Application - MSC-PE

Important note

For applicants outside the scope of the "Lisbon Convention" (third-country nationals) the admission decision in the stage 1 will be made on the basis of the result of a written online aptitude test TUM Test Power Engineering.

TUM Test Power Engineering 2023

The TUM Test Power Engineering 2023 took place on 13 February 2023. There is no second TUM Test Power Engineering scheduled in the application period until May 31, 2023. For applicants who do not fall under the scope of the "Lisbon Convention", the admission decision in the stage 1 will be based on the result of a TUM Test Power Engineering. If you belong to this group, unfortunately, there is currently no more possibility to apply for the TUM M.Sc. Power Engineering in 2023.

However, we recommend checking the wiki page regularly for any changes to this information.

APS Certificate

For Indian applicants: Due to the high number of applications, until further notice and in agreement with UniAssist, it is possible to apply for the VPD document without the APS certificate. An admission can therefore already be granted without the APS certificate. However, the APS certificate must be presented at the time of enrollment. The enrollment must be completed by mid-November.

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Dates & deadlines application winter semester 2023

- Start of application phase (opening of the application portal): 01 January 2023
- Application deadline TUM Test Power Engineering 2023 *: 05 February 2023
- Sending access data TUM Test Power Engineering 2023 *: 08 February 2023
- Trial run TUM Test Power Engineering 2023 *: 08 - 10 February 2023
- TUM Test Power Engineering 2023 *: 13 February 2023, 2pm German time (UTC+1)
- Sending of TUM Test Power Engineering 2023 certificates *: until 17 February 2023
- Recommended application deadline (especially for non-EU candidates due to visa issues): 15 March 2023
- Final application deadline: 31 May 2023

*: only for third-country nationals outside the scope of the "Lisbon Convention"

Further information about dates & deadlines you can find here.

Please note:
In order to get the visa issue completed prior to the start of the program in October, we strongly encourage non-EU applicants to apply by March 15. Missing documents (e.g. VPD) can be submitted until the final deadline.

The final application deadline for all applicants (including non-EU students) at TUM is 31 May for the next possible intake. Missing documents cannot be submitted after the final application deadline. (Exception: If the VPD document preparation is not yet completed, please upload a confirmation that you have requested the VPD document instead and submit the VPD document through the application portal as soon as you receive it.)

Requirements

General

Your application has a chance to lead to admission to the Master Program Power Engineering if ...

- ... you have a H+ rated (Anabin) Bachelor degree or equivalent in electrical or mechanical engineering, with a strong focus on power engineering and excellent grades.

https://anabin.kmk.org/no_cache/filter/institutionen.html

1. Click on „Suchen“

2. Click on „Länderauswahl öffnen“
3. Select from the drop down the country of your university (where you obtained your bachelor degree from) and confirm “Länderauswahl bestätigen”.

4. Select from “Alle Orte” the town of your university

5. All institutions/universities in the selected town will be displayed in the table below
6. In the column “Status” you can find out the rating of the university.

- ... you can show proof of passing the TUM Test M.Sc. Power Engineering with a score of at least **39 points** (only relevant for applicants outside the scope of the “Lisbon Convention”). However, the test result must not be older than 42 months.

The applicant's expertise will be examined as part of an aptitude assessment. **Outstanding expertise in the fields of electrical and mechanical engineering**, preferably in the field of power engineering, is particularly important. In principle, therefore, any applicant who can demonstrate this knowledge will be considered, regardless of the designation of the bachelor's degree program in which this knowledge was acquired.

Candidates who have failed to prove their eligibility for the Master Program Power Engineering in a previous application process may **re-apply** once.

**Special Conditions for Certain Countries**

For applicants outside the scope of the "Lisbon Convention" (third-country nationals) the admission decision in the stage 1 will be made on the basis of the result of a written online aptitude **TUM Test Power Engineering**.

