

**UNIVERSITY OF  
LUCERNE**

**FACULTY OF HUMANITIES AND  
SOCIAL SCIENCES**

# **COURSE OFFERING**

**LUCERNE MASTER IN COMPUTATIONAL  
SOCIAL SCIENCES (LUMACSS)  
FALL SEMESTER 2021**

Programme Director and Co-Initiators .....	3
Administration and Programme Coordinator .....	3
Semester Dates .....	3
Study Programme .....	4
Course Offering in Fall 2021 .....	6
Module Social Sciences .....	6
Module Statistics and Quantitative Methods .....	7
Module Computational Sciences and Digital Skills .....	7
Module Practical Skills .....	8

## 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:andrea.deangelis@unilu.ch">andrea.deangelis@unilu.ch</a> Senior Researcher and Lecturer Department of Political Science	041 229 56 96

## Administration and Programme Coordinator

<b>Department Address</b>	<b>Department of Political Science</b> Frohburgstrasse 3 P.O. Box 4466, 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>Jana Seregi, MAS</b> <a href="mailto:jana.seregi@unilu.ch">jana.seregi@unilu.ch</a>	3.B04 041 229 55 91
<b>LUMACSS Programme Coordinator</b>	<b>Nadia Bühler, MA</b> <a href="mailto:nadia.buehler@unilu.ch">nadia.buehler@unilu.ch</a>	3.A10 (Mo/Tue/We)

## Semester Dates

### Fall semester 2021

Courses take place from Monday, September 20<sup>th</sup> to Friday, December 23<sup>rd</sup> 2021

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

Monday, November 1<sup>st</sup>

All Saints' Day

Thursday, November 4<sup>th</sup>

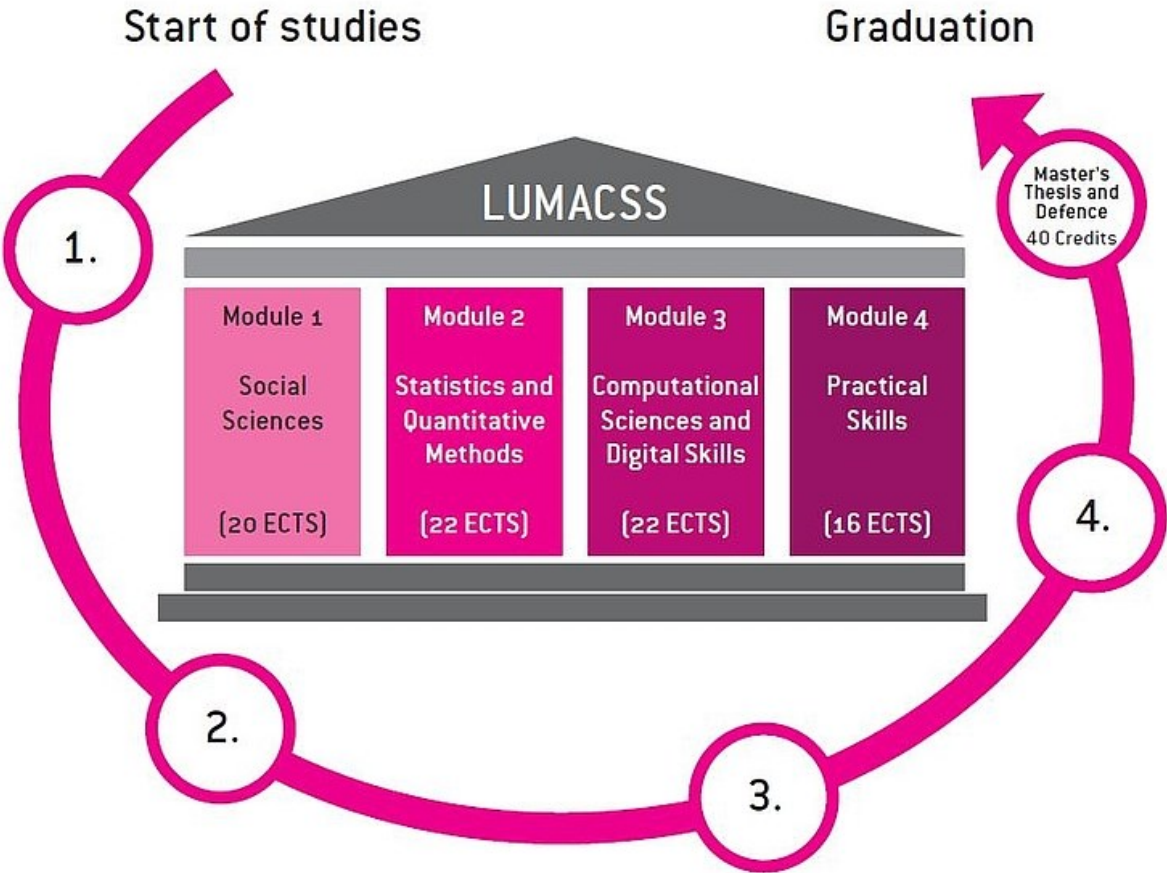
Dies Academicus, no lectures in the morning

