

# How to get through your studies in BEMP: legal aspects and specific information

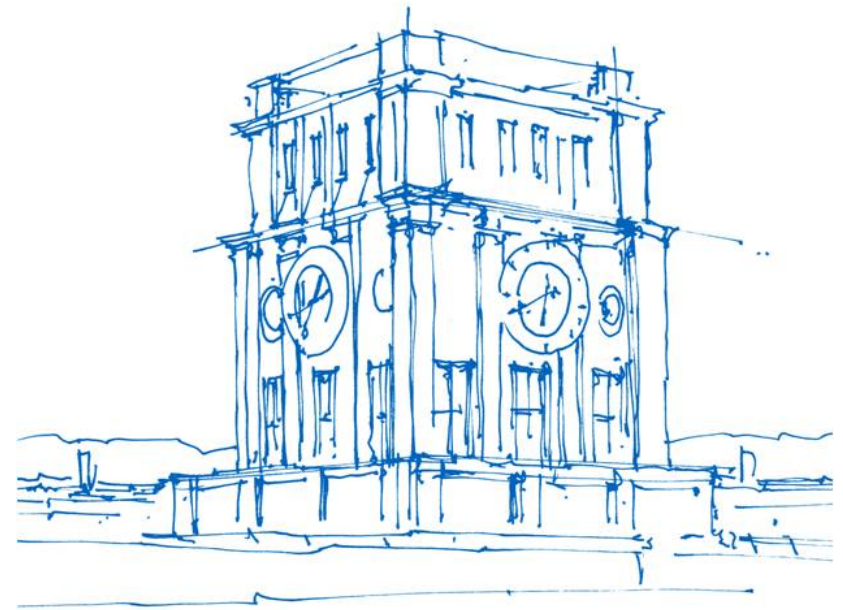
**Dr. Marianne Köpf**

Technical University of Munich

TUM School of Natural Sciences

Professional Profile Physics

Academic Administration



*Uhrenturm der TUM*

# Outline

Regulations, regulations, regulations

How to...

Questions/Answers

Networking

# Academic Counseling @ [studium@nat.tum.de](mailto:studium@nat.tum.de)



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# Information about the Degree Programme (I/II)

[Link Website TUM NAT](#)

TUM School of Natural Sciences  
Technical University of Munich



Homepage > Academics > Master > Biomedical Engineering and Medical Physics

## Master's Program Biomedical Engineering and Medical Physics

The courses on the Biomedical Engineering and Medical Physics Master teaches the basics and the skills required to successfully carry out research or industrial projects across the interdisciplinary boundaries between natural sciences, engineering and medicine.

**Curriculum**

**Departmental Student Academic Advisor**  
Master Biomedical Engineering and Medical Physics

TUM School of Natural Sciences  
Technische Universität München  
Boltzmannstr. 10  
85748 Garching

Seiten / ... / Master ✎ Bearbeiten 🗨️ Inline-Kommentare anzeigen 🌟 Favorit 👁️ Beobachtung(W) 🔗 Teilen(S) ⋮

## Biomedical Engineering and Medical Physics

- [Important Information](#)
  - ↳ [Language Courses](#)
  - ↳ [Access to Libraries](#)
- [News](#)
- [Welcome Meeting](#)
- [Academic and Examination Regulations](#)
- [Curriculum and Choosing your Modules](#)
  - ↳ [Exemplary Curriculum](#)
  - ↳ [How to find the modules listed in the focus areas](#)
  - ↳ [How to register for the courses \(and exams\)](#)
  - ↳ [How to get a schedule of courses](#)
  - ↳ [Language of instruction](#)
  - ↳ [How to choose your mentor](#)
- [Information on BEMP Lab Course Modules](#)
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[Link Wiki BEMP](#)

=> „Beobachten“


# Information about the Degree Programme (II/II)


[Link Wiki BEMP](#)

=> „Beobachten“

Betreff: [BC] TUM School of Natural Sciences > Quantum Science and Technology


Es gibt 1 neue Bearbeitung zu dieser Seite

 **Quantum Science and Technology**

 **Marianne Köpf** hat diese Seite bearbeitet

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Hier ist der Versions-Kommentar

 **Marianne Köpf** hat / haben dies am 9:27 AM geändert

News 2023-10-10

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Folgendes hat sich geändert:

 Inhalt

## Important Information

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### Language Courses

Registration for the language courses is done via TUMonline. Students who are not yet enrolled can not yet register for courses in TUMonline. However, they can check the Language Center website regularly, some courses may be offered later in the semester.

Students who did not give proof of German language skills will be given the additional requirement to within the first year of studies pass at least one module in which they earn German language skills integratively. E. g. this may be fulfilled by a German course of the language center within the general-education subjects. But also other certificates are accepted. The A1.1 level is sufficient for meeting the "Requirement Proof of Proficiency in German"/"Nachweis Deutschkenntnisse".

There are different offers for 'German as a Foreign Language'. During the semester as well as block courses in the end of each semester.

Link to the website of the TUM language center:  
<https://www.sprachenzentrum.tum.de/en/homepage/>  
<https://www.sprachenzentrum.tum.de/en/sprachenzentrum/languages/german-as-a-foreign-language/>

In case you do not get a place within one of the courses offered by the TUM language center, you also might have a look for other course offerings like: <https://www.dkfa.de/de/deutsch-in-studium-allgemeine-informationen/> or <https://kurse.vhb.org/VHBPORTAL/kursprogramm/kursprogramm.jsp?Period=77&School=12&Section=100>

### Access to Libraries

For access to TUM library, please have a look at <https://www.ub.tum.de/en>

Please note, access to e-media (e-books, e-journals, etc.) from outside the university network is via eAccess (<https://login.eaccess.ub.tum.de>), for which students need the TUM ID. Without a TUM ID, unfortunately, you can only access e-media with the PCs in the reading rooms of the library.

You can find your TUM ID within your tumonline account!

The e-access is only available after enrolment in the degree program, since media with costs are made available via this access.

### News

In this section you will find news and relevant information related to your studies that we share with you from time to time. (Offers for PhD positions can be found in the showcases next to the dean's office in the physics building in Garching.)

2023-10-10

Dear women@MCQST,

We invite all women\* at MCQST to a "women@MCQST breakfast" on \*24 Oct. 9:00-10:30 am\* at room 005 in Max Planck Institute for Astrophysics (Karl-Schwarzschild-Str. 1, 85748 Garching).

We want to use the meeting to address (either in the group or individually) any issues related to harassment, bullying, as well as anything else that you would like to discuss.

It is our experience that it can help a lot to talk about problems and to find together a solution to them.

Hence, we really want to listen and hear about your concerns, worries and suggestions and ask you to use this opportunity.

# Academic and Examination Regulations (FPSO) for BEMP

The **Academic and Examination Regulations (FPSO)** are, together with the General Academic and Examination Regulations (APSO), the contract you signed with the university at the time of enrolment. It is very important that you are familiar with the contents of these regulations.

- FPSO BEMP: [Link](#)
- APSO: [Link](#)

# Curriculum

	Semester	Modules			Credits in total
Study Phase	1.	<b>Biomedical Physics 1</b> Mandatory w ritten exam (Klausur) 5 CP	<b>Focus Areas</b> Electives various examination forms 25 CP		30
	2.	<b>Biomedical Physics 2</b> Mandatory w ritten exam (Klausur) 5 CP	<b>Focus Areas</b> Electives various examination forms 15 CP	<b>Advanced Practical Training</b> Mandatory laboratory assignment 6 CP	<b>General Education Subjects</b> Electives various 4 CP
Research Phase	3.	<b>Master's Seminar</b> Mandatory Presentation 15 CP		<b>Master's Work Experience</b> Mandatory Report 15 CP	30
	4.	<b>Master's Thesis</b> 30 CP			30
Legend		Light grey = mandatory modules of semester 1 and 2 Dark grey = General Education Subjects Light blue = Elective Modules of Focus Areas Dark blue = Research Phase (Master's Seminar, Masterpraktikum und Master's Thesis)			

# Credit Limit

There is a credit limit for the mandatory modules Biomedical Physics 1 (PH2001) and Biomedical Physics 2 (PH2002).

- **you must pass one within the first two semesters, otherwise you will be disenrolled by end of the second semester.**
- The exams are written exams (Klausur).  
They will take place in person at TUM in Garching – Germany!
- **Register for the exams via TUMonline!**



# Focus Areas

- You have to earn 40 credit points in the focus areas.
- There are two focus areas:
  - Bio-Sensors
  - Imaging
- All offered modules are listed on the website: [Link](#)
- You may choose **freely** over all focus areas. To ensure a broad coverage of topics a consultation by a mentor is recommended and required to enter the research phase.

# Mentor Counseling

- Make sure you have an idea of which of the modules you are interested in before contacting a mentor. A mentor will help you to review the individual study plan you have considered (selected modules).
- Take the counseling within the first weeks
- The discussed individual curriculum is not definitive, you can change your choice of modules later on. You also might change your mentor during your studies.
- Choose a mentor, your mentors are listed on following website: [Link](#)  
If you like to get deeper into Biosensors, please contact the mentors of the Biosensors modules, not those of the Imaging ones.
- You must submit a Mentor-Consulting Interview form when you register for the research phase

# Curriculum

	Semester	Modules		Credits in total
Study Phase	1.	<b>Biomedical Physics 1</b> Mandatory w ritten exam (Klausur) 5 CP	Focus Areas Electives various examination forms 25 CP	30
	2.	<b>Biomedical Physics 2</b> Mandatory w ritten exam (Klausur) 5 CP	Focus Areas Electives various examination forms 15 CP	Advanced Practical Training Mandatory laboratory assignment 6 CP General Education Subjects Electives various 4 CP
Research Phase	3.	<b>Master's Seminar</b> Mandatory Presentation 15 CP	<b>Master's Work Experience</b> Mandatory Report 15 CP	30
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# BEMP Lab Course

- advanced experiments dealing with different topics from the research area of Biomedical Engineering and Medical Physics
- research areas of the different institute from the physics department and the Munich Institute of BioEngineering (MIBE), thus facilitating future decisions regarding choices of specialization or topics for Master's theses
- students perform one experiments, which can be freely chosen from the offered catalog
- each experiment takes about 60 hours of laboratory work.  
In total each Lab Course has 6 Credit Points and so the total workload is 180 hours.
- **On October 19, 2 p.m.** there is a **preliminary meeting for the BEMP Lab Courses**. Prof. Julia Herzen and Katja Block will explain the general BEMP Lab Course framework, shortly present the experiments of the winter semester 2023/24.

<https://tum-conf.zoom-x.de/j/61162068302?pwd=T0IUaFZYK0EzSEFGaXhRNkx6UUUVUZz09>

Meeting-ID: 611 6206 8302

Kenncode: 945483

# General Education Subjects

- At least 4 credit points
- Elective courses – please see:  
<https://www.nat.tum.de/en/nat/studium/org/faq/studium/softskills-ph/>

choose for example from TUM School of Management, the Carl-von-Linde Academy or the Language Center

- **To take an exam: register in TUMonline!**
- *Those who still have to prove their knowledge of German can take a German course at the TUM Language Center, which can also be considered a general education subject.*

# Curriculum

	Semester	Modules				Credits in total
Study Phase	1.	<b>Biomedical Physics 1</b> Mandatory w ritten exam (Klausur) 5 CP	<b>Focus Areas</b> Electives various examination forms 25 CP			30
	2.	<b>Biomedical Physics 2</b> Mandatory w ritten exam (Klausur) 5 CP	<b>Focus Areas</b> Electives various examination forms 15 CP		<b>Advanced Practical Training</b> Mandatory laboratory assignment 6 CP	<b>General Education Subjects</b> Electives various 4 CP
Research Phase	3.	<b>Master's Seminar</b> Mandatory Presentation 15 CP		<b>Master's Work Experience</b> Mandatory Report 15 CP		30
	4.	<b>Master's Thesis</b> 30 CP				30
Legend		Light grey = mandatory modules of semester 1 and 2 Dark grey = General Education Subjects Light blue = Elective Modules of Focus Areas Dark blue = Research Phase (Master's Seminar, Masterpraktikum und Master's Thesis)				



# Going Abroad



## Dr. Maria Eckholt

International students,  
going abroad

General courses' issues  
and soft skills

@: [studium@nat.tum.de](mailto:studium@nat.tum.de)

Tel.: +49 (0)89 289 14461

Office: PH 2053

Tue. and Thu. 9:30 – 11:30 am

- Detailed Information about possibilities for a stay abroad (e.g. ERASMUS, TUMexchange)

<https://www.nat.tum.de/en/nat/studies/global/>

TUMexchange application deadline October 31 (10 a.m.)

Erasmus+ application deadline January 12, 2023 (at 12 noon)

- To follow international activities of the physics department – **Blog**

<https://wiki.tum.de/pages/viewrecentblogposts.action?key=tumphinternational>

# Curriculum

	Semester	Modules			Credits in total
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	4.	Master's Thesis 30 CP			30
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# Research Phase

- Full time => 60 Credit Points in total => 40 hours per week
- One **inseparable** entity (only formally divided into parts)
- One year of research in a group of or in a specialist field such as the Chair of Cell Biophysics, Physics of Biomedical Imaging, Applied Biophysics, Physics of Synthetic Biosystems, Radiology, etc.
- Find a supervisor during the first year.  
Please, see also the list of possible thesis supervisors on the website
- **Register at the beginning of the research phase**  
You can start your research phase also within one semester, you do not have to wait until the beginning of your third semester. Also, your study phase can be longer than two semesters in total.
- Additional information event every semester.  
You will get informed about this meeting via e-mail.

# Academic progress check (FPSO)

- Academic progress check (“not more than one year behind“)
  - by the end of the 3rd semester: 30 credit points
  - by the end of the 4th semester: 60 credit points
  - by the end of the 5th semester: 90 credit points
- 1 Credit Point at TUM equals a workload of 30 hours for an average student. => For a 5 CP module the workload is 150 hours!
- Please check yourself regularly your grade report within TUMonline and let us know if there are unassigned exams.

# Registration for courses

- Not mandatory, but useful.
- Professors can contact students.
- Course will appear in your TUMonline-schedule.
- Access for online material may be coupled to registration.

# Registration for exams

- To take an exam **you must register in TUMonline!**  
There will be an information e-mail when the registration starts.
- Best way to register to an exam is via „Curriculum“.
- Only passed exams will be listed in the final transcript.
- There is no limit to the number of attempts for failed exams.  
**Exception: mandatory modules Biomedical Physics 1 (PH2001) and Biomedical Physics 2 (PH2002).** You must pass one within the first two semesters.
- Once passed, exams can not be repeated.
- Go to the review of graded exam

# Additional requirement for integrative German skills

- To be admitted into BEMP you do not need to provide proof of German language skills.
- Students who did not give proof of German language skills will be given the additional requirement to within the first year of studies pass at least one module in which they earn German language skills integratively.
- E. g. this may be fulfilled by a German course of the language center within the general-education subjects. But also other certificates are accepted.
- The A1.1 level is sufficient.

# Additional Courses

- You might take other modules (optional courses) than mentioned in your curriculum
- They do not count into your degree program! – Neither the grades nor the amount of CP
- They will be listed in the appendix of your transcript of records

# Deadlines – I/II

## Exam registration periods

- Examinations normally take place accompanying the corresponding semester of study. Each module has two examination dates within an academic year.
- Regularly there are two time periods for module exams at TUM. The first follows immediately the lecture period, the second is just before the lecture period of the following semester begins. The exact dates for the current and following semesters are given on the [Website TUM NAT](#).
- The registration periods are defaults – please keep in mind that there might be small deviations and possibly different dates in other departments
- There will be an information e-mail when the registration periods start.

# Deadlines – II/II

## Re-registration

- Do not forget to **re-register for the next semester**

Deadlines: **February 15 for summer semester**  
**August 15 for winter semester**



# Key Websites

Wiki:

<https://wiki.tum.de/display/nat/Biomedical+Engineering+and+Medical+Physics> -> „beobachten“

School of Natural Sciences:

<https://www.nat.tum.de/>

TUMonline: <https://campus.tum.de>

# Some more information/advice/etc.

[Our Advice and Counselling Network: Studierendenwerk München Oberbayern \(studierendenwerk-muenchen-oberbayern.de\)](http://studierendenwerk-muenchen-oberbayern.de)

<https://www.nat.tum.de/en/nat/about/diversity/>

<https://www.zv.tum.de/en/diversity/home/>

# Tuition Fees for non EU-students

Please, keep yourself updated!

<https://www.tum.de/en/studies/fees/tuition>

# Live Tutorial

Registration for courses/exams within TUMonline, <https://campus.tum.de>

# Upcoming Events

## **Welcome Event**

October 16, 10.00-11.00 a.m. - in person on site!

Prof. Julia Herzen will welcome you at TUM, campus Garching.

We will have time for a get-together and talks.

## **Information on BEMP Lab Courses**

October 19, 2 p.m. – online/zoom

Prof. Julia Herzen and Dr. Katja Block will explain the general BEMP Lab Course framework, shortly present the experiments of the winter semester 2023/24 and answer individual questions.

<https://tum-conf.zoom-x.de/j/61162068302?pwd=T0IUaFZYK0EzSEFGaXhRNkx6UUUVUZz09>

Meeting-ID: 611 6206 8302

Kenncode: 945483

# Questions?



If you have questions or problems...



**Let us know!**

**[study@nat.tum.de](mailto:study@nat.tum.de)**



Please include your matriculation number.

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Consultation hour Dr. Marianne Köpf

You may make an appointment via Moodle

<https://www.moodle.tum.de/course/view.php?id=90475>  
Mathematics/Informatics Building, Room 5606.01.036