If you have obtained your **qualification for postgraduate studies (e.g. your bachelor)** in a country outside of the EU/EWR or Switzerland, you need to apply for a Preliminary Documentation (VPD) via uni-assist before applying to TUM. [https://www.tum.de/en/studies/application-and-acceptance/uni-assist/](https://www.tum.de/en/studies/application-and-acceptance/uni-assist/).

Furthermore, applicants from certain countries/provinces must comply with special conditions (e.g. APS certificate). Please check this link to see if this is relevant for you.

**General schedule**

After having received your completed application we will carefully evaluate it and decide whether we invite you for an interview. The following table shows the entire decision schedule assuming that we received your application by March 15:

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended deadline</td>
<td>March 15</td>
</tr>
<tr>
<td>Final application deadline</td>
<td>May 31</td>
</tr>
<tr>
<td>We encourage you to apply as early as possible, as otherwise it is highly likely that you will not be able to obtain a visa in time, in case you are admitted.</td>
<td></td>
</tr>
<tr>
<td>Interview</td>
<td>March - July</td>
</tr>
<tr>
<td>Results announced</td>
<td>Admission results will be announced as soon as possible, typically a few days after the TUM Test or interview</td>
</tr>
<tr>
<td>Official admission letter of TUM</td>
<td>Available for download after official notification</td>
</tr>
<tr>
<td>Beginn of winter semester</td>
<td>October 1</td>
</tr>
<tr>
<td>Beginn of the lecture period</td>
<td>Mid October</td>
</tr>
</tbody>
</table>

**Application Procedure**
Detailed information on the application process you will find at these links and their subpages:
https://www.tum.de/en/studies/application/application-info-portal/online-application
https://www.tum.de/en/studies/application/master/application-master

The selection of applicants who are admitted to the MSC-PE program is made through an aptitude assessment.

**Application procedure 2023 at a glance**

For applicants **outside** the scope of the "Lisbon Convention"

For applicants **inside** the scope of the "Lisbon Convention"

**Aptitude assessment**

The aptitude assessment for MSC-PE comprises two stages.

**Please note:** In stage 1 of the aptitude assessment, there is a difference between applicants who have obtained their Bachelor's degree in a country within or outside the scope of the "Lisbon Convention". Applicants who have obtained their Bachelor's degree in a country outside the scope of the "Lisbon Convention" are referred to as **third-country nationals** in the following. Please note: The deciding factor is the country in which you obtained your Bachelor's degree and not your nationality as a person. In stage 1 of the aptitude assessment, third-country nationals must provide valid proof of passing the TUM Test Power Engineering with a score of at least 39 points (test result must not be older than 42 months). Therefore, please check carefully if the country where you have obtained your Bachelor's degree has ratified the "Lisbon Convention". Information on this can be found at this link https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=165. **Please note that there really is a ratification.** A signature alone is not sufficient.

**Stage 1:**

For third-country nationals the result of the TUM Test Power Engineering is assessed, for other nationals the grade of the bachelor degree and the subjects passed are assessed. In both cases, the highest possible score
is 55 points. Applicants who have achieved **45 points or more are admitted directly**. Applicants who have scored less than 45 points but at least 39 points will be invited for an interview (stage 2). Applicants with a test score of less than 39 points are not considered eligible for the MSC-PE program.

The criteria for stage 1 are as follows (Note: The points mentioned below are used by the selection committee to describe your expertise in the particular area and do not equate to the number of courses you have taken or the number of credits you have earned.):

- **Overall grade in your Bachelor degree** (max. 25 points)
- **Subjects during your Bachelor degree that are relevant to MSC-PE** (max. 30 points)
  - Mathematics (max. 12 points)
  - Electrical Engineering (Power Engineering) (max. 9 points): e.g. circuit technology, electric fields and waves, solid-state physics and components, high-voltage engineering, power transmission technology, electrical machines
  - Mechanical Engineering (Power Engineering) (max. 9 points): e.g. engineering mechanics, thermodynamics, fluid mechanics, heat and mass transfer, machine dynamics

**Stage 2**

Applicants with less than 45 points but at least 39 points in stage 1 get an invitation for an interview.

