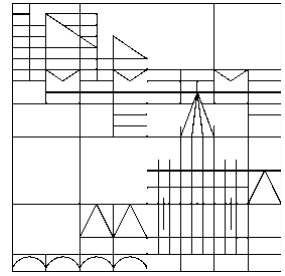


University of Konstanz
Faculty of Law, Economics and Politics
Department of Economics



Course Catalogue

**for the
Master's Programme
in Social and
Economic Data
Science**

**First Year/Second
Year**

**Winter Semester
2019/2020**

Version: 09/08/2019

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Course Advice for Students of the Master's Programme in Social and Economic Data Science

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Website: www.uni-konstanz.de/seds
Office Hours: Tuesday, Thursday, 10:00 – 12:00

Student Course Guidance:
Alessia Invernizzi
Email: seds.msc@uni-konstanz.de

Dates of the Winter Semester 2019/2020

Welcome Programme for
new Master's students Monday, 14th October 2019, 14:00
Lectures begin: Monday, 21st October 2019
Lecture-free period: Friday, 23rd December 2019 – Friday, 3rd January 2019
Lectures end: Friday, 15th February 2019

Registration period of the Department of Economics:

Seminar registration period for
Winter Semester 2019: Tuesday, 25th June - Monday, 01st July 2019

Seminar registration period for
Summer Semester 2020: Tuesday, 21st January – Monday, 27th January 2020

Exam Registration period: Tuesday, 21st January – Monday, 27th January 2020
Examination period I: Wednesday, 12th February – Saturday, 29th February 2020

Exam Registration period: Tuesday, 17th March – Monday, 23th March 2020
Examination period II: Saturday, 28th March– Saturday, 18st April 2020

<https://www.wiwi.uni-konstanz.de/en/advice-and-service/examination-office/>

Registration period of the Department of Politics and Public Administration:

Exam and Seminar
Registration period I: 01.12.2019 - 15.01.2020

Registration period II: tba

Examination Dates: <https://www.polver.uni-konstanz.de/service/formalitaeten/fristen-und-termine/>

Exam Registration Periods of the Department of Computer and Information Science

Registration: Via StudIS or with the offline-registration-form within the registration period
Reg. Period I (lectures): tba
Reg. Period II (lectures): tba
Examination dates, etc: <https://www.informatik.uni-konstanz.de/en/service-and-support/examinations/exam-registration/>

Exam Registration Periods of the Department of History and Sociology

Registration period (StudIS): Summer semester: 01st May – 15th June
Winter semester: 01st December – 15th January
<https://www.soziologie.uni-konstanz.de/en/study/ba-sociology/study-organisation/deadlines/>

Exam Registration Periods of the Department of Mathematics and Statistics

Registration: Students can apply up to one week before the exam.
Examination office: www.mathematik.uni-konstanz.de/beratung-und-service/pruefungsverwaltung/

Exam Registration Periods of the Department of Psychology

Examination dates: <https://www.psychologie.uni-konstanz.de/beratung-und-service/formulare-und-downloads/bachelor/>
Examination office (Lydia Dreher): <https://www.psychologie.uni-konstanz.de/beratung-und-service/ansprechpartner/>

**PREPARATION COURSES for new master's students
(free of charge, no registration necessary)**

Department of Economics:

PREP 1: Advanced Econometrics (Duration: 5 days)

W. Pohlmeier

Tuesday, 10/10/19, 13:30-16:45, F 420
Wednesday, 11/10/19, 13:30-16:45, G 227
Thursday, 14/10/19, 13:30-16:45, G 201
Friday, 15/10/19, 13:30-16:45, G 201
Saturday, 16/10/19, 13:30-16:45, G 201

See ZEuS: <https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml? flowId=detailView-flow&unitId=4001&periodId=180>

PREP 2: Quantitative Methods in Economics (Duration: 5 days)

J. Alasalmi

Thursday, 17/10/19, 10:00 - 16:45, K 503
Friday, 18/10/19, 10:00 - 16:45, K 503
Monday, 21/10/19, 11:45 - 16:45, G 227a
Tuesday, 22/10/19, 11:45 - 16:45, G 227a
Wednesday, 23/10/19, 11:45 - 16:45, G 227a

See ZEuS: <https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml? flowId=detailView-flow&unitId=4003&periodId=180>

Department of Computer Sciences:

Kompaktkurs Mathematik 1

S. Kosub

(Duration 5 days, german only)

See ZEuS: <https://zeus.uni-konstanz.de/hioserver/pages/cm/exa/coursemanagement/basicCourseData.xhtml? flowId=searchCourseNonStaff-flow& flowExecutionKey=e11s4>

Java Crash Course (Duration 3 days)

F. Götz-Hahn

Time and room t.b.a.

