



ICT MANAGEMENT EDUCATION™

Management education for the construction industry.
Improve your bottom line through ICT coordination.



Byggeriets Ledelsescenter

Become an ICT Manager

With the instatement of the ICT Regulations no. 118 & 119 in 2013, the ICT manager has gained a permanent role in Danish construction. The ICT Management Education™ focuses on digitalisation and business principles based on experience from industry specialists, and focuses on the requirements for digitalisation for public and non-profit construction project. Our goal is to enable you to fulfil all the requirements and goals inherent in the responsibilities of an ICT manager and ensure projects with better profitability for all parties involved.

The role of an ICT manager directly affects the construction industry's bottom line, which is why there is a high demand for the ICT Management Education. With an ICT Management Education you will be equipped to fulfil the ICT goals and regulations and thus achieve more successful construction project for your organisation and other parties contributing to the project. Byggeriets Ledelsescenter has educated more than 1000 ICT managers and 98% of course participants would recommend the education to others.

At the ICT Management Education™ we also discuss the new AB18, ABR18 and YBL18 and walk through the consequences for you as an ICT manager, the client and the other project participants. The education teaches you to make informed ICT decisions and to work towards the best results as an ICT manager.

You will be taught by a team of industry experts in their respective fields. You will have online access to a toolkit with templates and documents for direct implementation in your everyday work. After passing the exam, you will be a certified ICT manager and be a part of the leaders in professional construction in Denmark who will increase our industry's competitiveness and ensure higher profitability.

The client is responsible for ensuring that ICT coordination takes place throughout the construction project and that applicable laws and requirements are met. The role of ICT manager can be placed with the client, one of the project's consultants, the contractor, or a third party who is solely responsible for this task. When the role is placed with one of the parties involved in the construction project, it is an advantage, since this part knows the project from the inside.

Online or offline?

Whether you prefer to take the education online or offline, we have a solution that suits you and your needs. Both educations have the same comprehensive course content, so you'll get exactly the same benefits from both types of education. The only difference is that if you choose our online education, you participate directly from your computer with webcam, microphone and a stable internet connection. If you prefer to take the education offline, you will meet physically with teachers and participants, giving you the opportunity to network and enjoy 3 days of focused training away from the office and daily tasks.



The education is instrumental in
Keeping your finger on the pulse,
stay updated, network and be ready
for all challenges of digital construction.

- Peter Sommerfeld
Fredensborg Municipality

What do I achieve from attending?

Whether you choose the education online or offline, you get the same benefits.

- You will understand the requirements of the ICT regulations and their consequences in relation to the construction process and the subsequent O&M.
- You will learn how to draft ICT agreements and ICT specifications and understand the consequences of your choices.
- You will know the legal implications, contractual issues and the responsibilities and obligations of the ICT manager.
- You will learn how to implement an ICT strategy in practice and understand the importance of change management.
- You can drive projects to completion with minimised risk, improved bottom line and in compliance with laws and requirements.
- You can lead ICT coordination through the construction process via a roadmap.
- You strengthen your resumé, your competences and your company's competitiveness.
- You will become part of a professional network and meet potential business partners from all parts of the industry.
- The education ends with a certificate proving that you have completed the ICT Management education™.

The ICT regulations in general construction

The purpose of the ICT regulations is ensure a harmonised and and value-adding use of ICT in construction, renovation and operation and maintenance tasks in the public sector and publicly funded construction. Productivity in these tasks can be significantly increased through the extended use of ICT. The regulations include a number of requirements for the use of ICT and the methods and processes associated with digitalisation. In practical terms, the ICT regulations are designed as a series of requirements that the client must make available to the parties involved in the specific construction project. These requirements include:



- 3 ICT coordination**
- 4 Digital building object management**
- 5 Digital communication and project web etc.**
- 6 Using digital building models in project competitions**
- 7 Using object-oriented building models in design and construction**
- 8 Digital tendering and bidding**
- 9 Tendering with quantities**
- 10 Digital delivery at handover**
- 11 Digital defect information**

The ICT manager directly influences the process, progress and bottom line of a construction project. When you become an ICT manager, you can fulfil the productivity goals set out in the ICT regulations - **ICT as good business.**

Target group:

The ICT Management Education™ is aimed at everyone in the construction industry - both public and private - with an interface or interest in ICT. The education is relevant for clients, consultants, engineers, architects and contractors.

Program for the Education

Here you get an overview of the structure of the education and the different lessons. The education is designed to give you the greatest benefit and best preparations to maintain the role as an ICT manager. **The exam will consist of 2 multiple choice tests and a workshop with a group presentation.**

▶ Lesson 1: ICT- Managers roll

The purpose of the lesson is:

- To introduce the conditions that set the framework for the ICT managers work. This includes business conditions, management and organisation, digital technology and standardisation.

