Certification Program

Mastering
Digital Twins

> »Digital twins are the key game changer in digital transformation in order to make lifecycles more efficient and sustainable.«

Dr. Kai Lindow,
Head of the Virtual Product Creation division,
Fraunhofer Institute for Production Systems
and Design Technology IPK

Digital Twins – The Key Game Changer

A digital twin represents the reality: It can not only visualize the geometric appearance and structure, but also the behavior of products or systems. It merges reality and virtuality, creates transparency within complex engineering and operation processes and is an indispensable tool for the development and operation of cyber physical systems (CPS). Digital twins can assist companies throughout their whole chain of value creation by enabling clarity with digital data.

The technology enables to observe, analyze, visualize, simulate, interact and integrate intelligent products and production throughout their lifecycles. Companies need to start learning to customize digital twins to their value creation realities and to design their capabilities accordingly.
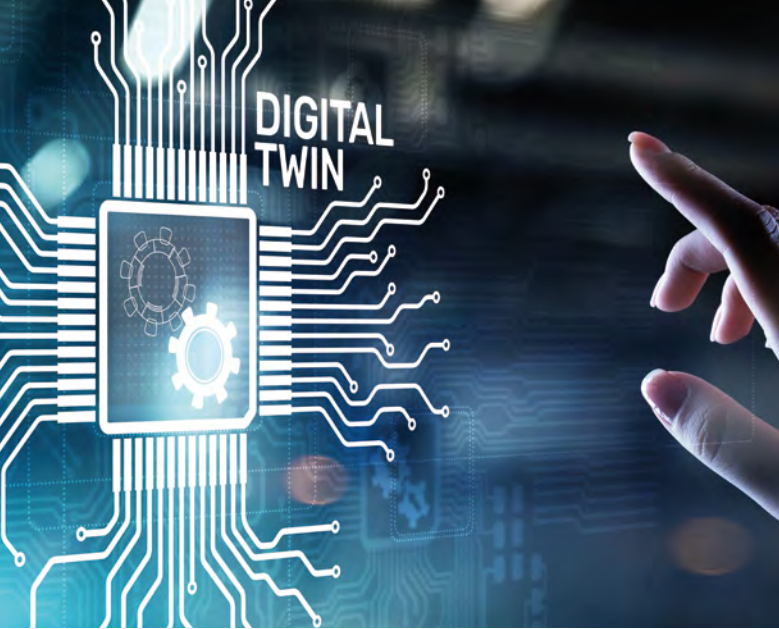
New Ways To Drive Business Value And Not Lag Behind

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"Mastering Digital Twins" is designed as a modular online learning program suitable for different professionals according to their training needs.

It will give you deep knowledge about all lifecycle phases of digital twins (ideation, design, development, operation and end of life) and a clear understanding of their business potential in different industry scenarios.

What you will get:

- Application oriented content – compiled by experienced experts from industry and research.
- Holistic perspective on digital twins as a multi-faceted strategic topic instead of only technology.

What You Will Learn

- Master digital twins – from concept to technical implementation.
- Understand how digital twins can add real value to your business.
- Realize the potential of digital twins and turn them into a business advantage for your company.

Your Added Value

- Boost your management or engineering career with a deep understanding of this essential Industry 4.0 tool.
- Drive the digital transformation in your company with knowledgeable answers to questions about how to realize the potential of a digital twin approach.
- Obtain an internationally valid personnel certification (according to ISO 17024).

Program Information

- **Format:** Online learning
- **Language:** English
- **Certificate:** Upon successful examination, participants are granted a certificate from the Fraunhofer Personnel Certification Authority
- **Time frame:** 10 h Online coursework

Learning Packages:

	Online coursework	Expert seminar	Certification
Option 1	495 €		
Option 2		995 €	
Option 3			1185 €
Option 4			1685 €

Online expert seminar: talk to our experts in a seminar tailored to your individual needs and questions.

Inhouse seminars are available on request.

The Digital Twins certification program was designed and is offered by experts from:

Fraunhofer
IPK

We look forward to welcoming you to our program!
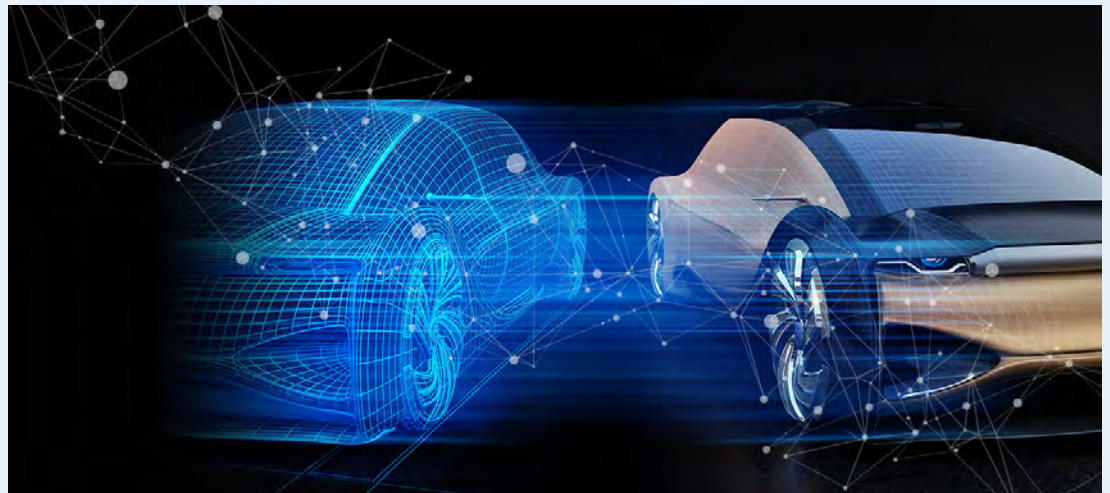
For further information, please visit our website.

Program Structure

Choose the certified track that best fits your needs:

	Certified Digital Twins **Business Consultant** Track	Certified Digital Twins **Solutions Architect** Track	Certified Digital Twins **Technical Developer** Track
Specific content	– Strategic implementation approaches – Competencies and capabilities	– Defining digital twin use cases – Shaping the environment for digital twins	– Engineering IT and APIs for digital twin design – Standards and safety in the context of digital twins – Clouds and databases – Data analytics – application in digital twins – Simulation and automation – Digital factory
Basic content	– Potentials, benefits and challenges of digital twins – Application in industry – today and tomorrow – Establishing digital twins – Dimensions and design patterns for digital twins		
Strategic content	– The lifecycle perspective – from ideation to operation – Technologies for digital twins		
Target group	– Business developers – Decision-makers – Consultants	– Operational managers – Team leaders	– Technology specialists

Contact

Do you have any questions for us?

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**www.academy.fraunhofer.de/
mastering-digital-twins**