According to FPSO (MSNE), applicants must provide a written essay as part of their application documents.

Topics, **resources and instructions** are announced here on this website. Kindly read this page carefully:

Each of the three essay topics is based on a recent scientific publication. Your task is to write a summary on **ONE** of the following three publications:

Topic 1: "Electronic dura mater for long-term multimodal neural interfaces" (written by Ivan R. Minev et al.)

Topic 2: "Temporal structure of motor variability is dynamically regulated and predicts motor learning ability" (written by Howard G Wu et al.)

Topic 3: "The feasibility of a brain-computer interface functional electrical stimulation system for the restoration of overground walking after paraplegia " (written by Christine E. King et al.)

We provide a TUM-bound access to all applicants using LRZ Sync-and-Share file hosting service: You may download all three publications (pdf format, ~90MB), following the instructions in TUM Online application system.
The screenshot on this website helps you finding the essay section in TUM Online Application System.
Kindly register in TUM Online Application System, fill all your applicant data first. In **TUM Online Application System** (i.e. not here on this website!), scroll down to the essay section, download the publications, read them carefully, decide for one of the publications and write your summary.

MSNE Admission Essay Format:
Applicants **choose one out of the three topics** listed above. Applicants provide an essay, performing a journal article summary and analysis. Applicants are encouraged to consider:

- *Introduction* – provide context for what the paper is about
- *Methods* – what were the key methods used, and how do they work?
- *Results* – what are the key results of the paper?
- *Contribution to the field* – What key step forward did the technology presented provide, or what key problem did it solve? What are the pros/cons of this technology?
- *Conclusions* – summarize important points of the above sections
- *References* - Applicants are also welcome to seek out and source other relevant literature that assists in writing the summaries/ the essay.

Constraints for this written essay:

- Written in **English**
- Length **between 550 and 650 words** (word count including essay title and essay plain text,

- excluding reference list, excluding picture captions, excluding footnotes, excluding text in tables,
- excluding students' declaration text, excluding auxiliary file/meta information such as date and name of author information). Kindly provide your wordcount final statistics in the document.
- No signature required.

Option to use AI in the essay research and writing:

- You have the option to use AI-based tools with both the research and writing phases of your paper. Large language models for assistance with writing is also included. If you choose to take this option for the writing phase, please submit your final paper along with the following:
  - Screenshots/the transcript of your communication with the LLM
  - A tracked changes version of your paper that shows what you wrote/changed from the writing provided by the LLM
- *This is completely optional*, so students may also choose to write their essay without the use of an LLM. Please note that *the evaluation of the essay will be solely based on the quality of the final, submitted version of the essay*.

Recommendations:

- Kindly provide the essay in a document form allowing to process text information, e.g. a pdf file generated by LaTeX, Word, or a different editor tool of your choice. Please do not provide a scanned image of your essay.

- We do not provide a template. I.e. you may choose your own favourite font, font size, line spacing, format, word processing software, etc…

Assessment criteria, according to FPSO regulation:

- A scientific and logical argumentation style; Covering the topic completely and correctly
- A structured scientific essay, referencing to resources completely and correctly, showing competence while applying domain-specific terminology in English, maintaining the length constraint (word count).