

Title of course	Digital Transformation and Data Value
Responsible instructor	Dr. Christian Leyh
Learning objectives	<p>Students will be able to</p> <ul style="list-style-type: none"> ▪ Identify and analyse fundamental issues relating to information technology aspects of everyday business life, ▪ Recognize central problems of the digital transformation, ▪ Understand the need for a strong digital transformation in companies, ▪ Evaluate in which situations the use of digital technologies and concepts is appropriate, ▪ Understand the interrelationships and interaction of different digital technologies and concepts, ▪ Critically assess the potential of technologies and concepts such as <ul style="list-style-type: none"> ▪ Artificial intelligence and the practical applications in data use and automatisisation, ▪ Digital platforms and digital business models, ▪ Correctly assess the benefits and risks/challenges of current digital technologies and concepts and derive suitable options for action and fields of action, primarily from the company's perspective, ▪ Recognize the extent to which information systems and associated data contribute to (operational) value creation, ▪ Understand where data has already found its way into value-added processes or can find its way into them, and ▪ Identify use cases for data-based value creation
Course contents	<ol style="list-style-type: none"> 1. Fundamentals of the Digital Transformation <ol style="list-style-type: none"> a. Digitization and Digital Goods b. Characteristics of the Digital Transformation c. Technology trends in Digital Transformation d. Digital platforms e. Success factors and barriers to digital transformation f. Current status of digital transformation in Germany and in country comparison 2. Data Science and Artificial Intelligence <ol style="list-style-type: none"> a. Basics and characteristics b. Benefits, risks and challenges c. Data usage from a management perspective d. Use cases 3. Digital Platforms and Digital Business Models <ol style="list-style-type: none"> a. Basics and characteristics b. Benefits, risks and challenges c. Internet economy - effects of digital transformation on value creation d. Use cases 4. Data-based Value Creation <ol style="list-style-type: none"> a. Basics and characteristics b. The value of data c. Concepts for data-based value creation d. Use cases
Teaching methods	<ul style="list-style-type: none"> ▪ Lectures

	<ul style="list-style-type: none"> ▪ Hermeneutic discourses ▪ Discussion ▪ Student presentations ▪ Self-study
Prerequisites	There are no formal requirements.
Suggested reading	<p>Preferably most recent edition:</p> <ul style="list-style-type: none"> ▪ Aagaard, A.: Digital Business Models - Driving Transformation and Innovation. Springer ▪ Hinterhuber, A.; Vescovi, T.; Checchinato, F.: Managing Digital Transformation - Understanding the Strategic Process. Routledge ▪ Jabłoński, A.; Jabłoński, M.: Digital Business Models - Perspectives on Monetisation. Routledge ▪ Mohanty, S.; Vyas, S.: How to Compete in the Age of Artificial Intelligence - Implementing a Collaborative Human-Machine Strategy for Your Business. Springer ▪ Rogers, D.L.: Digital Transformation Playbook - Rethink Your Business for the Digital Age. Columbia Univers. Press ▪ Srinivasan, R.: Platform Business Models - Frameworks, Concepts and Design. Springer ▪ Weber, A.: Digitalization for Value Creation - Corporate Culture for a Digital World. Springer ▪ Wirtz, B.W.: Digital Business Models - Concepts, Models, and the Alphabet Case Study. Springer ▪ Further references will be given during the classes.
Applicability	<p>This course is in particular applicable to the following Master programmes:</p> <p>International Business and Economics (M.A.; "IBE"), Finance (M.Sc.).</p> <p>This course is also applicable to other business-oriented Master programmes offered by Schmalkalden University of Applied Sciences.</p>
Workload	<p>Total workload: 180 hours, of them:</p> <ul style="list-style-type: none"> ▪ Lecture: 45 ▪ Self-study: 135, of them: <ul style="list-style-type: none"> ▪ Course preparation (in particular reading): 45 ▪ Presentation preparation: 45 ▪ Readings and exam preparation: 45
ECTS credit points and weighting factor	6 ECTS credit points; weighting factor: 6/120 (IBE) or 6/90 (Finance), respectively
Basis of student evaluation	Comprehensive written examination, 90 minutes (70%) and presentation (30%)
Time	First academic year
Frequency	Each academic year
Duration	One semester
Course type	Elective course
Remarks	Teaching language is English.