The interview usually takes about 20 - 30 minutes and can be done in person at TUM or as video conference.

The content of the interview covers the following main topics:

- **Motivation for MSC-PE** (max. 15 points)
- **Expertise and ability to do scientific work** (max. 30 points)
- **Communication skills in the English language** (max. 10 points)

For the final score of stage 2, the mean value of your score in the interview and the score of stage 1 is calculated. Hence, the highest possible final score is 55. **If your score of stage 2 is at least 40 points you will get admission.**

**TUM Test Power Engineering**

**Please note:** Only applicants for the Master's program in Power Engineering who have obtained their Bachelor's degree in a country outside the scope of the “Lisbon Convention” need to provide proof of successful participation in a TUM Test Power Engineering.

**Application & Admission**

All applicants who have registered an [online application account](https://example.com) for the study program M.Sc. Power Engineering by the [registration deadline](https://example.com) are admitted to the TUM Test Power Engineering. **A separate registration for the TUM Test Power Engineering is not required.** Information on how to register an online application account can be found [here](https://example.com). To register for the TUM Test Power Engineering it is desirable, but not mandatory, to have uploaded all documents required in the application portal. However, please make sure that you have completed the online application account for the M.Sc. Power Engineering to the extent that you can finalize the creation of the account with the "SEND" button. Please ensure that you have selected all the checkboxes at the end. **Press the "Send" button. The status of "Submission of application" must be displayed with a yellow "?" button follow by a date (see screenshot below).** If you have any problems sending your application successfully, please contact [studium@tum.de](mailto:studium@tum.de).
Please note that you will not receive any further confirmation of admission to the TUM Test Power Engineering at this stage.

If you would like to take the TUM test "off campus" (e.g. from home), an additional paid ($15) registration with Proctorio is required. This paid Proctorio registration takes place during participation in the mandatory TUM Test Power Engineering trial run.

If you would like to take the TUM test "on campus" at a TUM location, you must notify us via email to pa.mscpe@ed.tum.de.

Full registration for the TUM Test is ensured when the **Mandatory Trial run** has been successfully completed.

### Access data

Access data for the TUM Test Power Engineering (including the trial run) will be provided by email one week before the TUM Test Power Engineering. Please make sure to check your email account including the SPAM folder regularly for incoming emails from us during this period.

### Format

Proctored online single-choice test, based on the Moodle platform

### Duration

45 min

### Content

The TUM Power Engineering test covers the three subject areas mathematics, electrical engineering and mechanical engineering. The exam will be about basic knowledge in these three areas, which should have been taught as part of your previous studies. To prepare for the test, we therefore recommend that you repeat and refresh your knowledge of the basics in these three subject areas from your previous studies.

Please understand that we cannot provide any further information on the content of the test.

### Location

- Option 1: Non-TUM location ("from home")
  - Software-assisted supervision (Proctorio)

  For this type of examination you need a webcam (built-in or external) and a microphone (built-in or external).
The software records you while taking the exam and captures, if you have conversations, get up, leave the computer, or show other clearly fraud-suspicious behavior.

- Personal data is collected from you in order to ensure that there is no fraud. The supervision data is encrypted and pseudonymized and stored on German servers, so that it is best possible protected against unauthorized access.
- The data will ONLY be collected during the test and will be deleted after the test has been evaluated!

Further information on Proctorio can be found here:
- Proctorio Inc.
- Proctorio Germany

- Option 2: TUM location (“on campus”)
  - Room at TUM facility
    - TUM Room 5414.EG.001
    - Lichtenbergstr. 4a, 85748 Garching (Munich)
    - Germany
    - https://nav.tum.de/room/5414.EG.001
  - Human supervision

Equipment
- To participate in the TUM Test Power Engineering (both for the “from home” and “on campus” option) you have to provide and use your own computer that meets these requirements.
- Browser: Chrome, Edge, Brave
- Proctorio supervision plugin
- For the “from home” option: webcam (built-in or external) and microphone (built-in or external).

