

# Introduction to 3D-modelling

Fusion 360

# About Us

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**MAKE** NTNU

- Volunteer student organization
- Manages Makerverkstedet in U1
- Arranges courses and events
- Works to create a better relationship  
between student workshops

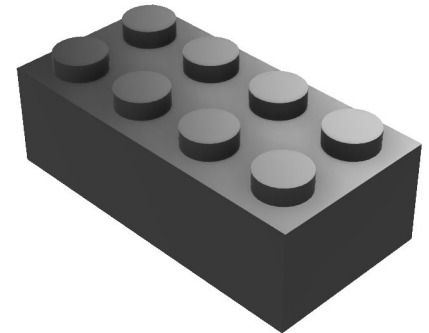
[makentnu.no](https://makentnu.no)

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Open 24/7  
Staffed weekdays  
from 12-18



- About the course
- Walkthrough of modelling:
  - A desk
  - A cup
  - Star handbag
  - Lego
- Free modelling (if we have time  
(we won't have time))

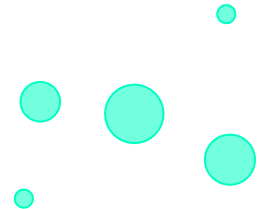


## What this course will go through

- Mechanical modelling / mechanical forms
- How to decompose real-world objects  
into simpler shapes

## What this course will NOT go through

- Organic modelling / organic forms
- Point and vertex modelling



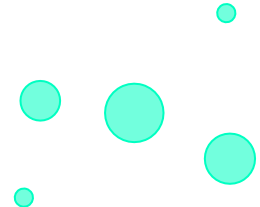
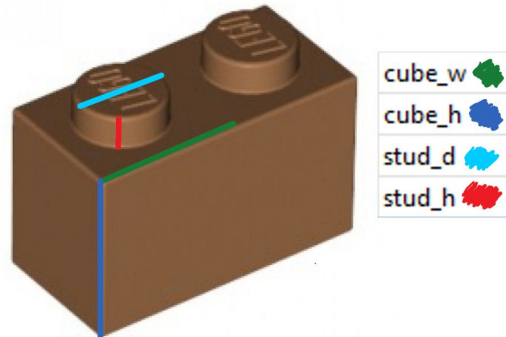
# Parametric modelling

- Define parameters then use them instead of manually dimensioning
- Useful if:
  - A dimension is used repeatedly
  - One or more dimensions are unknown
  - When making templates (ex: legobrick-template)

Parameters

Parameter	Name	Unit	Expressio	Value	Comments
<b>Favorites</b>					
▼ <b>User Parameters</b> +					
☆ User Parameter	studs_wide		2	2	Number of studs in the z-direction
☆ User Parameter	studs_long		4	4	Number of studs in the x-direction
☆ User Parameter	cube_w	mm	7.8 mm	7.80	Width of a 1x1 lego brick
☆ User Parameter	cube_h	mm	9.6 mm	9.60	Height of a lego brick
☆ User Parameter	stud_d	mm	4.8 mm	4.80	The diameter of a stud
☆ User Parameter	stud_h	mm	1.7 mm	1.70	The height of a stud measured form the top of the cube
<b>Model Parameters</b>					

OK



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