

Entrepreneurship – Session 14 (November 26)

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TUM Entrepreneurship Research Institute

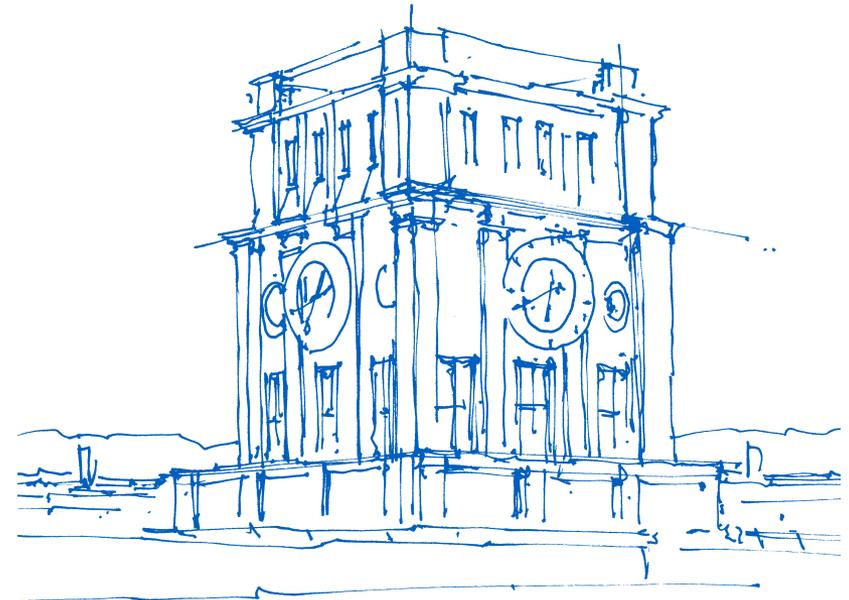
Professorship of Entrepreneurial Behavior

Munich, Winter Semester 2025/2026

More information about our institute on:



www.linkedin.com/company/tum-entrepreneurship-research-institute



Uhrenturm der TUM

Changes in the entrepreneurial role

Key activities of start-up entrepreneurs

- Entrepreneur as a spider in its web
- Broad overlapping roles
- Focus on internal activities:
 - Resource and team acquisition
 - (Informal) communication
 - Product development /prototyping
 - Purchasing major equipment
 - Analytical / conceptual work
- Obtaining and dealing with first customers



Key activities of growth stage entrepreneurs

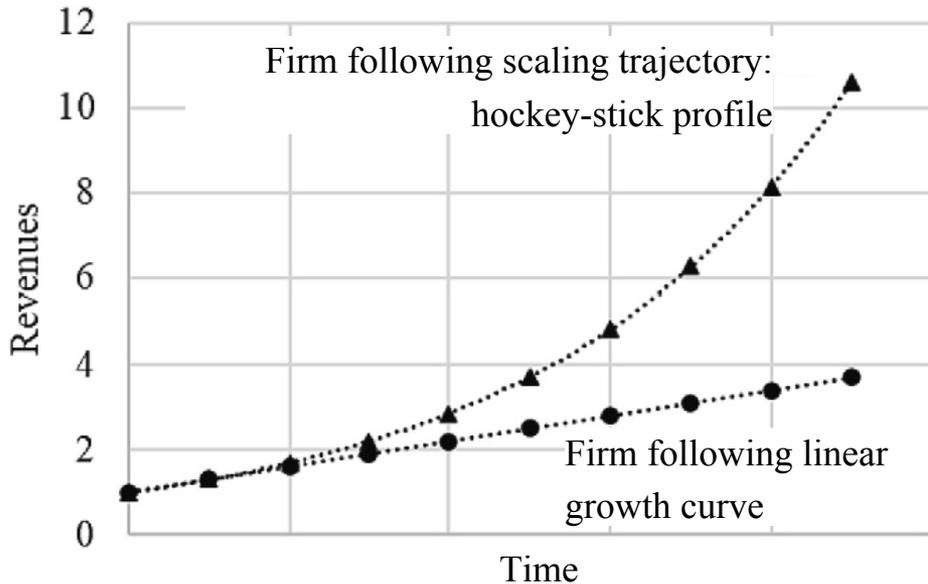
- Entrepreneur as a music conductor
- Supervisory and/or specialized roles
- Recruiting skilled professionals
- Focus on external and internal activities:
 - Strategic management
 - Strategic alliances & personal networking
 - Supplier relationships
 - Management of culture and vision
 - Business and organizational development



