











The German Higher Education System with a Focus on Baden-Württemberg & Aalen University

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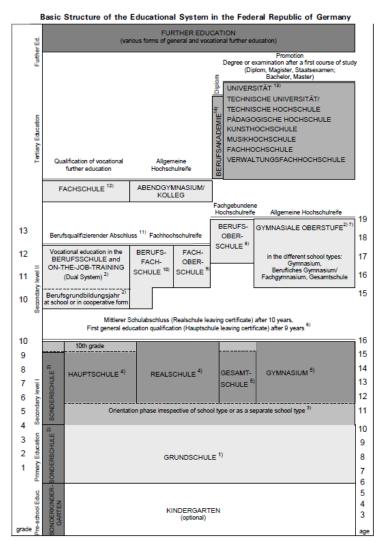


1 Germany's Higher Education Structure

There are **409 officially recognised institutions of higher education** in 165 towns and cities throughout Germany.

In Germany there are currently **270** state (public) higher education institutions, 37 church-maintained colleges, and 102 private universities.

To understand more about the educational system in the Federal Republic of Germany, the following table could help to illustrate the pathway a student could choose for their education



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Depending on the type of Higher Education Institution (HEI), the subject profile, qualification options, and admissions requirements will differ quite considerably. The following list presents a simplified overview of the key features for the various types of HEI:

Type of Higher Education Institution	Key Features			
Universities	Where?: Nationwide			
	Admission*: General higher education entrance			
	qualification (Abitur); in some cases, admissions			
	restrictions (Numerus Clausus) apply or			
	universities select their students themselves			
	Subjects**: Medicine, dentistry, natural			
	sciences, engineering, arts, humanities and			
	social sciences, languages and cultural studies,			
	theology, economics and business			
	administration, law, agricultural and forest			
	sciences, sport			
	Degrees: Bachelor's, Master's, Diplom, Magister,			
	Promotion (Doctorate), Staatsprüfung für das			
	Lehramt, Staatsexamen (State exam)			
	Studies begin: Mostly in the winter and summer			
	semester			
Technical Universities / Universities of	Where?: Nationwide			
Technology	Admission*: General higher education entrance			
	qualification (Abitur); in some cases, admissions			
	restrictions (Numerus Clausus) apply or			
	universities select their students themselves			
	Subjects**: Largely engineering and natural			
	sciences programmes, in some cases, arts and			
	humanities programmes as well			
	Degrees: Bachelor's, Master's, Diplom, Magister			
	Promotion (Doctorate)			
	Studies begin: Mostly in the winter semester			



Universities of Applied Sciences	Where?: Nationwide		
	Admission*: General higher education entrance		
	qualification (Abitur) or subject-		
	specific/Fachhochschule higher education		
	entrance qualification; local admissions		
	restrictions often apply; in some cases, a pre-		
	study internship is required		
	Subjects**: Engineering/technical professions,		
	business and management, social studies and		
	home economics, design, computer science,		
	library, information and documentary sciences,		
	nursing and public health sciences		
	Degrees: Bachelor's, Master's, Diplom		
	Studies begin: Mostly in the winter semester		
Colleges of Art, Film, and Music0	Where?: Small number of institutions. Info on		
	study opportunities available from: HEI Guide		
	and HEI Profiles; information specifically on		
	colleges of music:		
	http://www.miz.org/home.html (German Music		
	Information Centre)		
	Admission*: Subject-specific or general higher		
	education entrance qualification; where		
	applicants are particularly talented, this		
	entrance qualification may not be required.		
	Note: Proof of artistic talent is provided by		
	submitting work samples (portfolio) and taking		
	part in aptitude tests		
	Subjects**: Visual arts, performing arts and fine		
	art, design, restoration, photography, film and		
	television art, theatre/drama, art therapy,		
	instrumental training, singing, composition,		
	church music, music education, opera directing,		
	new media, film and television acting,		



	dramaturgy/dramatic art, camera, directing,		
	production and media management		
	Degrees: Bachelor's, Master's, Diplom, Magister,		
	Promotion (Doctorate), Staatsprüfung für das		
	Lehramt		
	Studies begin: Mostly in the winter semester		
Universities of Education	Where?: Baden-Württemberg only		
	Admission*: Subject-specific or general higher		
	education entrance qualification; sometimes a		
	pre-study internship is required		
	Subjects: All school subjects plus educational		
	sciences, education and psychology plus		
	internships, training of teachers for all school		
	types, including special needs schools and		
	inclusive education teachers for the mentally		
	and physically-disabled		
	Degrees: Bachelor's, Master's, Diplom, Magister,		
	Staatsprüfung für das Lehramt, Promotion		
	Studies begin: Mostly in the winter semester		
Theological and church-maintained colleges	Where?: Small number of institutions.		
	Information and list of study opportunities		
	available from: HEI Guide and HEI Profiles.		
	Further info available from: www.ekd.de (for		
	Protestant colleges); www.katholische-kirche.de		
	(for Catholic colleges)		
	Admission*: Subject-specific or general higher		
	education entrance qualification; in some cases,		
	church membership (Protestant or Catholic)		
	required; sometimes participation in an aptitude		
	test		
	Subjects**: Theology, religious studies,		
	philosophy, sociology, psychology, Greek,		
	priliosophy, sociology, psychology, dreek,		
	Hebrew, Latin, church music, social work and		



	education, health and nursing sciences, inclusive			
	education with majors in special needs			
	education, curative/therapeutic education, and			
	disability education			
	Degrees: Bachelor's, Master's, Diplom, Magister,			
	Promotion (Doctorate), Lizentiat, Staatsprüfung			
	für das Lehramt			
	Studies begin: Mostly in the winter and summer			
	semester			
Private Universities	Where?: Small number of institutions. Info on			
	study opportunities available from: HEI Guide			
	and HEI Profiles and from: www.private-			
	hochschulen.net			
	Admission*: Subject-specific or general higher			
	education entrance qualification; mostly			
	attendance of selection interviews and aptitude			
	tests			
	Subjects**: Economics and business			
	administration/management, social sciences,			
	law, engineering, tourism, computer			
	science/information technology, medicine, art			
	therapy, natural sciences, arts and humanities,			
	journalism			
	Degrees: Bachelor's, Master's, Diplom,			
	Promotion (Doctorate)			
	Studies begin: Mostly in the winter semester			
* Foreign secondary school leaving certificates or higher education entrance qualifications must				

^{*} Foreign secondary school leaving certificates or higher education entrance qualifications must be recognised as equivalent to the German general or subject-specific higher education entrance qualification.

^{**} Selection of usual academic subjects. The specific range of studies/programmes offered by each higher education institution can be checked in the database HEI Guide.



The German landscape of higher education provides foreign students with fantastic opportunities for preparing for their professional careers. The students' choices on where to acquire an excellent education will depend on personal preferences with respect to the educational philosophies in place at different types of institutions. For the most part, students can choose between two kinds of institutions: the more traditional universities, which focus on basic research and more theoretical concepts, and the newer universities of applied sciences such as Aalen University, which are more practice-oriented and focus on applied research.





The number of students in German's Universities has been growing since winter semester 2002/2003. In winter semester 2010/2011 there was 2.217.604 students registered in the Higher Education Institution.

2 Higher Education Structure in Baden-Württemberg

Among those 270 state (public) higher educational institutes in Germany, 56 of them are located in Baden-Württemberg.

Baden-Württemberg offers such a variety like no other state. Educations ranging from universities up to College of Art and Music are offered in high quality and in some cases they are internationally



known. Baden-Württemberg proudly presents this state as one of the state in Germany where four of the nine elite universities are located.

