 3. Student activities (parties, O Week etc.)
- 4. <u>www.FSR-WiRe.de</u> or Instagram





## **Accomodation Support**

- The university (or the Studentenwerk) are unable to meet the full demand for accommodation
  - The International Office offers assistance and advice for finding an apartment or an accommodation
  - WHEN: Weekly sessions, every Wednesday
  - **FORMAT:** In-person and online options available
  - **WHERE:** IKT and online: https://webconf.uol.de/rooms/3rf-ltm-f3r-evp/join
  - WHEN: 18 20 o'clock





- Personal responsibility is very high studying the degree program!!!
  - It is your own responsibility to visit the modules
  - Continuous learning

**Networking with other students** ⇒ **learning groups** 

- Choice of modules to build a coherent skill profile instead of looking for the module where you easily get good marks!!!
- Mastering challenges



### Individual planning of the course of studies: three examples

### 1. Example

#### 1. Winter term

wir874 Advanced Microeconomics (compulsory) 6 CP

wir894 Econometrics of Policy Evaluation (compulsory) 6 CP

inf962 Fundamental Competences in Computing Science III: Algorithms and computational Problem Solving (elective)

inf535 Computational Intelligence I (elective) 6 CP

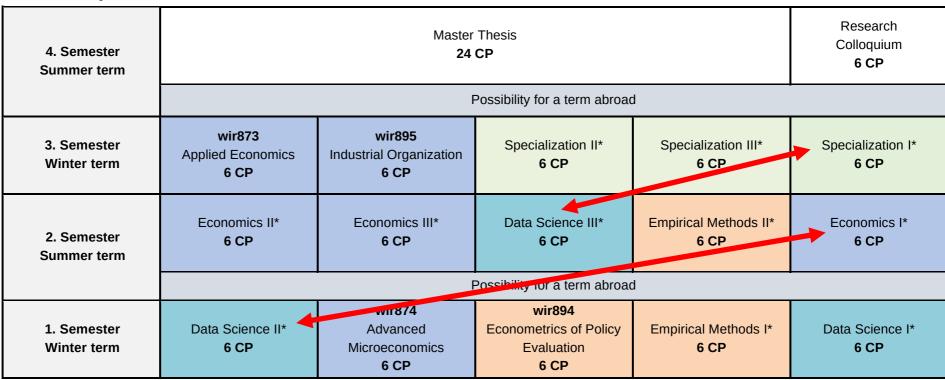
wir875 Forecasting Methods (elective) 6 CP



### Individual planning of the course of studies: three examples

### 1. Example

Dr. Bernhard C. Dannemann





### Individual planning of the course of studies: three examples

### 2. Example

#### 1. Winter term

wir874 Advanced Microeconomics (compulsory) 6 CP

wir894 Econometrics of Policy Evaluation (compulsory) 6 CP

inf535 Computational Intelligence I (elective) 6 CP

inf510 Energy Information Systems (elective)

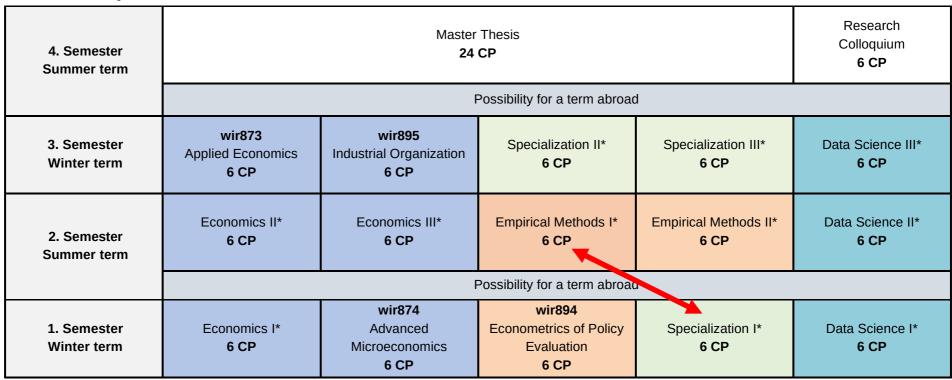
wir823 International Finance and Exchange Rate Economics (elective) 6 CP



### Individual planning of the course of studies: three examples

### 2. Example

Dr. Bernhard C. Dannemann





### Individual planning of the course of studies: three examples

### 3. Example

#### 1. Winter term

wir874 Advanced Microeconomics (compulsory) 6 CP

wir894 Econometrics of Policy Evaluation (compulsory) 6 CP

inf535 Computational Intelligence I (elective) 6 CP

wir823 International Finance and Exchange Rate Economics (elective) 6 CP

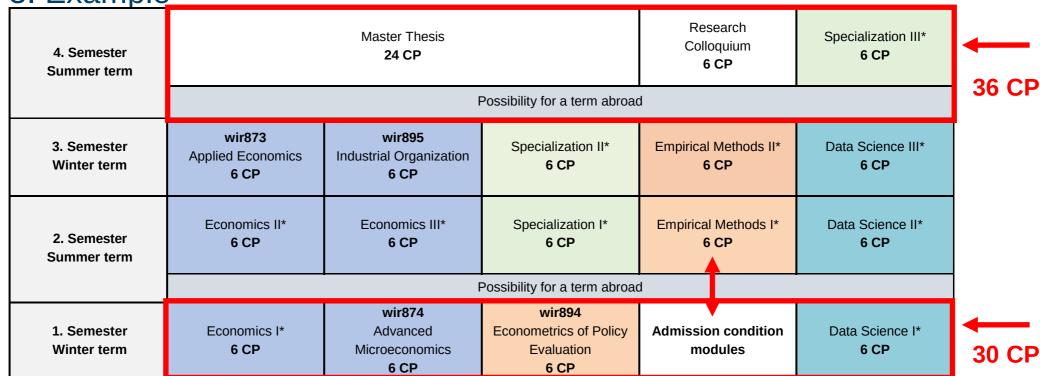
Admission condition modules\*

\* They have to be bachelor modules!!!



### Individual planning of the course of studies: three examples

3. Example





- Email Account
  - forename.surname@uol.de
  - You can link it with your private email account
  - First communication channel for official communication, check regularly!

 Todays presentation will be uploaded in stud.IP (Mentor program cohort 5) in the files section



• If you are facing problems with study organization, get advice or help as early as possible!

- Important things to keep in mind:
  - You need to clear admission conditions in time for re-registration!
  - Not paying the semester fee on time can get you exmatriculated from the program!
  - The study plan is a guideline, but leaves leeway. Nevertheless, keep your study progress in mind!



# Have fun and good luck!!!

Questions?

E-Mail: <u>bernhard.dannemann@uol.de</u>

Room: A5-0-005