

Name of study course: Global Production Engineering

University: Berlin Institute of Technology (Technische Universität Berlin)

Webpage: www.gpe.tu-berlin.de

Short description of the study course:

The GPE programme prepares students to become technology managers in multinational companies and organisations. The programme offers courses in production, engineering, management and intercultural communication as well as specialised advanced courses. It promotes technical skills in engineering disciplines such as the development of manufacturing processes and tools, modelling and simulation, quality control and economic evaluation. In addition, the GPE programme provides students with the ability for life-long learning in rapidly changing knowledge domains, fostering their self-initiative, decision-making skills and their ability to work in interdisciplinary and intercultural teams.

Global Production Engineering (long description)

Globalization and technology development advance rapidly. In a global market companies have to balance the ability to create and design innovative solutions with the ability to exploit them. Industry-based companies demand strategy-oriented personnel with a solid technological basis on the one side and an entrepreneurial attitude on the other.

Rather than focusing on business administration, Global Production Engineering (GPE) enables engineers to create systematic technological innovation combined with efficient and effective industrial business management. The alumni are being qualified to take leading positions in the transition area between engineering and management. The students will be enabled to interact in global value chains.

The qualifications are drawn from the occupational image of technology managers in a global environment. The following capabilities of today's Master-Alumni are expected from science and industry:

- Comprehension, assessment and application of coherences in management, natural science and technology for the development and improvement of products and processes in construction and assembly,
- Realization and assessment of interactions between economical, technological, environmental issues and society,
- Independent and self-responsible participation/cooperation in intercultural, multidisciplinary projects,
- Knowledge of European culture and language,
- The ability to assign and apply gained knowledge to the context of economy, society and culture in foreign countries.

The program offers two specializations: GPE in Manufacturing and GPE for Solar Technology. GPE-Manufacturing enables students to work in international production networks as manager of

technology. GPE-Solar offers comprehensive qualification in the solar technologies photovoltaic and solar thermal systems.

The program is open to students from all over the world with a Bachelor's degree in mechanical engineering or a comparable degree, English language proficiency and a minimum of one year of professional work experience. Language of instruction is English.

GPE Overview

Degree Master of Science
Content Technology Management
and German Engineering
Duration 4 semesters (2 years)

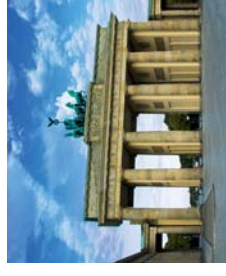
- Location** Berlin, Germany:
Technische Universität Berlin
- Language** English
- Course** To be selected from the following module groups:
- A Production
 - B Engineering
 - C Management
 - D Intercultural Communication
 - E Special Profile
- Further elements**
- Work placement
 - Master's thesis
- Admission requirements**
- Bachelor of Engineering/equivalent
 - TOEFL test/equivalent
 - At least one year's professional experience is usually required
 - Excellent grades
- Fees**
- €13,900 for the entire program (payable in four instalments)
 - €200 per semester for public transport ticket and administration
- Service**
- Service including accommodation arrangements, pick-up from the airport and general support and guidance
- Start** Annually in October
- Dean** Prof. Dr.-Ing. Günther Seliger

Study in the Heart of Europe

Berlin, the German capital, is the country's largest and most international city. It boasts a wealth of both German and international associations, businesses and media organisations. Berlin is one of Europe's most important research centres.

Theatres, museums, galleries, concert halls, jazz clubs and a flourishing arts scene combine to make Berlin one of the world's most vibrant cultural centres. Berlin is also home to over 6,000 bars and restaurants, and more than 40 % of its surface is covered by woods, parks and lakes.

As a GPE Solar student, you will be living in a city where a high standard of living doesn't cost the earth – a city considered one of the most exciting in the world.



Contact

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International Master of Science Global Production Engineering for Solar Technology

GPE Solar

- Two-year Master's degree program in solar technology
- Photovoltaics and solar thermal energy
- Production technology, system engineering, market development
- Taught by leading international researchers and developers
- Individually structured curriculum
- Strong, practical learning through business cooperation
- Excellent career prospects



Technische Universität Berlin

www.gpe-solar.de





GPE Solar: Engineering for the Future

The solar technology market is growing rapidly on a worldwide scale. Solar thermal energy and photovoltaics are among the sectors that are developing at the fastest rate internationally. Already, there is huge demand for qualified engineers who, with their expertise, can develop and implement innovative solutions.

With GPE Solar (Global Production Engineering for Solar Technology), the Technische Universität Berlin (TU Berlin) offers you an international Masters program that equips you with the necessary skills to compete successfully in a global growth industry. The GPE Solar study program covers the entire spectrum of value creation: from production engineering for manufacturing solar technology components to planning, installing and operating solar systems and also covers financing, law and marketing. You can structure your course however you like, according to your own interests.

It is important for us to maintain close business ties and our solar-related subjects are taught both by the TU Berlin's own renowned researchers and by practising industry experts. We offer our students challenging work opportunities with Germany's leading companies in the solar industry. This is also an area where we encourage you to carry out practice-based Master's theses.



Europe's Fastest Growing Cluster of Solar Industries

Taking our GPE Solar Master's program also gives you all the benefits of studying in the heart of the German capital. After all, Berlin and its surrounding region – the Federal State of Brandenburg – are home to the fastestgrowing cluster of producers, suppliers and service providers in the European solar industry. With their top-quality products and services, these companies are making a considerable contribution to the global success of German solar technology.

A Foundation of Knowledge and a Foundation in Practice

The TU Berlin is an internationally acclaimed university distinguished by its research and teaching excellence, highly qualified graduates, and modern management. The Institute for Machine Tools and Factory Management (IWF) at the TU Berlin coordinates the GPE Solar Master's program together with Berlin's Renewables Academy (RENAC) AG. Its laboratory offers a wide range of manufacturing facilities for learning first-hand about manufacturing and assembly, quality and automation e.g. by operating machine tools and robots and developing products in virtual reality.

With its range of GPE Master's programs, the IWF has considerable experience in uniting a solid base of academic knowledge with practice-based topics and it enjoys extensive contacts with the solar industry's leading businesses.



GPE Solar: Compelling Reasons to Study with Us

- The TU Berlin is one of Germany's leading technical universities.
- Berlin, with its cluster of solar industries, ranks high in international importance. The city and its surrounding region are home to many companies that specialise in both production and research.
- Numerous lecturers from solar technology companies, excellent work placements and commercially relevant topics for Master's theses all strengthen our emphasis on a solid practical foundation.
- You will be awarded a university-level Master's degree from the TU Berlin.
- The degree course is accredited by ASIIN (www.asiin.de).
- You will develop a global network of personal contacts and will benefit from the extensive alumni network.
- The modular course structure enables you to arrange your studies flexibly – according to your interests and the areas on which you would like to focus.
- Through the course of your study you will get to know industry and business leaders.