Wednesday, December 8<sup>th</sup>

Immaculate conception

# 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 2019

Module	Studienanforderung	Beschreibung	Credits 120	Cred. Tot.	<input checked="" type="checkbox"/>
Social Sciences	Vorlesungen	Drei Vorlesungen (à 2 Cr) oder zwei Kolloquialvorlesungen (à 3 Cr)	6		
	Masterseminar	-	4		
	Masterseminar	-	4		
	Schriftliche Masterseminararbeit	-	6	<b>20</b>	
Statistics and Quantitative Methods	Masterseminar	-	4		
	Masterseminar	-	4		
	Schriftliche Masterseminararbeit	-	6		
	Weitere Studienleistungen	-	8	<b>22</b>	
Computational Sciences and Digital Skills	Weitere Studienleistungen	-	20		
	Abschlusskolloquium	-	2	<b>22</b>	
Practical Skills	Variante 1: Freie Studienleistungen* inklusive Sozialkompetenz (2-6 Cr)	Freie Studienleistungen	16		
	Variante 2: Capstone-Projekt (10 Cr), freie Studienleistungen* inklusive Sozialkompetenz (2-6 Cr)	Absolvierung eines selbst organisierten Projekts	16		
	Variante 3: Praktikum (10 Cr), freie Studienleistungen* inklusive Sozialkompetenz (2-6 Cr)	Absolvierung eines selbst organisierten Praktikums von min. 8 Wochen Vollzeit	16	<b>16</b>	
<b>Masterverfahren</b>					
	MA-Arbeit	Masterarbeit (30 Cr) mit mündlicher Verteidigung (10 Cr)	40	<b>40</b>	

\* aus dem Masterlehrangebot der Kultur- und Sozialwissenschaftlichen Fakultät (KSF)

Der Musterstudienplan entspricht der Wegleitung zur StuPo 2016 mit Revision vom 1. August 2019 - Masterstufe. Download unter: [www.unilu.ch/ksf-reglemente](http://www.unilu.ch/ksf-reglemente)

## Course Offering in Fall 2021

For an up to date and more detailed **electronic version** of our course offering visit:  
[https://portal.unilu.ch/stg/ma\\_lumacss/sem=HS21](https://portal.unilu.ch/stg/ma_lumacss/sem=HS21)

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 Campus 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](#)

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

**Campus Luzern:** Registration via registration form, [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: International Intellectual Property Law	We, 12.15-14.00
VL	Burri: International Law of Contemporary Media	Tue, 12.15-14.00
VL	Karavas: Law and Society in a Global Context	We, 14.15-16.00
VL	Gruber: Critical Legal Tech: Wissenschaftliche Perspektiven auf Technologie und Digitalisierung im Recht	Tue, 10.15-12.00
VL	Blickenstorfer: Marketing Technology	Mo, 14.15-18.00
KVL	Trechsel: Political Behaviour and Communication	Tue, 10.15-12.00
KVL	Schaffer: Einführung in die Internationalen Beziehungen	We, 10.15-12.00
KVL	Blatter: Einführung in die Demokratietheorien	Tue, 14.15-16.00
MSE	Wagner: Compassion, Solidarity and Media	We, 10.15-12.00
MSE	Mützel: Relationale Soziologie: Theoretische Ansätze und empirische Studien	Tue, 16.15-18.00
MSE	Scherz: Democratic backsliding and European reactions	Block course
MSE	Oglesby: Researching consumers' behaviour, emotions and attitudes in the digital era	Thu, 10.15-12.00
MSE	Drews: Politics and the digital: online political expressions and behaviour	Block course
MSE	Wurpts: Aktuelle Themen der Netzwerkforschung	Mo, 16.15-18.00
MSE	Mützel: Soziologie der Algorithmen	Mo, 14.15-16.00
MSE	Kette: Organisation und Digitalisierung	Block course
MSE	Bayer: International Institutions and Regimes	Block course