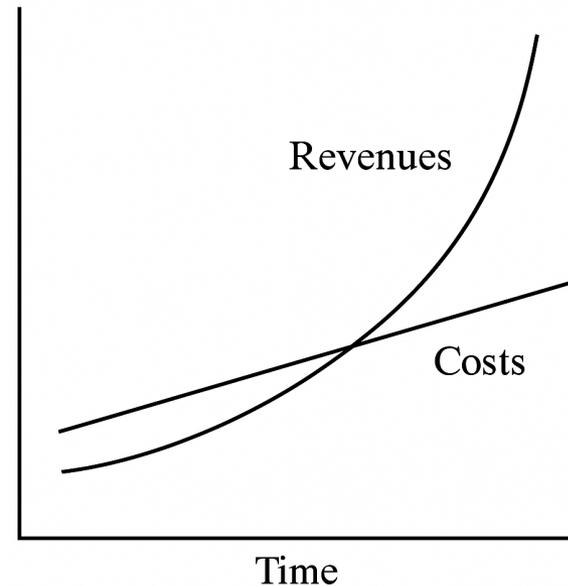
(Van Lancker, Knockaert, Collewaert, & Breugst, 2023; Wasserman, 2012)

Growing vs. scaling a firm

Comparison of scaling firm vs. firm following a steady growth trajectory



More efficient input-output relationship *within* a scaling firm



(based on Bohan et al., 2023)

Scale-ups have “high-growth strategy aimed at attaining economies of scale” (Piaskowska et al., 2021)

- ⇒ Serving each additional customer should cost less
- ⇒ Internal organizing (through automation and standardization) needs to keep pace with growth

Example – Multiple Choice Question

Entrepreneurs in the startup phase typically enact roles that...

- a) ...are overlapping and focus on external activities.
- b) ...are overlapping and focus on internal activities.
- c) ...are specialized and focus on internal activities.
- d) ...are specialized and focus on external activities.

Course overview

#	DATE	TOPIC
1	Oct 14	Introduction
2	Oct 15	Who is the “entrepreneur”?
3	Oct 21	How do entrepreneurs recognize opportunities?
4	Oct 22	How do entrepreneurs develop opportunities?
5	Oct 28	Guest lecture by Csilla Spiller (Beautechful)
6	Oct 29	How do entrepreneurs structure business opportunities?
7	Nov 04	How do entrepreneurs gain and allocate resources?
8	Nov 05	How do entrepreneurs manage their teams?
9	Nov 11	Putting content into play: Interactive workshop.
10	Nov 12	Guest lecture by Leonhard Teichert (Circular Republic)
11	Nov 18	Guest lecture by Stefan Schenk (PeterPark)
12	Nov 19	How do entrepreneurs enter their markets and how do they grow their ventures?
13	Nov 25	Guest lecture by Inga vom Holtz (UnternehmerTUM Funding for Innovators)
14	Nov 26	Q & A Session <i>Time for course evaluation. Please bring a computer or mobile device.</i>
	Dec 12	Exam

Your feedback is important

- You have benefited from the feedback provided by previous cohorts. Now you can contribute to the learning experience of future cohorts.
- Course evaluation is conducted through personalized links.
- E-mail with link from November 21 or reminder from November 26 to your TUM account
- Sender name should be TUM SoM Quality Management (either lehrevaluation@mgt.tum.de or lehrevaluation.wi@tum.de)
- You can participate in the evaluation until December 5



This lecture is only the start of a conversation: TUM highly values and fosters entrepreneurial competencies

TUM. The Entrepreneurial University

Innovation through talent, excellence and responsibility

Our Vision

As a leading **entrepreneurial university** we are a site of global knowledge exchange, shaping the future with talent, excellence and responsibility.