Trial run & Payment

It is obligatory to perform the trial run in time several days before the TUM Test. The “real” exam is only visible and accessible for you after you have taken the DEMO exam. Please study also carefully the demo video and info pages provided in your TUM Test Power Engineering Moodle account. Please use exactly the same technical equipment (e.g. computer, browser, microphone, camera) and room environment that you will have at the TUM Test. Also, the trial run is when you pay the $15 registration fee for Proctorio.

Certificate

A few days after the TUM Test Power Engineering you will receive a confirmation of participation together with the test result. If you want to apply for the M.Sc. Power Engineering, you have to upload this certificate as one of the documents in your TUMonline application account.

ZOOM Emergency Hotline

https://tum-conf.zoom.us/j/63311209749?pwd=cUNkNGkrckRvb3IDdDcrUFFFFaNXpWdz09
Meeting-ID: 633 1120 9749
Code: TUMPE2023
Active from Monday, 13 February 2023, 11am German time (UTC+1)

Required documents

Please note: If you do not have all documents available yet (e.g. VPD), you can still prepare and submit the application via TUMonline and add the missing documents in TUMonline up until the application deadline.

For details on documents to be submitted, please refer to the information in the TUMonline application portal, as well as to the Glossary of Documents.

Below you will find additional information on these documents.

TUM Test Power Engineering Certificate

Applicants for the Master’s program in Power Engineering who have obtained their Bachelor’s degree in a country outside the scope of the “Lisbon Convention” must provide evidence of successful participation in a TUM Test Power Engineering.

Please note: The deciding factor is the country in which you obtained your Bachelor’s degree and not your nationality as a person.
Please note: In the TUM application portal, you will be asked to upload a “Notification of successful participation in the TUM Test Power Engineering with min. score of 33 points”. However, 33 points is only a formally required minimum score for your application to be accepted. In the subsequent aptitude assessment based on the test result, a minimum score of **39 points is required** in order to be classed as suitable for the degree program.

**APS certificate** ("Certificate of the Academic Evaluation Center")

Please check [here](#) if you need to provide an APS certificate. The APS certificate is required to apply for the VPD.

**VPD** ("Vorprüfungs dokumentation") - Preliminary Record Examination for non-EU Applicants

Applicants who have obtained their qualification for postgraduate studies (i.e. a bachelor's degree) in a country **outside of the EU/EEA need to have their documents processed by uni-assist**. Uni-assist generates a preliminary record examination (VPD), which determines whether applicants qualify for postgraduate studies in Germany. Applicants with a qualification for postgraduate studies obtained in Switzerland do not need a VPD.

You must submit a VPD that was issued **specifically for your application to TUM**. A VPD issued for an application at another German university will not be accepted for your application at TUM. However, if you wish to apply for **more than one degree program** at TUM, it is sufficient to apply for one TUM-specific VPD.

Your VPD will be accepted at TUM for an **unlimited period of time** as long as there have been no changes to the Master's entrance qualification.

If the undergraduate program has not been completed at the time of application for MSC-PE, the VPD will be based on coursework received to that point.

To apply for the VPD, please submit your documents to uni-assist e.V within the relevant application period. Please be sure to send your VPD to TUM as soon as you receive it.

More information on the VPD you will find [here](#).

**Please note:**

- Verification of your documents with uni-assist does not qualify as an application for TUM. You will need to apply to TUM via TUMonline before the relevant application deadline.
- If you have questions about applying for a VPD, please contact uni-assist directly. We cannot provide this information as uni-assist is a separate institution from TUM.

**Curriculum Vitae**

Include an **up-to-date (!)** version of your CV in table form. Make sure, your education, projects, and professional experience are clearly stated. The length of the CV should not exceed two (maximum three!) pages.

**Transcript of Records**

It is not required that you have fully completed your previous degree at the time you apply for MSC-PE. However, you must have earned at least 150 credits in your previous degree program. Please submit your latest transcript of records. Your overall grade (CGPA) and the grading system should be clearly visible.

