Module MA-INF 3218	**Seminar Model-Driven Software Engineering**		
Workload 120 h	**Credit points** 4 CP	**Duration** 1 semester	**Frequency** every year
Module coordinator	Dr. Günter Kniesel		
Lecturer(s)	Dr. Günter Kniesel		
Classification	**Programme** M. Sc. Computer Science	**Mode** Optional	**Semester** 2.
Technical skills	On successful completion of this module, students should be able to: • Understand the differences between model driven and traditional software development • Describe the common features and peculiarities of different model driven development approaches • Assess the suitability of a model driven approach for a given project • Select appropriate tools for model driven development tasks • Explain the individual scientific topic prepared		
Soft skills	On successful completion of this module, students should have refined their scientific writing and presentation skills and should be able to: • Mine for profound knowledge about a given subject • Distill and communicate the summary of a computer science topic orally • Evaluate the scientific integrity of a written summary • Use modern presentation software		
Contents	Inhalte Model driven software development concepts, tools and methods. In particular: • Models, meta-models and meta-meta-models (General, MOF, EMOF, ECORE) • Text to model, model to text transformation • Imperative versus declarative model transformation • Model-driven versus other software development approaches • Best practice and research issues in model based development		
Prerequisites	**Recommended:** MA-INF 3207 – Advanced Logic Programming		

Format

Teaching format	**Group size**	**h/week**	**Workload[h]**	**CP**
Seminar	10	2	30 T / 90 S	4

T = face-to-face teaching; S = independent study

Exam achievements	Oral presentation, written report	(graded)
Study achievements	none	(not graded)
Forms of media	• Web page: https://sewiki.iai.uni-bonn.de/teaching/seminars/start • Slides (Powerpoint/PDF) • Mailing list for students	
Literature	• "Model-Driven Software Development: Technology, Engineering, Management". Thomas Stahl, Markus Voelter, Wiley 2006. • "Model-Driven Software Development". Sami Beydeda , Matthias Book, Volker Gruhn (Eds), ISBN 978-3-540-25613-7, Springer 2005 • David S. Frankel: Model Driven Architecture: Applying MDA to Enterprise Computing, John Wiley	