



# STUDY COPERNICUS & DIGITAL EARTH

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ISSUE NO 1



ERASMUS MUNDUS  
JOINT MASTER



Co-funded by  
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Palacký University  
Olomouc



**COPERNICUS MASTER  
IN DIGITAL EARTH**

<https://master-cde.eu/programme/accreditation>

## AQ quality seal 2022-2028



After an intense procedure and overall fulfillment of all necessary requirements, the Agency for Quality Assurance and Accreditation Austria (AQ Austria) awarded the programme with a quality seal applicable for a period of six years. This was in compliance with the European Approach for the Quality Assurance of Joint Programmes (2015).



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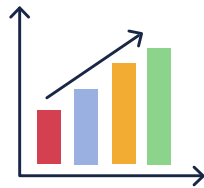


Get acquainted with our faculty, current students and alumni as they share their insights and experiences. Discover their perspectives and find answers to questions that may pique your interest about the geospatial Master of Science. The Erasmus Mundus Joint Master (EMJM) is a scholarship programme proudly co-funded by the European Union.

## Happy New Year!!!

Welcome to the first edition of the 'Study Copernicus & Digital Earth' newsletter series. In this issue, as well as forthcoming editions, stay updated on the latest news within the Copernicus Master in Digital Earth (CDE) programme and explore fascinating insights into the geospatial field.

To kick-start the new CDE edition which welcomes its first cohort in the academic year 2024/25, a call has been opened for applicants across the globe on Oct 25, 2023 to Jan 10, 2024.



360 completed  
applications

360 candidates successfully completed their applications before the deadline. The selection process is ongoing and soon enough eligible candidates will be interviewed and selected. We wish all candidates the very best.

## Erasmus Mundus Joint Master CDE-EMJM

The distinct Erasmus Mundus joint Master of Science (MSc) programme promotes the highest quality postgraduate education aiming at qualifying students to leadership in translating Copernicus services and the Digital Earth vision. A revised curriculum has been implemented and accredited in 2023. CDE advances domain specific knowledge and understanding, drives innovation, and contributes to the resolution of complexity on the interaction between humans and virtual representations of our world from local to global scales.



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## COPERNICUS MASTER IN DIGITAL EARTH

#Copernicus #DigitalEarth #EO #GI #GeodataScience  
Artificial Intelligence for Earth Observation #AI4EO  
#Geovisualisation #Geocommunication

# core fields of the geospatial Master of Science

## A little dive into the revised curriculum

In our commitment to delivering a high-quality educational experience, the CDE programme undergoes a comprehensive curriculum review on a regular basis. This process ensures alignment with industry standards and incorporates valuable feedback and recommendations from both current students and alumni. Discover some intriguing updates below:

Focus on object-based image analysis, big EO data analytics, advanced remote sensing, geospatial analysis, & integrated programming skills.

A new Project Management course has been integrated as a “student demand”.

Blended Intensive Programmes (BIP) & Summer Schools have been designed to expose students outside, and to enhance networking with industry.

PROGRAMME STRUCTURE COPERNICUS MASTER IN DIGITAL EARTH		ECTS
B1 – Orientation Project		6
B2 – Space-Time Models & Representations		6
B3 – Digital Earth Observation & Technologies		12
B4 – Spatial Image Analysis		6
B5 – Integrated Applications		12
SIP – Short Intensive Programmes		9   3
UBS: GeoData Science & AI4EO		30
UPOL: Geovisualisation & Geocommunication		30
ES - Elective Subjects		6   12
Master Thesis (incl Master's exam)		21
Work Placement / Internship		12   18
<b>Total</b>		<b>120</b>

Two distinct practical experiences are offered: (1) skill-based internship spanning two months or (2) a collaborative research work placement, fostering engagement with industry or a research institute and the potential to contribute to a student's Master's Thesis research.



# COPERNICUS MASTER IN DIGITAL EARTH

## CDE consortium

With the introduction of the collaborative research placement pathway in the curriculum, students have a broad spectrum of opportunities to explore, leveraging on a large consortium. The expansion of the CDE consortium introduces more partners, facilitating collaboration with institutions as well as students' work placement with notable industry partners.

<https://master-cde.eu/consortium/>



Associated partners contribute to the study programme and provide added value to faculty and students. International associations and agencies support the project with outreach and contribute to knowledge and skills transfer.



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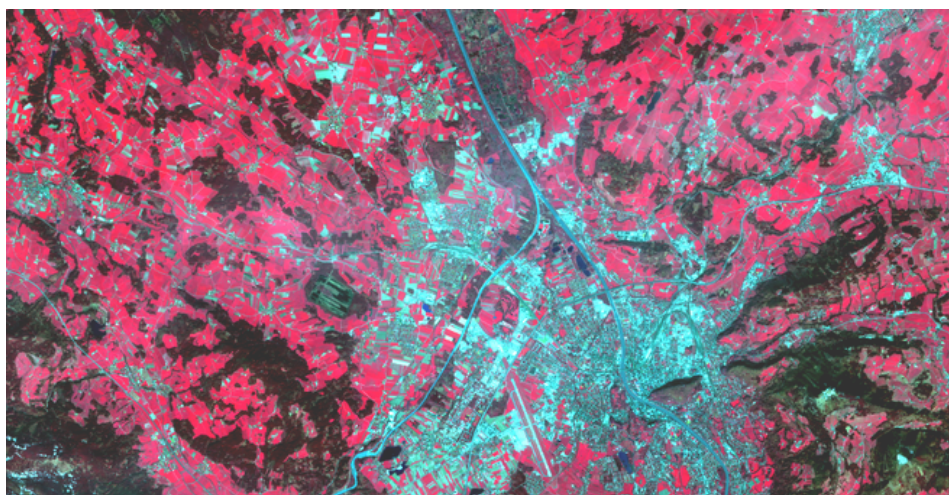