## Module Statistics and Quantitative Methods

Format	Lecturer and Title	Dates
MSE	Ströbele: Research Design and Methods in Quantitative Research I	Mo, 14.15-16.00
MSE	von Nordheim: Methoden computergestützter Textanalyse	Block course
MSE	Boes/Roser/Liu: Statistics and Epidemiology	We, 14.15-16.00
KVL	De Angelis: Introduction to Statistics for the Social Sciences	Thu, 14.15-16.00
HS	Schwegler: Sozialwissenschaftliche Datenanalyse mit R, Gr. 1	We, 14.15-16.00
HS	Horvath: Sozialwissenschaftliche Datenanalyse mit R, Gr. 2	Thu, 10.15-12.00
KVL	Diaz-Bone: Grundlagen der multivariaten Statistik	Thu, 14.15-18.00
VL	Hofstetter/Heim: Data Analytics and Decision Support	Fr, 10.15-14.00
VL	Heim: Angewandte Statistik und Ökonometrie	Fr, 14.15-16.00
VL	Heim: Causal Analysis	Thu, 10.15-12.00
UEB	Stiffler: Tutorial Causal Analysis	We, 14.15-16.00
UEB	Hüsler: Übung Gruppe 1 Angewandte Statistik	We, 16.15-18.00
UEB	Hüsler: Übung Gruppe 2 Angewandte Statistik und Ökonometrie	Thu, 08.15-10.00
VL	Fink: Kriminalstatistik und Kriminalpolitik	Mo, 10.15-12.00

## Module Computational Sciences and Digital Skills

Format	Lecturer and Title	Dates
VL	Meierer/Bachmann: Python – A non-technical introduction for business analytics	Block course
VL	Mannino: Supervised Machine Learning	Block course
VL	Meierer/Löwenberg: Machine Learning for mere mortals: Workflow, key models & coding	Block course
VL	Waelti: Introduction to Computer Science and Programming	Mo, 09.15-12.00
VL	Hofstetter/Pouly: Machine Learning in Marketing	Tue, 10.15-12.00, fortnightly Tue, 08.15-10.00
VL	Cilurzo/Habicht: Data Science Toolkits and Architectures	Fortnightly Thu, 16.15-19.00
WOS	Di Salvatore: Spatial Data Analysis for Social Scientists	Infos on <a href="#">Digital Skills</a>
WOS	Müller: Quantitative Text Analysis for Beginners using R and quanteda	Infos on <a href="#">Digital Skills</a>
WOS	Bright: Introduction to Python	Infos on <a href="#">Digital Skills</a>
WOS	Baliatti: Introduction to Programming for App Development	Infos on <a href="#">Digital Skills</a>

WOS	De Angelis: The R Week: A complete introduction to R for Data Science	Infos on <a href="#">Campus Luzern</a> website (See section on "Lucerne R Courses")
WOS	Attalides: Creating web applications in R using Shiny	Infos on <a href="#">Campus Luzern</a> website (Section on "Lucerne R Courses")
WOS	De Angelis: Data Visualization in R	Infos on <a href="#">Campus Luzern</a> website (See section on "Lucerne R Courses")
WOS	Umit: Web Scraping: Automating Data Collection from the Internet with R	Infos on <a href="#">Campus Luzern</a> website (See section on "Digital Skills")
MSE	von Nordheim: Methoden computergestützter Textanalyse	block course
KOL	Blatter: Kolloquium BA- und MA-Abschlussarbeiten	We, 18.15-20.00
KOL	Mützel: Kolloquium Medien und Netzwerke (laufende Abschlussarbeiten)	Mo, 16.15-18.00

## 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	Groebner: War der Buchdruck eine Kommunikationsrevolution? Lesen, Speichern, Löschen – vom Papier zu Gutenberg und den e-books	We, 14.15-16.00
VL	Speich Chassé: Geschichte der Digitalisierung. Informationsmaschinen und numerische Kommunikation seit ca. 1800	We, 10.15-12.00

### Legend

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