BDTIC
3rd BUILDING DIGITAL TWIN International Congress

DIGITAL TWINS infrastructures & cities

The DIGITWIN4CIUE project Master in Digital Twins for Infrastructures and Cities

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ORGANIZED BY:

BDTA DigiChecks EUnet4DBP

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION´S HORIZON EUROPE RESEARCH AND INNOVATION PROGRAMME – PROJECT 101058541 – DIGICHECKS

The DIGITWIN4CIUE consortium

UNIVERSIDAD POLITÉCNICA DE MADRID

École des Ponts ParisTech

MŰEGYETEM 1782

İSTANBUL TEKNİK ÜNİVERSİTESİ 1773

Civil Engineering & Architecture Schools

UNIVERSITATEA POLITEHNICA DIN BUCUREŞTI UPB 1818

AI and CS research center

NOMMON

tyris.ai Predictive Analytics

MainRail

ALTAMETRIS

Innovation SMEs

eliso European University

Co-funded by the European Union

LEADS ADVANCED DIGITAL SKILLS

DIGITAL TWINS infrastructures & cities

BDTA BUILDING DIGITAL TWIN ASSOCIATION

The DIGITWIN4CIUE project

- Co-Funded by

Digital Europe

Co-funded by the European Union

- 4 years Project
- Starting from Nov 2022
- 7.0 M€ Budget (1.2M€ subsidy for students)
- 50% co funding
- Promoted by European universities and disruptive and innovative SMEs
- Support from industry and administration

Objectives

To prepare and deliver an executive master targeting civil engineers to cover a major need of lack of digital training

To establish a sustainable Centre of Excellence of digital twins

To facilitate and accelerate the digital transformation of the built environment ecosystem

The Executive Master

Executive master in digital twins for infrastructures and cities

Why?

Need to cover a gap of training of the new generations of civil engineers and architects to lead the digital transformation of the sector

This gap will be further implemented in the official degrees in the coming years

Who?

Mainly targeted to young professionals of the built environment: civil engineers, architect, industrial and mechanical engineers...

Also targeted to professionals with a wider experience who want to divert their career or need to lead digital teams

Students from worldwide

When?

First edition starting in October 2023.

Admissions now open at www.digitwin4ciue.eu

The Executive Master

Executive

Targeted to professionals in the built environment

Blended

Online evening live sessions plus three onsite meetings (Thu-Sat) in Madrid, Paris, Budapest and/or Istanbul.

Joint Diploma

An institutional master jointly issued by four of the leading European Civil Engineering Universities

Project based

Learning by doing through real capstone projects under the mentorship of our industrial partners.

One year program

60 ECTS master program, from October to June 2024

Global

Students from all over the world, not necessarily from the coorganizing Universities. Fully taught in English

Faculty

Combination of professors and experts from the project members and industrial partners

Networking

Encouraged through onsite events, capstone projects, team group tasks...

