

Advantage through BIM Competence

Standardized BIM Education
with the buildingSMART Professional
Certification Program

CURRICULUM VITAE



M.Sc. Sarah Kristina Merz

| 2009 | B.A. Architecture, FH Aachen |
|------|---|
| 2009 | Urban Development, KMUST, Kunming, China |
| 2011 | Life Cycle Financial Management, Stanford University, USA |
| 2013 | M.Sc. Management [Construction Real Estate Infrastructure], |
| | Bauhaus University Weimar, Germany |
| 2014 | Product Manager, DIN Beuth Verlag GmbH |
| 2016 | Head of Academy, DEUBIM GmbH |
| 2016 | Committee member VDI 2552-8 "BIM Qualifications" |
| 2016 | Member buildingSMART Germany "BIM Certification" |
| 2016 | German representative & Co-Head buildingSMART International |
| | "Professional Certification Program" |
| 2019 | Head buildingSMART International Subcommittee |
| | "Professional Certification Practitioner" |
| 2020 | Head WG buildingSMART Germany "BIM Certification" |
| 2022 | Co-Head DIN NA 005-13-05 AA "Fachkompetenz" |



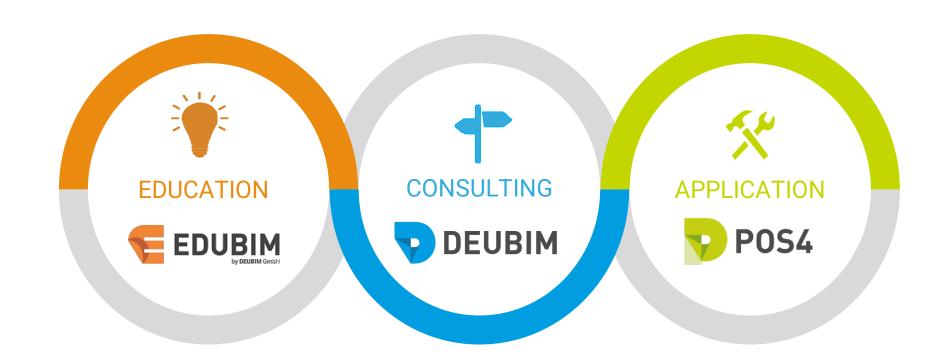








Our Company Group





Advantage through BIM Competence





Sustainability requires Empowerment



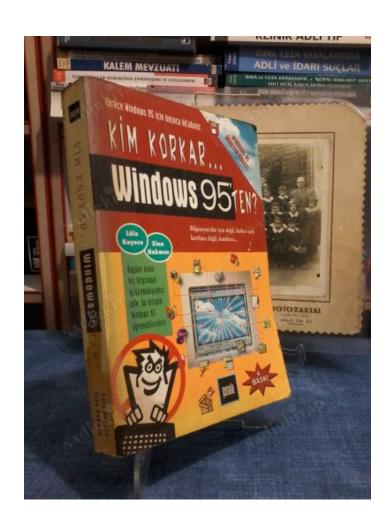
Education

Empowerment to actively, responsibly and autonomously shape the future in a globalized and digitalized world



DEMAND

Education beyond School



"The development of certification schemes for persons, in response to the ever increasing velocity of technological innovation and growing specialization of personnel, can compensate for variations in education and training and thus facilitate the global job market."

(ISO 17024:2012-11)



What can go wrong...







DEMAND

Necessity of BIM competence

Dijitalleştirme ve kolaylaştırma

İnşaat ve gayrimenkul sektörünü, tabi bütün yönetim kademeleri dahil olmak üzere, Open-BİM ve standart uygulama konusunda destekleyeceğiz.

[Bundesbau] Federal inşaat sektörü dijitalleştirmede bir rol modeldir. Aynı zamanda inşaat, konut ve iklimdeki siyasi amaçlarımız için büyük önemi vardır.

(cf. p.20, Koalitionsvertrag SPD, DIE GRÜNEN, FDP 2021)