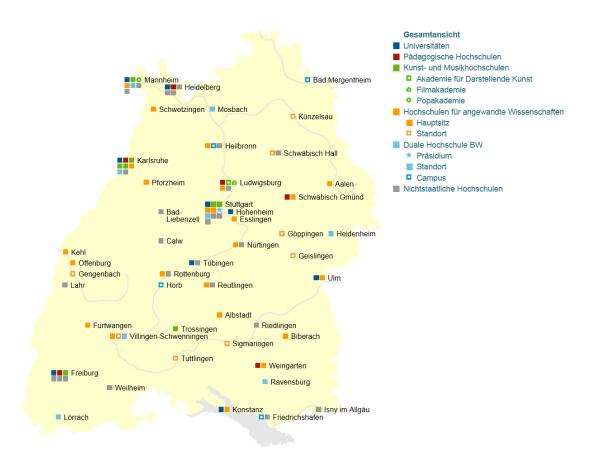
Baden-Württemberg has a highly developed university landscape with more than 70 higher education institutions.

In order to be able to compare the state's universities with the other institutions of higher education of Germany and among themselves, the university ranking of the Centre for Higher Education Development (Centrum für Hochschulentwicklung; CHE) offers detailed, up-to date and objective information regarding almost each subject at every university in Germany.

When looking at the ranking, it is striking to find that so many of Baden-Württemberg's universities enjoy an outstanding position in this evaluation. This is certainly due to the unique mixture of tradition, good financing and close connections with business and industry. This places the institutions of higher education of the state in a profitable position.

The Higher Education Institutes are spread across Baden-Württemberg; following is an overview of the location of the HEI in Baden-Württemberg.





The advantages for students studying in Germany are obvious: the German educational system is one of the world's best. Furthermore, German industry is strong and successful, highly export-oriented and presents many opportunities to highly qualified foreign students from all over the world, especially in our State of Baden-Württemberg as it has been mentioned before. Porsche, Bosch, Daimler, Carl Zeiss Optik and SAP are all names of global players which are well-known for their reputation worldwide.

2.1 Bachelor and Master Structure

Germany was involved in the Bologna Process from the beginning. The introduction of the Bachelor's and Master's Programmes to German Higher Educational Structure is considered as a crucial step in the international strategy of the German Higher Education Institutions. Starting early, back in 1998 the bachelor's and master's degree programmes were in a testing phase next to the existing Diplom and Magister Programme. Since 2002 the numbers of courses with Bachelor and Master Degree have



increased and starting winter semester 2009/2010 there are no longer Diplom and Magister Programmes in Germany.

Students who gain a Bachelor's degree in 6 to 8 semesters will have an academic qualification that gives them fast access to the job market. The Bachelor's degree is the initial entrance qualification to a profession and combines scientific knowledge with practical experience. If student wants to broaden or deepen their knowledge after a Bachelor's degree they will need to continue their studies in a Masters course.

The new structure of Bachelors and Masters Courses improves the qualifications for professional entry, increases student mobility, and shortens the time taken to qualify. The award of credit points means that grades earned in another German or European University can be recognized without difficulty.

If student decides to enter a Masters course after obtaining their Bachelor's degree it will be to deepen and broaden their knowledge. They will be aiming either for a scientific career or for further specialization. A Masters course lasts 2-4 semesters and the degree is necessary if they want to go on to a doctorate. As a rule the Universities of Applied Sciences have admission requirements for Masters Courses such as, for example, above average grades on their first course or a certain level of professional experience.

Following information is merely a rough guide. The actual structure of the degree programmes may vary depends on the university.

Bachelor's Programmes

Standard time to degree: Six up to a maximum of eight semesters, including time spent producing a Bachelor's thesis and taking all the exams.

Basic study stage: Two up to three semesters orientation and aptitude phase, generally completed with an intermediate exam.

Main study stage: Four semesters – if prescribed by the relevant Study Regulations – students in the main study stage complete compulsory stays abroad and internships. To graduate, students have to produce a Bachelor's thesis and in most cases take an oral exam.

