Welcome
Information Event #class25

TUM: Junge Akademie
22nd of July 2024, 6:00-8:00 PM
Theresianum at TUM
Agenda

05:30 PM  Arrival
06:00 PM  Opening
06:10 PM  Keynote by Prof. Dr.-Ing. Gerhard Müller, Director of the TUM: Junge Akademie
06:25 PM  What is TUMJA? – A closer look
06:40 PM  Application Process
06:45 PM  Q&A Session
07:00 PM  Get-together, meet current scholarship holders
08:00 PM  Wrapping up
This year's call:

Future Societies
New Options, New Competencies, New Dynamics
The Race between Education and the Enabling for Options

Future Skills?
Transformatory Skills
Target-oriented Skills

Sustainable Development Goals

https://www.bundesregierung.de/breg-de/themen/nachhaltigkeitspolitik/nachhaltigkeitsziele-erklärt-232174
Technical Skills

Key enabling Technologies

- Advanced manufacturing
  - Additive manufacturing
  - Autonomous systems
- Sensor technology
  - Industry 4.0
  - Robotics
- Integrated circuit design
  - Quantum computing
  - IoT sensors and systems
  - High-performance computing
- Biotechnology
  - 3D printing and design
- Chemistry, polymers, metals, glass
  - Rapid prototyping
- Neurotechnology
  - Biomechatronics
- AI in biology
  - Biometrics
- Life science technologies
  - Nanotechnology
- Electrical and electronics engineering
  - Biomedical engineering
  - Robotics
  - Autonomous systems
  - Hi-tech technologies
- Artificial intelligence
  - Deep Learning
  - Quantum AI
- Robotics
- Autonomous systems
- Hi-tech technologies

Identifying Talents and Creating Teams...

Technological dynamics:
... quality of life for everyone and solving global problems

Socioeconomic Dynamics:
... ways of thinking, arguing, informing, living and working

Dynamics in Skills Demand and Professional Identities:
... holistic thinking. Self-awareness
What is TUMJA? – A closer look

What makes TUMJA special?

Scholarship Program
for exceptionally talented and dedicated students at TUM, HfP, AdBK, HFF and HMTM

Passion for Science
Working on a scientific project is the core element of the TUMJA scholarship.

Vibrant Network
of alumni, professors, TUM Emeriti of Excellence and young researchers.
What is TUMJA? – A closer look

What is in it for me?

Project work: conduct research on a question chosen within your team

Taskforces: work in one of six taskforces *(TUMJA is mostly organized for students, by students)*

Events: have a lot of fun next to doing research ;)

Networking: with TUMJA scholars and alumni/ae from different universities and study programs, professors and employees from partner companies
What is TUMJA? – A closer look

Projects: Examples from previous years

ERIK*A • class23
Evaluating and improving SexEd in Bavarian schools

PRISMMatrix • class24
Improving math skills in high schoolers through creativity

TUMAny words • class23
Simplifying the TUM application process
What is TUMJA? – A closer look
Projects: Examples from previous years II

runTUMfit • class12
Improving fitness among TUM members by running together (now: TUM Campuslauf)

windfo • class24
Helping professors communicate research on social media
What is TUMJA? – A closer look
Projects: Examples from previous years III

TUM Bikesharing • class12
Identifying needs for bikesharing on campus (now: MVG Bikes)

EvaluatUM • class19
Improving teaching at TUM through student evaluation (now: EvaSys)

LETO • class21
Helps you find a study buddy at TUM
# What is TUMJA? – A closer look

## Taskforces

<table>
<thead>
<tr>
<th>Taskforce</th>
<th>Description</th>
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<tr>
<td><strong>CAP</strong> Contacts, Alliances, Partnerships</td>
<td>builds &amp; maintains partnerships with companies &amp; sponsors</td>
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<td><strong>Marketing</strong></td>
<td>designs advertising materials (flyers, posters, hoodies)</td>
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<td><strong>Symposium</strong></td>
<td>concerned with organizing the final presentation of the class</td>
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<td><strong>Recruiting</strong></td>
<td>accompanies the application process for the next class (assess applicants, plan info events)</td>
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<td><strong>Events</strong></td>
<td>plans internal events (dragonboat race, museum visits, company tours)</td>
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<td><strong>Mentoring</strong></td>
<td>organizes mentors (professors, people from partner companies) for scholarship holders</td>
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What is TUMJA? – A closer look

Events: Examples from the recent years

Dragonboat Race • 2022
TUMJA members racing as team "OlympJA - Schneller als Hermes"

Stilblüten • 2023
literary workshop for TUM members

Fireside Chat • 2024
panels on various topics, moderated by TUMJA students
What is TUMJA? – A closer look

Networking

Benefits from Networking

- Discuss ideas with experts
- Letters of Recommendation
- Internships, working student positions
- Receive feedback from experienced professionals
- Choosing a topic for your thesis
- Advice from people who had similar experiences
What is TUMJA? – A closer look

The 20-month schedule

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<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
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<th>JUL</th>
<th>AUG</th>
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- **Application**
- **Selection Days**
- **Info Events**
- **Kick-off weekend**
- **Project Work**
- **Seminar I**

**Project Work**
- Weekend Seminar II
- Weekend Seminar III First Evaluation
- Weekend Seminar IV Second Evaluation
- Weekend Seminar V Third Evaluation
- Weekend Seminar VI Fourth Evaluation
- Weekend Seminar VII Fifth Evaluation
- Weekend Seminar VIII Sixth Evaluation
- Symposium
- Reflection

2024

2025

2026
What is TUMJA? – A closer look

Expectations

You can expect...
- Trainings, workshops, cultural events
- Close contact to university staff
- Support (financial + non-financial) for realizing your ideas
- Meeting likeminded people from other study programs and working with them in a team
- Mentoring from alumni of the program

We expect...
- an honest interest in science *(don’t just "do it for the CV")*
- commitment to the 20-month project work
- commitment to the taskforce work
**Application Process**

Interested? Here's how to apply!

NOMINATION

INITIATIVE APPLICATION

**First stage: Application**

**Deadline: August 31st**

**Second stage: Selection Days**

(October 11th & 12th)

**Admission**

**Kick-off weekend**

Welcome to TUMJA!

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**Required documents**

- **Letter of Motivation** (anonymized)
- **CV** (anonymized, tabular)
- **Grade report**
- **Essay OR Video on this year's call**

Required for initiative applicants, *optional for everyone else:*
- **Letter of Recommendation**

**The second stage of assessment consists of:**

- **Personal interview** with tutors and mentors
- **Exchange your ideas** for this year's call with other applicants
- a **Group task**

**Be present on one of two days!**

*Contact us in case you are abroad, for example.*
Q&A Session

Any questions?
Thank you for your attention

We're looking forward to your application!
Please join us in the foyer for a get-together

Exchange ideas with other students and meet current scholarship holders

+ grab some drinks and food

Photo by HIVAN ARVIZU @soyhivan on Unsplash