

Unlock Your Potential with a Certificate of Advanced Studies (CAS)



»At a time when technological opportunities and the market situation are changing very quickly, it is difficult for companies - even if they are currently market leaders - to keep up with new developments. Individual employees in particular have to constantly re-orient themselves and qualify themselves - at the highest academic level. This requires time out sessions and conscious, far-sighted qualifications.«

Program Director
Prof. Dr.-Ing. Eric Sax

Institute for Information Processing Technology,
Karlsruhe Institute of Technology (KIT)



A Certificate of Advanced Studies (CAS) is a compact qualification designed to equip professionals with expertise in a specific field. Combining practical experience with industry-relevant insights, the CAS follows a compact four-step format, with each step consisting of 3–4 days of intensive learning.

Developed by leading experts from both academia and industry, the program delves into cutting-edge topics such as systems engineering, e-mobility, and automated driving, ensuring participants gain hands-on knowledge and future-proof skills.

It offers a flexible and impactful way to deepen expertise, broaden professional horizons, and address emerging challenges in today's fast-evolving industries.

Language:	English or German (upon request)
Admission requirements:	<ul style="list-style-type: none"> - First academic degree (e.g. Bachelor, Master or Diploma) - Professional experience - English language proficiency
Location:	HECTOR School of Engineering and Management Schlossplatz 19 76131 Karlsruhe
Costs:	5,970€* for the entire CAS program
Certificate	KIT Certificate and optionally 10 ECTS points upon exam completion

*The CAS are exempt from value added tax (VAT).

KEY FACTS

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E-Mobility Systems and Technology

- Requirements, Solutions and Challenges of E-Mobility
- Electric Drive Trains
- Energy Storage: H2-Storage
- Energy Storage: Batteries & Fuel Cells
- Power Electronics
- Charging Technologies
- Regulations/Political E-Mobility
- Charging Infrastructure

Systems and Software Engineering

- Fundamentals of Systems Engineering
- Embedded Systems Development
- Control Systems Development
- Modeling and Simulation
- Model-Based System Engineering
- Sustainable Engineering
- Software Engineering
- Discrete-Event Systems Simulation

Methods and Technologies of Automated Driving

- Systems Validation
- Electronic Systems Synthesis
- Machine Vision
- Decision Modeling
- Mobile Perception Systems
- Driver Assistance Systems



Your contact for further questions:

Ms. Martina Waldner

Senior Program Consultant HECTOR School

info@hectorschool.com

www.hectorschool.kit.edu

CAS

