	T = 2
Georg-August-Universität Göttingen	6 Credits
Modul: WIWI-WIN.0001: Enterprise Architecture und Prozessmodellierung	4 SWS
Enterprise Architecture and Process Modeling	
Learning Objectives / Competencies:	Arbeitsaufwand:
Upon successful completion of this course, students will be able to design,	Präsenzzeit:
implement, and manage enterprise architectures. They will possess in-	x 56 (regulär: Anzahl
depth knowledge and methodological skills to systematically structure and	SWS * 14)
further develop complex organizational structure. In particular, they will be	Selbststudium:
able:	x 124
- To describe and explain the phases of enterprise architecture	( <i>regulär</i> : 30 Stunden * x Credits –
development and management,	Präsenzzeit)
- To understand and apply Enterprise Architecture Management (EAM)	1 Taberizzeit)
approaches to various use cases,	
- To effectively utilize fact-based and methodological knowledge to plan,	
implement, analyze, and continuously improve enterprise architectures,	
for business processes and application systems,  - To use fundamental concepts of data and process modeling for the	
description, analysis, and development of enterprise architectures,	
- To independently complete modeling tasks related to the course's	
content, critically reflect on them, and provide constructive evaluations.	
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Course components:	
1. Lecture	2 SWS
Fundamentals of Enterprise Architectures	
a. Definitions and an overview of architecture layers	
<ul> <li>b. Current-state analysis and strategic evaluation of enterprise architectures</li> </ul>	
c. Fundamentals of Information Systems engineering	
2. Data Architecture	
a. Entity-Relationship Models	
b. Normalization	
3. Process Architecture	
a. Development of organizational frameworks	
b. Process modeling using (e)EPK	
Enterprise Architecture Management     a. Integration concepts	
b. Operations, monitoring, and continuous development	
5. Current Trends: Architectures in Ecosystems	
a. Digital platforms	
b. Data spaces	
2. Practical Exercise	
As part of the accompanying exercise, students deepen and expand the	
knowledge and skills acquired in the lecture. In particular, they apply their	0.0040
methodological expertise in practice by working with software artifacts to	2 SWS
actively engage in the planning, modeling, implementation, analysis, and	
improvement of real-world enterprise architectures.	
Working in groups of three to five, students complete accompanying	
exercises aligned with the lecture content. The exercises systematically	
guide them through the various phases of Enterprise Architecture	
Management, providing hands-on experience in applying key concepts of	
the course.	
	6 Credits

## **Examination Prerequisites:**

Successful completion of assigned exercises. Throughout the semester, students must sequentially complete and submit various assignments.

## Prüfungsanforderungen

- Demonstration of a fundamental understanding of the design, analysis, and management of enterprise architectures.
- Application of methodological knowledge for the analysis and evaluation of complex enterprise architectures.
- Subject-specific and functional knowledge regarding the implementation of enterprise architectures across various domains.
- Ability to transfer models, methods, and tools for enterprise architecture development to real-world problems.

Empfohlene Vorkenntnisse:
Modulverantwortliche:
JunProf. Dr. Christian Bartelheimer
Dauer: 1 Semester
Empfohlenes Fachsemester: 1-3
Vorschlag Anrechenbarkeit: