

**UNIVERSITY OF  
LUCERNE**

**FACULTY OF HUMANITIES AND  
SOCIAL SCIENCES**



# **COURSE OFFERING**

**LUCERNE MASTER IN COMPUTATIONAL  
SOCIAL SCIENCES (LUMACSS)  
SPRING SEMESTER 2024**



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## Programme Director and Co-Initiators

<b>LUMACSS Programme Director</b>	<b>Prof. Dr. Alexander H. Trechsel</b> <a href="mailto:alexander.trechsel@unilu.ch">alexander.trechsel@unilu.ch</a> Professor of Political Science and Political Communication	3.B12 041 229 55 90
<b>LUMACSS Co-Initiators</b>	<b>Prof. Dr. Sophie Mützel</b> <a href="mailto:sophie.muettel@unilu.ch">sophie.muettel@unilu.ch</a> Professor of Sociology with Emphasis on Media and Social Networks	3.A33 041 229 55 63
	<b>PD Dr. Mira Burri</b> <a href="mailto:mira.burri@unilu.ch">mira.burri@unilu.ch</a> Senior Lecturer Faculty of Law	4.A31 041 229 53 71
	<b>Dr. Andrea De Angelis</b> <a href="mailto:deangelis@ipz.uzh.ch">deangelis@ipz.uzh.ch</a> Senior Researcher and Lecturer Department of Political Science	

## Administration and Programme Coordinator

<b>Department Address</b>	<b>Department of Political Science</b> Frohburgstrasse 3 6002 Lucerne	
<b>E-Mail</b>	<a href="mailto:polsem@unilu.ch">polsem@unilu.ch</a>	
<b>Website</b>	<a href="http://www.unilu.ch/polsem">www.unilu.ch/polsem</a>	
<b>Phone</b>	041 229 55 91	
<b>Fax</b>	041 229 50 01	
<b>Administration</b>	<b>Stephanie Deuber</b> <a href="mailto:stephanie.deuber@unilu.ch">stephanie.deuber@unilu.ch</a>	3.B04 041 229 55 91
<b>LUMACSS Programme Coordinator</b>	<b>Dr. Samuel Schmid</b> <a href="mailto:samuel.schmid@unilu.ch">samuel.schmid@unilu.ch</a>	3.B14

## Semester Dates

### Spring semester 2024

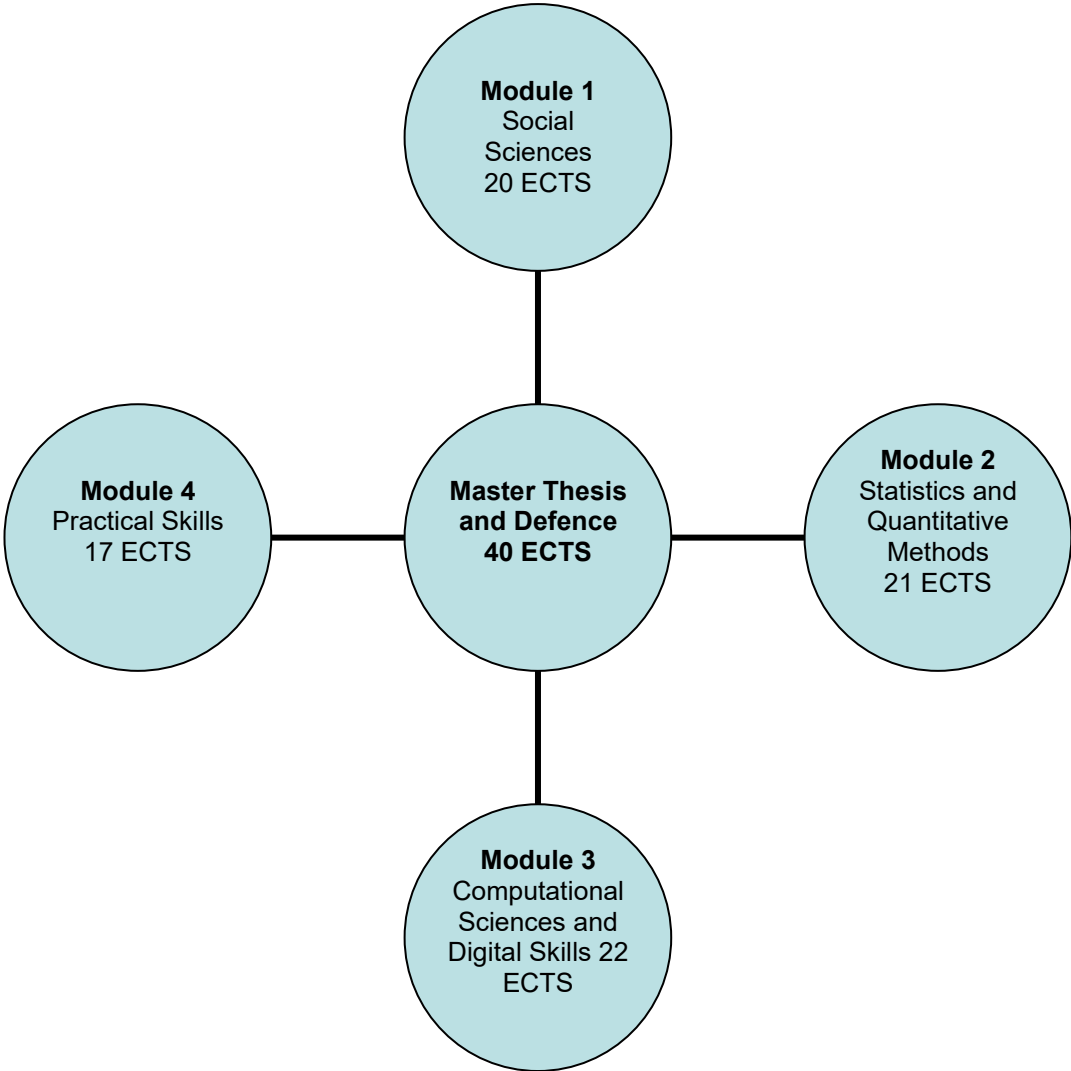
Courses take place from Monday, February 19<sup>th</sup> to Friday, May 31<sup>st</sup> 2024

