

DTU



SDC

The university partnership
Denmark – China



MSc in Chemical and Biochemical Engineering

From laboratories to real-world production

Sustainable and environmentally acceptable production processes are in demand. Existing production facilities must reduce pollution, and new facilities must be designed to prevent negative environmental impact. This means that there is a growing demand for research and development aimed at inventing innovative green methods and equipment for transforming raw materials into the substances and products society needs.

A Master's degree in chemical and biochemical engineering gives you a comprehensive understanding of chemical and biochemical engineering processes and the skills to bring new methods from laboratories to industrial production. The programme offers a high profile, research-based education in an inspiring environment with students and teachers from Denmark and China.

You will participate in courses which are based on state-of-the-art research within the field. You learn how to design, manage and carry out experiments, which gives you first-hand experience with working in an international standard laboratory environment, a great advantage when pursuing a career in a global setting.





Future career

Graduates are qualified to work in innovation driven enterprises of any size in Denmark or abroad. You will be especially qualified to work in challenging international environments that require the experiences and insights of different cultures, especially Asian and Chinese cultures. The MSc degree could also be the starting point for PhD or industrial PhD studies.

Studying in China

MSc programme in Chemical and Biochemical Engineering in Sino-Danish Center for Education and Research (SDC) is an international MSc programme that leads to a double degree from the Technical University of Denmark (DTU) and the University of Chinese Academy of Sciences (UCAS).

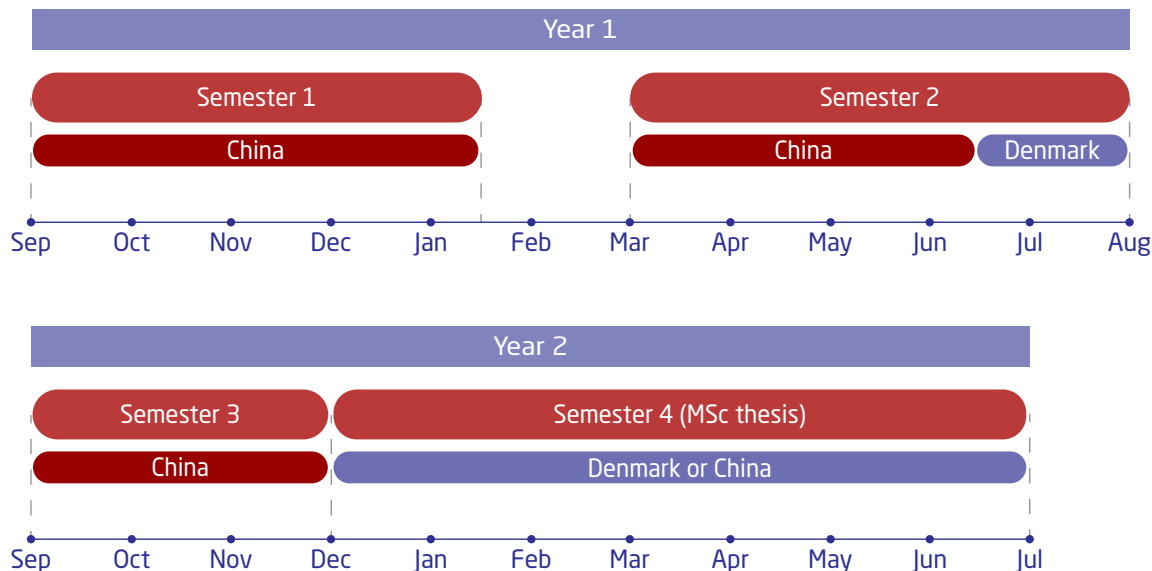
The degree gives you a unique opportunity to build your international network in an inspiring environment with students and teachers from Denmark and China. You will spend your study time in the SDC building in Beijing together with Danish and Chinese students from six other programmes. The Danish administration office offers support on site.

Sino-Danish Center for Education and Research (SDC) is a partnership between all eight Danish universities and University of Chinese Academy of Sciences (UCAS) in Beijing.



Programme structure

The 120-ECTS programme consists of general competence and technological specialization courses adding up to 90 ECTS, and a MSc thesis of 30 ECTS. Courses are taught as intensive courses in 3-6 week blocks and take place in both China and Denmark. The MSc thesis can be carried out either in China or Denmark.



Should you, along the way, decide that studying in China is not for you, you can easily transfer your studies to Denmark. It is also possible to apply for a semester exchange in the programme.

Programme content

The programme focuses on theoretical, experimental and practical aspects of chemical and biochemical engineering that are of relevance for product design, process design and production in chemistry, biotechnology, food, pharm and energy. Key elements are:

- Processes rooted in chemical or biochemical engineering
- Cross-disciplinary and cross-cultural design and development
- Sustainability of biomass based chemical production and fuel conversion
- Knowledge about Chinese culture and business environment integrated in the programme





Admissions

You need to hold a bachelor's degree in chemical engineering, biochemical engineering, chemical technology, biotechnology or related fields. Specifically, the following prerequisites apply:

- A solid foundation of mathematics and natural sciences from the bachelor's degree equivalent to 1-1½ years of education
- Basics of chemical and biochemical engineering equivalent to ½-1 year of education
- High level English language proficiency

Contact

Head of Education Programme
Kim Dam-Johansen, Professor,
Head of Department
Department of Chemical and
Biochemical Engineering
Technical University of Denmark

Tel: +45 4525 2845
kdj@kt.dtu.dk

Programme Coordinator
Hao Wu, Associate professor
Department of Chemical and
Biochemical Engineering
Technical University of Denmark

Tel: +45 4525 2927
haw@kt.dtu.dk

Website

www.dtu.dk/chembio