TUM Master's Days

Your passion · Your future · Your Master's at TUM

Online info sessions · 18 - 22 March 2024

Details and registration: www.tum.de/masters-days

Images: Astrid Eckert, Daniel Delang, Andreas Heddergott / TUM; Israel Tan Si Lie / TUMCREATE

M.Sc. AgriFood Economics, Policy and Regulation

Fabian Frick

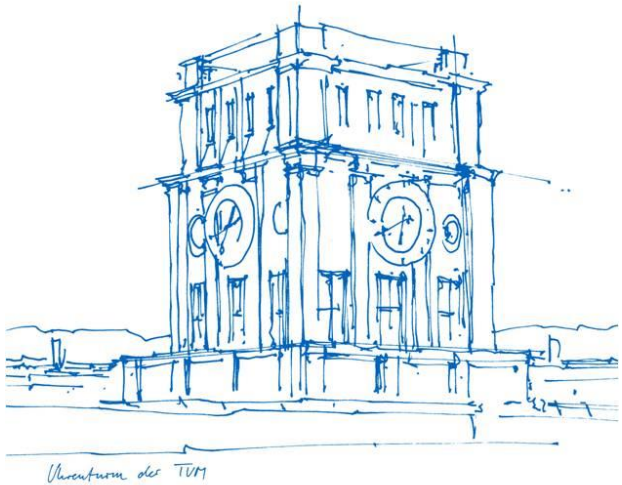
TUM School of Management

Chair Group Agricultural Production and Resource Economics

(Prof. Johannes Sauer)

TUM Master‘s Days

21 March 2024



Background

Complexity of modern agri-food systems…

…characterized by numerous trade-offs between sustainability dimensions,

such as those between stable and regional production of healthy and affordable food, securing farmer livelihoods, contribution to and consequences of climate change, animal welfare, and biodiversity loss,

…characterized by use of modern technology and new technology developments,

such as digitalization, genetic engineering, or pesticides,
paired with a certain level of technology aversion in today's society,

…characterized by a high and increasing level of internationalization,

internationally integrated markets with multicultural business partners,
common agricultural policy that needs to harmonize interests across countries.

Qualification

Objective is to train sector experts, who:

… understand the complexity of modern agri-food systems and the manifold interactions between the economic, ecologic, societal, and political dimensions,
with profound knowledge on economic, political, technological, and ecological principles,

… can apply their interdisciplinary knowledge acquired during the program to contribute as analysts and problem-solvers to tackling real-world agri-food-related challenges,

… have extensive scientific competencies to transfer new research findings into practice by evaluating findings and incorporate them into their decision-making,

… can effectively communicate with all relevant stakeholders in a constructive and competent way and are able to lead and contribute to multidisciplinary teams, working with people form different cultural backgrounds.

Potential working fields of graduates

International organizations and NGOs active in the Agri-Food sector,

such as EU agencies, FAO, World Bank, or industry associations (e.g., for analyses and advisory work in the form of policy and economic analysis, public relations and representation of interests),

Activities in national and regional ministries and associated authorities,

e.g., strategy development and design of public funding, public relations on rural development and agricultural and food policy issues),

Regulatory authorities at national and international levels,

such as EFSA (e.g., analysis and advisory activities as well as outreach activities taking into account policy requirements).

Potential working fields of graduates (II)

(International) sustainability management and corporate social responsibility, in the food processing or consulting industry

e.g., strategy development and cross-cutting tasks to improve operational sustainability performance and to implement new regulatory requirements, public relations and representation in committees and associations,

Media and communication sector,

e.g., analysis and documentation of social conflicts in the field of agriculture, nutrition, and natural resources,

Research activities in the academic sector (universities, colleges) and public research (regional and governmental research institutes),

in various disciplines such as agricultural sciences, natural sciences, social sciences, economics, and management, but also law.

Target groups

Primary target groups of the study program are graduate students from

agricultural sciences
economics and management,
political sciences.