Our Mission

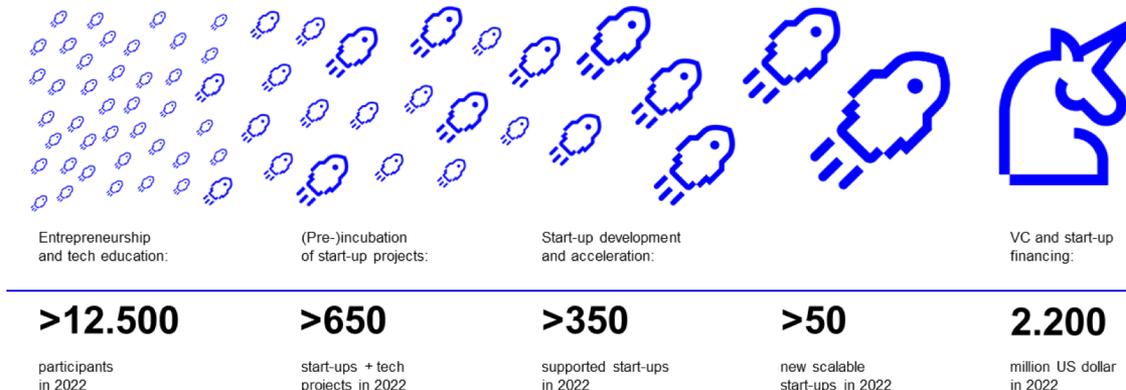
We inspire, promote and develop talents in all their diversity to become responsible, broad-minded individuals and empower them to shape the progress of innovation for people, nature and society with the highest scientific standards and technological expertise, with **entrepreneurial courage** and sensitivity to social and political issues, as well as a lifelong commitment to learning.

TUM Entrepreneurship

The Technical University of Munich is one of the most successful start-up universities in Europe.

Our Core Values

Entrepreneurial Mindset: We question the consequences of our actions, direct ourselves toward new challenges and improve our working methods continually. To this end, we commit ourselves to socially reflected innovations and promote their commercial application, as well as to sustainable technology spin-offs at all levels.



Exploring and learning how to be entrepreneurial at TUM paves a variety of exciting career paths for you



Possible career paths for entrepreneurial talents

Create / Work in a startup	Be an intrapreneur	Manage a family business	Own a small business
Work in an NGO	Be a politician	Be a business consultant	Work in the startup ecosystem
Be an inventor	Be a leader / change maker	Be a researcher / educator	+++

As a master's student, acquire entrepreneurial competencies in our various learning formats

Learn entrepreneurship basics	Develop & validate an innovative idea	Learn how to manage a startup and drive innovation & change	Graduate with impact
<ul style="list-style-type: none"> • Entrepreneurship¹ • Innovative Entrepreneurs² • SEA Start³ 	<p style="text-align: center;">General</p> <ul style="list-style-type: none"> • Think Make Start⁴ • TUM Science Hackathon⁵ • Tech Challenge² • Business Plan Basic Seminar² 	<p style="text-align: center;">Functional Skills</p> <ul style="list-style-type: none"> • Scaling Entrepreneurial Ventures¹ • Marketing Entrepreneurship Lab² • Business Plan Advanced Seminar² 	<ul style="list-style-type: none"> • Entrepreneurial Masterclass^{1&2}
	<p style="text-align: center;">Domain Focus</p> <ul style="list-style-type: none"> • Prototyping Entrepreneurial Ideas in New Technologies: Blockchain¹ • Entrepreneurship & Digital Innovation Summer School¹ • Quantum Entrepreneurship Lab⁶ • Quantum Fellowship Program⁶ • Healthcare Innovation Program⁶ • Innovation Competition Beverages & Food⁶ • Metaverse Design Lab⁶ • Mission 2030 Entrepreneurial Architecture⁶ • iTeam⁵ • HackaTUM⁷ 	<p style="text-align: center;">Technical Skills</p> <ul style="list-style-type: none"> • AI for Innovation & Entrepreneurship² • Digital Product School² • MakerSpace Courses² 	
	<p style="text-align: center;">Sustainability Focus</p> <ul style="list-style-type: none"> • Innovation Sprint² • International Summer School (Sustainable Entrepreneurship) • SEA Global Entrepreneurship Summer School³ • SEA MOOC: Social Entrepreneurship³ • Innolabs⁸ 	<p style="text-align: center;">Transformative Skills</p> <ul style="list-style-type: none"> • ChangeMakers¹ • Principled Entrepreneurial Decisions² • Innovation Facilitator² • Technology Entrepreneurship Lab² • EIT Climate Leadership Journey⁹ • SEA MOOC: Enabling Entrepreneurs to Shape a Better World³ • SEA MOOC: Future Skills³ 	
	<p style="text-align: center;">Receive in-depth entrepreneurship training</p>		<ul style="list-style-type: none"> • CDTM Technology Management⁸ • Manage & More²
	<p style="text-align: center;">Acquire entrepreneurial competencies in your study field</p>		<ul style="list-style-type: none"> • See entrepreneurship offering at your school
	<p style="text-align: center;">Explore entrepreneurial courses of international TUM partner universities</p>		<ul style="list-style-type: none"> • See EuroTeQ offerings