First Semester

1. Introduction to Computational Methods for the Social Sciences

Introduction to Computation for the Social Sciences (9 ECTS)

K. Donnay

Monday, 11:45 – 13:15, F 428

Tutorial:

Wednesday, 10:00 – 11:30, D 301

Please note: In preparation for “Introduction to Computation for the Social Sciences” we advise all new MSc SEDS Students to take the Python Block Course in October (see page 8).

2. Foundations of Data Science

Computer Science

Information Visualization II (6 ECTS)

D. Keim / J. Fuchs

Thursday, 10:00 – 11:30, D 247

Tutorial:

Thursday, 15:15 – 16:45, D 247

Data Mining: Basic Concepts (6 ECTS)

J. Fuchs / D. Keim

Tuesday, 11:45 – 13:15, R 511

Tutorial:

Group A: Thursday, 10:00 – 11:30, L 601

Group B: Thursday, 13:30 – 15:00, L 601

Analyse und Visualisierung von Informationen (9 ECTS)

D. Keim / J. Fuchs

Monday, 13:30 – 15:00, A 703

Tuesday, 11:45 – 13:15, A 701

Tutorial:

Group A: Thursday, 10:00 – 11:30, L 601

Group B: Thursday, 13:30 – 15:00, L 601

Please note: “**Analyse und Visualisierung von Informationen**” (german only) is an alternative to “Information Visualization II” **and** “Data Mining: Basic Concepts”

Konzepte der Informatik (6 ECTS)

B. Pampel

Monday, 13:30 – 15:00, A 701

Tuesday, 13:30 – 15:00, A 701

Tutorial:

Six groups, see [ZEUS](#)

Only in combination with

Programmierkurs I (Imperative Sprache) (6 ECTS)

J. Fuchs

Tuesday, 15:15 – 16:45, A 703

Tutorial:

Six groups, see [ZEuS](#)

Mathematics

Diskrete Mathematik und Logik (9 ECTS)
Wednesday, 10:00 – 11:30, R 513
Thursday, 10:00 – 11:30, R 513

S. Kosub

Tutorial:
Six groups, see [ZEuS](#)

Lineare Algebra I (6+3 ECTS)
Monday, 10:00 – 11:30, R 712
Thursday, 10:00 -11:30, R 712

S. Kuhlmann

Tutorial: tba

Mathematik für Wirtschaftswissenschaftler I (9 ECTS)
Monday, 08:15 – 09:45, A 600
Thursday, 10:00 – 11:30, A 600

J. Schropp

Tutorial:
15 Groups, see [ZEuS](#)

Datenmathematik

S. Kosub

Tuesday, 15:15 – 16:45, R 712
Thursday, 13:30 – 15:00, R 513

Tutorial:

4 Groups, see [ZEuS](#)

Social Science Methods

Introduction to Survey Methodology (6+3 ECTS)
Thursday, 11:45 – 13:15, A 702

P. Selb

Tutorial:
Wednesday, 11:45 – 13:15, C 358

Research Design I: Research Design and Causal Inference (9 ECTS)
Tuesday, 11:45 – 13:15, R 712

P. Selb

Empirical Research Methods (9 ECTS)
Tuesday, 15:15 – 16:45, A 600
Wednesday, 8:15 - 9:45, A 600

S. Shikano

Empirie: Quantitative Methoden (6 ECTS)
Thursday, 15:15 – 16:45, A 701

T. Wöhler

Tutorial:
5 groups, see [ZEuS](#)

Methoden I (5 ECTS)
Monday, 13:30 – 15:00, R 711

UD. Reips

Tutorial:
Monday, 15:15 - 16:45, R 711

Statistics

Statistics I (6 ECTS)

Tuesday, 11:45 – 13:15, R 513

Tutorial:

Wednesday, 11:45 – 13:15, R 513

Y. Shevchenko

Third Semester

1. Advanced Methods: Computer Science

Konzepte der Programmierung (6 ECTS)

Tuesday, 08:15 – 9:45, A 702

Wednesday, 08:15 – 9:45, A 703

M. Grossniklaus

Tutorial:

4 Groups, see [ZEuS](#)

Only in combination with

Programmierkurs III (Deklarative Sprache) (6 ECTS)

Tuesday, 13:30 – 15:00, A 704

L. Wörteler

2. Advanced Methods: Statistics

Advanced Econometrics (10 ECTS)

Wednesday, 08:15 – 09:45, A 704

Friday, 08:15 – 09:45, A 704

W. Pohlmeier

Please note: the tutorials take place before the first lecture!

