Readiness for Global SMEs
Redefining Academic and Vocational Education

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# FHM at a glance

**Fachhochschule des Mittelstands (FHM)** is a **private, state recognised University of Applied Sciences**

**University of Applied Sciences**

Is non profit - HEI Higher Education Institution

<table>
<thead>
<tr>
<th>Started with</th>
<th>50 students</th>
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<tr>
<td>Current 2018:</td>
<td><strong>5,000 students</strong> (Bachelor, Master, MBA)</td>
</tr>
<tr>
<td>Internship</td>
<td>about <strong>4,000 companies and institutions</strong></td>
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<tr>
<td>International Corporations</td>
<td>500 Students (PSP) + 100 B.A. / M.A. / MBA</td>
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<td>75 agreements with foreign universities</td>
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<td>Further Education</td>
<td>600 students annually</td>
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<tr>
<td>Doctoral programmes</td>
<td>100 students</td>
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<tr>
<td>Alumni</td>
<td>4,500 students</td>
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<tr>
<td>Careers in SME and family-owned corporations, founder and/ or entrepreneurial successors</td>
<td></td>
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<td>R &amp; D</td>
<td>Research &amp; Development, “Mittelstandsforschung” national, international</td>
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Campus in Germany
International Study Programs

- **Pre-Studies Program**
  - PSP Classic
  - PSP Professional
  - PSP Integra

- **Bachelor Program**
  - 2+2 Double Degree International Business Administration (DD-IBA)
  - 2+2 Double Degree International Hotel & Tourism Management (DD-IHT)
  - Digital Business Management (DBM) (bilingual German-English)
  - Industrial Engineering (WING) (bilingual German-English)
  - FHM-Bachelor + B.Sc. Equine Studies (Royal Agricultural University, UK)

- **Master Program**
  - GCBS 3+2 or 4+2 Master of Business Administration (MBA)
  - GCBS 3+2 or 4+2 International Management (IM)
  - International Technology Transfer Management (ITTM)
  - Double Degree International Management (FHM University) + Business Management (Royal Agricultural University, UK)

- **Doctoral Program**
  - Doctor of Philosophy (PhD)
  - Doctor of Business Administration (DBA)
Employment rate two months after studies

97.6% of the Alumni are employed or in a Master-Program.
Agenda

(1) SMEs – Definition and Challenges
   a. SMEs – Definitions and Characteristic Attributes
   b. SMEs in Germany, the EU and the World
   c. Secrets of German Mittelstand
      c.1. Internal Secrets
      c.2. External Secrets
   d. Challenges

(2) Redefining Academic and Vocational Education
   a. Challenges and Opportunities for New Academic and Vocational Education
   b. Toolbox: Practical Academic Education
      b.1. Preparation
      b.2. Institutional Infrastructure
      b.3. Teaching Approaches

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(1) SMEs – Definition and Challenges
a. SMEs – Definitions and Characteristic Attributes

**Quantitative criteria**
- 10-499 employees, between 10 and 50 million € annual turnover (Institut für Mittelstandsforschung 2016)
- Max. 250 employees, max. 50 million € annual revenue (European Commission 2005)

**Qualitative criteria**
- Local, owner-led company
- Often family-owned business
- Unity of ownership, management, liability and risk
- Important attributes: entrepreneurial mindset, know-how, customized high-quality product/service, high customer satisfaction, personal and close relationship to customer
- Thinking globally, acting regionally
a. SMEs – Definitions and Characteristic Attributes

Global SMEs

1) <500 employees, max. 50 million € annual revenue per year

2) Independent and owner-led business entity

3) Transnational business entity based on

→ external growth (through international expansion and Mergers and Acquisitions)
→ internal growth (through exports, cooperation management, start-ups in international target markets)
b. SMEs in Germany, the EU and the World

SMEs in Germany – statistics from 2016

- 3,46 million enterprises in Germany are SMEs
- 2,27 billion Euro revenue (=35,3 % of the overall German turnover)
- 17,18 million employees subject to social insurance contributions (=58,3% of all employees subject to social security)
- 82 % of all vocational trainees are working in SMEs.
- 208,2 billion Euro export turnover (=17% of total German export turnover)
- SMEs summed up a total of 53,5% of the net value added
- 9,4 billion Euro (=11,9%) of R&D expenditure of private business sector

Source: Institut für Mittelstandsforschung (2016)
https://www.ifm-bonn.org/statistiken/mittelstand-im-ueberblick/#accordion=0&tab=0

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b. SMEs in Germany, the EU and the World

SMEs in the European Union – statistics from 2015

SMEs are the backbone of Europe’s economy, providing the majority of all new jobs!

- SMEs (<250 employees) represent 99,8 % of all enterprises in the non-financial business economy in Europe (EU, Norway, Switzerland)
- 66,3 % of EU employees are employed at SMEs
- SMEs contribute 55,8 % of the total turnover in the EU

Source: Eurostat (2018):
b. SMEs in Germany, the EU and the World


- 99% of all firms in the OECD area are SMEs
- SMEs account for about 70% of jobs
- SMEs generate between 50-60% of value add
- SMEs tend to be under-represented in international trade, but can represent more than half of total exports in value added terms when considering SMEs’ indirect contribution to exports

c. Secrets of German Mittelstand

d.1. Internal Secrets

- Innovative spirit – innovation-driven enterprises
- Flexibility
- SMEs think in generations, not quarters
- Loyal, well trained staff
- Conservative financial conduct
- Hidden champions
- Regionally embedded but internationally oriented

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c. Secrets of German Mittelstand


"d.2. External Secrets"

- Excellent regional education
- Adequate, regional financing/funding
- Well-developed infrastructure and high quality of life in rural areas
- Effective and competent local administrations
d. Challenges

- SMEs are caught between regional responsibilities, national and international markets
- **Digitalization** → Changing business models, technology, work environments, developments of skills and recruitment of talents
- SMEs are lagging behind in digital transition
- "Skill shortages, poor management practices and workforce training limit SME productivity and innovation" (OECD 2017: 16)
- Protectionism
- Global SMEs

→ Need for a new approach on academic and vocational education
(2) Education and Training for SMEs
a. Challenges and Opportunities for New Academic and Vocational Education

- Global SMEs need new academic and vocational education

- Studies, continuing education and research & development

- different scales: regional, national and international
b. Toolbox: Practical Academic Education

b.1. PREPARATION

- FHM – Competency Model
- KODE – Test
- Continuing Education
- Coaching

- Digital – Readiness – Test: Competency Index 4.0

- Study Programme Development: What kind of knowledge will our students need in 5 years?

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b. Toolbox: Practical Academic Education

b.2. INSTITUTIONAL INFRASTRUCTURE

- Career Service Center (contact point for students)
- Institute for Business Foundation (IUG)
- Center for Sustainable Governance (CSG)
- Institute for Further Education and Competency Development (IWK)
b. Toolbox: Practical Academic Education

b.3. MANDATORY TEACHING APPROACHES

- Studies In Practice (SIP) → internship with academic mentoring
- Mandatory Business Plan in all study programmes
- Practitioner Colloquia / Company Visits / Guest Lectures
- Living Projects (embedded in lectures), e.g. exhibitions
- Foundation Chairs (Chairs funded by Foundations or Companies)
b. Toolbox: Practical Academic Education

b.3. TEACHING APPROACHES + ADD ONS

- Vocational Trainings (SAP, Excel, How to dress for business... etc.)
- Start-Up/Spin-Off Support
- Alumni Network

- Expert Circle
- Student involvement in Corporate Research Projects
- Bachelor/Master Thesis embedded in Business Company
- Career Day – university fair
- Job Portal
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