

Enterprise Frameworks					
Course Code CIF62037	Student Workload 90 hours	Credits (according to ECTS) 4.5	Semester Sem. 6 & 8	Frequency each even-semester	Duration 16 meetings
1	Types of courses <i>elective</i>	contact hours 63 hours	independent study 27 hours	class size 40 students	
2	Prerequisites for participation Completed Object Oriented Programming				
3	Learning outcomes IF-ILO-3 Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements. IF-ILO-7 Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks. IF-ILO-13 Graduates are able to perform abstraction, modeling, representation, and data acquisition in order to perform the data analysis.				
4	Subject aims Students are able to explain the basic concepts of enterprise application architecture. Students are able to explain the structure of the enterprise programming framework. Students are able to apply programming using enterprise framework. Students are able to implement microservice development in enterprise applications. Students are able to implement microservice deployment in enterprise applications.				
5	Teaching methods lectures, case study, class discussion, presentation, practice				
6	Assessment methods assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment				
7	This module is used in the following degree programs as well				

8	Responsibility for module
9	<p>Other information</p> <ol style="list-style-type: none"> 1. Sam Newman, 2014, Building Microservices: Designing Fine-Grained Systems 2. Craig Walls, 2016, Spring Boot in Action 3. Josh Long, 2017, Cloud Native Java: Designing Resilient Systems with Spring Boot, Spring Cloud, and Cloud Foundry 4. John Carnell, 2017, Spring Microservices in Action 5. Greg L. Turnquist, 2017, Learning Spring Boot 2.0 - Second Edition: Simplify the development of lightning fast applications based on microservices and reactive programming 6. Eberhard Wolff, 2018, Microservices: A Practical Guide : Principles, Concepts, and Recipes 7. Dinesh Rajput, 2018, Mastering Spring Boot 2.0: Build modern, cloud-native, and distributed systems using Spring Boot 8. Jeff Nickoloff dan Stephen Kuenzli, 2019, Docker in Action 9. Brandon Shaw, 2019, Docker Step-by-Step The Ultimate Guide From Beginner to Expert. Learn & Master The Platform and Containerize, Create, Deploy and Run Your Application Like a Professional 10. Ajay Kumar, 2019, Docker & Kubernetes Fundamentals First step into the world of containers and cloud native 11. Martin Fowler, 2002, Patterns of Enterprise Application Architecture 12. Irakli Nadareishvili, Matt McLarty, & Michael Amundsen, 2016, Microservice Architecture: Aligning Principles, Practices, and Culture 13. Nigel Poulton, 2017, The Kubernetes Book 14. Sam Newman, 2019, Monolith to Microservices: Evolutionary Patterns to Transform Your Monolith 15. Pressman RS (2009) Software Engineering A Practitioner’s Approach 7th Ed - Roger S. Pressman. 16. Sommerville I (2016) Software engineering (10th edition)