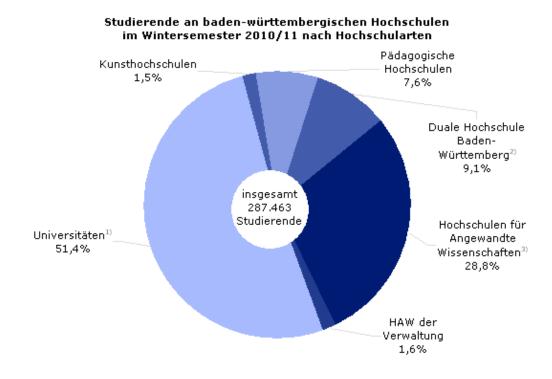


Structure: Programmes have a modular structure. One module is made up of several courses with a coordinated thematic and chronological structure. The basic study stage teaches foundation modules. The main study stage is largely made up of specialisation modules.

Master's programmes

Standard time to degree: Depending on the programme in question, two or four semesters (including the time required to produce the Master's thesis and to take the Master's exams).

Procedure: The programme extends over two or four semesters. Students complete the Master's thesis in the second or fourth semester. The students also need to sit a final oral exam that lasts around 60 minutes.



- 1) Einschließlich Private Wissenschaftliche Hochschulen sowie der Theologischen Hochschule.
- Ab WS 2008/2009 mit der Dualen Hochschule Baden-Württemberg (ehemalige Berufsakademien).
- 3) HAW (ehemals »Fachhochschulen«)
- © Statistisches Landesamt Baden-Württemberg 2011



2.2 List of Higher Educational Institutions in Baden-Württemberg

- Karlsruhe Institute of Technology
- 2. University of Freiburg
- 3. University of Heidelberg
- 4. University of Hohenheim
- 5. University of Konstanz
- 6. University of Mannheim
- 7. University of Stuttgart
- 8. University of Tübingen
- 9. University of Ulm
- 10. Aalen University of Applied Sciences
- 11. Albstadt-Sigmaringen University
- 12. Biberach University of Applied Sciences
- 13. Business Economics & Environment University Nürtingen-Geislingen
- 14. Catholic University of Applied Sciences Freiburg
- 15. Esslingen University of Applied Sciences
- 16. Furtwangen University of Applied Sciences
- 17. Heilbronn University
- 18. Karlsruhe University of Applied Sciences
- 19. Kehl University of Applied Sciences
- 20. Konstanz University of Applied Sciences
- 21. Ludwigsburg University of Applied Sciences
- 22. Mannheim University of Applied Sciences
- 23. Offenburg University of Applied Sciences
- 24. Pforzheim University of Applied Sciences
- 25. Protestant University of Applied Sciences Freiburg
- 26. Protestant University of Applied Sciences Reutlingen Ludwigsburg
- 27. Ravensburg-Weingarten University of Applied Sciences
- 28. Reutlingen University of Applied Sciences
- 29. Rottenburg University of Applied Sciences



- 30. Stuttgart University of Applied Sciences
- 31. Ulm University of Applied Sciences
- 32. Film Academy Baden-Württemberg
- 33. Pop Academy Baden-Württemberg
- 34. University of Music and Performing Arts Mannheim
- 35. <u>University of Music and Performing Arts Stuttgart</u>
- 36. University of Music Freiburg
- 37. University of Music Karlsruhe
- 38. University of Music Trossingen
- 39. Academy of Performing Arts Baden-Württemberg
- 40. Karlsruhe Academy of Fine Arts
- 41. Merz Akademie University of Applied Arts
- 42. State Academy of Art and Design Stuttgart
- 43. Stuttgart Media University (HdM)
- 44. University of Applied Sciences Schwäbisch-Gmünd
- 45. University of Arts and Design Karlsruhe
- 46. Baden-Wuerttemberg Cooperative State University Headquarter Stuttgart
- 47. <u>Baden-Wuerttemberg Cooperative State University Heidenheim</u>
- 48. Baden-Wuerttemberg Cooperative State University Karlsruhe
- 49. Baden-Wuerttemberg Cooperative State University Lörrach
- 50. Baden-Wuerttemberg Cooperative State University Mannheim
- 51. Baden-Wuerttemberg Cooperative State University Mosbach
- 52. Baden-Wuerttemberg Cooperative State University Mosbach Campus Bad Mergentheim
- 53. Baden-Wuerttemberg Cooperative State University Ravensburg
- 54. Baden-Wuerttemberg Cooperative State University Ravensburg Campus Friedrichshafen
- 55. Baden-Wuerttemberg Cooperative State University Stuttgart
- 56. <u>Baden-Wuerttemberg Cooperative State University Stuttgart Campus Horb</u>
- 57. Baden-Wuerttemberg Cooperative State University Villingen-Schwenningen
- 58. University of Education Freiburg
- 59. University of Education Heidelberg
- 60. University of Education Karlsruhe
- 61. University of Education Ludwigsburg
- 62. <u>University of Education Schwäbisch Gmünd</u>