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# 25<sup>TH</sup> ANNIVERSARY OF COPERNICUS

2023, the EU celebrated **25 years of Copernicus** - *Europe's Eye on Earth*, the European Union Flagship. It was a celebration of exceeded expectations for the Copernicus programme with a record of achievements such as the Sentinel satellites - which provides free and open data for all, as well as the Copernicus Land, Water, Atmosphere, Marine, Emergency, Climate Change and Security services.

CDE consortium partners and the Paris-Lodron's Department of Geoinformatics (Z\_GIS) have been involved in "Copernicus" related activities since the beginning. Ranging from strategic and development contributions for the Copernicus initiative from faculty and researchers to students' achievements.



*contains modified Copernicus Sentinel data*

story map: <https://storymaps.arcgis.com/stories/3177942e49b94fc4b60c772c0a038569>



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meet core faculty and project members



## Department of Geoinformatics Earth Observation & Geoinformatics



Stefan Lang  
Joint Programme &  
Academic Lead



Barbara Scherthanner-  
Hofer  
Programme Board



Dirk Tiede  
Programme Board



Barbara  
Brunner-Maresch  
Project Management &  
Student Support



## Computer Science Department GeoData Science & AI4EO



Sébastien Lefèvre  
Academic Lead & Selection  
Committee Chair



Charlotte Pelletier  
Programme Board



Sandra Vessier  
Head of International  
Office



Pernelle Blaise  
Student Support



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## Department of Geoinformatics Geovisualisation & Geocommunication



Vít Vozenílek  
Academic Lead & Selection  
Committee Chair



Alena Vondráková  
Programme Board



Dana Gronychová  
Coordinator of  
International Mobility



Jakub Koníček  
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## COPERNICUS MASTER IN DIGITAL EARTH

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Salzburg, Vannes, Olomouc: contains modified Copernicus Sentinel data





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## COPERNICUS MASTER IN DIGITAL EARTH

alumni testimonial



My name is **Felix Kroeber**. I work at the University of Salzburg, Austria as a research associate under two different projects. I studied Geography at the University of Cologne and continued with the CDE joint Master's programme at the University of Salzburg and the University of South Brittany.

### **Why did you choose the CDE Master's programme?**

After my Geography studies, I decided to get more involved in the quantitative data analysis which was briefly introduced during my undergraduate studies.

The CDE Masters' was a great opportunity to combine my application oriented interest with a methodological approach offered in the GeoData Science specialization track at the Computer Science Department of University of South Brittany in France.

### **What experience stands out the most during your Master's study?**

In terms of learning experience, I will say there was a great effort spent to adapt data science to the prior knowledge of students coming from different application-oriented domains which is why I specifically have chosen this track.

Also, the fact that the programme is split between two universities did not only include the obvious point of being exposed to different cultures in the corresponding countries, which is definitely nice, but also a change in the social dynamics of the group from a larger group with a greater variety of perspectives, to narrowed down interaction with a smaller group. Personally I found that very enriching.

### **Would you have had your postgraduate studies another way?**

No. I think I would actually do the same again. I really felt like this was a great mixture of different topics and methods which were enriching from my personal experience. I think what is really unique to this programme compared to other Erasmus opportunities is the special focus on either Geovisualisation or Geodata Science.

### **Any advice for new students?**

I think it is valuable to take some time at the beginning to see what is offered and align it to personal interests, topic-wise or method related and then build your profile steadily.

Also, familiarize yourself with the research focus of each university, depending on the study track and take advantage of that.



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## COPERNICUS MASTER IN DIGITAL EARTH

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### Connect with us



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## Faculty news



**Stefan Lang**

*Congratulations*

Stefan Lang, as former Vice-Dean of the Faculty of Digital and Analytical Sciences has taken on the role of Vice-Rector at Paris-Lodron University Salzburg, starting in January 2024. CDE staff and students extend a heartfelt congratulations to Assoc. Prof. Stefan Lang, the academic coordinator of the Erasmus Mundus Joint Master's programme.



**Josef Strobl**

*Thank you*

We would like to thank a truly remarkable individual who has recently retired from PLUS, the Z\_GIS department's founder Prof. Josef ("Sepp") Strobl. His vision, leadership, and tireless efforts have guided us to the success we enjoy. (Thomas Blaschke, Head of Department) Josef Strobl, Professor emeritus, CDE senior advisor, founder of the Department of Geoinformatics at PLUS initiator of Copernicus Master in Digital Earth programme, Digital Earth Alliance member, and much more.



## Upcoming activities



Selection Committee meeting on Feb 01, 2024

Project Kick-off meeting on Feb 2-3, 2024



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## Erasmus Mundus Joint Master

Copernicus Master in Digital Earth (CDE) is proudly co-funded by the European Union under the Erasmus+ programme. For a second period of funding (2023-2029), in total 83 student scholarships can be provided, in addition the programme can support 34 self-paying students with a fee-waiver. For the programme's period 2018-2024 a total of 61 scholarships have been offered to international and European students.