### There are no courses taking place on the following dates:

Friday, March 29 <sup>th</sup> to Sunday, April 7 <sup>th</sup>	Easter break
Thursday, May 9 <sup>th</sup>	Ascension day
Monday, May 20 <sup>th</sup>	Whit Monday
Thursday, May 30 <sup>th</sup>	Chorpus Christi

# Study Programme

The Lucerne Master in Computational Social Sciences (LUMACSS) is an interdisciplinary programme that equips graduates with the knowledge and skills needed to tackle the main social challenges of the digital age. LUMACSS has been specially designed for two kinds of students: social science graduates seeking to strengthen their data analytics and digital computation skills; and computational sciences graduates eager to learn how to best apply their computation skills to social sciences data and research questions. LUMACSS provides a unique opportunity to combine the social sciences and the computational sciences. The programme offers in-depth teaching and research on digitization and its manifold effects on modern polities, societies and economies.



The four LUMACSS modules combine various disciplines such as economics, political science, sociology, law, history and the computational sciences. The broad-based programme also develops statistical and computational methods and thus builds the key skills for the future job market. Coursework comprises a total of 120 ECTS and includes a final master's thesis and its defence.

## Musterstudienplan: MA Studiengang Lucerne Master in Computational Social Sciences (LUMACSS)

Studienbeginn ab HS 2023

Modul	Studienanforderung	Beschreibung	Credits 120	<input checked="" type="checkbox"/>
Social Sciences	Vorlesungen und/oder Kolloquialvorlesungen	-	6	
	Masterseminar	-	4	
	Masterseminar	-	4	
	schriftliche Masterseminararbeit	-	6	
Statistics and Quantitative Methods	Masterseminar	-	4	
	Masterseminar	-	4	
	Methodenseminar	Research Design and Methods in Quantitative Research I	4	
	Kolloquialvorlesung	Introduction to Statistics for the Social Sciences	3	
	schriftliche Masterseminararbeit	-	6	
Computational Sciences and Digital Skills	Masterseminar	Introduction to R for Data Science & Computational Social Science	4	
	Masterseminar	Data Mining in R	4	
	Masterseminar	Introduction to Python	4	
	weitere Studienleistungen	-	8	
	Abschlusskolloquium	-	2	
Practical Skills	Variante 1: freie Studienleistungen <sup>1</sup> (17 Cr)	freie Studienleistungen	17	
	Variante 2: Capstone-Projekt (10 Cr), freie Studienleistungen <sup>1</sup> (7 Cr)	Absolvierung eines selbst organisierten Projekts		
	Variante 3: Praktikum (10 Cr), freie Studienleistungen <sup>1</sup> (7 Cr)	Absolvierung eines selbst organisierten Praktikums von min. 8 Wochen Vollzeit		
<b>Masterverfahren</b>				
	MA-Arbeit	Masterarbeit (30 Cr) mit mündlicher Verteidigung (10 Cr)	40	

<sup>1</sup> aus dem Masterlehrangebot der Kultur- und Sozialwissenschaftlichen Fakultät (KSF). Bis zu 6 Credits können im freiwilligen Bereich universitäres Engagement belegt werden.