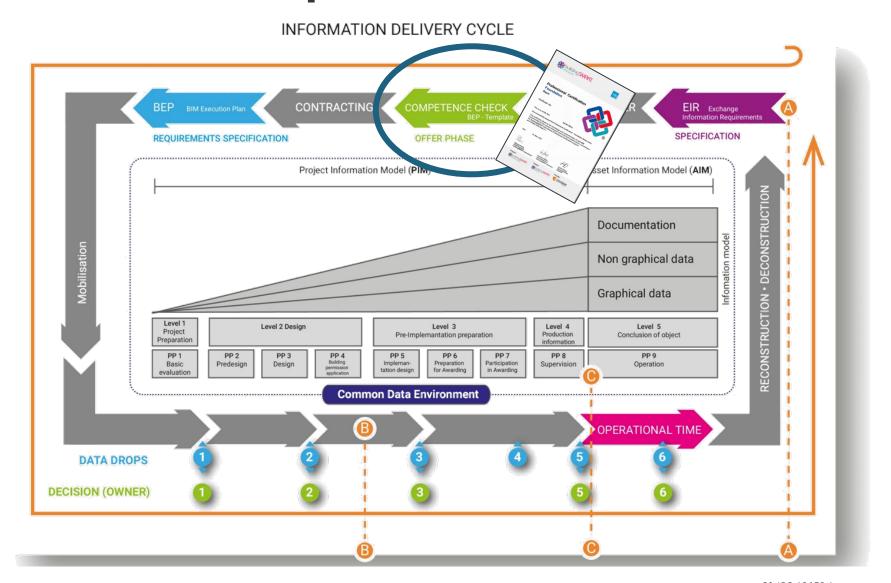
Mandatory BIM Use for Public Projects

- > Norway
- > Austria
- > Sweden
- > Finland
- Denmark
- > UK
- Netherlands
- > France
- > Germany
- > Italy
- > tbc

https://t1p.de/mandatory-bim



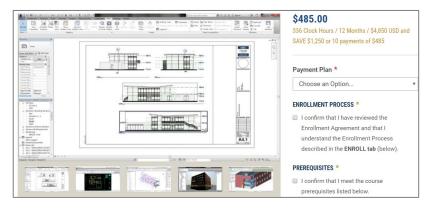
Proof of Competence in Process

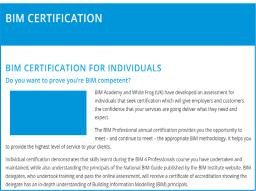




DEMAND

Certification Jungle





Авторизованный центр Академии ВІМ предлагает всем желающим сдать экзамен и подтвердить свои профессиональные навыки работы в продуктах

ДАТА ПРОВЕДЕНИЯ: по запросу +записаться

СТОИМОСТЬ:

Экзамен уровень Professional - 8 000 руб.

Экзамен с возможностью пересдачи - 9 000 руб.

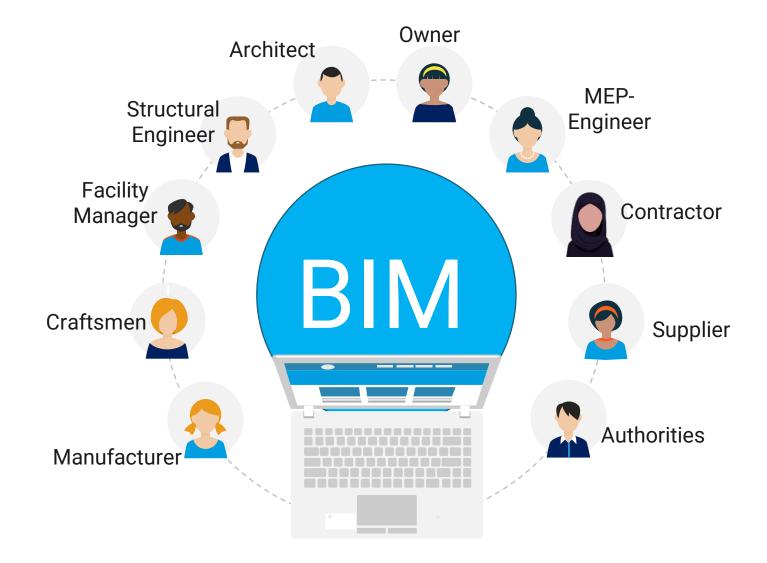
Экзамен с пересдачей и с практической подготовкой - 12 000 руб.





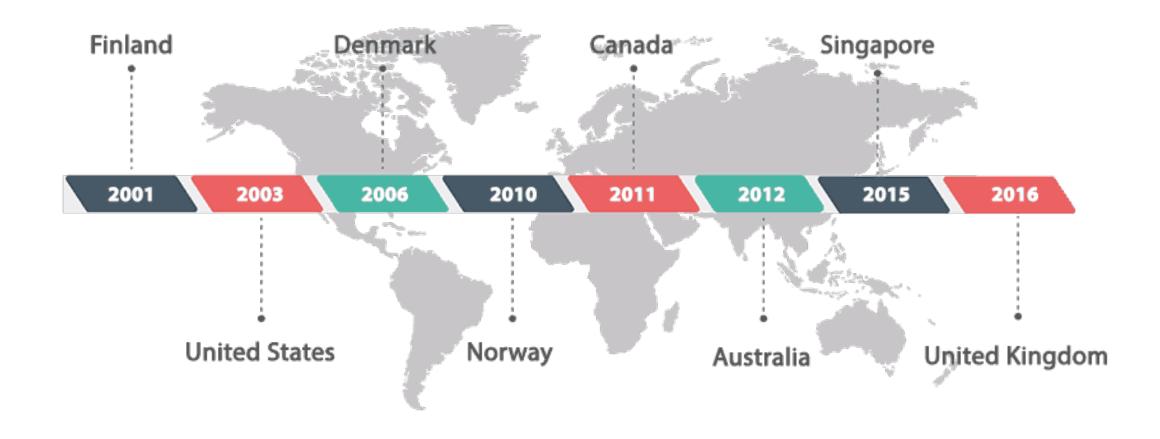


Language Lesson required





Are national solutions sufficient?