The learning objective of the lesson is:

- To contribute to the ICT manager being able to objectively argue and document the background and purpose of digitalisation in a company in relation to individual construction projects and partners.
- To help the ICT manager understand that the use of ICT is not only about technology, but also about business, management and organisation as well as competencies and standardisation.
- To briefly introduce the value-adding aspects of ICT use in construction projects.

▶ Lesson 2: The ICT regulations

The purpose of the lesson is:

- To go through the requirements of the ICT regulations in detail for public and non-profit buildings.
- To review the importance of the requirements in relation to the ICT technical options (standards and ICT tools) available on the market today.
- To illustrate the consequences of each requirement in relation to the construction process and subsequent operation and maintenance.

The learning objective of the lesson is:

- That the ICT manager knows all requirements in the ICT regulations and their consequences in relation to the building process and the subsequent operation & maintenance.
- That the ICT manager is aware of his/her tasks in relation to the requirements of the ICT regulations in a public and general construction project.



▶ Lesson 3: Facility Management

The purpose of the lesson is:

- To provide an overview of how building process data can/should be used in the subsequent operation and maintenance.
- To provide an overview of the operating organisation's use and challenges with digital building models and digital data.

The learning objective of the lesson is:

- That the ICT manager is familiar with the tasks of a Facility Management organisation on a general level.
- That the ICT manager is familiar with the types of information that are important for the operational phase, what data created during the construction process can be used for, and a general knowledge of formats and standards that can be used in connection with Digital Handover.

▶ Lesson 5: Construction law & digitalisation

The purpose of the lesson is:

- To outline relevant regulations in relation to the ICT managers role.
- To review the legal basis for the transfer of the ICT coordination obligation.
- To map and review practical challenges related to digitalisation of construction projects, with a special focus on responsibility and risk.

The learning objective of the lesson is:

- That the ICT manager gets an overview of the relevant regulations and conditions in relation to the ICT managers role.
- That the ICT manager is given the tools to enter into an agreement on the transfer of the obligation.
- To enable the ICT manager to identify legal risks and challenges, including the legal consequences of inadequate ICT coordination.

▶ Lesson 4: Change Management

The purpose of the lesson is:

- To provide an overall insight into the managerial challenges of implementing ICT agreements, which often mean change for an organisation.

The learning objective of the lesson is:

- For the ICT manager to gain knowledge of change management in order to implement an ICT agreement in practice.
- That the ICT manager understands that good change management is linked to change analysis.
- That the ICT manager understands the necessity of planning change initiatives.

▶ Lesson 6: Copyright & digitalisation

The purpose of the lesson is:

- In general terms, to provide insight into the exclusive rights, especially copyright, that are relevant to the ICT manager - which rights apply and what is protected.
- To provide knowledge about what the ICT manager must be aware of in relation to copyright when preparing, using and transferring drawings, building models, etc.

The learning objective of the lesson is:

- That the ICT manager is given the tools to enter into an agreement when transferring the obligation.
- To enable the ICT manager to identify legal risks and challenges, including the consequences of violating the rights of others in relation to e.g. drawings and building models.

Workshop with Kim Jacobsen

Workshop A: ICT-strategy for construction and operation clients

The purpose of this workshop is to learn how to set an ICT vision and ICT goals for a construction project - and from this to develop an ICT strategy and an ICT agreement.

Workshop B: ICT services and ICT specification

The purpose of this workshop is to learn how to create an ICT specification (ICT services) for a construction project that both supports the ICT vision and ICT goals developed in Workshop A, and supports the requirements and agreement rules set out in the ICT regulations, the AB rule set and the service descriptions from FRI (the Danish Association of Consulting Engineers) and Danish Architectural Companies.

Workshop C: ICT management and ICT process manual

The purpose of this workshop is to learn the tasks and deliverables of the ICT manager as specified in the ICT regulations and service descriptions from FRI (the Danish Association of Consulting Engineers) and Danish Architectural Companies. In addition, the aim is also to learn how to create an ICT process manual that supports the agreed ICT services specified in a construction project's ICT specification.

Workshop D: Digital handover and ICT Management

The purpose of this workshop is to learn how to prepare a digital handover specification for operations and maintenance. In addition, the aim is also to plan the necessary ICT management that the ICT vision, ICT objectives, ICT specification and ICT process manual of the construction project may require in order for ICT application to be successful for the entire project organization.



The Workshop ends with a group presentation.

