The Master programme in Lighting Design was launched in 2014.

We have enrolled more than 200 master students.

Half of them are Scandinavian and half of them international representing 25 different nationalities.

The first 26 students graduated in the summer 2016.

Before their graduation half of them were in job and after the first quarter 88 % were in job.
CURRICULUM : MSc Lighting Design

1. SEMESTER

ARCHITECTURE
- LIGHT AND SPACE
- SEMESTER PROJECT: SEEING THE LIGHT

LIGHTING
- LIGHTING FUNDAMENTALS
- SEMESTER PROJECT: CREATING WITH LIGHT: INTERACTIVE LIGHTING

MEDIA TECHNOLOGY
- RENDERED LIGHTING SIMULATION
- SEMESTER PROJECT: LIGHTING DESIGN INNOVATION

2. SEMESTER

ARCHITECTURE
- LIGHT AND CONTEXT
- SEMESTER PROJECT: LIGHTING DESIGN INNOVATION

LIGHTING
- EVIDENCE-BASED LIGHTING DESIGN

MEDIA TECHNOLOGY
- INTELLIGENT LIGHTING DESIGN

3. SEMESTER

ARCHITECTURE

LIGHTING

MEDIA TECHNOLOGY

4. SEMESTER

ARCHITECTURE

LIGHTING

MEDIA TECHNOLOGY

FOCUS AREA, ELECTIVE COURSE OR
CREATIVE INNOVATION AND ENTREPRENEURSHIP

SEMESTER PROJECT: LIGHTING DESIGN INNOVATION

MASTER’S THESIS IN LIGHTING DESIGN
THE “KICK OFF PROJECT”
An engaging entry to a transdisciplinary master education
A woman is punching a man – Two characters in a POP-ART theme
COURSE: Meaning of light: LIGHT & SPACE

Real-world studies of the interplay between light, space, texture and the human experience
The basic photometric and colorimetric terms, quantities and the relationships between the terms, which are necessary to describe light propagation in real scenes, virtual scenes and light shows.
COURSE : RENDERED LIGHT SIMULATIONS

Light sources in CG
Advanced rendering concepts
Light matter interaction
High dynamic range imaging
VR

https://www.youtube.com/watch?v=LptMGZSvdqY
SEMESTER PROJECT 1: Seeing the Light – Relight Campus
COURSE : EVIDENCE BASED LIGHTING DESIGN
COURSE: INTELLEGENT LIGHTING DESIGN

Programming intelligent and interactive systems
Smart lamps (hue, lifx)
Smart sensors (kinect, leap motion, myo)
Use of Arduino and Raspberry Pi
Lighting Protocols (DMX, DALI, Ethernet)

https://www.youtube.com/watch?v=BJ_yI9gsoO8&feature=youtu.be
How can interactive lighting design in tunnels improve the Cycle Super Highways?

https://www.youtube.com/watch?v=03wM7gKhSVY
STUDY ENVIRONMENT

Lighting Design Studio
LABS AT AAU CPH

DDL Lab : Office space with controllable lights
E-Lab : Electronics, 3D printing
Graphics Lab : Access to computers for graphics and rendering
Light Lab : Controllable lighting equipment
Focus on the practices and experience
What is said and done...and that in between
Rhythms, Routes and Routines

Methods:
Participant-observations
Interview / Focus group
Observations
Recordings
Survey
Social mapping
Cultural probes
Technological media based analytics

Sensors
Media-based analytics (activity detection, sleep patterns etc.)
Eye tracking
EEG and other neurophysiological factors

Renderings and simulations
2D for visualization and user tests
3D for visualization and user tests
Modeling Rendering
3D for calculations
3D/VR for real time visualizations

Light control and adjustments
interfaces
Design and Architectural Analytics

Phenomenological approach
Registration of the physical space, dimensions, materials, tactility
Registration of how light is reflected, absorbed and transmitted
Registration of experience and use of space over time
Reference to a cultural understanding of (day)light, space and time

Test and explore the phenomenon of light through design experiments, scale models, mock up
JOB OPPORTUNITIES

• Consultancy companies within the fields of engineering, architecture, landscape architecture, etc.

• Media production companies where lighting designers are needed to make animation films, computer games and other kinds of entertainment.

• Lighting companies and producers of lighting equipment.

• Furthermore, lighting designers are needed in the public sector where you can find work at municipalities and in the State Administration as well as in various other fields where light and media is involved.
Master thesis: Biophilic Dynamic Light Projections
A proposal for the revitalization of socially-inactive urban spaces
(Ioana Fartadi)
Master thesis: Musicon path: light that follows (Esben Oxholm)
Master thesis: Explore methods for digital asset reconstruction and their application within lighting design (Iulian Drug)
Master thesis: Experiencing the Light Through our Skin - an EEG Study of Colored Light on Blindfolded Subjects (Mads Lind)
Post-Doc: AI-empowered lighting style/atmosphere transfer
(Tsampikos Kounalakis)
Project: LighTel Project: Circadian lighting for frail elderly and people with dementia

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<td>Circadian new lighting</td>
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Project: Double Dynamic Lighting
Videos from Lighting Design AAU

https://www.youtube.com/playlist?list=PL6YnmCLAAMwdiyvSVgFKBv8KHkwaoEorf
PLDC : Professional Lighting Design Convention

Award for Best Lighting Design Education 2017
The Lighting Design Research Group at AAU-Cph (LiD-RG) has a mission to contribute to new and improved ways as to how we use and perceive light in our daily lives.
3 Research Themes

**Light and Health**
- circadian rhythm lighting in old-age homes
- the effect of lighting on eating disorders
- personalized health

**Double Dynamic Lighting**
- combining daylight and dynamic artificial lighting to improved productivity and sustainability
- improving learning environments

**Intelligent Light**
- Artificial intelligence and machine learning
- VR and real-time light rendering
- IoT and Sensor technologies
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Industrial Partners
ADMISSION

- 40 seats
- List of approved bachelor degrees on website (light.aau.dk)
- Application: Grades from bachelor / undergraduate programme
  1-page motivational letter
  Relevant extra-curricular activities
- Deadline: 1st of March
FOR MORE INFORMATION

Web: www.light.aau.dk
Facebook: Lighting Design AAU-Cph
Instagram: lighting_design_aau_cph