¹ TUM School of Management; ² UnternehmerTUM; ³ Social Entrepreneurship Academy; ⁴ TUM Entrepreneurship; ⁵ Junge Akademie; ⁶ TUM Venture Labs; ⁷ TUM School of Computation, Information and Technology; ⁸ CDTM; ⁹ TUM partner

Entrepreneurial jobs...

Some examples for specific webpages offering jobs in startups (with a focus on Germany / Munich), but you can probably find similar pages for other countries/ regions:

- <https://www.munich-startup.de/pinboard/stellenangebote>
- <https://startupsucht.com/>
- <https://www.deutsche-startups.de/startups-jobs/stellenangebote/>

We also post information about jobs, internships, and student projects in our TUM startups on social media and on our website



TUM Entrepreneurship Research Institute

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 Research Services · Garching, Bavaria · 8K followers · 29 alumni

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News

All information about seminars and lectures of the TUM Entrepreneurship Research Institute

Find additional news about our institute on LinkedIn

Projektarbeit: Business Development und
 Munigo Performante ermöglicht den sicheren, erschütterungs- und
 Risiko von Verletzungen und Langzeitschäden und verbesserte
 Dämpfer-System sorgt für eine präzise... [\[read more\]](#)

Project Study: Growth or GTM Strategy at Or
 Company:OneTutor is an AI-powered learning platform helping
 through quizzes and chat-based tutoring. With 22,000+ users a
 Germany's fastest-growing EdTech... [\[read more\]](#)

Project Study: Build Climate Intelligence with Ark Climate →
 Company:Ark Climate is a Munich-based climate-tech startup helping local governments reach net zero through a software platform that
 turns climate plans and measures into actionable, trackable progress. Tasks: Conduct structured research on climate protection and
 adaptation measuresDistil complex... [\[read more\]](#)

Project Study: Cust
 Company Ark Climate is a M
 municipalities to track emiss
 and data expertise to... [\[read more\]](#)

IDP @ Unternehmer
 IDP @ UnternehmerTUM Gm
 teams empower innovation
 solutions and build innovat



<https://www.ie.mgt.tum.de/en/ent/news/>



The exam

(exam content is identical,

but different module combinations result in different durations)

**120
minutes**

- Students in module “Entrepreneurial, Strategic, and International Management” (WI001185)
- Date: Friday, Dec 12, 2025 from 5.15 to 7.15 pm (**on-site**)
- Rooms: Please check your e-mail address connected to your TUMonline account in the days before the exam.

**60
minutes**

- Students just in lecture “Entrepreneurship” (WI000984)
- (Students in module “Global Entrepreneurship”)
- Date: Friday, Dec 12, 2025 from 7.00 to 8.00 pm (**on-site**)
- Rooms: Please check your e-mail address connected to your TUMonline account in the days before the exam.

The grades

ESI module

WI001185

- Students in module “Entrepreneurial, Strategic, and International Management”
- Points for the two exams will be combined
- You will be given one final grade for the two exams

E’ship only

WI000984

- You will get one grade for this lecture

Part of global e’ship

WI900005

- Students in module “Global Entrepreneurship”
- You will be given an individual grade for this lecture
- You will also get an individual grade for the second part of the module (course be UnternehmerTUM)

Registration for exam ends **December 1st, 2025**

Do you need one overall grade for the module Entrepreneurial, Strategic, and International Management?