Tutorial:

Group A:

Monday, 15:15 – 16:45, G 300, begins 21/10/2019

L. Shkoza /
G. Fechteler /
C. Mücher

Group B:

Tuesday, 24/10/19, 13.30-15.00, G 227

From Tuesday 28/10/19: 13.30-15.15, G 227a

L. Shkoza /
G. Fechteler /
C. Mücher

3. Programming and Scripting

Python Block Course (6 ECTS)

Monday, 14/10/2019, 10:00 – 13:15, G 227a

Tuesday, 15/10/2019, 10:00 – 13:15, G 227a

Wednesday, 16/10/2019, 10:00 – 13:15, G 227a

Thursday, 17/10/2019, 10:00 – 13:15, G 227a

Friday, 18/10/2019, 10:00 – 13:15, G 227a

S. Scholz / et al.

Please note:

This course is recommended as preparation for “Introduction to Computation for the Social Sciences”. The obligatory registration for this course will be open from 02/09/2019 – 20/09/2019. More details t.b.a in due course.

Data Analysis with R (7 ECTS)

Thursday, 08:15 – 09:45, BS 217

M. Herrmann

Datenanalyse mit R (7 ECTS)

Thursday, 10:00 – 11:30, BS 217

M. Herrmann

Programmierkurs I (Imperative Sprache) (6 ECTS)

Tuesday, 15:15 – 16:45, A 703

J. Fuchs

Tutorial:

Six groups, see [ZEuS](#)

Programmierkurs III (Deklarative Sprache) (6 ECTS)

Tuesday, 13:30 – 15:00, A 704

L. Wörteler

4. Social Science Applications

Computational Social Science Seminar (6 ECTS)

Monday, 10:00 – 11:30, G 306

K. Donnay

Timetable Foundations of Data Science Winter Semester 2019/2020

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:15 – 9:45	Optional German Course Mathematik für Wirtschaftswissenschaftler I (L) / Schropp		Empirical Research Methods (L) / Shikano	Optional German Course	
10:00 – 11:30	Lineare Algebra (L) / Kuhlmann		Introduction to Computation for the Social Sciences (T) / Donnay Diskrete Mathematik und Logik (L) / Kosub	Information Visualization II (L) / Keim Data Mining Basic Concepts (T) / Fuchs/Keim Group A Analyse und Visualisierung (T) / Group A Diskrete Mathematik und Logik (L) / Kosub Lineare Algebra (L) / Kuhlmann Mathematik für Wirtschaftswissenschaftler I (L) / Schropp	
11:45 – 13:15	Introduction to Computation for the Social Sciences (L) / Donnay	Data Mining Basic Concepts (L)/ Fuchs/Keim Analyse und Visualisierung von Informationen (L) / Keim Research Design I: Research Design and Causal Inference (L) / Selb Statistics I (L) / Shevchenko	Introduction to Survey Methodology (T) / Selb Statistics I (T) / Shevchenko	Introduction to Survey Methodology (L) / Selb	
13:30 – 15:00	Analyse und Visualisierung von Informationen (L) / Keim Konzepte der Informatik (L) / Pampel Methoden I (L) / Reips	Konzepte der Informatik (L) / Pampel		Datenmathematik (L) / Kosub Data Mining Basic Concepts (T) / Fuchs/Keim Group B Analyse und Visualisierung (T) / Group B	

15:15 – 16:45	Methoden I (T) / Reips	Programmierkurs I (L) / Fuchs Datenmathematik (L) / Kosub Empirical Research Methods (L) / Shikano		Information Visualization II (T) / Keim Empirie: Quantitative Methoden (L) / Wöhler	
17:00 – 18:30					
18:45 – 20:15					

L = Lecture, T = Tutorial, S = Seminar

Timetable Advanced Modules Winter Semester 2019/2020

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:15 – 9:45		Konzepte der Programmierung (L) / Grossniklaus	Advanced Econometrics (L) / Pohlmeier Konzepte der Programmierung (L) / Grossniklaus	Data Analysis with R (S) / Herrmann	Advanced Econometrics (L) / Pohlmeier
10:00 – 11:30	Computational Social Science Seminar (S) / Donnay			Datenanalyse mit R (S) / Herrmann	
11:45 – 13:15					
13:30 – 15:00		Programmierkurs III (L) / Wörteler			
15:15 – 16:45		Programmierkurs I (L) / Fuchs			
17:00 – 18:30					
18:45 – 20:15					

L = Lecture, T = Tutorial, S = Seminar

