Chair of Computational Modeling and Simulation
TUM Deparment of Civil, Geo and Environmental Engineering
Technical University of Munich

Software Lab 2024

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Objectives

- Design and implementation of engineering software

- Teamwork – team responsibility

- Solutions for research and/or industry relevant problems

Benefit

- Scientific skills: Software Engineering, Simulation Background
- Soft skills: Teamwork, Presentation, Communication
- **6 ECTS**:   2 hours per week * 2 semester

Organisation/Contact

- Miguel A. Vega Torres M.Sc. (miguel.vega@tum.de)

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Dates

- Jan 31st   presentation of project topics
- Feb 14th   application deadline for the topics
- March ~1st   announcement of Software Lab 2024 project teams

Key points

- Duration   SS 24 & WS 24/25
- Time effort   **2 hours/week**
- Group size   3 - 4 students (usually 3)
- 3 Reviews   exact dates will be announced one month in advance
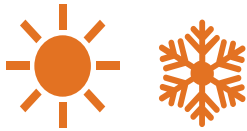- Deliveries   documented code, scientific report and a poster

2 Semesters
(2 h/week)

Groups (3 - 4)

3 Presentations

Deliverables:
Code, data, report

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All information:

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Deliverables:
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https://www.cee.ed.tum.de/cms
/teaching/master/softwarelab/

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CHOOSING YOUR TOPIC

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How to Register

1. Read the guidelines: Decide if you want to commit to the project.

2. Choose your six most favorite topics and two no-go topics:

- 🥇 2 Gold topics

- 🥈 2 Silver topics

- 🥉 2 Bronze topics

- ✖ 2 No-go topics (No student will be matched to one of his No-go topics!)

3. Registration: insert your selection in the online form on the website (same QR code as before).

- ⚠ Use your TUM email address for it.

- 📅 Do it before Feb 14th EOD.

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Q&A

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Q&A

1. Which programming skills are needed?

- The content of the CiE 1 course or equivalent.

2. How difficult is software lab?

- It is a very difficult project!

- ⚠ *If you cannot guarantee a commitment of at least 2 hours per week to work on the project, please do not send an application with your selection on the website.*

3. What if I sent a selection once but now changed my mind?

- Only the last application (with the TUM Email) before the deadline will be considered for the topic assignment.

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Q&A

4. Can the Software lab project be used as a base for a master's thesis?

- Yes, however, a master's thesis should be an independent work, distinct from the specific focus of the software lab.

- If the results of your software lab project are good enough, your supervisor may recommend that you extend them and write a paper out of it.

5. How is the distribution done?

- An algorithm automates the distribution process by aiming to maximize the number of students receiving a gold topic.

- It is not first-come-first-serve.

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PRESENTATION OF TOPICS