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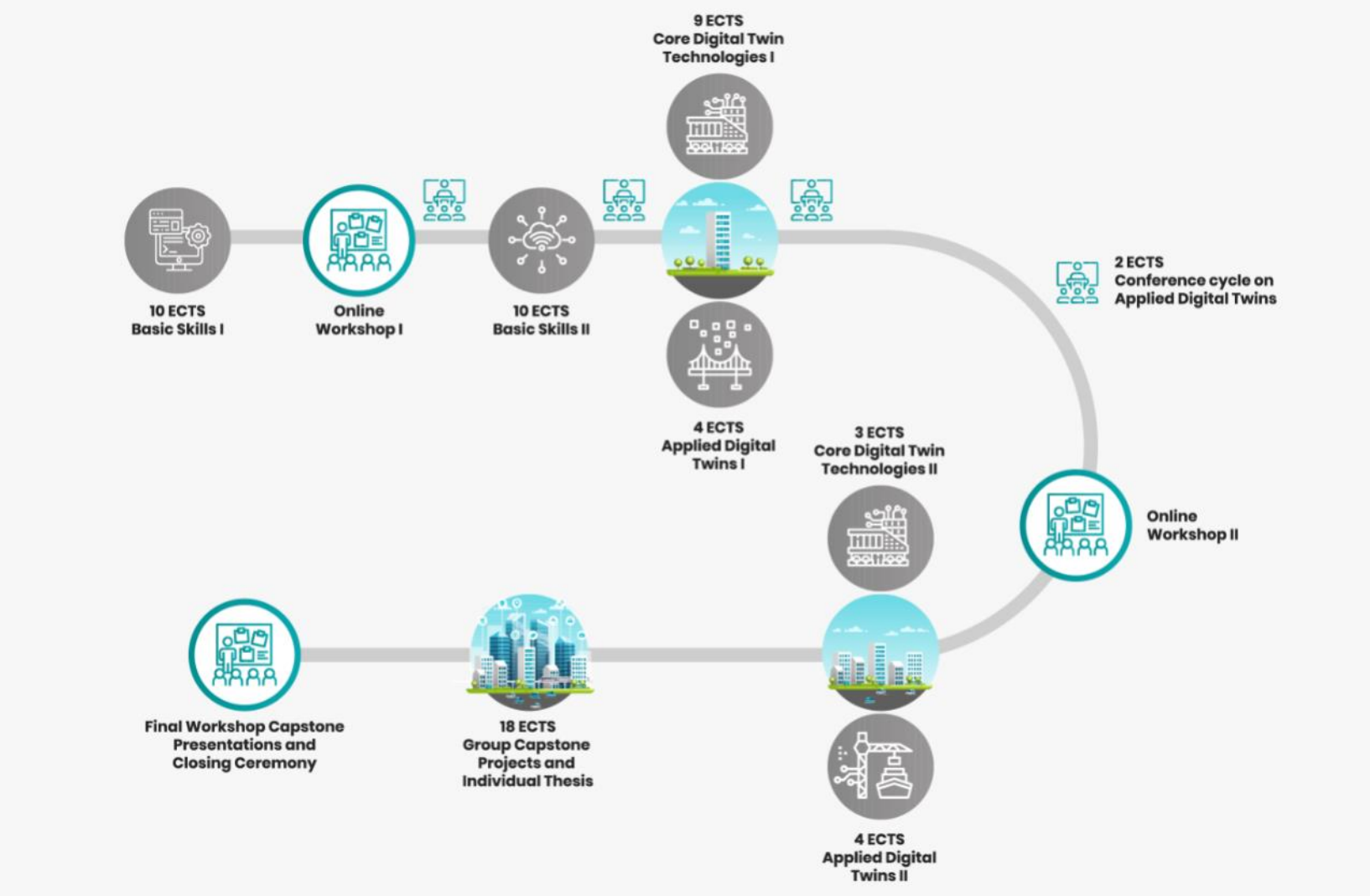
The Executive Master



Learning outcomes

- Fundamental knowledge on the key digital technologies that are used in digital twins for infrastructures
- Ability to conceive digital twins to address the specific challenges found in the planning, design, construction, operation and management of civil infrastructures and networks.
- Ability to define strategies for digitalization of infrastructures (future and already built).
- Identification of services and associated business opportunities created by digital twins.

The Executive Master

Conference cycle

A cycle of 20 weekly lectures of 60-90 min by leading experts of the industry and academia, between November and April.

The lectures will address the application of digital twins to different fields of the built environment, specially those not included in the elective courses

Capstone projects

Hands-on real world cases of applied digital twins, proposed and mentored by 1-2 industrial partners, and coordinated by faculty of the Master.

Developed in groups of 4-6 students between January and June, with 2 onsite workshops and a final presentation at the closing ceremony

An excellent sandbox to test innovation projects and evaluate use cases

ferrovial TYPSA CONSULTING ENGINEERS & ARCHITECTS adif FUJITSU NOMMON ALTAMETRIS ARUP tyris.ai Predictive Analytics . . .

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Thank you!

Info and admissions:

https://www.digitwin4ciue.eu

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