

# Learn to make complex data readable and to discover the unexpected in your data set Take the course Visual Analytics

Visual analytics combines automated analysis techniques with interactive visualizations for an effective understanding, reasoning and decision making based on very large and complex data sets. Following this two-sided approach to data analysis, this course offers a practical introduction to Visual Analytics in three parts – each corresponding to one of the three single subjects, the course consists of:

- the automated data analytics techniques especially supervised and unsupervised learning,
- the interactive visualization techniques especially for uni-, bi-, and multivariate data.
- the effective combination of both in a practical visual analytics system as a course project.

Participants develop familiarity with key concepts in data mining, visualization methods, and their mutual integration into visual analytics. Practical skills include understanding relevant terminology, utilizing state-of-the-art libraries and toolkits, and evaluating visual analytics solutions.

#### Target group

Developers of business intelligence (BI) solutions seeking to learn the intricacies of developing a complete BI solution. Business intelligence architects aiming to acquire a profound understanding of the technologies and thereby design optimal solutions for specific business needs. Data Scientists or Data analysts, who analyze data on a daily basis, but want to acquire new knowledge about how the underlying technology functions.

Duration October 2024 – June 2025

**Application deadline** 1. June 2024

Language English

**Teaching dates (subject to change)** 10.09.24 (Kickoff Zoom call), 13.09.24, 27.09.24, 11.10.24, 25.10.24, 08.11.24, 22.11.24

**Price** DKK 24,000

Course provider Aarhus University

**Questions about admission, enrollment, and billing inquiries** Admission officer, Sabine Louisa Haxen Phone number: +45 9352 2803 E-mail: evu.nat-tech@au.dk **Questions regarding the curriculum** Associate Professor Hans-Jörg Schulz E-mail: hjschulz@cs.au.dk

"Visual Analytics is particularly helpful for exploratory data analyses. You learn to look for data, to confirm the expected but also to discover the unexpected and it is exactly what it does. You have a certain expectation about what the data looks like, and the data visualization helps you to confirm that the data actually is how it should be, and on the other hand, if there is something out of place, it also helps you to

discover something new that otherwise would stay hidden."



**Associate Professor** Hans-Jörg Schulz, course lead for Visual Analytics.

Read more and sign up here: https://www.au.dk/visual-analytics

It-vest networking universities

# **Study a Master of IT** – IT competencies for you and your company

The master programme of IT is a continuing and further education for people who work professionally with

- software development
- IT management
- business development with IT
- IT security and information security
- · product and service development with it
- teaching within the field of IT.

## Through subjects at Master of IT, you can:

- Develop your professional and personal skills to work solution-oriented and innovatively with IT-related tasks.
- Get access to the latest knowledge based on the universities' IT research.
- Get a theoretical foundation that helps you make highly qualified analyses and decisions that support your practical work.

 Become professionally challenged and get time for professional immersion together with both lecturers and fellow students.

The subjects on the master programme of IT are organised within two tracks:

#### **Software Construction**

covers all aspects of software development: specification, design, construction, analysis, verification, security.

#### Organisation

covers IT for organisational and business change processes – including IT strategy and IT management.

#### Choose one subject, several subjects or the full programme

The teaching is part-time and is organised around a number of seminars combined with online communication, reading and writing assignments.

You decide for yourself whether you want to take one or more subjects on the programme. The subjetcs are combined in courses with a duration of 5-9 months. It is possible to combine three courses and a master's project and obtain an academic degree as MSc.

#### Specialisation in IT security and information security

A special opportunity is that you can combine courses and a master's project to become a specialist in either IT security or information security. The specialisation in IT security is offered on the track of Software Construction. The specialisation in information security is offered in the track of Organisation.



#### **Need supervision?**

You are always welcome to contact It-vest and the networking universities with questions about a Master of IT. It-vest: Tel: +45 7027 6850, e-mail: it-vest@it-vest.dk

### www.master-it-vest.dk

The master programme of IT is offered by the It-vest cooperation between the University of Southern Denmark, Aalborg University and Aarhus University.



JESPER LUND KLARIS, Head of Development – EG Housing

"The strength of the structure of the master of IT is that it is a very intense course with very intensive teaching sessions. The combination of theory at a high level and presenters from the industry giving their take on how the theory works in practice is also really good. This makes it all come together nicely."



JOHN MADUM, chief consultant, and information security advisor

"I am specialized in IT security and to work based on an academic background is a clear advantage. Studying on a master's level, you get the necessary theories, tools and methods to make decisions which are not just based on a gut feeling."

> JESPER MØLLER JAKOBSEN, software developer at Mindworking A/S

"Master of IT has given me useful tools, a better overview of our software architecture and a greater insight into what lies 'below' the surface of the system. My new knowledge entails that I, today, have been given more responsibility and an opportunity to work with software architecture – I was previously primarily a developer."







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