

# 10 REASONS TO STUDY EPIDEMIOLOGY



LUDWIG-  
MAXIMILIANS-  
UNIVERSITÄT  
MÜNCHEN

**PSPH**

PETTENKOFER SCHOOL OF PUBLIC HEALTH

# WHAT IS EPIDEMIOLOGY?

Epidemiology investigates which factors protect, maintain or improve the health of individuals and populations, and which factors are harmful and cause disease.

As socioeconomic and environmental conditions are evolving worldwide, new health risks are gaining relevance in different populations.

Therefore, it is particularly important to recognise emerging health or disease trends as well as the factors driving those.

Epidemiological knowledge enables a better understanding of the dynamics of diseases and ill-health conditions and provides a solid scientific basis for health measures.

# YOUR CAREER AS EPIDEMIOLOGIST

A master's degree in epidemiology at LMU Munich and PSPH opens up career opportunities in many different areas. Our students acquire solid theoretical and practical skills that qualify them for a career in science, but also in industry.

After graduating, some of our alumni decide to pursue a PhD diploma or continue working in research.

Other graduates work in the pharmaceutical sector, in consulting, at health insurance companies, clinical research organisations and in governmental and non-governmental organizations.

# 10 REASONS TO STUDY EPIDEMIOLOGY AT LMU MUNICH AND PSPH

1

Focus on methods

Our MSc Epidemiology has a strong focus on teaching students a broad variety of methods needed in modern epidemiology.

You will learn advanced and innovative epidemiological and statistical methods, quantitative and qualitative methods, how to deal with complex issues – and more.

## 2

Expertise in clinical, genetic, environmental, occupational epidemiology

The courses, internships and additional events enable students to experience a wide range of research and work opportunities in various fields.

## 3

Study at a University of Excellence

LMU Munich stands for innovative research and outstanding teaching. It is one of the few universities in Germany to be regularly awarded the title of "University of Excellence".

## 4

Lecturers with profound expertise

We cooperate closely with numerous relevant local, national and international organizations, benefitting our students not only when choosing an internship, but also in teaching. Lectures are held by experts from different fields with extensive experience in science and practice.

## 5

### International and interdisciplinary classmates

Our programme is international: about one quarter of the students come from Germany, but 75% come to us from almost all regions of the world – with diverse backgrounds.

Each of them contributes to the intercultural and interdisciplinary exchange in classes and beyond.

## 6

### Gain hands-on experience

Through the two mandatory internships in our programme, students gain relevant practical experience prior to graduating.

## 7

### Live in one of the most vibrant European cities

In the heart of Europe, Munich is among the most vibrant, diverse and popular cities to live in.

In international rankings, it is regularly considered to be one of the most liveable cities.

## 8

### A customizable programme

Aside from the mandatory core modules, our students can largely customize their studies according to their interests by selecting from a variety of specialisations, elective modules, internship opportunities and master's thesis topics.

## 9

### Integrated mentoring programme

Students in our programme can be assigned to a mentor, if wanted – a professional in their field of interest.

Mentors and mentees can meet throughout the whole course of the programme and discuss relevant topics around studies and career opportunities.

## 10

### Opportunities for networking

The study programme, internships and events organised for students provide numerous opportunities for everyone to connect with professionals from various fields of epidemiology research and practice.

# OUR PROGRAMME

The programme offers students the chance to learn how to analyse different problems in health-related fields and how to plan, execute, and interpret studies.

Over the course of two years, students learn about the relationships between diseases and the risk factors that lead to ill-health as well as how to recognise diseases trends, to apply health prevention and promotion approaches, and to determine the prognostic value and the influence of therapeutics on patient quality of life.

Students also study the relationship between diseases, an individual's genetic predisposition, and influential environmental factors.

In the second and third semester students gain practical experience through two mandatory internships.

The programme is structured in accordance with the Bologna Process. A total of 120 ECTS credits must be acquired over four semesters.

#### CORE MODULES (72 ECTS)

- Quantitative Methods
- Epidemiology and Research Design
- Public Health Practice and Research
- Research Skills
- Internships
- Master Colloquium
- Master's Thesis

#### SPECIALISATIONS (36 ECTS)

- Clinical Epidemiology
- Epidemiology (Advanced Methods in Epidemiology, Applied Epidemiology)
- Genetic Epidemiology
- Environmental, Occupational and Radiation Epidemiology
- Advanced Biometry

All lectures, courses and seminars are held in English. In the electives, students also have the opportunity to choose courses in German.

#### ELECTIVES (12 ECTS)

- Advanced Quantitative Methods
- Recent Developments in Biostatistics
- Applied Statistics in Epidemiology
- Qualitative Methods
- Health Communication
- Prevention and Health Promotion
- Social and Behavioural Sciences
- Global Public Health
- Public Mental Health
- Health Services Research and Health Economics
- Epidemiology of Diet and Lifestyle Factors

4 SEMESTERS / 2 YEARS  
120 ECTS

# HOW TO APPLY

## Admissions requirements

- Completed university degree (bachelor's degree or equivalent) in a health-related discipline such as: medicine, pharmacy, natural sciences, psychology, social sciences, statistics, sport science, economics and business administration, law and communication science
- Advanced competency in English
- Good knowledge of mathematics and statistics
- Formal application including curriculum vitae and certificates
- Passed written and oral entry exam (in English)

**APPLICATION: MAY 15**

**SEMESTER START: MID-OCTOBER**

## Written exam

The written exam lasts 90 minutes, in which we test the applicants' knowledge of and abilities in the following topics:

- Basic knowledge of mathematics and statistics
- Critical interpretation of scientific literature and information in the media
- Principles of scientific work
- Important basic concepts in epidemiology and Public Health
- Current issues relevant to epidemiology

## Oral exam

The oral exam is conducted in the form of a 30-minute admission interview.

The following topics will be discussed to assess the abilities of the applicant:

- Knowledge in mathematics and statistics
- Motivation for the master's programme
- Realistic perception of career prospects
- Ability to outline how the master's programme will complement the knowledge and skills obtained in previous studies
- Problem solving and decision making abilities
- Ability to critically evaluate scientific findings
- Communicative competences

**BOTH THE WRITTEN AND THE ORAL PART OF THE EXAM CAN BE DONE ONLINE**

# FREQUENTLY ASKED QUESTIONS

1

What is the teaching language of the programme?

All courses and lectures of the core modules and the corresponding exams are held in English. Thus, good English language skills are a prerequisite.

Please note that certificates have to be submitted with the application. Find more information here:

[bit.ly/LMU-admission-info](https://bit.ly/LMU-admission-info)

2

Are German language skills required?

Knowledge of the German language is not required but strongly recommended, as you can choose more courses – and it makes living in Germany much more enjoyable.

3

Does LMU Munich offer language courses?

LMU Munich offers German courses for various levels of proficiency. Find more information here:

[bit.ly/LMU-language-courses](https://bit.ly/LMU-language-courses)

4

Is work experience required before applying for the programme?

Work experience can be an asset, but it is not a requirement for admission to the programme.

## 5

### How much is the tuition fee per semester?

LMU Munich charges a semester fee of approximately 130 EUR per semester.

Find more information on the fee here:

[bit.ly/lmu-fees](https://bit.ly/lmu-fees)

## 6

### What is the deadline for applications?

The deadline for applications is May 15. The written exam takes place in May/June.

All candidates who successfully pass the written exam are invited for an oral exam, which takes place in June/July.

Information on the application procedure and the current deadlines can be found on our website.

## 7

### How can I apply?

Application is possible exclusively online. The link to the application portal is published usually in March on our website.

Deadline is May 15. You can find more information on our website:

[bit.ly/epi-application](https://bit.ly/epi-application)

8

How many students are being admitted to the programme every year?

Approximately 30-40 students start every year.

9

Can I enroll as a part time student?

No, our study programme is a full time programme only.

10

How is the weekly schedule set up?

Your timetable depends mainly on your choice of electives.

## 11

Can I finish the study in one year by taking extra courses?

No, this is a 2-year programme, which cannot be completed in one year.

## 12

What type of Visa should I apply for?

Students from most countries outside the EU require a student visa. We strongly advise you to contact the German embassy and/or consulate in your country to ensure that you apply for the correct type of visa for your situation.

Please make sure to check in advance what the exact entry permit regulations applicable to your nationality are.

## 13

Can I work while being enrolled in the programme if I am staying in Germany on a student visa?

Work permit regulations may vary depending on your nationality and/or visa status. For further information on how to access the German labour market for you, please contact either the German embassy or the consulate responsible for issuing your visa.

## 14

### How can I find a student job?

You can find a list of student assistant jobs here:

[bit.ly/LMU-student-jobs](https://bit.ly/LMU-student-jobs)

Further job opportunities as well as opportunities for further qualifications can be found on the website of the LMU Career Service:

[bit.ly/LMU-career-service](https://bit.ly/LMU-career-service)

## 15

### How can I find accommodation?

Finding accommodation in Munich can be difficult, especially in September, October and November, when most new students arrive in the city.

Therefore, it is advisable to start looking for accommodation as soon as possible. Most students live in private rooms or apartments. Rooms in students' halls of residence usually have long waiting lists.

Most of these rooms are managed by "Studentenwerk München".

For further information and advice for students looking for accommodation in Munich, please consult:

[www.studentenwerk-muenchen.de/en/](https://www.studentenwerk-muenchen.de/en/)

OUR UNIVERSITY

LUDWIG-MAXIMILIANS-UNIVERSITÄT  
LMU MUNICH

OUR INSTITUTE

INSTITUTE FOR MEDICAL  
INFORMATION PROCESSING,  
BIOMETRY AND EPIDEMIOLOGY  
IBE

OUR SCHOOL OF PUBLIC HEALTH

PETTENKOFER SCHOOL  
OF PUBLIC HEALTH  
PSPH

Founded in 1472, LMU Munich is a major German public university. It has a long-standing record of excellence, which culminated in its recognition by the German government's highly prestigious Excellence Initiative. As one of the largest German universities, LMU Munich is marked by a vibrant and diverse academic life and research culture.

The university has been actively promoting interdisciplinary research in the health sciences, in particular through the Munich Centre of Health Sciences and the Pettenkofer School of Public Health. Both of these platforms for conducting health research and translating research into policy and practice were co-initiated by the IBE.

The Institute for Medical Information Processing, Biometry, and Epidemiology (IBE) has broad-ranging methodological expertise in conducting observational studies and randomized controlled trials and in advancing and applying innovative epidemiological and statistical techniques. Notably, researchers at the IBE are involved with international efforts to adapt systematic review methodology to complex interventions.

The IBE engages with a variety of national as well as international partnerships, including the Cochrane Collaboration and the World Health Organization (WHO). As part of the Pettenkofer School of Public Health, the IBE cooperates with the Bavarian Health and Food Safety Authority (LGL) and Helmholtz Munich (HMGU).



*Professor Dr. Ulrich Mansmann  
Director of the IBE*



*Jake Burns works as a  
research associate at  
LMU Munich*

# NOT EVERYTHING THAT COUNTS CAN BE COUNTED

"The MSc Epidemiology taught me much that I use every day. Yes, you learn the principles of good research, to be an epidemiologist, but you learn much more than that. The programme taught me how to think critically about complex problems, about potential solutions and about how to evaluate those solutions. Just one small warning: you will never read the health section of the newspaper the same way again."

Our mission is to provide the students of our master's program in epidemiology with the fundamental methodological and analytical knowledge required in the epidemiological practice.

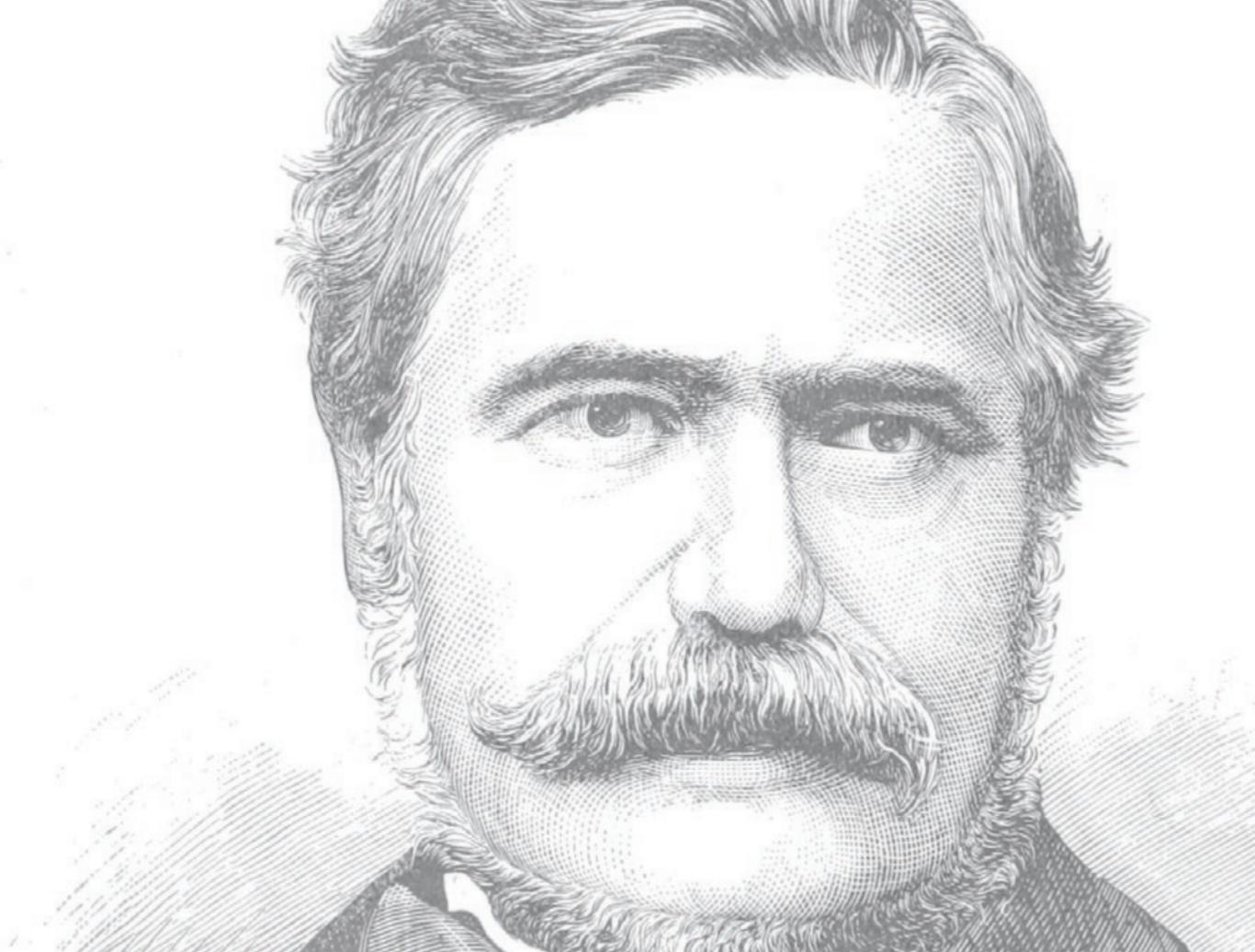
Through our focus on clinical, genetic, environmental and occupational epidemiology, we aim to present our students with diverse opportunities to learn, explore and conduct research throughout the whole duration of the programme.

# MAX VON PETTENKOFER (1818-1901)

Max von Pettenkofer founded the world's first hygiene institute at LMU Munich in 1865. He is considered a pioneer of public health, and Munich owes him its sewage system, which was extremely innovative for the 19th century, and the central drinking water supply – two cornerstones for the health of the city's population.

For Pettenkofer, health was a comprehensive medical, social, economic, technical and epidemiological challenge.

As the eponym of the Pettenkofer School of Public Health, he still refers to the roots of public health in Munich and Bavaria.



# MSc EPIDEMIOLOGY

4 SEMESTERS / 2 YEARS

120 ECTS

FULLTIME

APPLICATION MAY 15

ENGLISH

START MID-OCTOBER

LMU Munich | Pettenkofer School of Public Health  
Institute for Medical Information Processing, Biometry, and Epidemiology (IBE)  
Master´s Programme Epidemiology

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