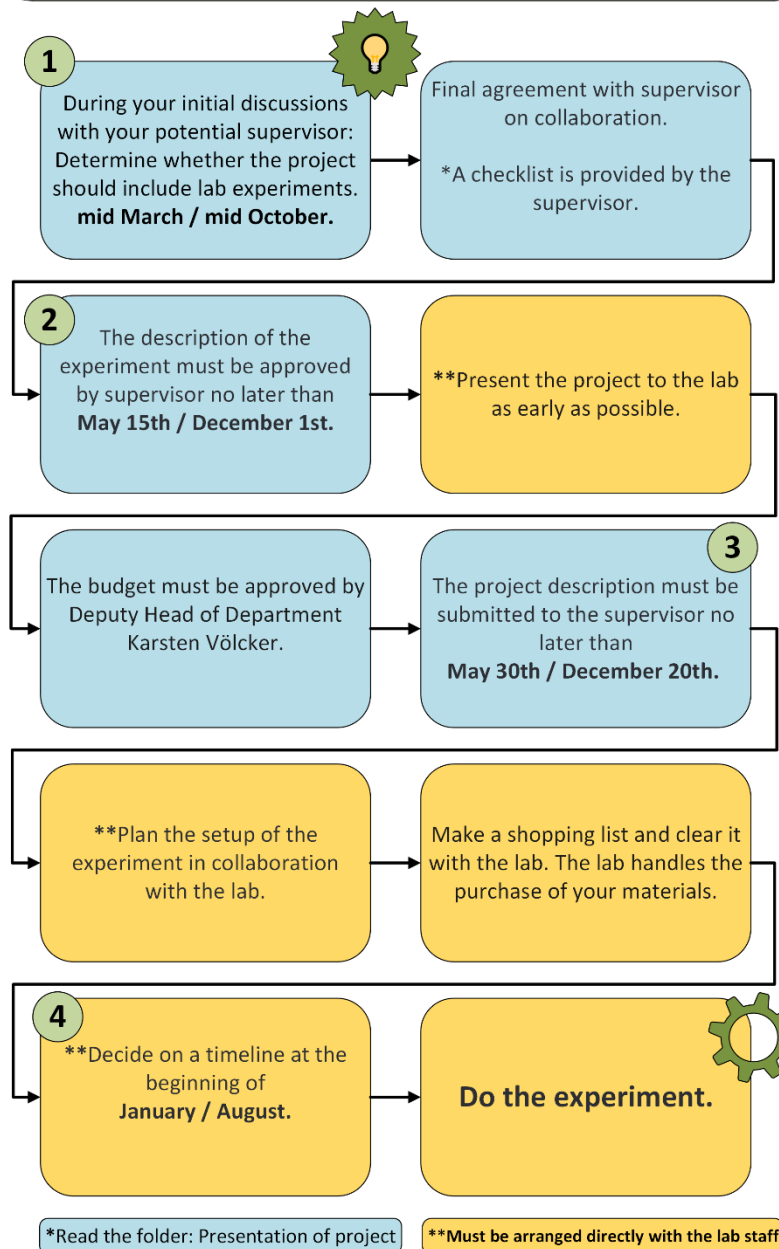
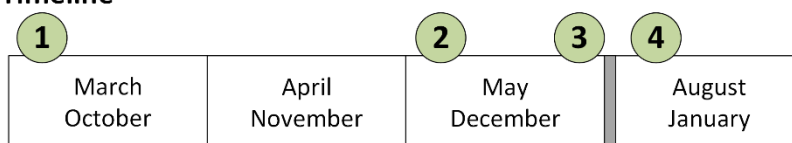


Presentation of projects in CAE Labs

Procedure for BSc/MSc-students that would like to do experiments in CAE labs



Timeline



To plan the next semester, we kindly ask everyone who wishes to do lab experiments to register your projects at the end of the previous semester. That way we can accommodate everyone.

