Duale Hochschule Baden-Württemberg (DHBW)
Baden-Württemberg Cooperative State University
„Made in Germany:“
Combining Practice Oriented Higher Education & Internationalization at the DHBW

1st INTERNATIONAL WEEK on
Practice Oriented Higher Education (IW-PROHE)
at Széchenyi István University, in Győr/Hungary
February 2 – 5, 2015
WHY THIS TOPIC, TODAY?
Longstanding faculty cooperation
New ERASMUS+ Agreement
Common corporate partners
(Audi, for example)
Compatible industry profiles
Tendency for DHBW & partners to "go east" for good opportunities
(Good people, hospitality…)

09.02.2015
BADEN-WUERTTEMBERG – a Prospering Federal State in Germany and a Perfect Location in the Heart of Europe

• Baden-Wuerttemberg – a central gateway to Europe

• 80 % of all European capital cities can be reached within two hours

• Economic power house: GDP of almost € 400 bn is higher than that of many European nations

• 4,8 % of GDP is invested into research & development (more than any other federal state in Germany)

• Engineering is the traditional strength: Half the machines produced in Germany come from Baden-Wuerttemberg
BADEN-WUERTTEMBERG – Home to Many Global Players
Baden-Wuerttemberg Cooperative State University (DHBW)

- DHBW Heidenheim
- DHBW Heilbronn
- DHBW Karlsruhe
- DHBW Loerrach
- DHBW Mannheim
- DHBW Mosbach with Campus Bad Mergentheim
- DHBW Ravensburg with Campus Friedrichshafen
- DHBW Stuttgart with Campus Horb
- DHBW Villingen-Schwenningen

→ approx. 34,000 students (out of total 350,000 students in Baden-Wuerttemberg)
History of the Baden-Wuerttemberg Cooperative State University (DHBW)

- **1974**: Berufsakademie Baden-Wuerttemberg (BA) is founded.
- **1982**: The start-up phase is over. Berufsakademie has 8 main locations.
- **1989**: 15 years since foundation: approx. 10,000 enrolled students and 4,000 partner companies and social institutions (corporate partners).
- **2006**: DHBW shifts from traditional pre-Bologna (‘Diplom‘) study programs to bachelor’s degree programs.
- **2014**: Approx. 34,000 students and over 9,000 corporate partners.
Key Features of the Baden-Wuerttemberg Cooperative State University (DHBW)

- Based on the US State University System
- Unique combination of vocational training and higher education
- Short duration of study guarantees an early career launch
- Faculty comprising both academic teaching staff and industry experts
- Active cooperation of partner companies and social institutions
- Cooperative research
- Corporate socialization of the young generation of qualified employees
- Industry-related postgraduate study programs for future executives and field experts
Education System in Germany

- **Grundschule (Primary School)**
- **Hauptschule (General Secondary School)**
- **Realschule (Intermediate Secondary School)**
- **Berufskolleg (Vocational Training)**
- **Fachhochschulreife (Technical College Maturity)**
- **Abitur’ (A-Levels / University Entrance Qualification)**
- **Gymnasium (High School)**
- **Berufliches Gymnasium (Post Secondary College)**
- **UNIVERSITIES OF APPLIED SCIENCES**
- **BADEN-WUERTTEMBERG COOPERATIVE STATE UNIVERSITY**
- **UNIVERSITIES**

**Age**
- 6
- 10
- 16
- 18-19
- 23-24
Cooperative Higher Education: Theory and Practice Integrated

Theoretical knowledge

6 x 12 weeks of intensive studies at one of the 12 DHBW locations and campuses

Practical experience

6 x 12 weeks of workplace training in one of over 9,000 partner companies or social institutions
DHBW: Organization of the Study Process

- 'Abitur' (University Entrance Qualification)
- Selection Process by the Corporate Partners/Admission
- Bachelor of Arts (B. A.)
- Bachelor of Engineering (B. Eng.)
- Bachelor of Science (B. Sc.)
- Training Phase
- Postgraduate Studies (MBA) (M.A.) (M.Eng.) (M.Sc.)
- Job
ALLOCATION OF STUDENTS:

DHBW School of Engineering
DHBW Business School &
DHBW School of Social Work

approx. 34,000 students
over 9,000 corporate partners

DHBW School of Engineering: 32 %
DHBW School of Social Work: 7 %
DHBW Business School: 61 %
Enrolled Students: DHBW 1974 – 2012
Corporate Partners of DHBW: 1974 – 2012
Indicators of Success

DHBW graduates are promoted to executive positions earlier than the graduates of other higher education institutions.