63. <u>University of Education Weingarten</u>



3 Aalen University (Aalen University of Applied Sciences)



Aalen University is situated in the southern German state of Baden-Württemberg. Aalen University was established back in 1963 as a State Engineering School. In 1971 it became a University of Applied Sciences. At the moment, Aalen University is accommodating more than 4500 students and is offering 16 different different **Bachelor** Programmes, 13 Masters Programmes, and 4 further education courses. The programmes organised into five schools: are

Chemistry, Electronics & Computing Science, Management & Business Sciences, Mechanical Engineering & Material Science, and Optics & Mechatronics.



Since many years, Aalen University has been the strongest university of applied sciences in Baden-Württemberg in research. One fourth of our university workers work and concentrate solely in research, working on research projects and being partly graduate students studying for a doctorate in cooperation with partner universities. Through continuous economic work and qualified research

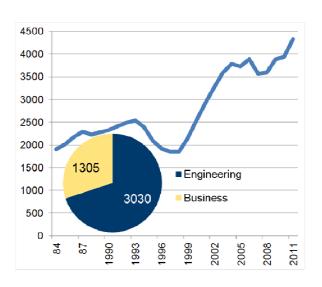


applications, the research professors regularly acquire third-party funds particularly from the national government, from the state government, from the Baden-Württemberg State Foundation, from the German Research Community (DFG – Deutsche Forschungsgemeinschaft), as well as from the industry and the European Commission.

Foreign students will take advantage of the opportunity to gain practical experience in companies during compulsory internships in the industry. Bachelors and Masters Theses are very often carried out in cooperation with companies, providing our graduates with excellent career opportunities right from the start.

Development of Student Numbers

Number of Students



Note: including WBA, GSO and Taxmaster

All professors of Aalen University have a strong industrial background and are thus in a position to provide students with excellent links to companies. In combination with its high quality education, its own Career and Start-Ups Centre and a large offering of soft skills related electives Aalen University prepares its students optimally for their professional life.

As a matter of fact, the strong and career boosting industry links of Aalen University are proven through the representation of the following companies and organizations in its university council and its board of trustees: Binder Optik AG, Carl Zeiss AG, Mapal KG, Chamber of Industry & Commerce Ostalb, ZF Lenksysteme GmbH, Maschinenfabrik Alfing Keßler GmbH, Gebrüder Leitz GmbH & Co, Varta Gerätebatterie GmbH, Agilent Technologies Deutschland GmbH, IBM, Westfälisch-Lippischer



Sparkassen- and Giroverband, Voith Unternehmensgruppe, Rud Kettenfabrik, Aradex AG and Kreissparkasse Ostalb.

4 List of Study Programmes in Aalen University

Aalen University study programmes are spread over following five schools:

- 1 Chemistry
- 2 Electronics and Computing Sciences
- 3 Management and Business Sciences
- 4 Mechanical Engineering and Material Science
- 5 Optics and Mechatronics

The following diagram shows the study programmes both bachelor and masters which Aalen University offers.