This document must be upload as an **authenticated copy**. See the main page of the application requirements for details.

If the original document was not issued in German or English, you have to upload an authenticated copy of the translated document (to German or English) as well. However, it is not sufficient to send the translation only.

**Proof of Proficiency in the English Language**
With regards to proof of English proficiency, please see the link below. Pay particular attention to the information "Verification of English Skills by Language of Instruction".


**Proof of Proficiency in the German Language  Optional**

During your studies you can acquire German language skills e.g. by attending lectures offered in German language or by taking a dedicated German language course at the TUM Language Center.

**GRE (Graduate Record Examination) / GATE (Graduate Aptitude Test in Engineering) / AWA (Analytical Writing Assessment)  All Optional**

Copy of GRE / GATE / AWA certificates.

**Crediting of Previous Academic Studies**

The check of the creditability of moduls from your previous studies for MSC-PE can only be done after full enrollment at TUM, i.e. at the beginning of the first semester of your MSC-PE study. A preliminary check or crediting during your application phase is not possible.

**Further Information**

We also refer to the information under the following links

- TUM homepage: Power Engineering
- ED wiki: Starting your studies – M.Sc. PE
- ED wiki: "News" on the page Students – M.Sc. PE.

**Deferment of the start of studies / Reserving your spot**

If you decide to postpone your study after successful admission please inform studium@tum.de.

If admission to the Master's program in Power Engineering has been granted, it is valid for all subsequent applications for this program. According to the current status of the statutes, there is no time limit on the validity.

Please note that you will not be automatically readmitted for next year's study programs. You must become active yourself and create a new application in the application portal again, taking into account the deadlines. To do this, please resubmit last year’s application documents with an updated CV. However, you do not have to go through the whole aptitude assessment again. The admission requirements are still fulfilled. If the application portal asks you to upload a document "Notification of successful participation in a TUM Test Power Engineering", please upload your admission letter instead.

Further information

**Visa Matters**

Unfortunately, we cannot influence individually the processes of issuing visas by the local German embassies. We are also unable to communicate with the responsible embassies in this regard. This is the sole responsibility of the embassies. Please have understanding for this.

However, we refer to the regularly held TUM info sessions Visa and Residence Permit. Further information you can find here.
Furthermore, it is possible to apply for a "Prospective Student Visa" even without admission. This means that the applicant do not have to wait for admission to apply for a visa. The "Prospective Student Visa" is valid for three months and gives study applicants the opportunity to meet the requirements for admission. If the time is not sufficient, the period of stay can be extended thereafter for a maximum of another six months. Once students have been granted admission, they can then apply directly for a residence permit for study purposes.

At this point we explicitly refer to the Disclaimer.

Grade Converter

This grade conversion tool, together with your degree program’s Academic and Examination Regulations (FPSO), is a tool to help you convert grades earned in countries other than Germany, based on the “modified Bavarian formula”:

- \( N_{\text{max}} \) = Maximum grade of the foreign grading scale
- \( N_{\text{min}} \) = Minimum passing grade of the foreign grading scale
- \( N_d \) = Grade obtained abroad
- \( Z \) = Grade value sought in the German grading system

Enter the maximum grade, the minimum grade, and your grade obtained in the system used at your university.

The result is your respective grade in the German system. The grades represent the following assessments of the examination performances:

- ≤ 1.5 "very good": excellent performance
- 1.6 – 2.5 "good": performance well above average
- 2.6 – 3.5 "satisfactory": average performance
- 3.6 – 4.0 "sufficient": performance meets the standards in spite of deficiencies
- From 4.1 "fail": performance does not meet the standards because of substantial deficiencies

Please note: This tool is only intended to provide a first orientation and the results are in no way binding.

Disclaimer

The information on these wiki pages is provided for orientation purposes. No legal claims can be derived from incorrect statements. Only the corresponding official documents (e.g. APSO, FPSO) are legally binding.