



Engineering education system in Germany

GIIEWS DECISION SUPPORT SYSTEM - REFERENC

German-Indonesian Tsunami Early Warning and Mitigation Project (GIIEWS)

Decision Support System

The Concept
Systems
Observations
Assessment and Decision Support

German-Indonesian Tsunami Early Warning and Mitigation Project (GIIEWS) develops and implements a Decision Support System (DSS) as part of the Early Warning and Mitigation Project (EWM) in Indonesia.

Thomas Ernsting/LAIF

Engineering Education in Germany

Doctoral Studies
(4-5 years)

Master
(1-2 years)

Bachelor
(3-4 years)

grammar school
(12 years)

Number of engineering programmes:

- 1 400 Master programmes
- 1 900 Bachelor programmes

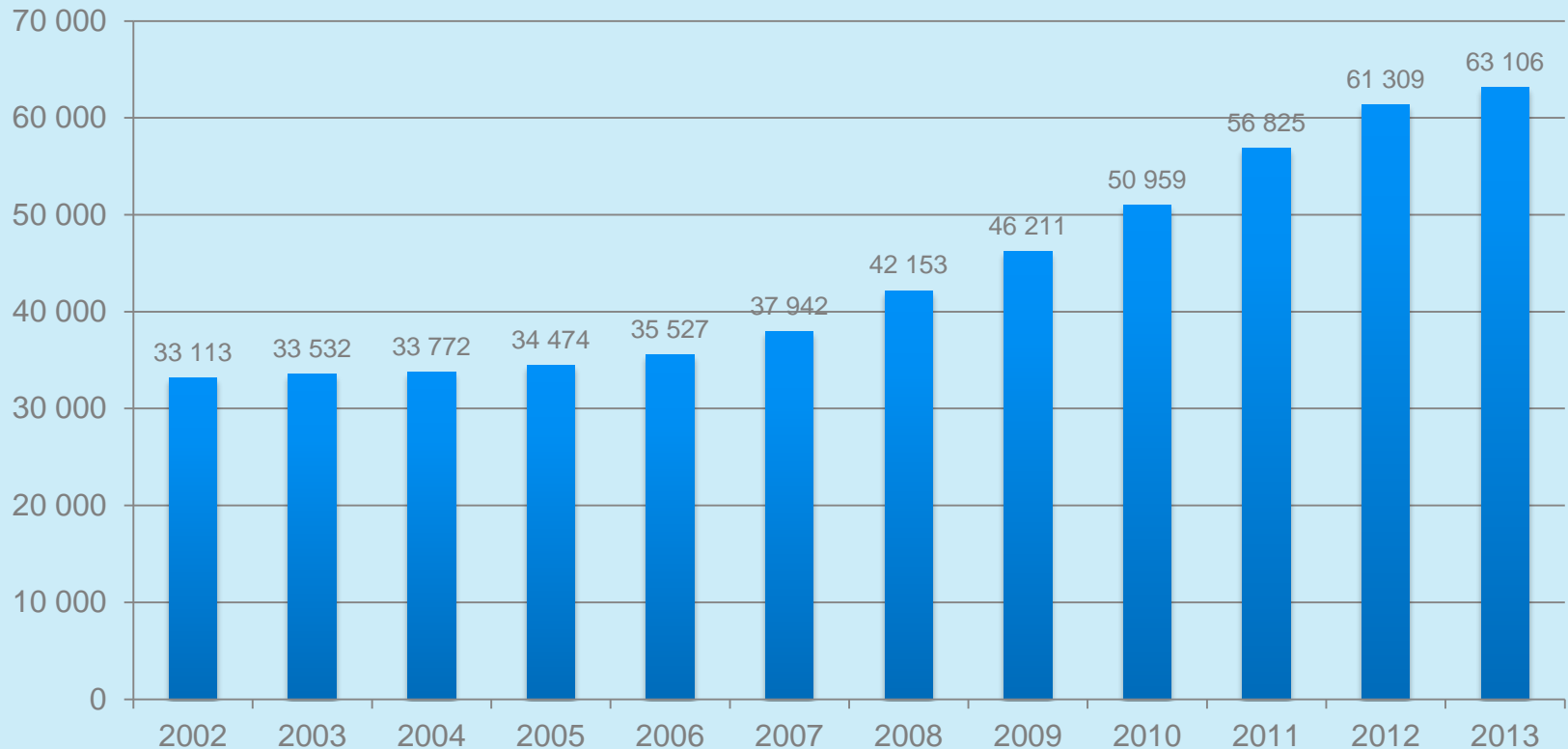
Number of engineering students (2013):

- 530 000 (45 000 from foreign countries)
- 110 000 firstyear students
- 65 000 firsttime graduates
- 3 100 Doctoral degrees

Academic titles for engineers:

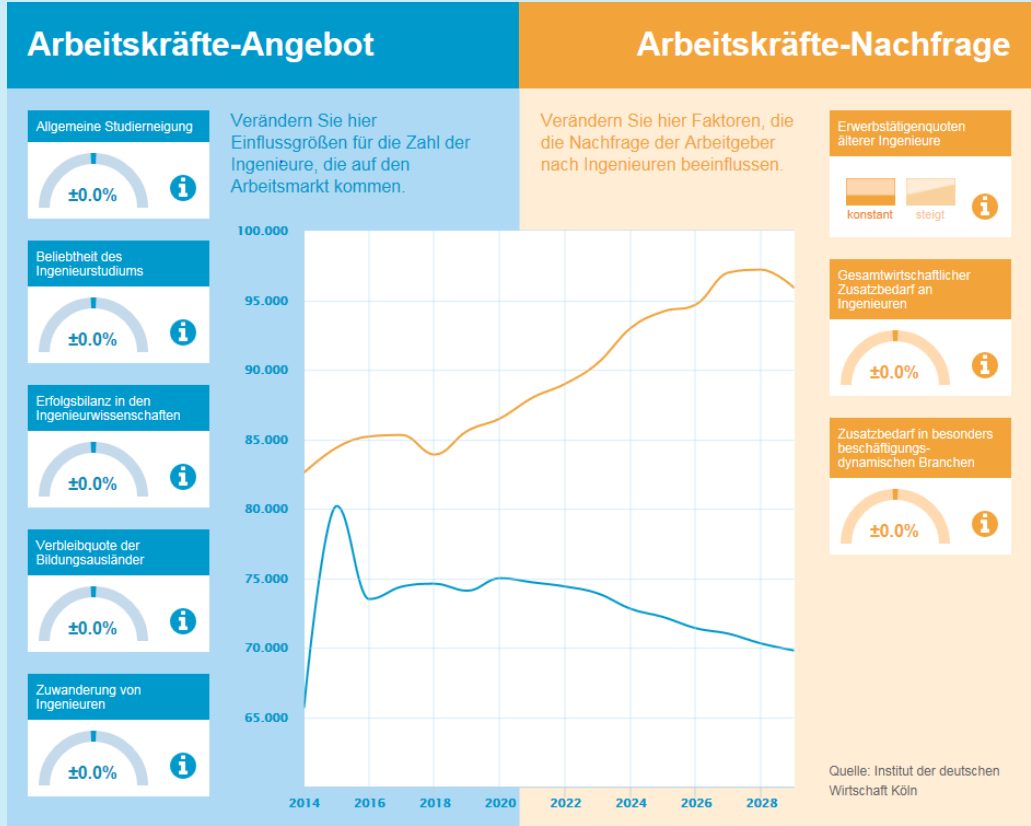
- Bachelor / Master of Engineering
- Bachelor / Master of Science
- Bachelor / Master of Arts
- Dipl.-Ing.
- Dr.-Ing.

Development of firsttime graduates in engineering



peak with 63,000 firsttime graduates by dual Abitur cohorts and suspension of conscription in 2013.

engineering labor market in Germany in future



www.vdi.de/szenariotool

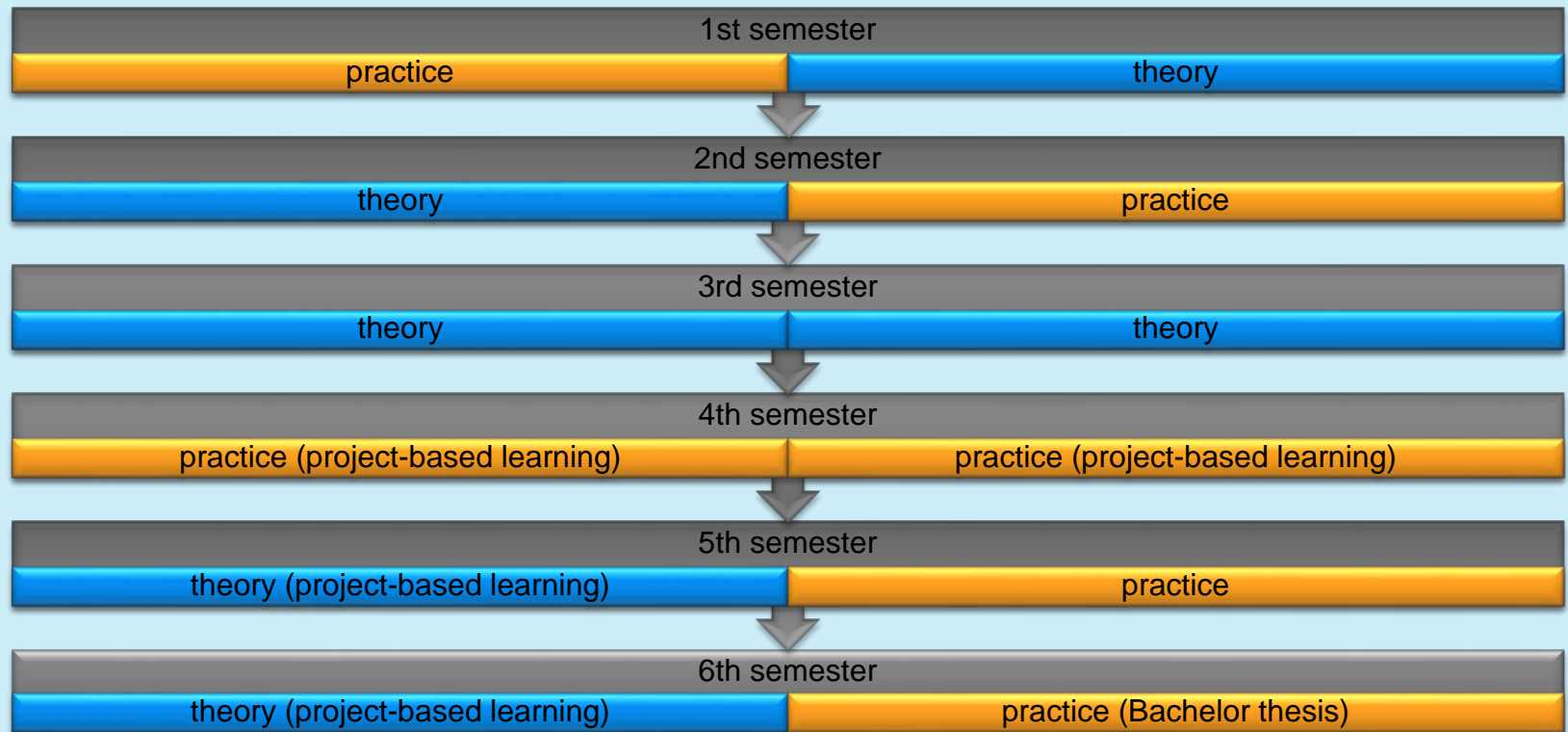
Till 2029 about 700,000 engineers must be substituted.


Specialty: Dual Training System for Engineers

**Bachelor of Science/
Bachelor of Engineering**

**university or
university of applied sciences
+ company
3 – 5 years**

Specialty: Dual Training System for Engineers



 = practical training → company

 = theoretical training → university or university of applied sciences



Thanks for your attention

Engineers & technicians in Germany (2012)

in engineering-related professions

technicians & craftsmen

yes

no

employed

695,000

624,000

893,000

self-employed & civil servants

167,000

209,000