Academic Program for Master Degree Candidates in Materials Science and Engineering

Program overview

This program will ensure that students become experts in the field of Materials Science and Engineering. The first year is almost entirely devoted to expanding one's knowledge of the field. In the second year, the courses are mainly focused on research methodologies and the topic for the dissertation is chosen and the associated research plan is written. In the third year, students will finish their dissertations and after defending, they will be awarded the title of M.eng.

Target audience and eligibility

This training program has been designed for students who want to further their career in the field of Materials Science and Engineering. To be eligible to apply the following criteria, students should be met:

- 1. Have a Bachelor degree in Materials Science and Engineering or related sciences.
- 2. Must be a non-Chinese citizen and hold a foreign passport accordingly.
- 3. Must be able to speak English and satisfy the requirement related to this¹.
- 4. Two letters of recommendation by at least assistant professors.
- 5. Must be in good mental and physical health².

Study Period and Length of Studies

The academic year starts in September and ends in June. The length of this program is 3 years.

Fees

Fee type	Fee amount
Tuition per year	¥34,000

¹ This means or have a passport from a native speaking English country or be able to prove that your highest obtained diploma or degree was given fully in English medium or you have a IELTS certificate with a score of at least 6.0 or a TOEFL score of at least 80.

² This has to be proven by the filling in of a 'physical examination form' by a medical doctor and should be certified accordingly

Accommodation per day ³	¥35-45
Application fee	¥400
Medical insurance per year	¥800

Aim of the program

The aim of the program is to educate the next generation of Materials Science and Engineering talent to be able to compete with their peers in the global job market. Through extensive training and research practise, students will graduate and hold the Master's degree enabling him or her to work in industry, industrial design and consultancy, etc..

Learning outcomes and methods of assessment

To ensure students can get the maximum out of his or her talents, they are encouraged to specialize in one of four areas. These areas are:

- 1. Material Science
- 2. Material Engineering
- 3. Material physics and chemistry
- 4. Material packaging

To ensure students have a broad and in-depth knowledge, the following courses are given in the first year. The courses that will be given are listed below.

Course Title and description	Assessment Method
Essentials of Material Science and Engineering	Written exam
Material phase transformation	Written exam
Thermodynamics of materials	Written exam
Thermo-Physics of welding	Written exam
Principles of welding technologies	Written exam
Welding inspection and quality control	Written exam
Theory and technologies of sheet metal forming	Written exam
Theories and technologies of surface engineering	Written exam

³ Can vary depending on the room type.

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Science and engineering of advanced polymers	Written exam
Advanced ceramics	Written exam
New methods for polymer synthesis	Written exam
Materials engineering technology	Written exam
High performance composites	Written exam
Multivariate data analysis	Written exam
Chinese Language Courses (HSK)	Written exam
China Survey	Written exam

After the first-year, students are actively encouraged to publish in journals together with their supervisors. This will enable them to deliver higher quality research which is needed for the completion of their dissertations. Also, students will have some China related course not mentioned above in the first year, such as Chinese language, culture, etc..

When and how to apply

Applicants can apply starting from December 20th, 2021 till May 31st, 2022. For more information on the documents needed and the application procedure, please visit: http://www.istudy.sdu.edu.cn.

Application for financial support

There are possibilities for getting a scholarship either by the China Scholarship Council (CSC), the local government or through Shandong University. For more information on CSC scholarships, please visit: http://www.campuschina.org/. For more information on local government or university scholarships, please visit: http://www.istudy.sdu.edu.cn.

Contact information (for questions regarding the program or school)

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