

**UNIVERSITY OF  
LUCERNE**

**FACULTY OF HUMANITIES AND  
SOCIAL SCIENCES**

# **COURSE OFFERING**

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

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## Programme Director and Co-Initiators

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## Administration and Programme Coordinator

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## Semester Dates

### Spring semester 2021

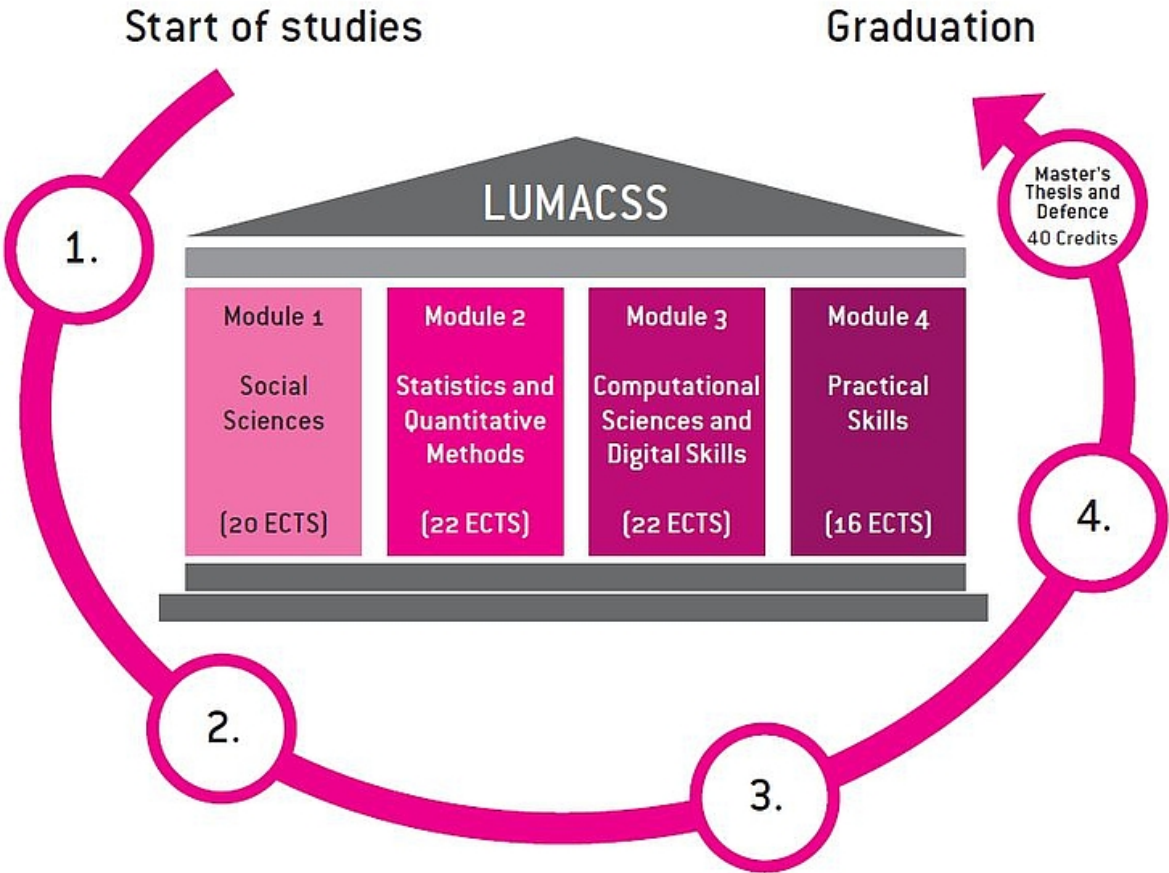
Courses take place from Monday, February 22<sup>nd</sup> to Friday, June 4<sup>th</sup> 2021

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

Friday, April 2 <sup>nd</sup> to Sunday, April 11 <sup>th</sup>	Easter break
Thursday, May 13 <sup>th</sup>	Ascension day
Monday, May 24 <sup>th</sup>	Whit Monday

# 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 Masterlehreangebot 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 Spring 2021

For an up to date and more detailed **electronic version** of our course offering visit:  
[https://vv.unilu.ch/stg/ma\\_lumacss/sem=FS21](https://vv.unilu.ch/stg/ma_lumacss/sem=FS21)