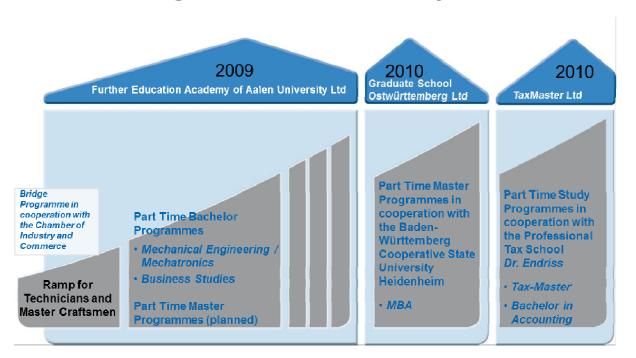
School of Chemistry	School of Electronics & Computer Science	School of Mechanical Engineering & Materials Science	School of Optics & Mechatronics	School of Management & Business Sciences	
■ Chemistry	Electronics and Information Technology Informatics IT-Security Media Computing Science Software Engineering Business Computing Science	Mechanical Engineering Plastics Engineering Mechanical Engineering / Production and Management Mechanical Engineering / Business and Management Mechanical Engineering / Business and Management Mechnical Engineering / Product Development and Simulation Surface and Materials Technologies Materialography International Technical Sales Management	Mechatronics Technology Communication Optometry / Optometry and Audiology Optoelectronics / Laser Technologies Technical Teacher Education	 Business Studies SME Health Management International Business Studies Industrial Management 	Bachelor Programmes
 Analytical & Analytical Biochemistry 	Computer Controlled Systems	 Applied Surface and Materials Sciences Polymer Technology Product Development and Production Advanced Materials and Manufacturing (Master by Research) 	 Technical Teacher Education Photonics Vision Science and Business (Optometry) 	 Industrial Management Management / International Business 	Master Programmes

Aalen University also offers part time education programme. The Part Time Programmes at Aalen University includes Further Education Academy of Aalen University Ltd., Graduate School Ostwürttemberg Ltd., and TaxMaster Ltd. The Further Education Academy of Aalen University Ltd.



offers an extensive range of courses from Business Administration, Mechanical Engineering, and Mechatronics, as well as customized seminars for companies and interested parties on an academic level. It is a Bridge Programme in cooperation with the Chamber of Industry and Commerce. In 2012 the Graduate School Ostwürttemberg Ltd. was established. It offers a Part Time Master Programmes (MBA) in cooperation with the Baden-Württemberg Cooperative State University Heidenheim. In the same year the Part Time Study Programmes in cooperation with the Professional Tax School Dr. Endriss was established. The students are able to pursue a Master degree in Taxation combined with the state exam for the Certified Tax Advisor or a Bachelor degree in Accounting.

Part Time Programmes at Aalen University

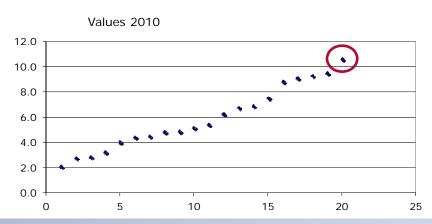




5 Applied Research in Aalen University

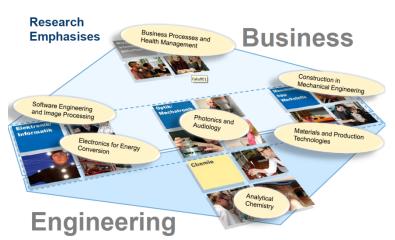
The research value of Aalen University has grown within the years according to the report from the Advisory Body AG4 of the Ministry of Science, Research and Arts.

Strongest University of Applied Sciences in Baden-Württemberg



- Note: every point stands for the research value of a university of applied sciences
- The research values are supplied by the Advisory Body AG4 of the Ministry of Science, Research and Arts on the basis of the research reports of the Institutes for Applied Research of the universities of applied sciences

As one of the strongest research universities in Baden-Württemberg, research and its results have been an important part and play a major role in Aalen University. Our Research Emphasies are both in Engineering and Business areas.



