

# Advanced additive manufacturing technologies

MICRO-413

Spring semester 2025

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**BM 4110**

# TP organization

Week	Date	Topic
5	March 20	Group Formation
6	March 27	Training
7	April 3	Training/First Print
8	April 10	First Print
9	April 17	First Print
10	April 24	Easter week
11	May 1	Final Print
12	May 8	Final Print
13	May 15	Imaging Session
14	May 22	Imaging Session/Competition day
15	May 29	Ascension/ Holiday
16	June 5	Report

# TP organization

- Stereolithography TP
- Group formation - Fill out the Excel sheet
- Select one **group leader** (email us)
- Select TP spots in the Excel sheet

# TP SLA - Schedule

Week 6 (March 25)				Week 7				Week 8				Week 9				Week 10 (Easter)				Week 11				Week 12				Week 13				Week 14			
Tue		Wed		Th	Wed		Thu		Wed		Thu		Wed.		Thu		Wed		Thu		Wed		Thu		Wed		Thu		Wed						
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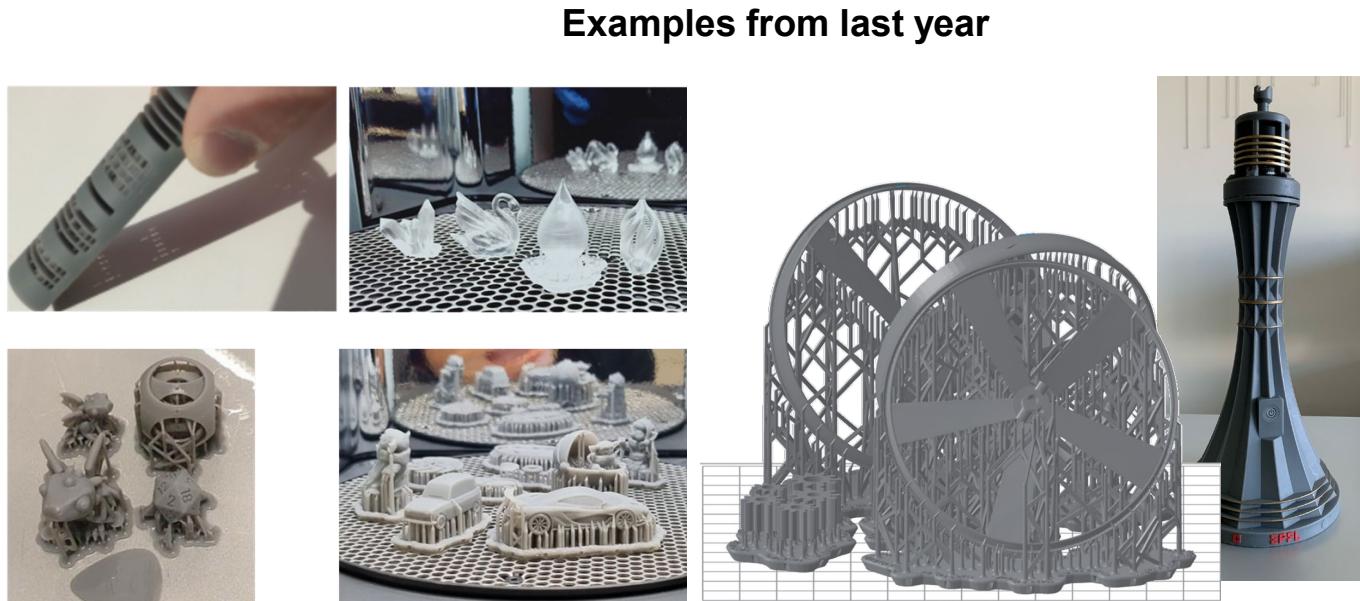
## NOTES

P1	Training with the 3D printer (1.5h)	location: MED 3 1119	The full team should be there
P2	Printing autonomously (1 day)	location: MED 3 1119	You need to be there <i>at the beginning of the session</i> , to launch your print / <i>at the end</i> , to develop and collect it
P3	Imaging your print (1h)	location: MED 3 1219	The full team should be there

# TP SLA - Printing

MED 3 1119

Form 3 (Formlabs)