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 in 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 mid-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: Internet Law	We, 10.15-12.00
VL	Dzamko-Locher: Datenschutzrecht	Tue, 12.15-14.00
VL	Meyer: Blockchain und Smart Contracts	We, 14.15-16.00
VL	Haux: Technikrecht	Thu, 16.15-18.00
KVL	Trechsel: Einführung in die Vergleichende Politikwissenschaft	Tue, 12.15-14.00
KVL	Schaffer: Europäische Integration	We, 10.15-12.00
MSE	Jaeger: Global Political Theory	block course
MSE	Bohn: Gesellschaft, Kultur und Medien	Tue, 16.15-18.00
MSE	Mayer: Critical Data Studies	block course
MSE	Mützel: Datenkapitalismus und Entwicklungen im Marketing	Mo, 14.15-16.00
MSE	Abend: How to do research that makes a difference in the world	We, 10.15-12.00
MSE	Mützel: Geld und Bezahlen weltweit in Zeiten der Digitalisierung: Daten und Beziehungspflege	Tue, 14.15-16.00
SEM	Seele: Digital Ethics	block course

### Module Statistics and Quantitative Methods

Format	Lecturer and Title	Dates
MSE	De Angelis: MA Research design in quantitative Studies II	We, 16.15-18.00
MSE	Horvath: Geometric and visual data analysis	Thu, 14.15-16.00
MSE	Diaz-Bone: Data production, quality and equivalence	Thu, 10.15-12.00
MSE	Wurpts: Methoden der sozialen Netzwerkanalyse	Mo, 16.15-18.00
MSE	Boes: Quantitative Methods	Tue, 13.00-16.00



VL	Schmid: Einführung in die Ökonometrie	Fr, 14.15-16.00
VL	Schmid: Statistik	Thu, 14.15-16.00
VL	Strittmatter: Causal Machine Learning	Fr, 14.15-18.00
VL	Matter: Big Data Analytics	Thu, 14.15-18.00
UEB	Hüsler: Einführung in die Ökonometrie	Fr, 12.15-14.00

## Module Computational Sciences and Digital Skills

Format	Lecturer and Title	Dates
VL	Cilurzo/Habicht: Unsupervised Machine Learning	Fortnightly We, 16.15-20.00
VL	Zumbach: Data-Driven Consulting	Fortnightly Fr, 08.15-12.00
VL	Cabane: Data Visualization	Thu, 14.15-18.00
VL	Giangreco: Data Modeling and Database Systems	block course
VL	Strittmatter: Causal Machine Learning	Fr, 14.15-18.00
VL	Matter: Big Data Analytics	Thu, 14.15-18.00
WOS	Baliotti: App Development	Infos on <a href="#">Digital Skills</a>
WOS	Curini: Big Data Analytics	Infos on <a href="#">Digital Skills</a>
WOS	Leemann/Gessler: Data Journalism	Infos on <a href="#">Digital Skills</a>
WOS	Bright: Python	Infos on <a href="#">Digital Skills</a>
WOS	Di Salvatore: Spatial analysis	Infos on <a href="#">Digital Skills</a>
WOS	De Angelis: Introduction to R for Data Science	Infos on <a href="#">Campus Luzern</a> website (See section on "Lucerne R Courses")
WOS	De Angelis: Regression Analysis using R	Infos on <a href="#">Campus Luzern</a> website (Section on "Lucerne R Courses")
WOS	Büchel: LaTeX for Dummies	Infos on <a href="#">Campus Luzern</a> website (See section on "Statistical Software")
WOS	Umit: Working with Twitter Data in R	Infos on <a href="#">Campus Luzern</a> website (See section on "Applications for Data Science")
MSE	Mundt: Online forschen mit Shiny & Co. Responsive Datenerhebung, -auswertung und -präsentation mit R	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
MSE	Bärnreuther: Apps, Algorithmen und Big Data: Gesundheit im digitalen Zeitalter	We, 12.15-14.00
HS	Glahn/Gruber: Social Media für KulturwissenschaftlerInnen	Thu, 16.15-18.00
HS	Van Ditmars: Media & Politics	Tue, 10.15-12.00
HS	Alter: Religion digital – Kulturelle Praktiken, religiöse Ideen und Digitalisierungsprozesse	Thu, 08.15-10.00
WOS	Burri: Copyright in the Digital Age	block course

### Legend

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