

2019.HS

Module Name: Business Process Integration	
Module Code	w.BA.XX.2GPI-WIN.XX
Module Description	End-to-end business processes require the integration of numerous IT components as well as of employees and customers. This module focuses on how this integration is achieved using a microservices architecture in which a process engine orchestrates all technical and human participants. This is based on technically executable models in the Business Process Model & Notation (BPMN) language.
Program and Specialization	Business Information Technology
Legal Framework	Academic Regulations BSc dated 29.01.2009, Appendix to the Academic Regulations for the degree programs in Business Administration, Business Information Technology, and Business Law, first adopted on 12.05.2009
Module Category	Module Type: Compulsory
	Program Phase: Main Study Period
ECTS	6
Organizational Unit	W Institut für Wirtschaftsinformatik Ltg
Module Coordinator	Peter Heinrich (heip)
Deputy Module Coordinator	Björn Scheppler (scep)
Prerequisite Knowledge	Basic knowledge of business process management, knowledge of software engineering (object-oriented programming in Java and in a development environment), basic knowledge of modeling and processing various data structures, knowledge of web engineering, basic knowledge of requirements engineering
Contribution to Program Learning Goals (Affected by Module)	<ul style="list-style-type: none"> § Professional Competence § Methodological Competence § Social Competence § Self-Competence
Contribution to Program Learning Objectives	Professional Competence <ul style="list-style-type: none"> § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence <ul style="list-style-type: none"> § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence <ul style="list-style-type: none"> § Written Communication § Oral Communication § Teamwork & Conflict Management Self-Competence <ul style="list-style-type: none"> § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change
Module Learning Objectives	Students... <ul style="list-style-type: none"> § understand business process automation in the context of corporate IT, business IT alignment, and the socio-economic environment. § are able to explain specialist terms and interrelations of business process integration. § understand the principle of microservices architecture in combination with a BPM system. § are able to apply knowledge acquired in other modules to tasks involving software engineering, web engineering, and data modeling in the context of business process integration. § have mastered the elements of BPMN notation relevant in managing technically executable processes. § are able to use a BPM system to integrate IT components and human components using formally defined processes and complying with framework conditions. § are able to assess under what circumstances automation is worthwhile and which degree of automation is appropriate.

Module Content	§ Introduction (BPM lifecycle, reasons for automation, types of automation, and degree of automation) § Process modeling using BPMN (with a focus on technical modeling) § Process integration (architectures and technical implementation) § Testing § Guest lecture from a practitioner		
Links to other modules	The content of this module is linked to the following modules: w.BA.XX.2BSSW-WIN.XX w.BA.XX.2InfoM-WIN.XX w.BA.XX.2SWEEng.XX w.BA.XX.2WEng-WIN.XX		
Methods of Instruction	§ Lecture § Interactive Instruction § Exercises § Project Work	Social Settings Used: Individual Work	
Digital Resources	§ Teaching Videos § Practice and Application Exercises (with Key)		
Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study
Large Class	28 h	-	
Small Class	28 h	54 h	
Group Instruction	-	-	
Practical Work	-	-	
Seminar	-	-	
Total	56 h	54 h	
Performance Assessment			
End-of-module exam	Form	Length (min.)	Weighting
Written exam	Closed book	60	40,00 %
Permitted Resources	No calculator		
Others			
	Assessment	Length (min.)	Weighting
Continuous semester work	Grade	-	20,00 %
Practical exam	Grade	90	40,00 %
Classroom Attendance Requirement	Individual group meetings (dates to be communicated at the beginning of the semester)		
Language of Instruction/Examination	German		
Compulsory Reading	No compulsory reading. The exam is based on the lectures.		
Recommended Reading	-		
Comments	-		