⇒ Please sign up for the exam in the module ESI Management (WI001185M)

Do you need just one grade for the lecture Entrepreneurship or *two separate grades* for the lecture Entrepreneurship and the lecture Strategic and International Management?

⇒ Please sign up for the exam in Entrepreneurship (WI000984) [and if applicable for the exam in Strategic and International Management].

If you are not enrolled at a different campus (Heilbronn or Straubing), you are (typically) not allowed to take their exams.

Organizational remarks – What is relevant?

- **What is relevant?**

- The **lecture** (all sessions, slides, examples, explanations) including guest lectures.
- No exact numbers and detailed statistics. You should just understand the big pictures highlighted by the numbers.
- No further readings / references from class as indicated on the sessions' last slides.

Organizational remarks – be well prepared

- We will send out **e-mails** with the **room allocations**. Please check the e-mail addresses connected to your TUMonline / Moodle accounts.
- Please be on time! We cannot give you any extra time if you arrive late. Use the NavigaTUM if you are unsure about your room.
- Please bring along a **proof of identification** (with a **picture!**).
- You may bring a **non programmable calculator**. For the entrepreneurship exam, **you will definitely not need a calculator**. You may need it for the Strategic and International Management exam, and we want to create equal conditions for all students.
- **No additional materials** are allowed at your desk, including notes and dictionaries.
- You are **not allowed to have any mobile device at your seat**. Your device must be switched off. If this is not possible, it must at least be in silent mode with all alarms and notifications deactivated. Place your device in your bag at the front or at the back of the room. Do not keep your mobile phone in your pockets and remove your smartwatches (and any watches that resemble a smartwatch).

Organizational remarks – during the exam

- During the attendance check, the supervisors will place a **sticker** on the front page of your exam that contains a code with your personal information (e.g., name and matriculation number). You will also be asked to **sign the attendance list**.
- In the highly unlikely event that the invigilators have missed you, please draw their attention to it.
- **Do not cheat** and please try to **avoid** the **impression** of cheating!
- Do not start writing until you are told to and stop writing as soon as you are told to.
- Please refrain from talking while you have your exam at your seat.
- If you need anything, raise your hand and wait for the supervisor/ invigilator. We will not answer any questions about the content of the exam.
- Please assist us during the collection of the exams and ensure that the invigilators receive your exam.

How will the exam look like? (Entrepreneurship part only)

- There will be **35 multiple-choice questions**. For each correct answer you will get 1 point.
- The multiple-choice questions consist of one question/statement and several potential answers. Only one answer is correct and can be identified as the best out of the potential answers!
- The options “none of the above“ or “all of the above“ are not necessarily correct (but they can be).
- Choose only one answer. If you mark more than one item, you will always get 0 points. Please be very clear which answer you have chosen!
- Points will not be deducted if you choose the wrong answer. You should answer all multiple-choice questions (if you do not know the answer, just guess!).

How will the exam look like? (Entrepreneurship part only)

- There is **no separate answer sheet**. Please indicate your selected answer below each question directly as follows:

Mark correct answers with a cross



To undo a cross, completely fill out the answer option



To re-mark an option, use a human-readable marking



- Use a regular **pen**, not a pencil. Please do not use a green or a red pen.
- Just to be on the safe side, you will also be asked to write your name and matriculation number on the front page of the exam. Please make sure to do this. If you don't, we may not be able to assess your exam.

- Please indicate your full name and matriculation number here:

– **Name:** _____

– **Matriculation number:** _____

Time for your questions



References from the class

- Bohan, S., Tippmann, E., Levie, J., Igoe, J., & Bowers, B. (2024). What is scaling? *Journal of Business Venturing*, 39(1), 106355.
- Piaskowska D., Tippmann E., Monaghan S. (2021). Scale-up modes: Profiling activity configurations in scaling strategies. *Long Range Planning*, 54: 102101.
- Van Lancker, E., Knockaert, M., Collewaert, V., & Breugst, N. (2023). Preparing for scaling: A study on founder role evolution. *Journal of Business Venturing*, 38(4), 106315.
- Wasserman, N. (2012). *Founder's dilemmas: Anticipating and avoiding the pitfalls that can sink a startup*. Princeton University Press.