Professional Certification Program



building SMART.

- Certification Program of buildingSMART International
- Development and coordination by international committee





Why Professional Certification?

- ✓ Verifiable qualified BIM professionals with comparable competence level
- ✓ Global benchmark for content of teaching and certification standards
- ✓ Consistent understanding of BIM (terminology and processes)

Developed by... buildingSMART International

Provided by... buildingSMART chapters

Conducted by... Training organizations

FOR...

individuals throughout the entire value chain of design, construction and operation in the construction and real estate industry!





SOLUTION

Learning Outcomes



BASIC - Learning Outcome Framework Overview

- 1) Understand what BIM is, why it is needed, and recognise its specific terminology.
- 1-1) Define the drivers that have led to BIM;
- 1-2) Define BIM;
- 1-3) Identify & Define key BIM terminology
- Define BIM maturity levels;
- 1-5) Define what constitutes an Information Model.
- 2) Recognise the advantages of BIM, compared to traditional project delivery.
- Know why collaborative and new ways of working are required;
- 2-2) Identify the effects of poor information management on projects
- 2-3) Identify the standards developed to mitigate poor information;
 2-4) Identify the benefits of BIM to construction professionals;
- 2-5) Identify the benefits of BIM adoption to clients, and facility management
- Understand the project information development cycle (and its key terms); specifically how project information is specified, produced, exchanged, and maintained.
- 3-1) Know why employers need to clearly define their requirements (EIR);
- Understand the content and value of a BIM Execution Plan (BEP);
- Know why consistent exchanges of information is required;
- 3-4) Identify the key elements and benefits of using a collaborative exchange platform (CDE);
- 3-5) Know why clearly defined information management roles are required;
- -6) Know why assessing potential supply chain members before appointment is required.
- 4) Recognise the need for open and interoperable solutions
- 1) Define who buildingSMART are;
- Define openBIM and its benefits compared to using proprietary products and systems;
- 4-3) Know what IFC is, and its benefits;
- Know what MVDs are, and their benefits;
- 4-5) Know what IDMs are, and their benefits;
 4-6) Know what the bSDD is, and its benefits;
- 4-7) Know what is BCF and its benefits.
- 5) Identify an organisations capability in working with BIM
- 5-1) Understand the potential benefits for a company in adopting BIM;
- i-2) Understand the factors that define an organisation's level of BIM Maturity;
- 5-3) Know why BIM adoption needs to align to Organizational goals;
- Identify the benefits and challenges to BIM adoption;
- 5-5) Know what the data security implications are for adopting BIM.

- 1) Understand the definition, key terminologies and benefits of Building Information Modeling.
- Recognize the advantages of BIM compared to traditional project delivery.
- 3) Understand the project information development management, with BIM, according to the ISO 19650 series.
- 4) Recognize the need for open and interoperable solutions.
- 5) Understand the terms and measures of BIM capability within an organization.

01/03/2017bSI-LOF-00P01.01, DRAFT



SOLUTION

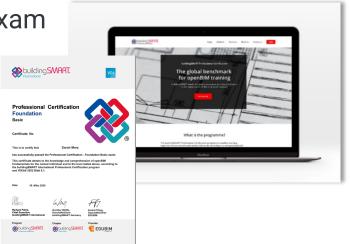
Certification Process

Seminar conducted by buildingSMART-approved training providers



Course content (min. 16 learning units) according to "buildingSMART International Professional Certification Learning Outcome Framework"

Concluding with online exam







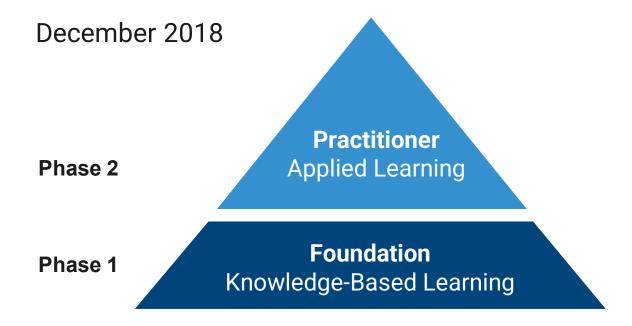
Status Quo

• First **program start**: May 2018

• **Approval** of first training providers: October 2018

Certification of first individuals:

Next steps: PRACTITIONER









Questions and Comments

Sarah Kristina Merz Head of Academy

DEUBIM GmbH Grafenberger Allee 82 40237 Düsseldorf

E: sarah.merz@deubim.de T: +49 (0)211 9665 1304