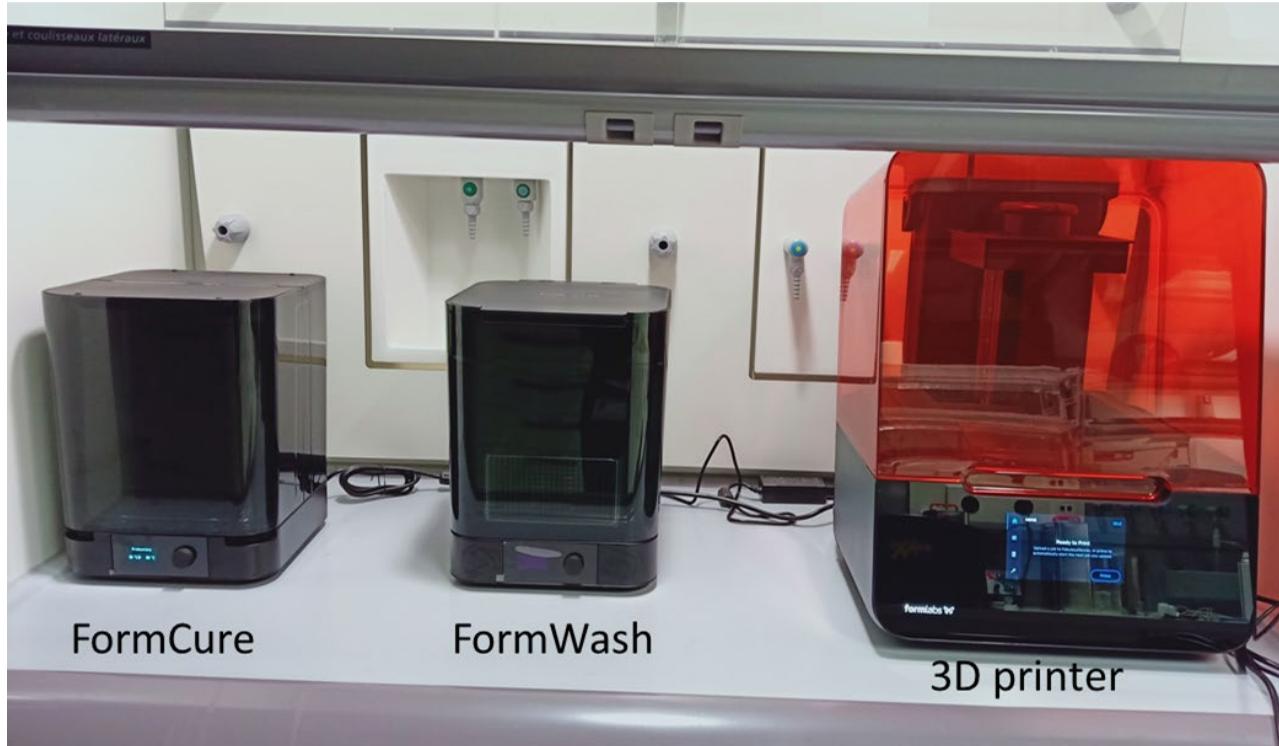
Building volume:  $14.5 \times 14.5 \times 18.5 \text{ cm}^3$

Printing resolution: up to  $25 \mu\text{m}$  in all direction

Printing resin: Grey, Clear

# TP SLA - Printing

MED 3 1119



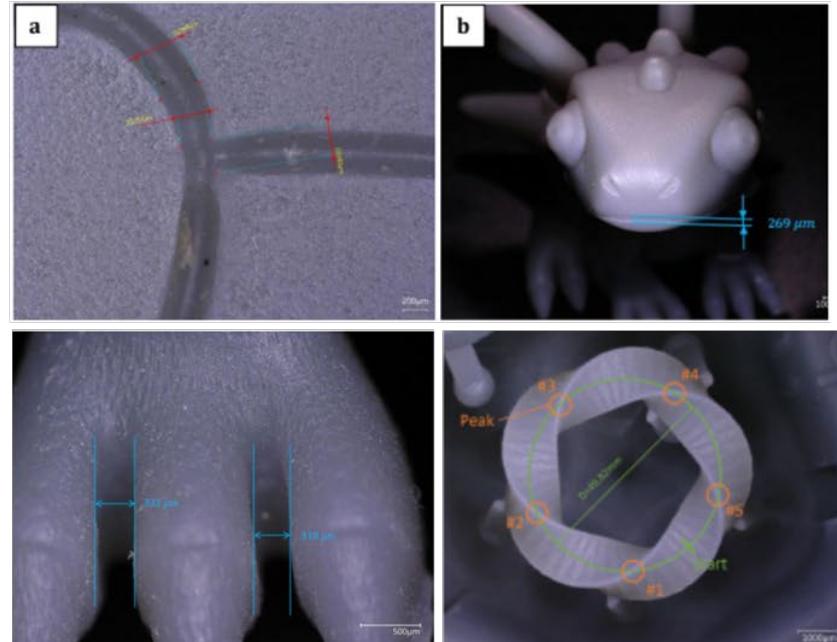
# TP SLA - Imaging

MED 3 1219

Keyence microscope



Examples from last year



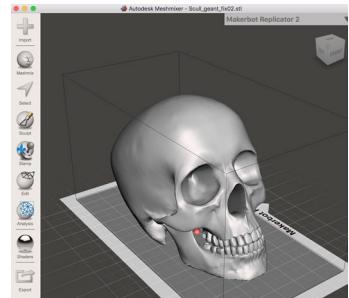
# TP steps



Design



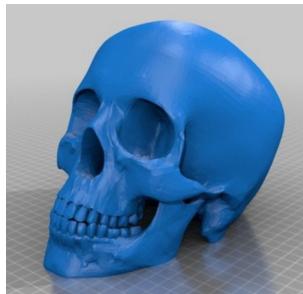
Print



Introduction



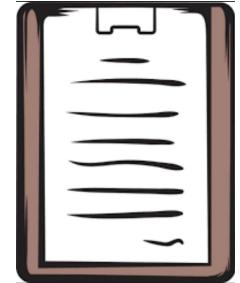
Imaging Session



Competition



Report



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# Report tips

- Design a good 3D shape for winning. Please remember to print a scaled version for the imaging session.
- Design a sample to test the characteristics of the printer. Remember that you need to understand the printing technology.
- The report should include a conclusion on the performance of your design in the competition.
- The report will include questions about the exercise session.

Thank you!!