If you want to do an experiment at the lab, please send us an email or stop by and provide us with the following information:

- A description of the experiment
- Drawings of the setup
- Requests for data acquisition
- Preferred timeline
- Contact information

Description of the experiment

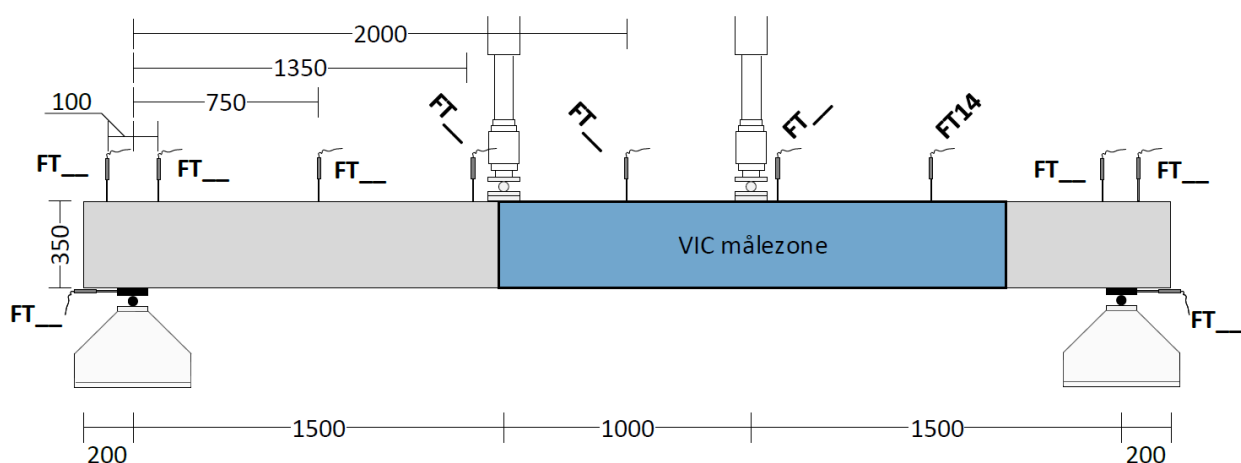
inspiration:

- What's the experiment about?
- What do you wish to examine?
- How many specimens do you want to work with?
- What do you already know?
- Budget.
- Do you have external funding and/or supervision?
- The lab staff needs to know as much as possible from the very beginning of your experiment.

Drawings of setup

At some point you'll need to make drawings of the setup. It is a huge advantage if these are made sooner rather than later, with great attention to detail.

An example of a drawing:



Please come and see what components we already have for the setup of your experiment. We can even help you make specimens that you can use in your setup. We can make specimens in e.g.

steel, wood, plastic, and acrylics. We also have a CNC-machine, 3D printers, a lathe, welding equipment, a laser cutter and much more.

Requests for data acquisition

It's important to consider which data you intend to acquire during your experiment. We can examine a lot of different things so your focus should be relevance and delimitation.

Among other things, the lab has the following machines and items at its disposal:

- Displacement transducers (50 mm, 100 mm, and 300 mm)
- Laser displacement transducers (30 mm)
- Load cells (500 N – 500 kN)
- Optical fibres for measurements of strain and temperature
- Digital Image Correlation
- Accelerometers
- Strain gauges
- Data acquisition with up to 80 channels
- Hydraulic actuators (250 mm movement, max. 365 kN each)

Preferred timeline

Please provide us with a realistic timeline and consider when you would be ready to do your experiments in the lab and how much time you think your experiments will take. Since we usually make the setups from scratch and plans tend to change along the way, lab work usually ends up taking more time than anticipated. Specimens must be made for the setup, a transducer might break, a vendor may be sold out of the wanted equipment; anything can happen. So to be on the safe side you should add a few days to your timeline.

Contact information

- Name
- E-mail
- Student number/AU-ID
- Phone number
- Project- and activity number (for the invoice)
- Name of supervisor

This information is kept until the end of term.

Access to lab

If you need access to the lab, you can apply for access through the lab website, using the following link: **cae.au.dk/baer-lab**

Lab staff



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Fields of expertise

Jeppe	Wood, concrete
Jes	Metal, plastic
Jørgen	Data acquisition, electronics, 3D printing, laser cutter

Feel free to make an appointment with us for advice within our areas of expertise. We have extensive experience with experimental setups and are here to help you navigate your project successfully. We can answer most questions – and if not, we know where to direct you.