

## Certificate Course Digital Transformation of Service Systems

The certificate course **Internet of Things (IoT): Digitalization of Service Systems** enables participants to play a vital role at the intersection of technical and business issues, being able to bridge the gap between company's customers and end users, line-of-business experts and IT experts. In doing so, they shall understand that digital service systems transcend mere technological artifacts but constitute complex socio-technical phenomena. Accordingly, the course is designed to introduce the nature, role, and potentials of digital technologies in corporations and its products and services enabling a holistic digital transformation process.

### Course Benefits & Take Away for Participants

The participants will

- understand key concepts and implications of digital transformation;
- explore opportunities of information technologies to enable holistic digital business transformation;
- recognize key characteristics of information technologies used in globally operating enterprises;
- learn core stages of digital transformation processes;
- master important concepts to successfully execute digital transformations.



### Overview Course Agenda

The growing importance of IT in the business world goes along with faster and faster innovation cycles. IT has become core for businesses from an internal operational as well as an external customer perspective. Today, IT is considered as a key enabler of operational excellence ranging from the enrichment of routine working tasks (e.g., enterprise resource planning systems) to e-enabled integration of entire business eco-systems (e.g., e-supply chains). The ability to implement and use IT in a way supporting the overall value proposition of a corporation has become a central success determinant for many firms.

	Day 1	Day 2	Day 3
8 am - 1 pm	Lecture	Lecture	Lecture
	Lunch Break		
2 - 5:30 pm	Lecture	Excursion	Conclusion & Farewell (Exams optional)

Large-scale digital service systems strongly interplay with work practices of employees as well as organizational structures shaping and being shaped by individuals' behavior. Thus, successful implementation of digital service systems requires dealing with change beyond technology. Various entities, both external and internal, are involved in digital transformations. As such, they impact multiple levels of an organization ranging from the individual employee to the entire organization. Complementing this primarily operational and company-internal perspective, we recently have seen a massive growth of digital extensions of existing products and services across all industries. The disruptive potential of IT has already transformed selected key industries, media or retail for example, and its impact is continuously growing in all areas of business.

On the left: Exemplary Schedule of a 3-day Certificate Course

## Agenda in Detail

Day 1:	Day 2	Day 3
<p><b>Session 1: Fundamentals of Digital Service Systems &amp; Case Study</b></p> <p>Motivation   Basic Definitions and Conceptual Foundations   IT Capabilities in Digital Service Systems   Digital Products &amp; Services   How does Industry 4.0 fit into this?</p> <p><b>Session 2: The Digital Transformation Process</b></p> <p>The Pre-Implementation Phase (e.g., Strategic Alignment Model, Project Portfolio Evaluation, Examples)</p> <p><b>Industry Talk: KPMG AG (exemplary)</b></p>	<p><b>Session 2 to be continued: The Digital Transformation Process</b></p> <p>The Implementation Phase (e.g., IS Lifecycle, Organizational Adaptation Process, Project vs. Program Mgmt, Software Selection, Critical Success Factors, Implementation Approaches, Technochange, Examples)</p> <p>The Post-Implementation Phase (e.g., Customer Perspective, Use Development, Technology Acceptance Model, Acceptance Research in Information Systems UTAUT, Post-Adoptive Behaviour, Usability, Examples)</p> <p><b>Industry Talk: SAP SE (exemplary)</b></p>	<p><b>Session 3: Digital Service Design Challenge &amp; Group Work</b></p> <p>Digital Service Design Framework   Business Model Design   Double Diamond Model   User-Centered Design Practices &amp; Tools</p>

## Registration & Organizational Details

Duration	3 days
Price	2.495 € per participant
Group Size	max. 15 participants
Certificate	Certificate of the HECTOR School of Engineering & Management, Technology Business School of the Karlsruhe Institute of Technology (KIT)
Requirements	First University Degree (Bachelor or equivalent) A minimum of 5 years of professional experience in the specific field of the course is recommended The course can be held in German or in English – appropriate skills in the respective language are required. For international companies translators can be hired.
Registration	Register online via <a href="http://www.ectorschool.kit.edu/certificate_courses.php">www.ectorschool.kit.edu/certificate_courses.php</a>



For consultancy or company arrangements please contact:

### Program Consultancy

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## Course Instructor



### Prof. Dr. Alexander Maedche

Full Professor  
at the Karlsruhe Institute of Technology (KIT)

Prof. Dr. Alexander Maedche was appointed full professor at the KIT in November 2015 at the Department for Economics & Management. At the same time he received the call as director at the Karlsruhe Service Research Institute (KSRI). In 2016 he was appointed as dean of studies *Information Engineering & Mgmt.*

At HECTOR School he combines scientific expertise with his experience from being vice president *Product Management User Interaction* at the SAP AG and from the Bosch Group as department manager *Business Intelligence in Corporate Sector Information Technologies.*