## Course Offering in Spring 2024

For an up to date and more detailed **electronic version** of our course offering visit:  
[https://portal.unilu.ch/stg/ma\\_lumacss/sem=FS24](https://portal.unilu.ch/stg/ma_lumacss/sem=FS24)

Please note that **German titles** of courses indicate that courses are taught in German.  
 Please note that there are **different procedures for registration** at the different faculties and for courses taught via Digital Skills Luzern:

**Faculty of Humanities and Social Sciences:** Registration two weeks before the start of the semester till the end of the first two weeks of the semester via [Uniportal](#)

**Faculty of Law:** Registration mid-semester, [click here for more information](#)

**Faculty of Economics:** Registration mid-semester, [click here for more information](#)

**Faculty of Health Sciences and Medicine:** Registration end of semester, [click here for more information](#)

**Digital Skills:** Registration via registration form, [click here for more information](#)

### Module Social Sciences

Format	Lecturer and Title	Dates
VL	Burri: Internet Law	We, 12.15-14.00
VL	Morand / Vasella: Datenschutzrecht	Fr, 08.15-10.00
WOS	Burri: Copyright in the Digital Age	Block course
VL	Blickenstorfer: Marketing Technology	Block course
VL	Moser / Savioz: Introduction to Cryptocurrencies, Stablecoins, and Central Bank Digital Currencies	Mo, 12.15-14.00
KVL	Trechsel: Einführung in die Vergleichende Politikwissenschaft	Tue, 12.15-14.00
KVL	Schaffer: Die Schweiz im Kontext der europäischen Integration	We, 10.15-12.00
MSE	Hoggenmüller: KI-Tools für die visuelle Methodenforschung nutzen: Potenziale und Grenzen von Dall-E, Stable Diffusion und Midjourney	Thu, 14.15-16.00
MSE	Jaeger: Genealogies of Global Governance	Block course
MSE	Holzer: Digitale Gesellschaft: Soziale Beziehungen, Politik und Öffentlichkeit im Wandel	Block course
MSE	Saner: Soziologie und künstliche Intelligenz	Tue, 10.15-12.00
MSE	Unternährer: Wert, Werte und Bewertung in der digitalen Ökonomie	Mo, 12.15-10.00
MSE	Blatter / Schulz: Research Designs and Methods in Qualitative Studies	We, 16.15-18.00

### Module Statistics and Quantitative Methods

Format	Lecturer and Title	Dates
MSE	Hönig: Studying Climate Change and Political Unrest (Research Design and Methods in Quantitative Studies)	Block course

VLUEB	Boes / Ackermann / Bardy: Advanced Quantitative Methods (ARM)	Tue, 12.30-14.00 We, 14.15-16.00
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### Module Computational Sciences and Digital Skills

Format	Lecturer and Title	Dates
MSE	De Angelis: Data Mining for Political and Social Sciences using R	Block course
MSE	Bright: Introduction to Python	Block course
WOS	Bäurle / Bachmann: Forecasting in Economics and Business	Thu, 08.15-10.00
VL	Giangreco: Data Modeling and Database Systems	Block course
VL	Matter: Big Data Analytics	Block course
WOS	Cabane: Data Visualization	Thu, 14.15-18.00
VL	Cilurzo / Habicht: Unsupervised Machine Learning	Fortnightly We, 16.15-19.00
VL	Knaus: Causal Machine Learning	Block course
WOS	Attalides: Introduction to R	Infos on <a href="#">Digital Skills</a>
WOS	Attalides: Introduction to Shiny in R	Infos on <a href="#">Digital Skills</a>
WOS	Curini: Big Data Analytics	Infos on <a href="#">Digital Skills</a>
WOS	Umansky: Data Wrangling and Visualization with Tidyverse	Infos on <a href="#">Digital Skills</a>
WOS	Attalides: Introduction to Web Scraping and Text Analysis in R	Infos on <a href="#">Digital Skills</a>
WOS	Attalides: Introduction to Machine Learning in R	Infos on <a href="#">Digital Skills</a>
WOS	Attaldies: Introduction to Visualisations in R	Infos on <a href="#">Digital Skills</a>
WOS	Attalides: Introduction to Building Packages in R and Version Control	Infos on <a href="#">Digital Skills</a>
WOS	Attalides: Introduction to Statistics in R	Infos on <a href="#">Digital Skills</a>
KOL	Saner / Unternährer: Kolloquium Medien und Netzwerke (laufende Abschlussarbeiten)	Block course
KOL	Blatter: Kolloquium BA- und MA- Abschlussarbeiten (qualitative, theoretische Arbeiten)	Tue, 18.15-20.00
KOL	Diaz-Bone: Kolloquium für laufende Abschlussarbeiten	Block course
KOL	Schaffer: Kolloquium BA- und MA-Abschlussarbeiten (quantitative Arbeit)	Tue, 18.15-20.00

## Module Practical Skills

In the module on Practical Skills, students have access to the complete offering of the Faculty of Humanities and Social Sciences.

However, the following courses are especially recommended for LUMACSS-students:

Format	Lecturer and Title	Dates
HS	Albert: Netze, Modems, Diskettenpost: Der Computer als Kommunikationsmedium, 1970er-1990er Jahre	We, 16.15-18.00
HS	Forrer: «Überwachen und Strafen» - Michel Foucaults Klassiker im Zeitalter der Digitalisierung	We, 14.15-16.00
MS	El Kassar: Philosophie der Algorithmen	Mo, 12.15-14.00

### Legend

HS: Hauptseminar; KOL: Kolloquium; KVL: Kolloquialvorlesung; LKK: Lektürekurs; MSE: Masterseminar; SOV: Sonderveranstaltung; UEB: Übung; VL: Vorlesung; WOS: Workshop