



**information on the master's
admission procedure.**

STUDY PROGRAM MECHATRONICS & SMART
TECHNOLOGIES

MCI



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introduction

Thank you for your interest in our full-time Master program Mechatronics & Smart Technologies. This guideline should provide information on our admission process.

Completing our online application form, enables you to participate in our admission process. Places are allocated based on the following criteria:

1. Curriculum vitae 30%

Your **personal** and **professional qualifications and experience** will be assessed on the basis of the documents submitted with your application.

Please attach importance to your **letter of motivation** - tell us why you are interested in our study program, how a degree from MCI should impact your professional career and what motivates you. Attach a detailed resume, transcripts, relevant professional certifications, etc. to your application.

2. Entrance exam 20%

An online exam will be held to assess candidates' knowledge of **engineering and natural science** and their **competence** in **English**.

3. Interview 50%

A personal interview gives candidates an opportunity to make a personal presentation, to discuss the information provided in their application papers, and to explain their educational and professional goals.

Should you need additional information, our administration office is always at your disposal:

mail to: office-mech@mci.edu, phone: 0512 2070 3900

We are looking forward to receiving your application and wish you every success for the application procedure.



DI Dr. Andreas Mehrle
Head of the Department



1 schedule for the admissions procedure

To provide greater flexibility in meeting your needs, MCI has introduced an admissions process with sessions held on separate dates. Since we cannot predict how many applicants will present themselves for the various sessions, and in view of the fact that only fifteen places are available for the study program, you are **recommended to participate at the earliest possible date** so as to secure a place as soon as possible.

You will find the current admission dates as well as the corresponding application deadlines under <https://www.mci.edu/de/studium/master/mechatronics-smart-technologies>

2 subsections

2.1 CURRICULUM VITAE

A key element in the admissions process is an assessment of the candidates' CV on basis of the submitted documents. Due account is taken of any additional qualifications over and above the basic prerequisites such as academic performance, further education, work experience and periods spent abroad.

2.2 ADMISSION TEST

The written entrance exam is an online test. It is composed of two parts:

- a.) Questions from the fields of engineering and natural science
Candidates are given 90 minutes to answer 60 questions in a multiple or single choice format.
- b.) English test
Candidates are given 60 minutes to conduct a reading exercise and write a short essay on a given topic.

The written entrance exam serves to assess candidates' competence in engineering and natural science, as well as their command of English.

2.3 PERSONAL INTERVIEW

The interview, which is held with a panel of three, gives candidates the opportunity to present their goals, motives and competences, and permits an evaluation of their suitability for the study program.

Applicants may choose to have the interview conducted via Skype. For details and free download, go to www.skype.com.



3 admission requirements

The Master program in Mechatronics & Smart Technologies is open to graduates of Bachelor and Diploma programs in the fields of engineering/engineering science or natural sciences with curricula involving at least 75 relevant ECTS credits.

The decision on the acceptability of prior qualifications is taken by the Program Director. Fifteen students can be admitted to the program each year.

we look forward to receiving your application!



4 sample questionnaires

1. Processes of an ideal gas can be characterized as:

- a. isobar
- b. isochore
- c. isocline
- d. isentrope

2. Which of the following formulas calculate a power:

- a. $i \cdot u$
- b. $\int F ds$
- c. $F \cdot v$
- d. $\frac{1}{2} \rho v^2$

3. Automated handling of work pieces has the following advantages compared to handling by hu-mans:

- a. more precise
- b. constant quality
- c. lower investment costs
- d. faster

4. How many degrees of freedom (DOF) describe the pose of a rigid body in space:

- a. 0
- b. 1
- c. 3
- d. 6

5. Which type of degree-of-freedom possesses a nut on an bolt:

- a. linear
- b. rotational
- c. cylindrical
- d. helical

6. Zener diodes are most commonly used in:

- a. voltage amplifier circuits
- b. oscillator circuits
- c. power supply circuits
- d. current limiting circuits

7. Wien's displacement law is essential for:

- a. the design of a pyrometer
- b. structural analysis of a PCB
- c. solving convolution integrals on a DSP
- d. Satellite image processing



Solutions:

1. a. right, b. right, c. wrong, d. right
2. a. right, b. wrong, c. right, d. wrong
3. a. right, b. right, c. wrong, d. wrong
4. a. wrong, b. wrong, c. wrong, d. right
5. a. wrong, b. wrong, c. wrong, d. right
6. a. wrong, b. wrong, c. right, d. wrong
7. a. right, b. wrong, c. wrong, d. right