Engineering education system in Germany
Engineering Education in Germany

Number of engineering programs:
- 1,400 Master programs
- 1,900 Bachelor programs

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.

Source: Statistisches Bundesamt, Berechnung VDI e.V.
Till 2029 about 700,000 engineers must be substituted.

Source: VDI Szenario-Tool Ingenieurarbeitsmarkt 2029
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

- **1st semester**: practice → theory
- **2nd semester**: theory → practice
- **3rd semester**: theory → theory
- **4th semester**: practice (project-based learning) → practice (project-based learning)
- **5th semester**: theory (project-based learning) → practice
- **6th semester**: theory (project-based learning) → practice (Bachelor thesis)

= practical training → company
= theoretical training → university or university of applied sciences
Thanks for your attention
Engineers & technicians in Germany (2012)

- Employed: 695,000 (yes) + 624,000 (no) = 1,319,000
- Self-employed & civil servants: 167,000 (yes) + 209,000 (no) = 376,000
- Total technicians & craftsmen: 893,000

Source: German Mikrozensus 2012, Bundesagentur für Arbeit 2015