*Strengthen your CV
and your competences
with an education
from BLC*

98%
recommend
the education

“ The ICT Management Education was an eye-opener for me. I am happy with my participation and all the teachers were very professional and skilled at teaching - also online, even though I was a bit sceptical before I started. ”

- Online participant

“ The education is super well structured. You start with a general overview and then dive directly into the material. I found the education very broad and it covered the content of the ICT regulation, industry standards, the related laws and the practical use of ICT. I now have a really good grasp of the main concepts. The education was updated with the latest regulations, so everything was in control. At LEAN Design, we use the ICT certification to highlight ICT as a consultancy service, and it has aroused the interest of several people and has been very positive for our company. ”

- Jonas Wildt Rosenkilde, Lean Design

“ Overall, I had a really good experience with the ICT Management Education - it was super well organised. We bid on a case where an ICT manager was required, and I was assigned the role - and I would never have been able to fulfil that role if I had not participated on the ICT Management Education. Having people with different project roles, gives a good dynamic, as everyone sees things from a different perspective and can bring something different to the table. I've definitely learnt a lot that I can use in the future. ”

- Christa Møgelberg, Enemærke & Petersen

“ It all worked pretty well for me, as a complete beginner in ICT, and I got 110% out of it as I wanted. I feel well prepared to work with ICT in the real world. ”

- Online participant

“

The ICT Management Education is a short, concise education that provides an overview of ICT implementation in Danish construction without going into unnecessary detail.

- Lasse Jensen, Atkins Danmark A/S

”



At Byggeriets Ledelsescenter each teacher is a leading industry professional, recognised from higher education in the industry, and dedicated to putting theoretical knowledge into practice with a focus on construction.

Kim Jacobsen, owner of K-Jacobsen A/S

Kim has more than 20 years of experience in the construction industry, where he has previously worked with business development and standardisation of IT, for example as IT manager at Rambøll. He has taken an active part in the Ministry of Economic and Business Affairs' initiative "The Digital Construction Industry" and was the author of the ICT regulation 1381. Today, Kim works with translating strategic IT, digitalisation and ICT into business benefits.

Christian Koch, Professor and Head of Section, University of Southern Denmark (Odense)

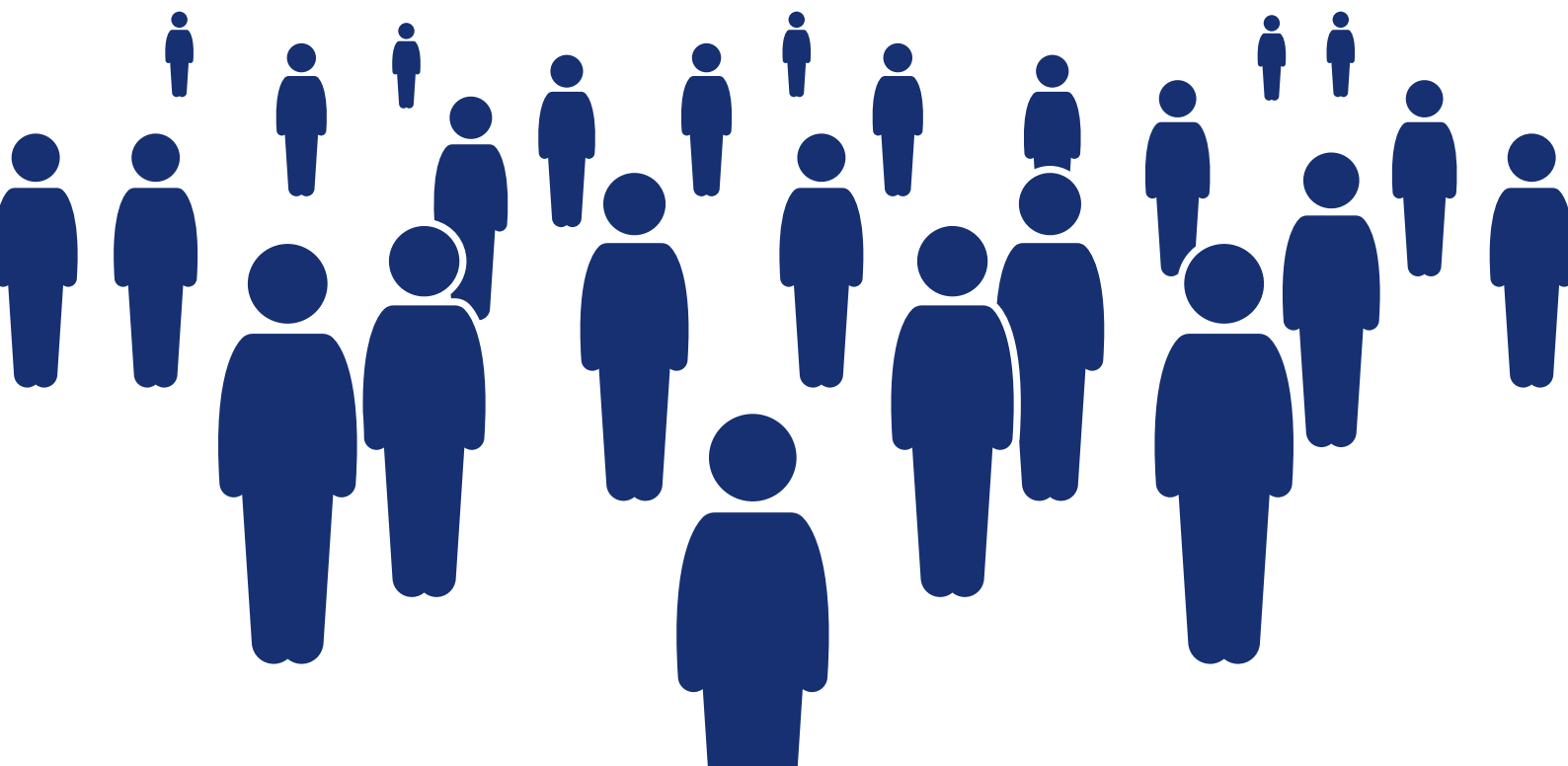
Christian research and teach in management, organisation, innovation, IT, sustainability and circularity in construction within design, production and property management. He participated in the development program 'The Digital Construction' and the implementation network, and he is a former member of the boards of bips, Molio, the partnership Cuneco, the Danish Fire and Security Technology Institute and the construction contractor Barslund AB. Finally, Christian is also a visiting professor at Halmstad University.