IBM study on career opportunities

DHBW graduates enjoy higher incomes compared to other employees within the same age range (30-41 y.o.)

IBM study on career opportunities

The best secondary school leavers study at DHBW

Empirical study of the University of Tuebingen

Source:
Kramer, Jochen et. al. (2011): While the best opt to study at universities, the rest chooses other higher education institutions? Education Magazine. September 2011, Volume 14, Issue 3, pp 465-487.
IBM Deutschland GmbH, Corporate Communications (2000): Berufsakademie: IBM is one of the biggest work placement providers. Press release 17.06.2000, Böblingen.
Advantages for Enrolled and Prospective Students

• Advantageous combination of higher education and workplace training
• Financial independence from the first semester onwards
• Early career launch due to the short duration of studies
• Individual supervision due to small classes
• Faculty comprising both academic teaching staff and industry experts
• Field-related know-how passed on by freelance experts and professionals from cooperating companies and social institutions
• Excellent prospects on the labor market
Advantages for Corporate Partners

- Students are selected by corporate partners – early talent retention
- Corporate socialization of the young generation of qualified employees
- Active cooperation of companies and social institutions
- Excellent performance of co-op students
- Co-op graduates adjust quickly to new challenges – better work adjustment
- Significantly reduced costs in comparison to initial training schemes of the graduates of other higher education institutions
Advantages in Relation to Education and Labor Policy

• Short study period of only 3 years

• Extremely low drop-out rate: approx. 90 % of co-op students at DHBW successfully complete their studies

• Graduates enjoy high employability upon graduation (85 – 95 %)

• Young graduates
  • 23 years on average – female graduates
  • 24 years on average – male graduates
Opportunities for improvement: Dual System at DHBW

Rapid growth has caused stress inc. between DHBW and Partners
DHBW planning process (i.e., hiring tenured faculty) much longer than in industry

While DHBW has many SMEs (typical German “hidden champion” companies, some smaller companies cannot plan or finance talent acquisition 3 years in advance
Approved Quality

- All of the study programs at DHBW are both nationally and internationally recognized intensive degree programs with 210 ECTS points.

- In 2011, DHBW was the first university in Baden-Wuerttemberg that obtained system accreditation by the Central Evaluation and Accreditation Agency (ZEvA).

- 150 ECTS for the theoretical & 60 ECTS for the practical part:
  - Integration of theory and practice phases in the curriculum
  - Strong interrelation of academic learning and workplace training
  - Defined system of evaluation and quality management
Cooperations Worldwide

- Canada (3)
- USA (30)
- Mexico (3)
- Colombia (5)
- Ecuador (3)
- Chile (2)
- Brazil (1)
- Peru (1)
- Costa Rica (1)
- Argentinia (1)
- South Africa (4)
- Egypt (1)
- Indonesia (4)
- Singapore (1)
- Australia (8)
- New Zealand (2)
The DHBW Model in Other Countries („Export“ of DHBW Model)

Latin America:

- Brazil
- Colombia
- Ecuador
- Mexico
- Peru

Numerous inquiries and visits from across the world
Internationalization in the Dual Environment

Intense academic program combined with work schedule (ca. 4 semesters @ 11 week per year!) – difficult to schedule
Some employers value international assignments, others avoid them!
Most partner universities have longer term or semesters (negotiation with company required for extra time)
Rich Opportunities for Globalization!

„Kolleg“ – University prep program for international high school graduates
International recruitment (full bachelor‘s)
Classic academic semester abroad
Praktika – internship abroad
International Program in Business
International Program in Engineering
Departmental or class global programs
(one week to 2 semesters)
Summer Schools (Chile, China, USA, etc.)
Campus-wide focus but
Statewide programs as well
Opportunities for improvement: „Dual“ Internationalization

“Sell” global opportunities better to Chairs and Professors
(DHBW has Presidential Directive: globalization takes precedence over curriculum details)

“Sell” better to partner companies: demonstrate the advantages of early global experience in careers of young managers

Improve pre-departure training

Improve “shock” and support for returning students

Systematically “infuse” globalism into curriculum and campus life (opportunities for students who do not or cannot go abroad)
Now a few points specifically on Campus Mosbach (inc. Bad Mergentheim)
Major Highlights in the Region

- Heidelberg
- Technical Museum in Sinsheim
- Castle Guttenberg
- Stuttgart
- Mannheim
- Frankfurt
- Wuerzburg
- Castle Hornberg
- Bad Wimpfen
- Rothenburg o. d. Tauber
<table>
<thead>
<tr>
<th>Subject</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angewandte Informatik</td>
<td>AI</td>
</tr>
<tr>
<td>Applied Information Systems</td>
<td></td>
</tr>
<tr>
<td>E-Mobility</td>
<td>EM</td>
</tr>
<tr>
<td>E-Mobility</td>
<td></td>
</tr>
<tr>
<td>Kunststofftechnik</td>
<td>KT</td>
</tr>
<tr>
<td>Plastics Technology</td>
<td></td>
</tr>
<tr>
<td>Informations-technik</td>
<td>IT</td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
</tr>
<tr>
<td>Virtual Engineering</td>
<td>VE</td>
</tr>
<tr>
<td>Virtual Engineering</td>
<td></td>
</tr>
<tr>
<td>Bauwesen - Fassadentechnik</td>
<td>FS</td>
</tr>
<tr>
<td>Civil Engineering – Facade Technology</td>
<td>PM</td>
</tr>
<tr>
<td>Holztechnik</td>
<td>HT</td>
</tr>
<tr>
<td>Wood Technology</td>
<td></td>
</tr>
<tr>
<td>Internationale Produktion/Logistik</td>
<td>IPL</td>
</tr>
<tr>
<td>Int'l. Production/Logistics</td>
<td>ITP</td>
</tr>
<tr>
<td>Maschinenbau</td>
<td>MB</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td>Verfahrenstechnik</td>
<td>VT</td>
</tr>
<tr>
<td>Automotive Electronics</td>
<td></td>
</tr>
<tr>
<td>Mechatronik</td>
<td>MT</td>
</tr>
<tr>
<td>Mechatronics</td>
<td></td>
</tr>
<tr>
<td>Wirtschaftsingenieur ITVM</td>
<td>ITV</td>
</tr>
<tr>
<td>Business Engineering – Int'l. Technical Sales Mgmt.</td>
<td></td>
</tr>
</tbody>
</table>
School of Business (Mosbach)

- Bank
- Banking

- Electronic Business
- Electronic Business

- Handel
- Trade

- Holz-Betriebswirtschaft
- Timber Trade

- Industrie
- Industry

- Industrie - Zeitarbeit
- Industry – Temporary Employment

- Industrielles Service-management
- Industrial Service Mgmt.

- Internationaler Handel
- International Trade

- Junior Program of Business Administration

- Onlinemedien
- Online Media

- Steuern und Prüfungswesen
- Accounting, Taxes & Auditing

- Vertriebs- und Koop.-management
- Sales & Cooperation Mgmt.

- Warenwirtschaft und Logistik
- Supply Chain Management

- Wirtschaftsinformatik
- Business Information Systems
Increasing Number of Students at the DHBW Mosbach
22 % of all degree students study abroad for at least one semester (2010/11)
More engage in a practice semester abroad, through their companies

<table>
<thead>
<tr>
<th>Student Exchange/Study Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outgoings</strong>: One semester or one year of studies in Engineering or Business at a partner university (with full recognition of credits) - 2010/11: 182 students; 2011/12: 167 students; <strong>2012/13: approx. 220 students</strong></td>
</tr>
<tr>
<td><strong>Incomings</strong>: Free selection of courses or modules in different degree programs in Engineering and Business taught in German and in English in Mosbach and Bad Mergentheim – 2010/11: approx. 70 students - <strong>2011/2012: approx. 62 students (40 MOS/22 MGH)</strong></td>
</tr>
</tbody>
</table>

DHBW Mosbach cooperates with universities all over the world...
Which Possibilities do our Students have?
(based on a 6 semester Bachelor‘s program, +2 for American equivalent)

Kolleg – prep program for international students

Semester abroad – primarily in the 4th theory semester

Internship abroad – predominantly in the 4th theory semester

Summer School – in the 2nd or 4th (eventually the 6th) internship semester

IPB (Int‘l Prog. Bus.) – in the 3rd or 4th theory semester

IPE (Ont‘l Prog. Engineering – in 6th theory semester

Various other opportunities (class or departmental trips, full year abroad in certain departments, etc.)
International Partner Universities
EUROPE

**Denmark**
International Business Academy, Kolding

**Finland**
Central Ostrobothnia University of Applied Sciences, Kokkola
Laurea University of Applied Sciences, Espoo

**France**
Ecole La Mache – Centre de Formation, Lyon
IDRAC, Lyon
ESDES an der Université Catholique de Lyon, Lyon
Université de Franche-Comté, Besançon

**Great Britain**
Anglia Ruskin University, Chelmsford, England
Cardiff University, Cardiff, Wales
Staffordshire University, Stafford, England
University of Glamorgan, Pontypridd, Wales

**Ireland**
Athlone Institute of Technology, Athlone

**The Netherlands**
Hogeschool Zeeland, Vlissingen

**Poland**
University of Economics in Katowice, Katowice

**Russia**
Bauman Moscow State Technical University, Moskau
St. Petersburg Polytechnical University, St. Petersburg

**Sweden**
University West, Trollhättan

**Slovakia**
University of Economics in Bratislava, Bratislava

**Slovenia**
University of Ljubljana, Ljubljana

**Spain**
Universidad de Alcalá, Madrid
Universidad Politécnica de Valencia, Alcoy
Europäische Wirtschaftsakademie, Madrid

**Czech Republic**
Mendel University of Agriculture and Forestry, Brno

**Turkey**
Istanbul Kültür University, Istanbul

**Hungary**
Budapest College of Management, Budapest
Budapest University of Technology and Economics, Budapest
Szent István University, Gödöllő
University of Pécs, Pécs
SZE Győr
International Partner Universities

USA
NAU (Northern Arizona University), Flagstaff, Arizona
California State University System, California
University of California, Riverside, California
UNF (University of North Florida), Jacksonville, Florida
GVSU (Grand Valley State University), Grand Rapids, Michigan
Augsburg College, Minneapolis, Minnesota
OSU (Oregon State University), Corvallis/Bend, Oregon
Texas State University, San Marcos, Texas

Canada
University of Waterloo, Waterloo, Ontario

Chile
Universidad Técnica Federico Santa María, Valparaíso

Ecuador
Universidad de Cuenca, Cuenca
ESPE – Escuela Politécnica del Ejército, Quito
ESPOCH (Escuela Superior Politécnica de Chimborazo), Riobamba
Universidad Católica Santiago de Guayaquil

Colombia
Corporación Universitaria Empresarial Alexander von Humboldt, Armenia
Fundación Universitaria Empresarial de la Cámara de Comercio de Bogotá, Bogotá
Corporación Universitaria Autónoma de Occidente, Cali
Corporación Universitaria Tecnológica de Bolívar, Cartagena
Universidad Autónoma de Bucaramanga, Bucaramanga

Egypt
GUC – German University in Cairo

Australia
Griffith University, Brisbane/Logan/Gold Coast, Queensland
University of the Sunshine Coast, Sippy Downs, Queensland

China
SEU (Southeast University), Nanjing

Georgia
European School of Management, Tbilisi

Japan
Momoyama Gakuin University, Izumi, Osaka

Korea
Ajou University, Suwon
CAU (Chung-Ang University), Seoul

New Zealand
NMIT (Nelson Marlborough Institute of Technology), Nelson

Singapore
NYP (Nanyang Polytechnic), Singapore

Mexico
Tecnológico de Monterrey, Monterrey (Hauptcampus)
UNID, Tlalneplantla/Luis San Potosi/Zacatecas

Peru
Universidad de San Martín de Porres, Lima
THANK YOU!