

Bachelor of Engineering (B. Eng.) *Sustainable Resources, Engineering and Management (StREaM)*

Module overview (Status: July 2022)

| | A | B | C | D | E - Project | F - Languages & Portfolio | | |
|---|---|--|--|--|---|---|---|--|
| 1 | Sustainable Development (Interdisciplinary Introduction) (5 CP) | Fundamentals of Natural Science (5 CP) | Mathematics 1 (5 CP) | Fundamentals of Economic Science (5 CP) | Intercultural Communication and Participation (5 CP) | German / Other Foreign Language (A1) (5 CP) | Portfolio (Reflection and Personal Development) incl. Career Pathways (5 CP) (online during sem. 6) | |
| 2 | Materials and Production Engineering (5 CP) | Ecology, Resources and Sustainable Cities (5 CP) | Mathematics 2 (5 CP) | Engineering Mechanics and Fluid Mechanics (5 CP) | Scientific Project and Academic Skills (5 CP) | German / Other Foreign Language (A2) (5 CP) | | |
| 3 | Renewable Energy Systems (5 CP) | International Law and Policies (5 CP) | Information Technology and Data Science (5 CP) | Machine Design (5 CP) | Production Management and Global Supply Chains (5 CP) | German / Other Foreign Language (B1) (5 CP) | | |
| 4 | Sustainability Management (5 CP) | Ethics and Social Responsibility (5 CP) | Business Development, Innovation Management and Marketing (5 CP) | International Accounting and Finance (5 CP) | Product Development and Production Processes (5 CP) | German / Other Foreign Language (B2) (5 CP) | | |
| 5 | Elective Module (5 CP) | Elective Module (5 CP) | Team Development and Leadership (5 CP) | Controlling and Project Management (5 CP) | Interdisciplinary Project (5 CP) | German / Other Foreign Language (C1) (5 CP) | | |
| 6 | Elective Module (online) (5 CP) | Academic Skills Refresher and Internship Mentoring (online) (5 CP) | Internship (Option: Studying Abroad) (15 CP) | | | | | |
| 7 | Internship (Bachelor Project) (18 CP) | | | Bachelor Thesis and Defense (12 CP) | | | | |

StREaM (B. Eng.) – Programme information (Status: July 2022) / The start date is April. For more information, including the Module Handbook, please see <https://www.h2.de/stream-en>.

Profile and learning outcomes of the programme of study

StREaM (B. Eng.) is an interdisciplinary, international Bachelor's programme that combines engineering and economics, with a special focus on sustainability as an overlapping theme. On the one hand, students acquire basic knowledge in both engineering and economics. On the other hand, they know and understand the principles of sustainable development as well as its importance for the economy and industry, for the environment and to society in Germany and internationally.

Upon completion of the programme, students have acquired skills that allow them to:

- identify and analyse problems that intersect engineering and economics and to work with others to develop solutions to these problems,
- plan, carry out and evaluate sustainability projects, while taking into account engineering, economic, ecological, societal and cultural perspectives,
- communicate, collaborate and cooperate successfully within interdisciplinary and intercultural contexts, also while using digital tools,
- reflect upon their competence and their personal development as well as to continuously improve themselves.

Career perspectives

Job opportunities exist, e. g., in industrial and service companies as well as in the public sector – and generally in any sector where skills are needed to make production and product development processes more sustainable and to manage resources and energies in a responsible way.

Their interdisciplinary academic education allows StREaM (B. Eng.) graduates to work in positions that require an understanding of both technology and economics, e. g., in the fields of product distribution, product development as well as in quality and environmental management. Another field of activity is management consulting. Possible occupational profiles are project manager, product owner, compliance manager and management consultant.

The international Bachelor's programme StREaM (B. Eng.) opens up various job opportunities in Germany and internationally.