Module MA-INF 3219	**Lab Model-Driven Software Engineering**		
Workload 270 h	**Credit points** 9 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: • Describe the process of model driven software development (MDSD) and support this description with personal experiences • Connect model driven software development guidelines to concrete practical examples • Be able to use one or several concrete MDSD tools and techniques and explain their use to others		
Soft skills	Students should be able to: • Run a software project based on MDSD tools, techniques and methods • Establish and iteratively evolve a project plan • Collaborate in a team • Estimate the required time and other resources for given tasks • Manage a software development project with time constraints		
Contents	Model driven software development methods are the key to a new level of automation and tool integration in software development. Students will learn how MDSE concepts, tools an methods boost the development of general purpose and domain specific languages, leverage software quality analysis tools and foster automated software improvement.		
Prerequisites	**Required:** MA-INF 3218 – Seminar Model-Driven Software Engineering The seminar lays the conceptual foundations for the work in the lab.		
Format	**Teaching format** / **Group size** / **h/week** / **Workload[h]** / **CP** Lab / 8 / 4 / 60 T / 210 S / 9 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/labs/start • Slides (Powerpoint/PDF) • Wiki as a shared knowledge base • Task Tracking System (Electronical or Physical) • Shared repository for source code and development documents • Mailing list		
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 • Modellgetriebene Softwareentwicklung, Techniken, Engineering, Management. dPunkt, 2005		