Frederik S. Borg, Operations Manager, NREP

Frederik is an expert in Facility Management, as a qualified engineer specializing in digital construction and Digital Facility Management. He has experience in bridging the gap between the executing party and the subsequent operation as well as broad professional knowledge of how modern technology is used to operate digitally. Among other things, he advises major construction and operations clients on the implementation of digital tools.

Hanne Steffensen, Steering Manager, University College Copenhagen

Hanne is a change management practitioner. She has worked with large and small change projects in various organisations - from implementing new IT systems to changing business and markets. She has a solid knowledge of the organisational, psychological and communicative issues in change management. She holds degrees from Aalborg University and Copenhagen Business School, supplemented with several management courses, including coaching and a mini MBA.



Anne Møller Lagerberg, Owner of Lagerberg Rådgivning ApS

Anne has extensive experience in construction and facility management. She is an experienced project manager from the construction industry, a senior consultant in digitalisation and comes from a position as head of department in Aarhus Municipality, with responsibility for new construction, FM digitalisation, energy renovation and energy management. Anne is a co-founder and partner at Lagerberg Rådgivning A/S and helps companies and building owners who want responsible and sustainable operation of their buildings.

Timm Braun, Attorney at Law, TVC Law Firm

Timm is a partner and head of TVC Law Firm's construction law department. He has extensive experience in advising on construction law matters and particularly specialized advice and assistance in the preparation and conclusion of construction and technical consultancy contracts, as well as during the construction process and in handling construction law disputes. Timm has extensive experience in arbitration and litigation.

Peter Qvist Lessél, Lawyer, Molt Wengel

Peter is a lawyer at Molt Wengel, a law firm specialising exclusively in construction. On a daily basis, Peter leads a team that specialises in primarily technical and complex construction contracts. The advice ranges from the early tender phase of e.g. client consultancy agreements, preparation of ICT specifications and advice during the execution and handover phase. Peter has been affiliated with the University of Copenhagen as a guest researcher in Digital Construction Law and has published an article on co-projecting in digital discipline models.

Peter Lind Nielsen, IT lawyer, Bech-Bruun Law Firm

Peter is an experienced IT lawyer, and has for more than 20 years advised both customers and suppliers. He has particular experience with contracts in EU tenders and works extensively with contract drafting, negotiation and dispute resolution in IT projects. Peter is a certified IT lawyer and a frequent speaker and trainer.

Johnny Petersen, Senior Attorney, Bech-Bruun Advokater

Johnny has particular expertise in intellectual property law, including patents, trademarks and designs. He is heavily involved in counselling and conducting litigation on intellectual property rights and he also advises on personal data law. Johnny is and has for a number of years been recommended by Legal 500 within intellectual property law.



Contact

BYGGERIETS LEDELSESCENTER

RIB Software - Ryesgade 19C
2200 København N.
Gitte Daurehøj
Tlf. 53 72 92 87

Practical information:



Where

The education is held in Copenhagen.



When

See all dates and exact time schedule here:
www.byggerietsledelsescenter.dk/ict-management-education



Scope

3 full days from 08.00 AM - 16.00 PM.



Preparation

Expect one day of preparations before the education starts.



Exam

2 multiple-choice tests and a group assignment with presentation.



Certification

If you pass the tests, you will receive a certificate.



Sign up

Sign-up is open to everyone, whether you are unemployed or employed.



Deadline

No later than one week before the education starts. The education will only be conducted if there are enough enrolments.



Price

DKK 22.995,- (excl. VAT)



Catering

Breakfast, lunch, coffee, tea and cake are served all three days.