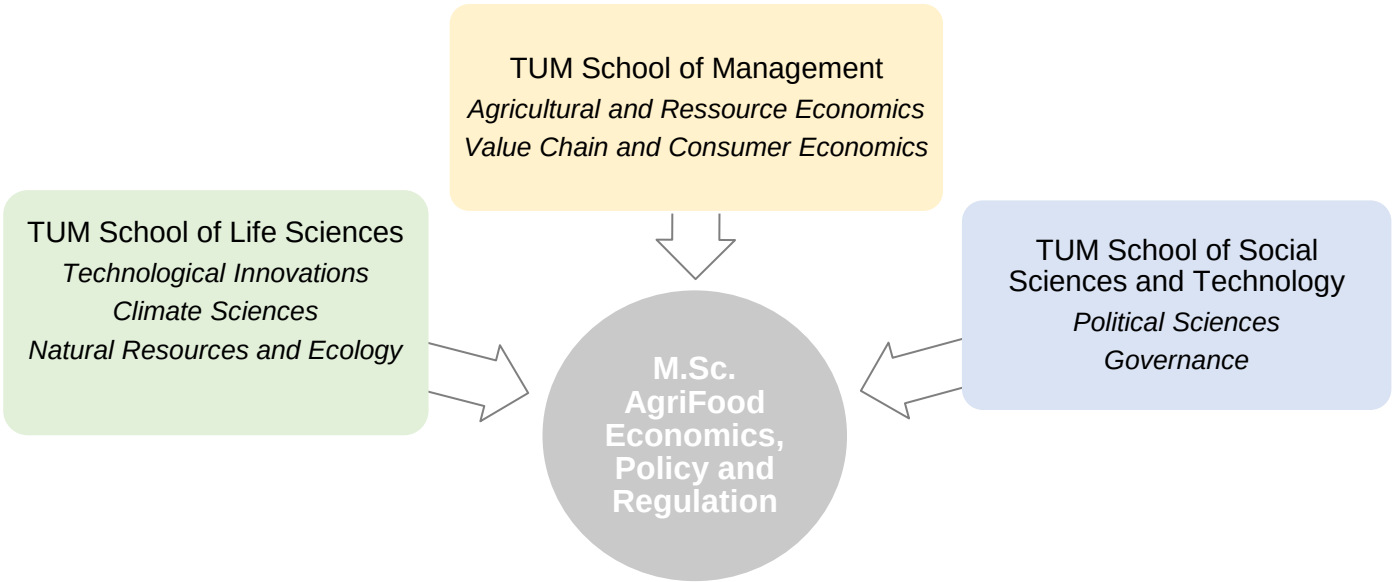
Qualified applicants have to demonstrate a minimum level of knowledge in economics, natural sciences, and policy.

They have to demonstrate a level of fluent English skills.

The program pursues a high level of supervision, for example, in the interdisciplinary research project module. Given the limited teaching resources in the faculties, a cohort size of no more than 50 students per year is targeted.

Three TUM Schools contributing

AgriFood Economics, Policy and Regulation combines competencies from the fields of agricultural and horticultural sciences (natural sciences and technology), economics and political science and uses the expertise of three TUM schools:



Curriculum

Mandatory modules: 37 CP

Electives: min. 53 CP

Semester	Modules						Credits
1.	MGT001416 Economics of Agriculture and Technology (required) K 6 CP	SOT86611 Sustainability Politics and Policy (required) LP 6 CP	LS10016 Environment, Agriculture and Food (required) B 5 CP	LS10017 Technology for Agriculture and Food (required) K 5 CP	MGT001417 Quantitative and Qualitative Methods in AgriFood Research (required) K 5 CP	LS Interdisciplinary Qualification (elective) 3 CP	6 30
2.	MGT001418 Interdisciplinary Research Project Agri-Food Economics, Policy and Regulation (required) W 10 CP		LS / WI / SOT Elective Modules (elective) Modules of at least 53 CP must be completed from the following elective areas: 1. (Agricultural) Economics 2. Governance, Political Sciences and Sociology 3. Climate Sciences, Resources and Ecology 4. Technological Innovations In addition, up to 6 CP may be selected from the SoLS “Interdisciplinary Qualification” Catalog. 20 CP				30
3.	LS / WI / SOT Elective Modules (elective) (Designs see above) 10 CP		LS / WI / SOT Elective Modules (elective) (Designs see above) 20 CP				30
4.	LS10018 Master´s Thesis (required) W 30 CP						30
Key	dark blue = final thesis blue = elective modules grey = required modules				CP = credit points; K = written exam; M = oral exam; LP = learning portfolio; PRÄ = presentation; B = report; PJ = project work; W = research paper		

Mobility-Window

Electives (selection)

1.1 Area: (Agricultural) Economics

No.	Module name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examination (min)	Weight factor	Language of Instruction
WI001204	Economics of Water Use, Regulation and Markets	VI	SoSe	4	5	Written exam	120		English
WZ2757	Advanced Environmental and Natural Resource Economics	VO + SE	WiSe	3 + 1	5	Written exam	90		English
WI001281	The Economics of Firm Competition	VO + UE	SoSe	2 + 2	6	Written exam	90		English
WZ1561	Value Chain Economics	VI	SoSe	4	6	project work			English
WI000739	Consumer Behavior	VI	WiSe	4	6	Written exam	120		English
WI000948	Food Economics	VI	WiSe	4	6	Oral exam	25		English

Electives (selection)

1.2 Area: Governance, Political Sciences, Sociology

No.	Module name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examination (min)	Weight factor	Language of Instruction
WI000321	International Commodity Markets and Trade Policy	VI	WiSe	4	5	Written exam	90		English
POL65102	International Development, Poverty and Inequality	SE	SoSe	4	6	Report			English
SOT86511	European and Global Governance	SE + SE	WiSe	2 + 2	6	Research paper			English
POL62400	Environment and Climate Transformation	SE + SE	SoSe	2 + 2	6	Research paper			English
POL61405	Political Regimes and the Economy	SE	SoSe	4	6	Research paper			English

Electives (selection)

1.3 Area: Climate Sciences, Resources, Ecology

No.	Module name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examination (min)	Weight factor	Language of Instruction
WZ1590	Climate Change	VO + SE	SoSe	2 + 2	5	Written exam	90		English
WZ1824	System Analysis and Introduction to Ecology	VO + VO	WiSe	2 + 2	5	Written exam	90		English
MGT001365	Advanced Seminar Energy Market: Applied Economic Analysis of Decarbonization Strategies: Firm's Perspective	SE	WiSe	4	6	Research paper			English
WZ2730	Climate Change - Science, Impacts and Adaptation, Mitigation	VO + SE	WiSe	2 + 2	5	Oral exam	30		English
WZ1344	Urban Agriculture	VO + SE	WiSe	2 + 2	5	Report			English
WZ2724	Emission Control in Land-Use and Animal Husbandry	VO	WiSe	3	5	Oral exam or written exam	20 or 90		English

Electives (selection)

1.4 Area: Technological Innovations

No.	Module name	Type of Instruction	Sem.	SWS	Credits	Type of Examination	Duration of Examination (min)	Weight factor	Language of Instruction
WZ1060	Precision Agriculture	VI	SoSe	4	5	Written exam	120		English
WZ2581	Plant Biotechnology	VO + SE	SoSe	2 + 2	5	Written exam	90		English
WZ1488	Perspectives of Genetic Engineering in Agriculture	VO	SoSe	4	5	Written exam	90		English
WZ1339	Robotics and Automation in	VO	WiSe	2	3	Written exam	60		English

Timeline and requirements for admission

Start: Winter semester 2024/25 (lectures start 14 October)

Application website open since 01.02.2024

Admission Requirements

1. Bachelor's degree in Agricultural or Horticultural Sciences, Political Sciences, Economics or Business Administration, or a comparable degree program.
2. Adequate knowledge of the English language, students whose native language or language of instruction is not English must provide TOEFL (min. 88 points), IELTS (min. 6,5 points) or the „Cambridge Main Suite of English Examinations"
3. Passing the Aptitude Assessment.

