

Quick facts

- **Duration:** Three-semester studies, including master-thesis, organised in block study periods
- **Start of studies:** Winter semester
- **Credit points:** 90 ECTS
- **Tuition fee:** 2.300 EUR per semester
- **Academic degree:** Master of Engineering (M.Eng.)
- **Working language:** English
- **Place of Study:** Detmold, Germany: Hochschule Ostwestfalen-Lippe, University of Applied Sciences
-

Profile of Detmold School

The Detmold School of Architecture and Interior Architecture is a department of Hochschule Ostwestfalen-Lippe, University of Applied Sciences. It benefits from a 120-year-old design-tradition. The department offers a variety of architectural education; from chair to town: architecture, interior architecture, and urban planning. The faculty of interior design is the largest program in Germany.

The open and transparent arrangement of the school's buildings – all designed by students – produces a dynamic and creative atmosphere around campus. This energetic campus, together with the variety of courses of study on offer, shapes the unique character of Detmold.



Master • Computational Design and Construction

Hochschule Ostwestfalen-Lippe

Prof. Dipl.-Ing. Marco Hemmerling MA

Emilienstr.45
D-32756 Detmold

info@m-cdc.de

www.m-cdc.de

T +49 (5231) 769 -667

F +49 (5231) 769 -712



Hochschule Ostwestfalen-Lippe
University of Applied Sciences

Detmolder Schule
für Architektur und
Innenarchitektur

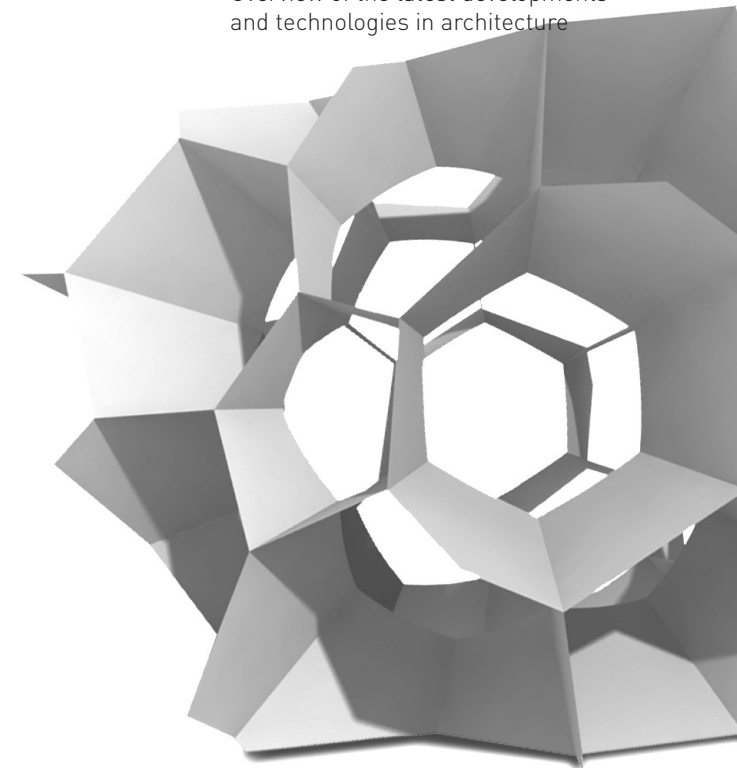
werkstatt.emilie

an-institut der
Hochschule Ostwestfalen-Lippe
University of Applied Sciences



Master • Computational Design and Construction

- New post-graduate master programme at Detmolder Schule für Architektur und Innenarchitektur, institute of higher education in Germany
- Impartation of scientific and practical competence in digital design and construction methods
- Overview of the latest developments and technologies in architecture



Master • Computational Design and Construction

Digital technologies altered the field of architecture and the architectural profession significantly – from design to production. Against this background the study program incorporates the professional qualities of higher architectural education as well as the theoretic and operative aspects of information technology.

The new post-graduate Master program focuses on digital design methods and construction technologies in Architecture, Engineering and Design. The Curriculum provides scientific and practical foundation and gives an overview of latest developments in Computational Design and Construction.

To convey further knowledge of these technologies is the main goal of the master's curriculum. The Master Computational Design and Construction is based on the following principles:

- Computer-aided methods as cross-linking of design, construction and fabrication process
- Inter- and transdisciplinary exchange
- Studies related to practice
- Synergy and additional benefit out of the connection between university, companies and external professionals
- Integration of compact workshops and symposia

Target Audience

The three-semester Master program addresses graduates of Architecture, Interior and Product Design, Civil and Mechanical Engineering, as well as Information Technology and related studies. Cooperative projects, symposia and master theses serve as a platform for collaborations with the building industry, software suppliers, other universities and architectural offices.

Curriculum				Amount		Semester Semester Periods Per Week						Provider (University or External Partners)
				SPW	CR	1		2		3		
Modul-No.	Module	Abbreviation			L	S	L	S	L	S		

Compulsory Subjects

Basic-Modules

1400	Building Information Modeling	M-CDC B1	3	4	1	2					HS OWL
1401	Programming	M-CDC B2	3	4	1	2					HS OWL
1402	Simulation	M-CDC B3	3	4	1	2					HS OWL
1403	Project- and Datamanagement	M-CDC B4	2	2					2	0	HS OWL
1404	Digital Fabrication	M-CDC B5	6	8			2	4			HS OWL
1405	Material and Construction	M-CDC B6	3	4			1	2			HS OWL

Project-Modules

1406	Computational Design	M-CDC P1	6	10	1	5					HS OWL
1407	Computational Construction	M-CDC P2	6	10			1	5			HS OWL

Spezial-Modules

1408	Best Practice 1	M-CDC S1	3	4	1	2					EP
1409	Best Practice 2	M-CDC S2	3	4					1	2	EP
1410	New Technologies	M-CDC S3	3	4			1	2			HS OWL
1411	New Materials	M-CDC S4	3	4					1	2	HS OWL

Amount Compulsory Subjects

44 62 18 18 8

Compulsory Electives

	CE 1: Subject of Course Group 1	M-CDC-WP	3	4	1	2					EP
	CE 2: Subject of Course Group 2	M-CDC WT	3	4			1	2			EP

Amount Compulsory Electives

6 8 3 3

	Master-Project			15					x		HS OWL
	Colloquium			5					x		HS OWL

Amount SPW • CR

50 90 21 • 30 21 • 30 8 • 30

Compulsory Electives – Course Group 1 – Planning

1450	Advanced Simulation	M-CDC WP 1	3	4							
1451	Software 1	M-CDC WP 2	3	4							
1452	Software 2	M-CDC WP 3	3	4							

Compulsory Electives – Course Group 2 – Engineering

1453	Advanced Fabrication	M-CDC WT 1	3	4							
1454	Software 3	M-CDC WT 2	3	4							
1455	Software 4	M-CDC WT 3	3	4							