Course Catalogue

for the Master’s Programme in Social and Economic Data Science

First Year/Second Year

Winter Semester 2018/2019

Version: 19/10/2018
Course Advice for Students of the
Master's Programme in Social and Economic Data Science

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Office Hours: Tuesday, Thursday, 10:00 – 12:00

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

Dates of the Winter Semester 2018/2019

Welcome Programme for new Master’s students: Monday, 15th October 2018
Lectures begin: Monday, 22nd October 2018
Lecture-free period: Friday, 22nd December 2018 – Friday, 5th January 2019
Lectures end: Saturday, 16th February 2019

Registration period of the Department of Economics:

Seminar registration period for Summer Semester 2019: Tuesday, 22nd January – Monday, 28th January 2019
Exam Registration period: Tuesday, 22nd January – Monday, 28th January 2019
Examination period I: Wednesday, 13th February – Saturday, 02nd March 2019
Exam Registration period II: Tuesday, 19th March – Monday, 25th March 2019
Examination period II: Saturday, 30th March – Thursday, 18th April 2019

Registration periods of the Department of Politics and Public Administration:

Exam registration period: 01/12/2018 – 15/01/2019
Exam registration period II: 16/03/2019 – 20/03/2019
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): 01/12/2018 – 04/02/2019
Reg. Period II (lectures): 18/03/2019 – 25/03/2019
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.geschichte.uni-konstanz.de/en/study/mathe-history/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 (Elke Stepczynski): 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 A. Simmet
(Duration 5 days)

Wednesday, 10/10/2018, 13:30 – 16:45, room tba
Thursday, 11/10/2018, 13:30 – 16:45, room tba
Friday, 12/10/2018, 13:30 – 16:45, room tba
Monday, 15/10/2018, 13:30 – 16:45, room tba
Tuesday, 16/10/2018, 13:30 – 16:45, room tba

See ZEuS: https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml?_flowId=showEvent-flow&unitId=4001&termYear=2018&termTypeValueld=2&navigationPosition=studiesOffered%2CsearchCourses

Department of Computer Sciences:

Brückenkurs Mathematik S. Kosub
(Duration 5 days, geman only)
See ZEuS: https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml?_flowId=showEvent-flow&unitId=4879&termYear=2018&termTypeValueld=2&navigationPosition=studiesOffered,searchCourses

Java Crash Course F. Götz-Hahn
(Duration 3 days)
See ZEuS: https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml?_flowId=showEvent-flow&unitId=4879&termYear=2018&termTypeValueld=2&navigationPosition=studiesOffered,searchCourses
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: K. Donnay
Wednesday, 10:00 – 11:30, D 247

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 7 or:
https://zeus.uni-konstanz.de:443/hioserver/pages/startFlow.xhtml?_flowId=showEvent-flow&unitId=18857&termYear=2018&termTypeValueId=2)

2. Foundations of Data Science

Computer Science

Information Visualization I (6 ECTS) D. Keim
Monday, 13:30 – 15:00, C 358
Tutorial:
Thursday, 11:45 – 13:15, C 358

Data Mining: Basic Concepts (6 ECTS) J. Fuchs
Tuesday, 15:15 – 16:45, R 511
Tutorial:
Thursday, 10:00 – 11:30, C 358 t.b.a.

Analyse und Visualisierung von Informationen (9 ECTS) D. Keim
Monday, 10:00 -11:30, A 702
Tuesday, 13:30 – 15:00, R 511
Tutorial:
Wednesday, 13:30 – 15:00, M 630 t.b.a.
Please note: “Analyse und Visualisierung von Informationen” is an alternative for “Information Visualization I” and “Data Mining: Basic Concepts" (in german, last time during the wintersemester 2018/19):

Konzepte der Informatik (6 ECTS) B. Pampel
Monday, 13:30 – 15:00, R 611
Tuesday, 13:30 – 15:00, A 701
Tutorial:
Six groups, see ZEUS

Only in combination with

Programmierkurs I (6 ECTS) J. Fuchs
Tuesday, 10:00 – 11:30, R 611
Tutorial:
Six groups, see ZEuS
Mathematics

Diskrete Mathematik und Logik (9 ECTS)   S. Kosub
Wednesday, 10:00 – 11:30, R 513
Thursday, 10:00 – 11:30, R 513
Tutorial:
Six groups, see ZEuS

Lineare Algebra I (6+3 ECTS)   O. Schnürer
Monday, 10:00 – 11:30, R 712
Thursday, 10:00 -11:30, R 711
Tutorial: t.b.a.

Mathematik für Wirtschaftswissenschaftler I (9 ECTS)   J. Schropp
Monday, 08:15 – 09:45, A 600
Thursday, 10:00 – 11:30, A 600
Tutorial:
15 Groups, see ZEUS

Social Science Methods

Introduction to Survey Methodology (6 + 3 ECTS)   P. Selb
Thursday, 11:45 – 13:15, A 702
Tutorial:
Wednesday, 11:45 – 13:15, E 402

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

Empirical Research Methods (9 ECTS)   S. Shikano
Tuesday, 17:00 – 18:30, A 600
Wednesday, 10:00 – 11:30, A 600

Empirie: Quantitative Methoden I (6 ECTS)   T. Hinz
Monday, 15:15 – 16:45, M 629
Tutorial:
5 groups, see ZEuS

Methoden I (5 ECTS)   UD. Reips
Monday, 13:30 – 15:00, R 711
Monday, 15:15 - 16:45, R 711

Statistics

Statistik I (6 ECTS)   V. Véteinsdóttir
Tuesday, 11:45 – 13:15, R 513
Tutorial:
Wednesday, 11:45 – 13:15, R 513
Third Semester

1. Advanced Methods: Computer Science

   Algorithmen und Datenstrukturen and Programmierkurs III (9+6 ECTS)   F. Schreiber
   Monday, 15:15 – 16:45, A 702
   Tuesday, 15:15 – 16:45, A 702

   Tutorial:
   4 groups, see ZEuS

   Programmierkurs III   M. Waldvogel
   Friday, 13:30 – 15:00, R 712

   Tutorial:
   2 groups, see ZEU

2. Advanced Methods: Statistics

   Advanced Econometrics (10 ECTS)   W. Pohlmeier
   Wednesday, 08:15 – 09:45, A 704
   Friday, 08:15 – 09:45, A 704

   Tutorial:
   3 groups, see ZEuS

   Advanced Time Series Analysis (8 ECTS)   R. Brüggemann
   Monday, 10:00 – 11:30, F 425
   Friday, 08:15 – 09:45, F 425

   Tutorial:
   Friday: 08:15 – 09:45, F 425   R. Braun

3. Programming and Scripting

   Python Block Course (6 ECTS)   A. Berg / MP. King
   Monday, 15/10/2018, 10:00 – 13:15, G 309
   Tuesday, 16/10/2018, 10:00 – 13:15, G 309
   Wednesday, 17/10/2018, 10:00 – 13:15, G 309
   Thursday, 18/10/2018, 10:00 – 13:15, G 309
   Friday, 19/10/2018, 10:00 – 13:15, G 309

   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 in ZEuS from 01/09/2018 –
   10/10/2018.

   Introduction to Visualization with D3 (3 ECTS)   K. Donnay/
   Monday, 22/10/2018, 10:00 – 11:30, L 829
   Monday, 29/10/2018, 10:00 – 11:30, L 829
   Monday, 05/11/2018, 10:00 – 11:30, L 829
   Monday, 12/11/2018, 10:00 – 11:30, L 829
   Monday, 19/11/2018, 10:00 – 11:30, L 829
   Monday, 26/11/2018, 10:00 – 11:30, L 829

   L. Abdullayeva
Data Analysis with R (7 ECTS)  
Thursday, 08:15 – 09:45, BS 217

Datenanalyse mit R (7 ECTS)  
Thursday, 10:00 – 11:30, BS 217

Programmierkurs I (6 ECTS)  
Tuesday, 10:00 – 11:30, R 611

Tutorial:  
Six groups, see ZEuS

Programmierkurs III  
Friday, 13:30 – 15:00, R 712

Tutorial:  
2 groups, see ZEUS

4. Social Science Applications

Computational Social Science Seminar (6 ECTS)  
Tuesday, 10:00 – 11:30, F 428

K. Donnay
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<td>Programmierkurs I (L) / Fuchs</td>
<td>- Diskrete Mathematik und Logik (L) / Kosub</td>
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<td>Analyse und Visualisierung von Informationen (L) / Keim</td>
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<td>- Empirical Research Methods (L) / Shikano</td>
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<td>- Statistik I (T) / Véteinsdóttir</td>
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