Admission process

- **1. Stage**: Final grade (max. 30 points) and online aptitude test (max. 40 points)
  → Online test (40 min, written, English) on following topics:
  - general and interdisciplinary basic knowledge about the regional and global challenges faced in the agri-food sector (30%),
  - research methods and mathematical fundamentals (30%),
  - knowledge of the fields of agricultural economics, economic relationships, and current political discussions (40%).

  → passed with min. 52 points, failed with fewer than 46 points, in between: stage 2

- **2. Stage**: Assessment Interview (online, 20-30 min) with questions concerning
  - motivation (max. 10 points)
  - ability to communicate in English (max. 10 points)
  - General and interdisciplinary basic knowledge with regard to the regional and global challenges faced in the agri-food sector + demonstration of previous subject-specific knowledge + exposition of a research project (e.g. the final thesis) from the first degree program (max. 40 points)

→ Total points: points from 1st stage + points from 2nd stage

→ Admission with 81 or more points

Q&A

My undergrad degree is not highly relevant. How can make up for this? How about Food Technology?

→ Admission according to study regulations (§36).

Can I apply for this winter semester 2024/25, even though I expect to receive my Bachelor's degree in June?

→ “Hard” transition from Bachelor’s to Master’s: transcript of 180 cp must be provided by 31st of May.

Possibility to study at other TUM campuses?

→ Based in Freising, but relevant courses also in Munich and Garching.

Fees waiver process?

→ some exceptions, see https://www.tum.de/en/studies/fees/tuition

→ for further questions, please contact the TUM Center for Study and Teaching (studium@tum.de)

Q&A (2)

When will the aptitude test take place, and is there any recommendable material?

→ Thursday, 13 June 2024 at 2 pm (https://www.ls.tum.de/en/ls/studies/application/)

→ Preparation: focus on topics formulated in the study regulations

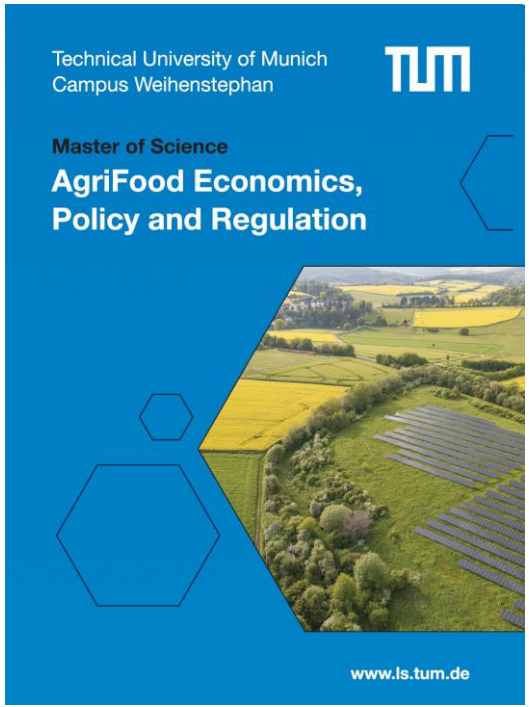
What are the working options after graduation?

→ See working fields mentioned.

What is the quota for this program?

→ Target number of 50.

Further information



Program website:
https://www.ls.tum.de/en/ls/studies/courses-and-programs/agrifood-economics-policy-and-regulation-msc/

General information on application process at TUM:
https://www.tum.de/en/studies/application/master/application-master

Contact for individual questions:
agrifood.co@ls.tum.de

View study programme: