

DUAL Master program

***Center for Advanced Studies (CAS)
&
Indo-German Training Centre (IGTC)***

www.cas.dhbw.de

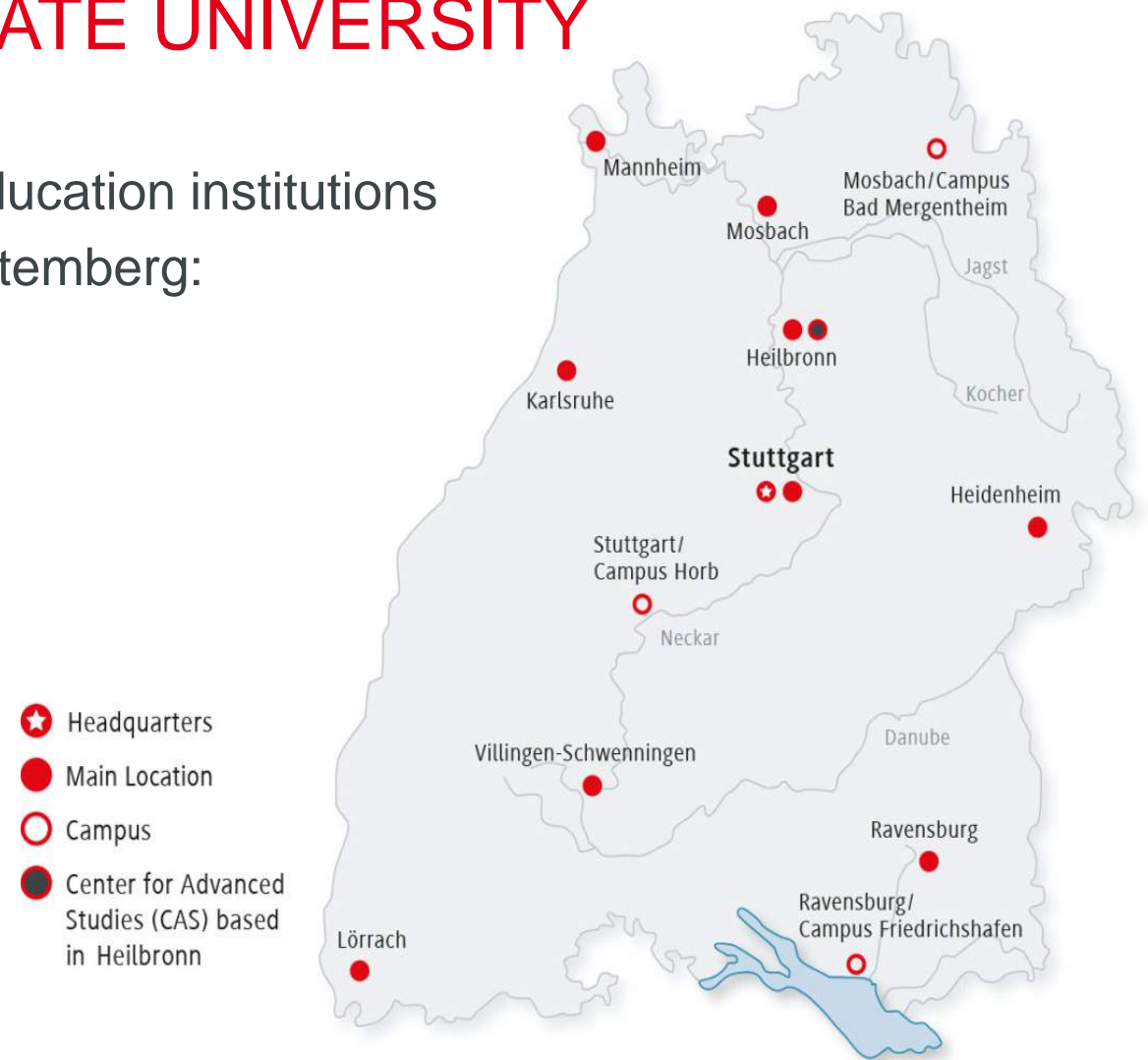


DHBW: BASED ON THE US STATE UNIVERSITY SYSTEM

DHBW counts as one of the largest higher education institutions in the German Federal State of Baden-Wuerttemberg:

- » 9 DHBW locations &
- » 3 DHBW campuses
- » approx. 34,000 students
- » over 9,000 corporate partners

DHBW is the first German **higher education** institution offering degree programs with an **integrated on-the job training**



COOPERATIVE HIGHER EDUCATION: ACADEMIC LEARNING + WORKPLACE TRAINING

THEORETICAL BACKGROUND

6 x 3 months studying at one of
the
12 DHBW locations and



PRACTICAL EXPERIENCE

6 x 3 months practical qualification at
one of over 9.000 cooperating
companies and social institutions



RENOWNED CORPORATE PARTNERS



SIEMENS

DAIMLER



PORSCHE



Alcatel-Lucent



BOSCH
Technik fürs Leben

STIHL®



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elringklinger



WITTENSTEIN

TRUMPF



ThyssenKrupp



FESTO



Allianz 

INDICATORS OF SUCCESS

The best
secondary
school leavers
study at DHBW

Empirical study of the
University of Tuebingen

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

Source:

Kramer, Jochen et. al. (2011): *While the best opt to study at universities, does the rest choose 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.

The Center for Advanced Studies

- With the establishment of the Center for Advanced Studies (CAS) in Heilbronn, Baden-Wuerttemberg Cooperative State University (DHBW) combines its postgraduate work-study programs under one roof.
- The Master program was initially concentrated on Alumni of the bachelor program at DHBW, who worked at German industrial companies such as Daimler AG or Porsche AG and simultaneously wanted to pursue a Master degree.
- Later the program was continuously extended to external and inter-national students, so now CAS offers post-graduate Master programs in engineering, business and social work.

The Center for Advanced Studies (cont'd)

- Special mark of the CAS/IGTC program is its **practical focus**.
- Students can study for their Master's degree while still working for their company. A current working contract is required for all students.
- Students are also required to have at least one year of working experience. German students in general have even more.
- CAS professors are required – besides having a theoretical background and PhDs – to have long-term practical experience in business corporations.
- Thereby CAS can make sure, that
 - state-of-the-art business and technical knowledge is taught in all courses.
 - all students can immediately apply the theoretical work from CAS directly to their practical work.



Intention and background of the CAS/IGTC Master Program

- The CAS/IGTC Master Program program is intended at IGTC students, who wish to **pursue an international experience, a higher education in business and simultaneously earn a Master's degree at a renowned German institution.**
- The Master program qualifies students to take over leadership positions in internationally oriented companies.
- During the CAS/IGTC experience, IGTC students stay for approx. 4 weeks in Germany. During their stay students are required to complete 3 courses of the CAS Master program. Several courses – required from the German Master program – can be recognized from IGTC.

Structure of the CAS/IGTC Master program

Timeline - Overview



1. Year

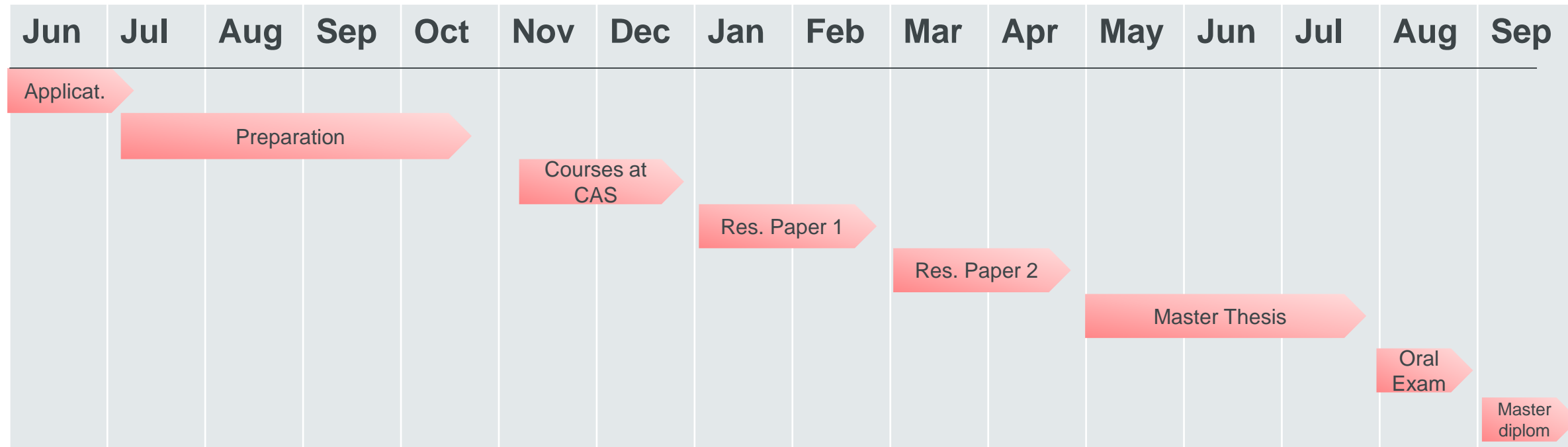
- IGTC students enroll at IGTC, complete courses and work for employers
- Complete and receive **IGTC Certificate**



2. Year

- IGTC students also enroll at CAS (Germany), get IGTC courses recognized, take courses at CAS and finish their Master thesis
- Complete and receive **German Master Degree**

Timeline – 2. Year – Study program at CAS (Germany)



- The timeline of the program is scheduled to offer IGTC students a curriculum packed with high-quality courses, opportunities to experience German working and living culture and state-of-the-art knowledge about German production and digitization techniques.
- The program can be finished with a renowned **German Master degree** within **12 months**.

Application requirements

- A successfully completed, qualifying university course of studies (Bachelor) at a recognized German or international university.
- English language skills sufficient to enable studies proved either by TOEFL (at least 500 points in the PBT) or a comparable test or an English language Bachelor's degree.
- The approval of at least one year of relevant professional work experience following the acquisition of the first university degree (Bachelor).
- A successful acceptance examination in the form of a selection interview.
- An agreement with a cooperation institution, which provides employment for the period of the Master's program at CAS.

Timeline – Important Dates and Deadlines

- June 30th – Application Deadline for the program.
- November 11th – Start of course week 1 (Courses, Excursions and Company Visits)
- November 18th – Start of course week 2 (Courses, Excursions and Company Visits)
- November 25th – Start of course week 3 (Courses, Excursions and Company Visits)
- December 2nd – Start of final week (Meetings with Scientific Paper supervisors)
- January 1st – Start of preparation of Research Paper 1 (2 months time)
- March 1st – Start of preparation of Research Paper 2 (2 months time)
- May 1st – Start of preparation of Master Thesis (3-4 months time)
- August – Oral examination
- September 30th – Award of Master Degree

Structure of the program – CAS Students

General Management		Specializations		Scientific Papers	
Course	ECTS	Course	ECTS	Course	ECTS
General Management 1	5	Elective Modul 1	5	Research Paper 1	5
General Management 2	5	Elective Modul 2	5	Research Paper 2	5
General Management 3	5	Elective Modul 3	5	Master Thesis	20
General Management 4	5	Elective Modul 4	5		
General Management 5	5	Elective Modul 5	5		
General Management 6	5	Elective Modul 6	5		
Total	30	Total	30	Total	30

- The Dual Master program at CAS regularly requires the completion of 90 ECTS.
- 30 ECTS are completed with General Management courses, 30 ECTS are completed with Specializations and 30 ECTS are completed with the successful writing of scientific papers.

Structure of the program – IGTC Students

General Management		Specializations		Scientific Papers	
Course	ECTS	Course	ECTS	Course	ECTS
General Management 1	5	Elective Modul 1	5	Research Paper 1	5
General Management 2	5	Elective Modul 2	5	Research Paper 2	5
General Management 3	5	Elective Modul 3	5	Master Thesis	20
General Management 4	5	Elective Modul 4	5		
General Management 5	5	Elective Modul 5	5		
General Management 6	5	Elective Modul 6	5		
Total	30	Total	30	Total	30

- IGTC students have already completed several courses at IGTC in India. After profound evaluation of content and difficulty level, several modules can be recognized as equivalent and need not be completed at CAS.
- IGTC students therefore have to complete only the courses “General Management 5”, “General Management 6”, “Elective Module 6” and the scientific papers (courses marked in dark colours).

Structure of the program – Accepted IGTC courses


Content Comparison / Course Recognition	
IGTC	CAS
General Management Modules	
Course	Course
Quantitative Methods Market Research	GM I: Application oriented research
Strategic Management I Strategic Management II	GM II: Strategic management
Economics for Managers Business Law	GM III: Managerial Economics and law
Business Ethics and Corporate Gov. Organizational Behavior	GM IV: Leadership, organization and ethics

Content Comparison / Course Recognition	
IGTC	CAS
Specialization Modules	
Advertising and PR B2B Marketing	EM1: B2B Kommunikation
Sales & Distribution Management Services and Retail Marketing	EM 2: International Sales Management
Human Resource Management Ind. Relations and Labour Laws	EM 3: Internationales Personalmanagement
International Finance WTO & Trade Policies	EM 4: International Finance and International Monetary Systems
Logistics & Supply Chain Management Logistics & Supply Chain Management 2	EM 5: Supply Chain Management: Strategien, Ziele und Trends

- These tables show the results of the comparison of IGTC and CAS courses regarding content and difficulty level.
- The IGTC courses stated can be recognized as equivalent with the corresponding CAS courses.

Courses for IGTC students

Course Idea



Bosch Center for Artificial Intelligence

Achieving a leading position for Bosch in AI by attracting top talent, conducting differentiating research, and applying AI for the transformation of Bosch towards an AI-driven IoT company.



Extract Information

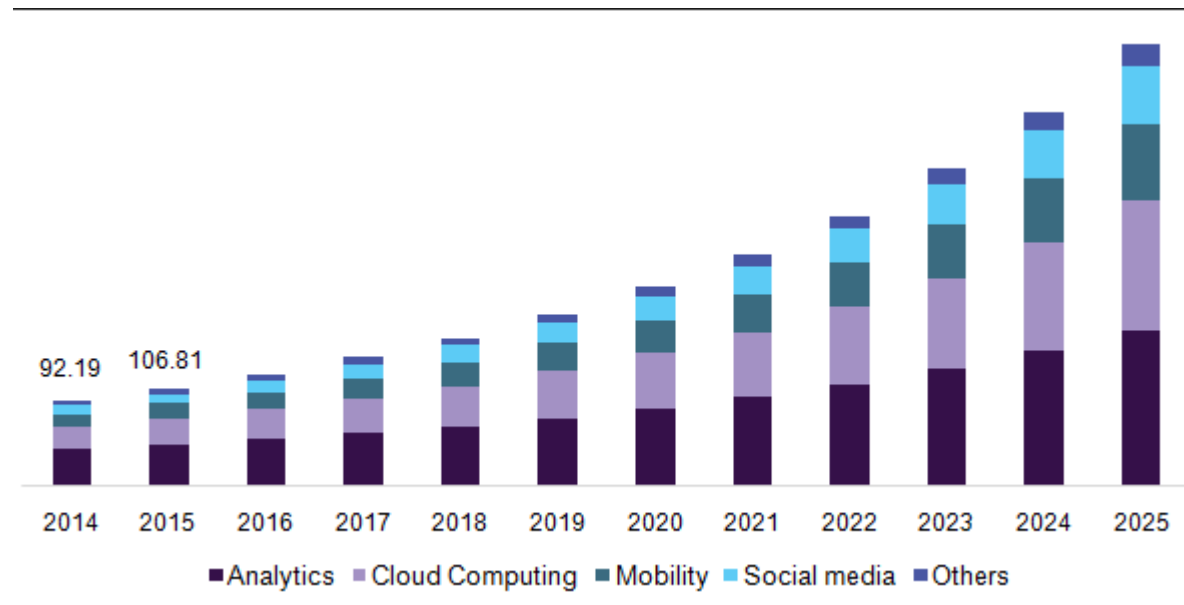


Use and present Information

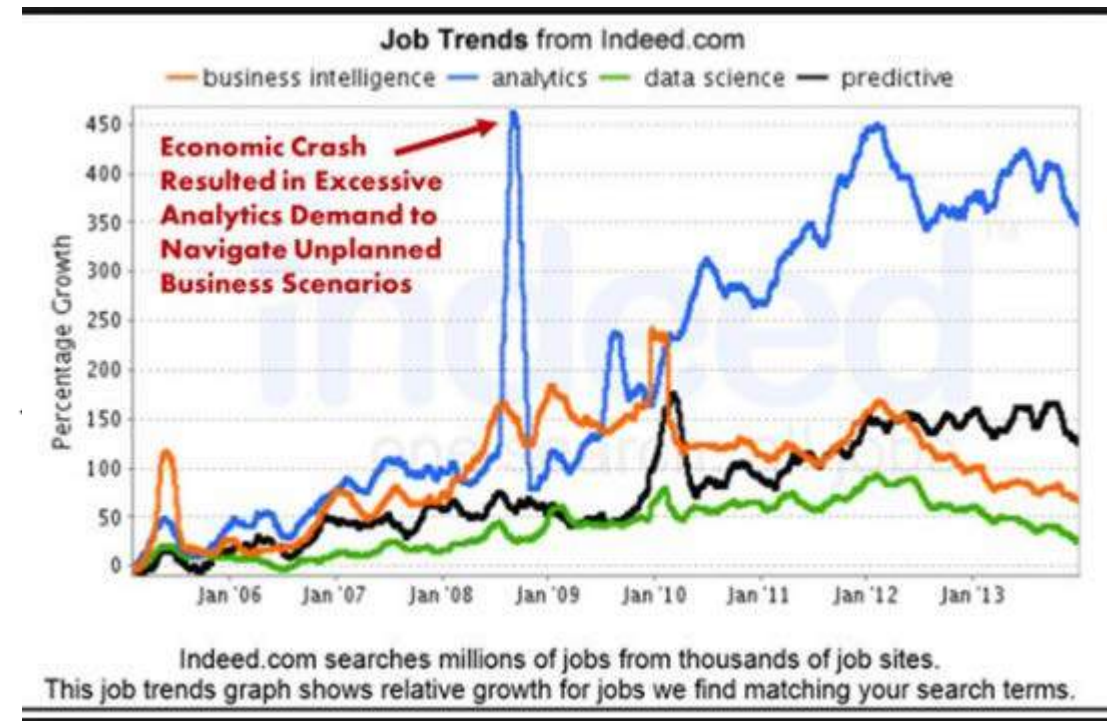
SAP Digital Boardroom

Meaning of digitalization

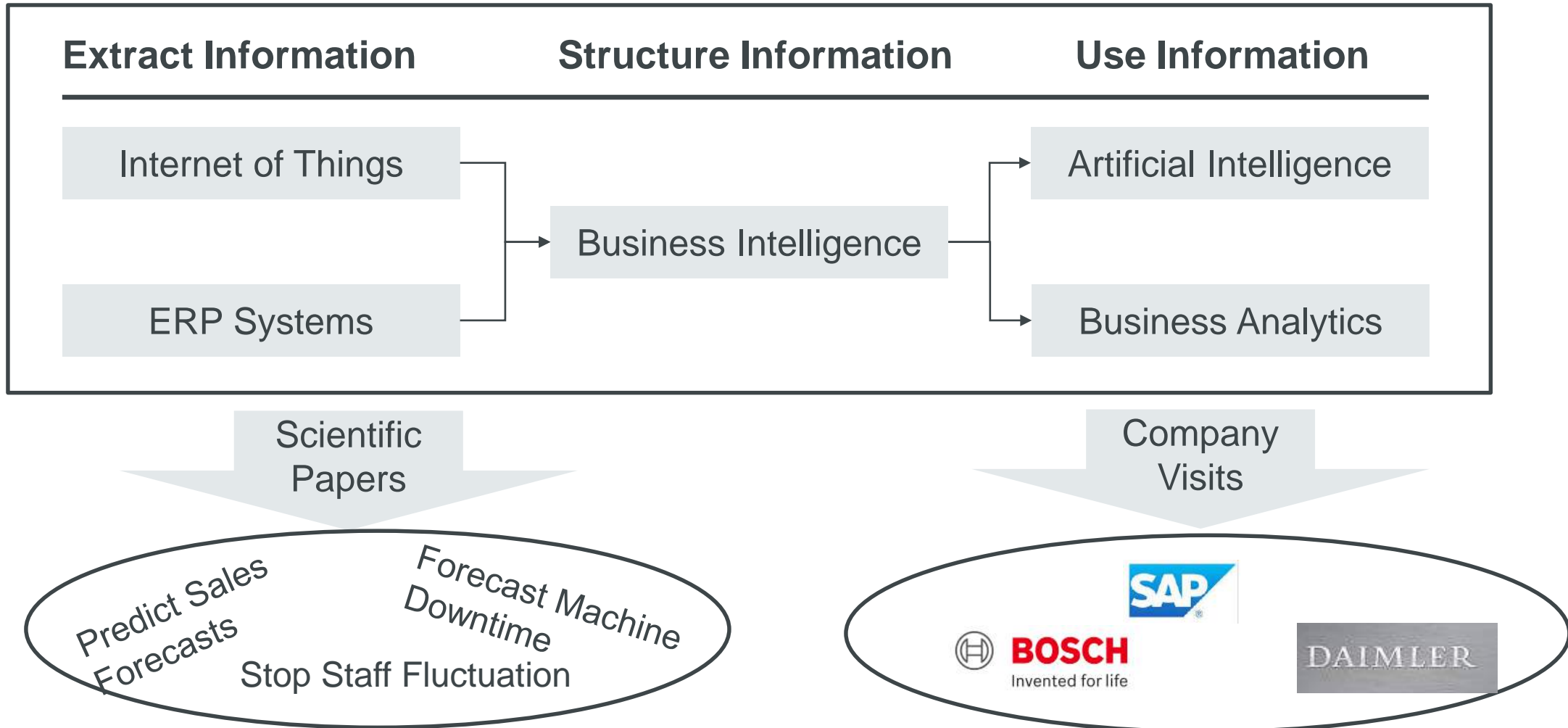
Digital Transformation Market Size



Digital Transformation and Job Trends



Course road map



Course overview

- The three courses are designed to give students a deep insight into German engineering culture as well as current state-of-the-art analytics knowledge used both in engineering and business. All courses are taught in English.

General Management Module 5: Industry 4.0

Content

- German production processes and quality management system
- Usage of artificial intelligence in production
- Business process reengineering in the digitization

General Management Module 6: Interdisciplinary skills

Content

- Effective communication
- Team Leading
- Personal development skills
- Intercultural behaviour

Elective Module 6: Business Analytics

Content

- Usage of Big Data from production in business using Analytics techniques
- Descriptive Analytics, Predictive Analytics and Prescriptive Analytics
- Production Analytics and Marketing Analytics
- Analytics Software Tools

Course: General Management 5 “Industry 4.0 – Process and Quality Management”

- **Industry 4.0** is a name given to the current trend of automation and data exchange in manufacturing technologies. It includes cyber-physical systems, the Internet of things, cloud computing and cognitive computing. Industry 4.0 is commonly referred to as the fourth industrial revolution. This course tackles current topics in the steering of production facilities and ensuring the quality of process and products within Industry 4.0.
- **Topics of the course include:**
 - Introduction to Artificial Intelligence (AI)
 - Introduction to European Quality Management Standards
 - IT Process Management & Work Flow Management
 - Effective Process Management
 - Business Process Reengineering

Course: General Management 6 “Interdisciplinary Skills”

- The seminars in “Interdisciplinary Skills” assists students in their personal development and career planning. Students will get to know themselves better and can expand their strengths in the seminars.
- Seminars offer you a variety of ideas to help master career challenges and develop personal skills. Our seminar catalogue offers a wide range of seminars on topics such as
 - Effective Communication and Shaping of Relationships
 - Team Leading and Controlling of change
 - Personal Development and Evolvment of your personality
 - Intercultural Behavior

Course: Elective Module 6 “Business Analytics”

- **Business analytics (BA)** refers to the skills and technologies needed for continuous iterative exploration and investigation of past business performance. In the context of the "digitization of the economy" (for example through Industry 4.0 and the "Internet of Things"), extraordinary large amounts of internal data are generated. Companies that want to be successful in the future have to be able to analyze these data and draw conclusions from it. At this point, the course „**Business Analytics**“ starts.

- **Topics of the course are:**
 - Devising and usage of descriptive, predictive and prescriptive algorithms
 - Usage of state-of-the-art statistical methods to forecast numbers and events
 - Application of business analytics software to aggregate, analyse and visualize business problems and solutions for top management

Scientific Papers: Research Paper 1 and 2

- **Research Papers** are designed to combine problems from the operational practice with theoretical theories and sophisticated methodologies. Methodologies are quantitative statistical methods, learned in the Business Analytics module.
- The research project work has a scope of 15-20 pages (without table of contents and appendix). It will be created in a processing time of two months.
- Each Research Paper is a separate module and consists of two partial examinations, which are weighted as follows: Research Paper writing 70%, presentation 30%.
- Topics for research paper can be chosen freely. Proposals are made by CAS supervisors.

- **Typical topics are and could be e.g.:**
 - Cash Flow Forecasting for a German conglomerate using time-series models
 - Optimization of Working Capital Levels using a multivariate regression approach
 - Feasability Study for a new product in a foreign market using systematic customer survey data

Scientific Papers: Master's Thesis

- **The master's thesis** can be started as soon as the research projects 1 and 2 have been successfully completed. It has a volume of 60-80 pages (without table of contents and attachment). It is created in a processing time of 3-4 months. The final grade is based on Weighting: Master's Thesis 85%, Colloquium (Defense) 15%.
- The master's thesis should tackle a big business problem with more sophisticated models and can also involve the collection of data.
- **Typical topics are and could be e.g.:**
 - Comparison of German and Indian customer preferences using extensive questionnaire and interview data
 - Development of a scoring system for selection and rejection of new customers
 - Predictive maintenance systems in German industrial companies – Current state and future developments

Company Visits

- Company visits are intended to give students an impression of German working culture, production methodologies and inside views of state-of-the art technology.
- Students will meet with production and sales managers and can ask questions regarding current and future development of the industry.
- Past company visits include companies such as
 - Daimler AG
 - Robert Bosch GmbH
 - Porsche AG



The Master Degree

Master degree and certificate

- The following page gives an impression of the certificate, that all IGTC students will receive, who finish the program successfully.





DUALE HOCHSCHULE BADEN-WÜRTTEMBERG
BADEN-WÜRTTEMBERG COOPERATIVE STATE UNIVERSITY

Urkunde Certificate

Die Duale Hochschule Baden-Württemberg Center for Advanced Studies (CAS) verleiht
Baden-Wuerttemberg Cooperative State University awards

Herr / Mr

Geboren am 01. März 1980
born on 1980-03-01

auf Grund der erfolgreich abgelegten Masterprüfung
due to the successfully completed examination

im Studiengang / in der Studienrichtung
in the study course / major

Master in Business Management / General Business Management
Master in Business Management / General Business Management

den akademischen Grad
the academic degree

Master of Arts (M.A.)

Prof. Dr.-Ing. Frech
(Direktor / President DHBW CAS)

Heilbronn, 30. September 2019



DUALE HOCHSCHULE BADEN-WÜRTTEMBERG
BADEN-WÜRTTEMBERG COOPERATIVE STATE UNIVERSITY

Zeugnis Degree Certificate

Herr / Mr

geboren am 01. März 1980 in Mumbai, Republik Indien
born on 01 March 1980 in Mumbai, Republic of India

hat am 30. September 2019 an der Dualen Hochschule Baden-Württemberg
Center for Advanced Studies, Heilbronn, im Studiengang **Master in Business
Management** in der Studienrichtung **General Business Management** das
Masterstudium erfolgreich abgeschlossen.

Gesamtnote: gut (1,8)*
ECTS-Klassifikation: B**

successfully completed the Master's study program on 30 September 2019
in **Master in Business Administration Major General Business
Management** at the Baden-Wuerttemberg Cooperative State University
Center for Advanced Studies, Heilbronn.

Overall grade: gut (1,8)*
ECTS classification: B**

Die Bezeichnungen und Noten der einzelnen Module sind auf der Rückseite
aufgelistet.

The description and grades of the individual modules are listed overleaf.

Prof. Dr.-Ing. Frech
(Dekan Wirtschaft /
Dean of the School of Business)

Stuttgart, 30. September 2019

Prof. Dr. Kaapke
(Wissenschaftliche Leiterin /
Head of Department)

Modulcode [Module code]	Bezeichnung Modul [Module]	Bewertung [Result]	ECTS-Punkte [ECTS Credits]
WM1001	General Management 1 [General Management 1]****	gut (2,0) [good (2.0)]	5
WM1002	General Management 2 [General Management 2]****	gut (2,1) [good (2.1)]	5
WM1003	General Management 3 [General Management 3]	gut (2,3) [good (2.3)]	5
WM1004	General Management 4 [General Management 4]****	gut (1,7) [good (1.7)]	5
WM1005	General Management 5 [General Management 5]	gut (1,8) [good (1.8)]	5
KM1011	Fachübergreifende Kompetenzen (interdisciplinary skills)****	bestanden [passed]	5
WSM1010	Wirtschaftliches Management und Controlling (Value-oriented management and controlling)****	gut (1,7) [good (1.7)]	5
WSM1018	Führungswirtschaft Kosten- und Leistungsrechnung (Management-oriented cost and performance accounting)****	gut (2,1) [good (2.1)]	5
WSM1021	Supply Chain Management: Strategien, Ziele und Trends (Supply Chain Management: strategies, goals and trends)****	gut (1,8) [good (1.8)]	5
WSM1030	Komplexes SOURCE: Beschaffungsmanagement (Core Process SOURCE: Procurement management)****	gut (1,7) [good (1.7)]	5
WSM1010	Ausschreibungsmanagement (Tender management)****	gut (1,7) [good (1.7)]	5
WSM1064	Strategisches Personalmanagement (Strategic personnel management)****	gut (2,2) [good (2.2)]	5
WSM1011	Forschungsarbeit 1 [Research paper 1]	sehr gut (1,4) [very good (1.4)]	5
WSM1012	Forschungsarbeit 2 [Research paper 2]	gut (1,6) [good (1.6)]	5

Zusatzmodul/Zusatzfächer (Optional modules)****

Masterarbeit [Master Thesis]:

WSM1013	Evaluation of Supply Chain Strategies at Ganten, India	sehr gut (1,5) [very good (1.5)]	10
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1,0 – 1,9 sehr gut 1,0 – 1,9 gut 2,0 – 2,9 befriedigend 3,0 – 4,0 ausreichend 4,1 – 5,0 nicht ausreichend (5,0 – 5,5 very good 1,0 – 1,9 good 2,0 – 2,9 satisfactory 3,0 – 4,0 sufficient 4,1 – 5,0 not sufficient)

ECTS-Klassifikation: A = für die besten 10 % aller Studierenden, B = für die nächsten 20%, C = für die nächsten 30%, D = für die nächsten 20%, E = für die nächsten 10% und unbestanden (Abgelehnt) (A = for the best 10% of a department, B = for the next 20%, C = for the next 30%, D = for the next 10% and failed)

Die Note der Zusatzleistung geht nicht in die Gesamtnote ein (This grade from the additional course does not count towards the overall grade)

**** Dieses Modul wurde am 01.07.2019 abgesetzt und auf der Masterarbeit angerechnet (This module has been stopped at the 01.07.2019 and has been recognized for the master's programme)

The CAS campus in Heilbronn, Germany

Modern Environment for Modern Study Programmes...



...at the Bildungscampus Heilbronn



Housing and Visa

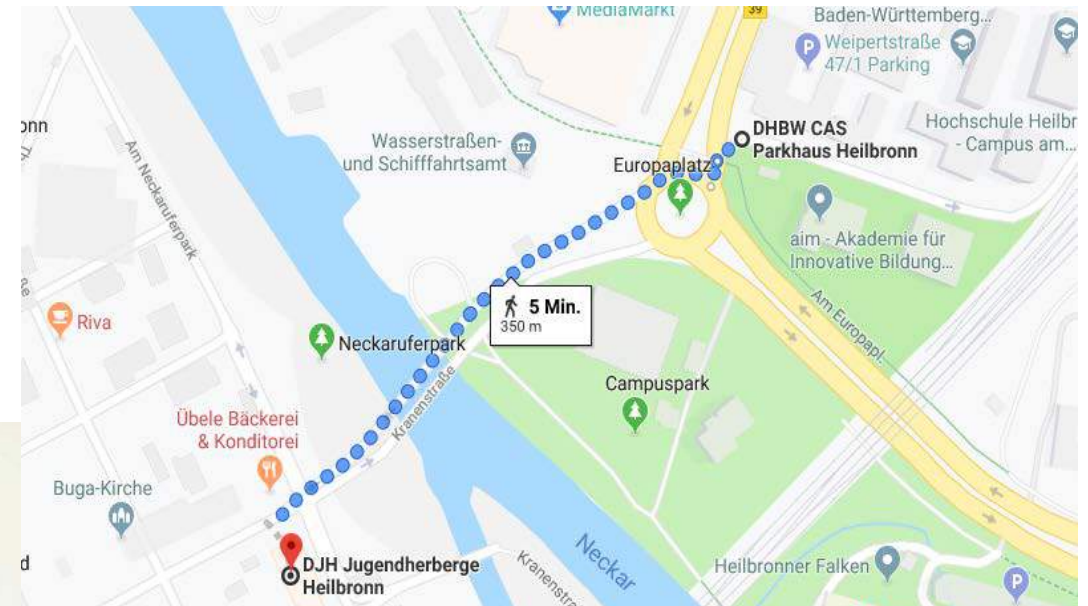
Housing

- IGTC students are accommodated in modern youth hostel, which provide a convenient and pleasant stay in Germany.
- Students can chose between double or single bedrooms
- The town of Heilbronn offers also a variety of leisure activities and also traditional German restaurants and sightseeing options.



Housing

- The youth hostel is 200 meters from campus



Housing



Visa and Insurance

- IGTC students can apply for a student VISA or a tourist VISA.
- As the actual stay within Germany is just about 4 weeks a tourist VISA is enough and also much easier to obtain. We therefore recommend to apply for a normal tourist visa.
- Students from countries outside the EU must obtain health insurance in Germany. The costs usually amount to approximately 80 euros per month.

Costs of the Master Program

Costs

- IGTC students are officially enrolled as CAS students for two semesters until completion of the Master's thesis.
- Fees for one semester are 4,050€, total 8,100€ amount for taking courses and mentoring of the scientific papers. Enrollment fees are 300€
- Costs for accommodation for approx. 4 weeks arise at around 1,400€
- Costs for food and leisure activity can vary by person and have to be evaluated individually.
- Costs for flights usually amount to ca. 800€-1.000€ for round-trip flights.
- Costs for VISA and health insurance must be added.

References from current and former students

SOUND PRACTICAL TRAINING

- Degree course with on-the-job training
- Business-related issues are incorporated in class
- Newly gained specialist knowledge and methodological skills are directly applied in professional practice



Hayo Schelten: “I dedicated my master’s thesis to an upcoming project in my company. It served as a springboard to my management position.”

Hayo Schelten
Master's Graduate DHBW CAS
Head of European Locomotive Fleet
Strategy and Planning, Deutsche Bahn AG

TAILORED SELECTION

- Wide range of study programmes, highly customisable study concept
- Wide variety of modules to choose from, allowing for unique opportunities of job integration
- Tailored to previous specialist knowledge, business tasks and personnel development



Tabea Fey: “Given the wide variety of possible modules to choose from in my Cooperative Master’s programme, there are no limits to the topics and ideas that my employer and I have and share.”

Tabea Fey
Master’s Student DHBW CAS
Head of Department Dental Private Label,
Kettenbach GmbH & Co. KG

HIGH QUALITY STANDARD

- Close integration of theory and practice
- Highly topical course content
- Well-versed teaching staff
- Experienced organisation
- Focus on the students
- Motivated students



Photo credit: iStockphoto/ZDF

Sandra Schuler: “The Cooperative Master’s is an asset to us, which particularly distinguishes itself by its strong focus on practical application and the quality of the teaching staff.”

Sandra Schuler

Vocational Training, Further Training,
Personnel Development
Zweites Deutsches Fernsehen (Corporate Partner)

FLEXIBLE IN TIME

- Flexible scheduling of classes allows students to reconcile study, work and family life
- Long-term planning of attendance times for classroom teaching blocks
- Standard period of study can be extended



Sebastian Schmid: “It was no problem at all to take all the exams that took place during my parental leave afterwards.”

Sebastian Schmid
Master's Graduate DHBW CAS
Strategic Purchaser, Sto SE & Co. KGaA

INTERDISCIPLINARY APPROACH

- Sharing professional knowledge and experience with fellow students from various industries and positions
- More than 1,000 postgraduate students



Photo credit: Hobby Foto Esslingen

Miriam Knopf: “The conversations and discussions on specialist topics with my fellow students were particularly helpful for me. They came from different departments and positions.”

Miriam Knopf

Master's Graduate DHBW CAS
Head of Vocational Education and Training
Coordinator of Further Professional Development
Werkstätten Esslingen Kirchheim gGmbH

PROMOTING PERSONAL STRENGTHS

- “Interdisciplinary Skills” module to strengthen personal characteristics in a targeted manner
- Wide variety of seminars to choose from (around 50 classes)
- Development of intercultural skills through international excursions



Markus Schwarzer: “The ‘Interdisciplinary Skills’ module was incredibly helpful for me, also for my future.”

Markus Schwarzer
Master's Graduate DHBW CAS
Design Engineer, Allgaier Process Technology GmbH

INDIVIDUAL EXCHANGE

- Small groups with an average of 18 students per module unit
- Intensive exchange with teaching staff and fellow students



Joshua Reiling
Master's Graduate DHBW CAS
Design Engineer, Daimler AG

Joshua Reiling: “In my eyes, the practical experience of the teaching staff and my fellow students, which prompted many interesting discussions, have been particularly useful.”

LOCAL COMPETENCIES

- Classes across all DHBW locations
- The best learning environment for each study programme



Photo credit: DHBW Mosbach

Prof. Dr. Gabi Jeck-Schlottmann
President DHBW Mosbach

Prof. Dr. Gabi Jeck-Schlottmann: “Offering the Cooperative Master’s degree courses across all our locations provides the opportunity to combine both our resources and especially our strengths. The students get the best of all our locations, while they can choose from a highly flexible range of studies.”