Study Mechanical Engineering (BSc) in English at one of the Top German Engineering Universities
Karlsruhe Institute of Technology (KIT)
Portfolio & Figures

KIT Research Centers:
- Information Technology
- Energy
- Mobility

KIT Data & Facts:

<table>
<thead>
<tr>
<th>125</th>
<th>Institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,315</td>
<td>Employees</td>
</tr>
<tr>
<td>847 M €</td>
<td>Annual Budget</td>
</tr>
<tr>
<td>25,196</td>
<td>Students</td>
</tr>
<tr>
<td>355</td>
<td>Professors</td>
</tr>
</tbody>
</table>

Source: KIT, March 2016
### International Department of the KIT
Portfolio & Study Programs

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>KIT Mechanical Engineering College</td>
<td>KIT Technology Business School</td>
<td>First KIT Graduate School in Optics &amp; Photonics</td>
<td>KIT Graduate School in Teratronics</td>
<td>Science Academy</td>
</tr>
<tr>
<td>Fulltime</td>
<td>Part-time</td>
<td>Fulltime</td>
<td>Fulltime</td>
<td>Fulltime</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GDH</th>
<th>Conference Center &amp; Accommodation Facilities</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ID Campus</th>
<th>Rooms &amp; Apartments (120 incl. bath rooms, shared kitchen &amp; living facilities, 3 x 1-room-apartments, 8 x 2-room-apartments, Bar, PC Pool, Music Room, Laundry Room)</th>
</tr>
</thead>
</table>

**ID Office:** Administration, Facility Management, IT, and Services

www.carlbenzschool.de
Carl Benz School of Engineering
Keyfacts & Advantages for Students

- English-taught Mechanical Engineering Program
- 3 year Bachelor of Science program
- Mechanical Engineering School of the KIT
- Preparing for Master, PhD & industry

- Partner of International Higher Education (CIS, IACAC, EUC …)
- Talent bench for global engineers
- Industry internship program
- 90% international students
- Recognized around the globe
Discover the Exciting World of Engineering

Why Mechanical Engineering?

- Great job opportunities
- Versatile discipline
- New emerging fields, e.g. biotechnology, materials science, nano-technology

What is Mechanical Engineering?

- One of the oldest and broadest of the engineering disciplines
- Profession requires education and skills that span a wide range of fields
- Core concepts: mechanics, kinematics, thermodynamics, materials science, structural analysis, and electricity

In which fields do mechanical engineers work?

- Design, production, logistics, research, technical sales/marketing, software engineering, product management etc.
The Program in Mechanical Engineering

**Mandatory Engineering Sciences**

1. Advanced Mathematics
2. Manufacturing Technologies
3. Computer Science in Mechanical Engineering
4. Material Science
5. Mechanical Design

**Specials**

- Basic Industrial Internship

**Language Courses**

**Soft Skill Courses**

- Technical Thermodynamics and Heat Transfer
- Production Operations Management
- Wave Phenomena in Physics

**SEMESTER**

1
2
3
4
5
6
The Program in Mechanical Engineering

Specialization in one of the following Majors + Bachelor Thesis

5 Semester

Automotive Engineering
- Vehicle Comfort and Acoustics
- Electrical Machines
- Machine Dynamics

Global Production Management
- Industrial Engineering
- Virtual Engineering
- Manufacturing Technology
- Handling & Logistic Systems

6 Semester

Energy Engineering
- Technical Combustion
- Heat and Mass Transfer
- Fundamentals of the Energy Technology
- Energy Economics

Mandatory Lessons, e.g.
- Machines & Processes
- Fluid Mechanics

Industrial Internship

Supplementary Courses, e.g.
- Professional Application
- Methods in Management & Leadership

Bachelor of Science (B.Sc.) of the KIT

www.carlbenzschool.de
New Major in Global Production Management

- Topic: Smart Factory, Industry 4.0
- Practical phase at Daimler, Bosch or Carl Zeiss
- Chance of a subsequent bachelor thesis with the company

- Integrated Industry Unit “Smart Factory@Industry”
  - Combination of regular lectures with on-the-job training at the innovation labs of Daimler, Bosch or Carl Zeiss
  - Students get the chance to design complex production systems together with experts
Admission requirements
CBS is the right choice if...

- ... you have advanced skills in Mathematics & Physics
- ... you have a passion for Engineering
- ... you want to study in English language
- ... you think globally or bring an international spirit
- ... you have a desire for an international career
### How to get into the program

#### Admission Requirements

<table>
<thead>
<tr>
<th>Carl Benz School of Engineering</th>
<th>Maschinenbau-Program at the KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language: English only</td>
<td>Language: German only – B1/C1 required</td>
</tr>
<tr>
<td>Size of class: ≤ 50 students</td>
<td>Size of class: 600 students in the first semester</td>
</tr>
<tr>
<td>English-speaking Student Office</td>
<td>German-speaking ‘Studienbüro’</td>
</tr>
<tr>
<td>Own on-campus-accommodation</td>
<td>Rare accommodation availabilities</td>
</tr>
<tr>
<td>Individualized mentoring &amp; career counseling</td>
<td>No individualized mentoring</td>
</tr>
<tr>
<td>Participation in all lectures, activities and offers of the KIT</td>
<td>No participation in the English-speaking programs of Carl Benz School</td>
</tr>
<tr>
<td>Admission: Based on High School grades &amp; further qualifications will increase chances of being admitted to the program</td>
<td>Admission: Based on High School grades only</td>
</tr>
</tbody>
</table>
Your unique chance
Find us in Germany

Berlin
Hannover
Frankfurt
Baden-Wuerttemberg
Munich
And now:
Find Karlsruhe
Technology region Karlsruhe
Window of Opportunities

World’s Biggest Chemical Company
BASF

70 km

Daimler’s biggest Truck Plant in the World
DAIMLER

6 km

8 km

75 km

Carl Benz School Karlsruhe

8 km

28 km

75 km

John Deere

And a lot more…

BOSCH
Invented for life

75 km

Bosch Logistics

Porsche

Headquarter

SIEMENS

18 km
Why to choose the Carl Benz School?
From a Company’s Perspective

- Combination of excellent apprenticeship of the KIT and individual and practice-oriented career preparation → ideal preparation for today’s labor market

- Courses are held by lecturers of the Karlsruhe Institute of Technology (KIT) → outstanding quality standards of trainings are ensured

- Quality is testified by the international reputation of the KIT and its performance in numerous rankings

QS Ranking 2016

#4 Germany
#37 Europe
#98 World
Admission Process – Two Options
What is the Pre-Semester

- Preparatory courses on Mathematics, Physics, Chemistry & English

- Duration: August - October

- Entry exams at the end of Pre-Semester

- + excursions, team building workshops etc.
Excellent grades in Mathematics, Physics & Chemistry?
The Early Admissions Exams could be your best option

- Four exams in three days
- You get all material for preparation
- Direct admission
- Participation in Pre-Semester not necessary
- Notification by mid-April

Next dates:
March 20 - 22, 2017
April 03 - 05, 2017
# How to get into the program
## Admission Requirements

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High school education</strong></td>
<td></td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>- 35 Points</td>
</tr>
<tr>
<td>A-Levels</td>
<td>- 82%</td>
</tr>
<tr>
<td>Abitur</td>
<td>- 2.3</td>
</tr>
<tr>
<td>U.S. High School Diploma</td>
<td>- GPA of 3.5</td>
</tr>
<tr>
<td>SAT (Math &amp; Evidenced-based Reading and Writing)</td>
<td>- 1,200 (new SAT)</td>
</tr>
<tr>
<td><strong>Subject knowledge &amp; understanding</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics, Physics</td>
<td>1. Higher/Advanced Level</td>
</tr>
<tr>
<td></td>
<td>2. Excellent grades (e.g. 6/7 (IB), A*/A (A-Levels))</td>
</tr>
<tr>
<td>Additional science (Chemistry preferred)</td>
<td>3. Taught during the last 2 years</td>
</tr>
<tr>
<td><strong>English language</strong></td>
<td></td>
</tr>
<tr>
<td>Mother tongue</td>
<td>no test needed</td>
</tr>
<tr>
<td>Language of instruction for the past 5 years</td>
<td>no test needed</td>
</tr>
<tr>
<td>TOEFL</td>
<td>- 570 pb // 240 cb // 95 iBT</td>
</tr>
<tr>
<td>IELTS</td>
<td>- Band score of 6.5</td>
</tr>
<tr>
<td>TOEIC</td>
<td>- Score of 880</td>
</tr>
</tbody>
</table>
Application Procedure

1. Preparation of documents
   • Curriculum Vitae, Transcript of records/Predicted grade sheet, passport photograph, personal statement, declaration of financial support, …

2. Submission of the application
   • Via our online application portal
   • Rolling application process

3. Review of your application
   • A confirmation will be sent when we receive your application

Admission
   • You will receive a status report confirming your (successful) application
# The Mechanical Engineering Program

## Facts & Figures

<table>
<thead>
<tr>
<th>Program</th>
<th>Mechanical Engineering (International)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>Bachelor of Science of the Karlsruhe Institute of Technology (KIT)</td>
</tr>
<tr>
<td>Duration</td>
<td>3 years</td>
</tr>
<tr>
<td>Language of Instruction</td>
<td>English</td>
</tr>
<tr>
<td>Location</td>
<td>Germany</td>
</tr>
<tr>
<td>Admission Requirements</td>
<td>Preferably IB, A-levels, US High School Diploma or similar</td>
</tr>
<tr>
<td>Accommodation</td>
<td>On-campus housing</td>
</tr>
<tr>
<td>Program Costs</td>
<td>€330 Early Admission Exams and/or €4,500 Pre-Semester €7,000/Semester – tuition fees + Living expenses</td>
</tr>
</tbody>
</table>
CBS Summer School
A Glance into Mechanical Engineering

For technically-inclined high school students in their last two years of secondary education.

Next dates:
2 x 1 week in June/July 2017

- Introduction to the engineering studies
- Workshops
- Visits to institutes of the KIT and engineering companies
- Interesting and entertaining leisure activities
Truth? Let’s hear their point of view
Voices of two CBS students

“I decided to study Mechanical Engineering because I want to discover and innovate mechanical solutions to industrial problems.”

“I like the fact that it’s a more tangible application of maths and science.”

Alex Rohregger
Italy
Frankfurt International School, Frankfurt (Germany)
Intake 2014

Isha Gandhi
India
William P. Clemens High School, Sugar Land, Texas (USA)
Intake 2013
Contact

Yaxian Liu
International Recruitment
Carl Benz School

yaxian.liu@kit.edu

www.carlbenzschool.de