

# Deep Learning in Computer Vision

**Course description:** <https://kurser.dtu.dk/course/02514>

**Course duration:** 04/06/2021 - 24/06/2021

**ECTS:** 5

**TAs:** Kilian Maurus Zepf (K), Christian Keilstrup Ingwersen (C), Frederik Warburg (F)

## Tentative course plan (check for changes)

Date	What	Who
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### Part 1: Introduction to Deep Learning for Computer Vision via Object Detection

Friday 4.6	09:00 Lecture 1.1 Introduction 10:15-11:45: Exercise 1.1 Fully connected Neural Networks 13:00 Lecture 1.2 Convolutions 15:00-16:30 Exercise 1.2 Convolutional Neural Networks	Morten TAs F+K  Morten TAs F+K
Monday 7.6	09:00 Lecture 1.3 Optimization and Architectures 10:00-11:00 Exercise 1.3 Resnet 13:00 Introduction to Project 1.1 Classification 13:00-17:00 Work on Project 1.1 14:00-15:30 TAs present	Morten TAs F+K Morten  TAs F+K
Tuesday 8.6	Work on Project 1.1 09:00-10:15 TAs present 14:30-15:15 TAs present 16:00-17:00 Morten + K present	TAs F+K TAs F+K Morten + K
Wednesday 9.6	09:00-10:00 Lecture 1.4 Localization and Detection Introduction to Project 1.2 Detection 10:00-17:00 Work on Project 1.2 10:00-11:30 Aasa + F present 14:00-15:30 TAs present	Aasa  Aasa Aasa + F TA F+K
Thursday 10.6	Work on Project 1.2 09:00-11:00 Aasa present 14:00-16:30 TAs present <b>Project 1.1 &amp; 1.2 deadline at midnight</b>	Aasa TAs F+K

## Part 2: Image segmentation

Friday 11.6	09:00-10:00 Lecture 2.1: Segmentation 10:00-12:00 Exercise 2.1 on Segmentation 10:30-12:00 TAs present 13:00-14:00 Lecture 2.2: Segmentation 14:00-17:00 Exercise 2.1 on Segmentation 14:00-15:00 Aasa present 14:30-16:00 TAs present	Aasa  TAs C+K Aasa  Aasa TAs C+K
Monday 14.6	09:00-17:00 Work on project 09:00-9:30 Present project 09:30-11:30 Aasa present 10:00-11:30 TA K present 14:00-15:30 TAs present	Aasa Aasa TA K TAs C+K
Tuesday 15.6	09:00-10:00 Lecture 2.3 on UQ in Segmentation 10:00-17:00 Work on Project 10:00-11:30 Aasa present 10:30-11:30 TA present 14:30-16:00 TAs present	Aasa Aasa TA C TAs C+K
Wednesday 16.6	09:00-17:00 Work on project 09:00-11:00 Aasa + Christian present 13:30-15:00 TAs present <b>Project 2 deadline at midnight</b>	Aasa + TA C TAs C+K

### Part 3: GANs

Thursday 17.6	09:00-10:00 Lecture 3.1: Introduction to GANs 10:30-12:00 Exercise 3.1: GANs 13:00-14:00 Lecture 3.2: CycleGAN 14:00-17:00 Continue exercise 15:00-16:30 TA session	Morten TAs C+K Morten  TAs C+K
Friday 18.6	10:30-12:00 TA session 14:00-15:00 TA session 16:00-17:00 Morten + C present	TAs C+K TAs C+K Morten + C
Monday 21.6	10:30-12:00 TA session 14:00-15:00 TA session 16:00-17:00 Morten + C present	TAs C+K TAs C+K Morten + C
Tuesday 22.6	09:00-10:30 TA session 14:00-15:00 TA session 16:00-17:00 Morten + C present <b>Project 3 deadline at midnight</b>	TAs C+K TAs C+K Morten + C
Wednesday 23.6	Exam preparation	

### Exam

Thursday 24.6	Exam: Multiple Choice Exam as well as Poster Session	Aasa+Morten
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