

<b>Module number</b>	<b>Module name</b>	<b>Module coordinator</b>
BIW-MA-AC-O-06	Building Information Modeling: Methods and Concepts	Prof. Dr. Karsten Menzel bauinformatik@tu-dresden.de
<b>Learning goals</b>	<p>Students understand the concepts of Building Information Modeling (BIM). They are able to professionally structure and model complex engineering projects. They can specify the dependencies of processes and associated sub-models. Furthermore, students can specify, configure and manage integrated hardware-software architectures for Building Information Modeling.</p> <p>Students are capable to use suitable software tools for specifying information requirements in BIM.</p> <p>Finally, students are capable to check and evaluate the quality of information shared in complex BIM projects. They can critically evaluate the scope, consistency and completeness of BIM models and are able to lead a team project group.</p>	
<b>Content</b>	The teaching and learning content emphasizes on: (i) Concepts of BIM, (ii) Strategies and methods for process and team management in BIM, (iii) Concepts and methods for quality management in BIM.	
<b>Teaching and learning methods</b>	2 SWS Lectures, 2 SWS Project, self-directed studies. (SWS...contact hour)	
<b>Prerequisites</b>	Knowledge and expertise in „ <i>Bauinformatik</i> “ at the level of Bachelor degree programs. Knowledge and skills acquired in the „Mentoring Program“.	
<b>Applicability</b>	Compulsory Module of the ACCESS MSc-degree program ( <i>Advanced Computational and Civil Engineering Structural Studies</i> ).	
<b>Requirements for earning credit points</b>	Credit points are awarded after successful completion of the examination. Written examination of 90 minutes' duration. Language of instruction: English.	
<b>Credit points and grades</b>	Five credit points can be acquired through the module. The module grade corresponds to the grade of the examination.	
<b>Module frequency</b>	The module is exclusively offered in the Winter Term.	
<b>Workload</b>	Total workload is: 150 hours.	
<b>Module duration</b>	The module is delivered over one term.	
<b>Recommended reading list</b>	André Borrmann, Markus König, Christian Koch, Jakob Beetz: Building Information Modeling: Technology Foundations and Industry Practice; Springer; 1. Ausgabe. 2018.	