The fields of research in engineering or science area include analytical chemistry, drive systems and electronics, optometry and audiology, biophotonics, foundry technology, computer science,



plastic injection moulding, laser measurement technology, and so on.

In Business there are doctorate students who are engaged in topics such as business processes and health management.

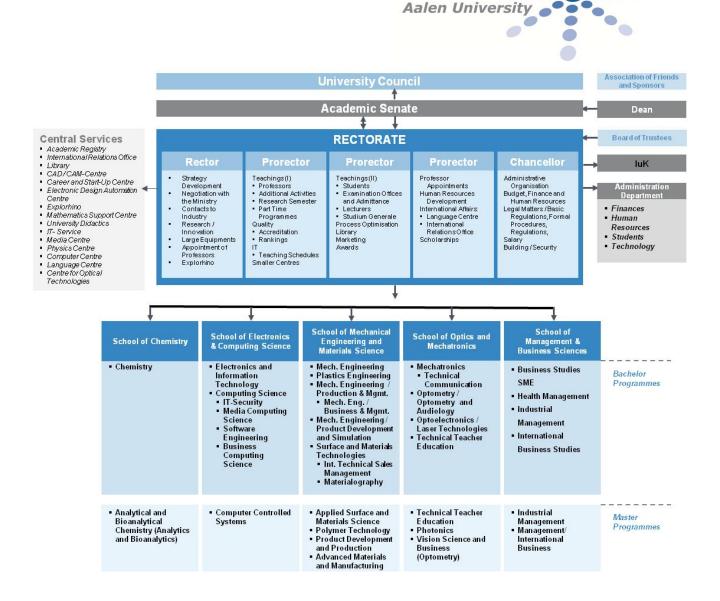
Aalen University has several institutions that concentrate on the research. Following are institutions which could be found here.

- Applied Research Institution Institut für Angewandte Forschung (IAF)
- Applied Business Science Research Institution Institut f
 ür angewandte
 betriebswirtschaftliche Forschung (IBF)
- Applied Systems Dynamic Institution Institut für angewandte Systemdynamik (IAS)
- Materials Research Institution Institut für Materialforschung
- Product Development Institution Institut für Produktentwicklung
- Innovation Centre of Aalen University Ltd. Innovationszentrum an der Hochschule Aalen
 GmbH
- Foundry Technology Aalen Gießerei Technologie Aalen (GTA)
- ZAFH Photonics

6 Aalen University Organizational Structure

Aalen University is fully recognised and accredited as a state's educational institution in Baden-Württemberg, Germany.

Following diagram shows Aalen University's Organizational Structure: Hochschulrat – University Council, Senat - Academic Senate, Rektorat - Rectorate (consist of rector, pro-rector, and head of administration) connected to the central services and to administrative fields and overseeing the five faculties of Aalen University.



7 Central Services at Aalen University

Aalen University has different centres for its infrastructures which offer different services throughout the whole university.

7.1 Academic Registry (Studentische Abteilung)

The Academic Registry consists of two main services for students: the Central Enrolment Office and the Central Examination Office. These two offices are responsible for the application and admission of students to Aalen University.



7.2 International Relations Office (IRO)

The International Relations Office of Aalen University supports the university in its internationalisation strategy and activities. Prospective international students seeking full-time or exchange studies at the Aalen University could get their study information and information on application process from the IRO.

At the same time, the IRO advises students, professors and staffs of Aalen University on issues related to studies, thesis, language course, postgraduate studies, PhD, visiting professor and research stays in foreign universities, as well as practical semester.

7.3 Library

The library is included as a central facility of Aalen University. It supports not only students, professors, staffs but also anybody else interested in the study courses, applied research and further education. The library's service includes a wide and adequate range of printed and electronic media such as printed books and magazines, e-book-databases and electronic papers. The library offers a work space for focused reading and learning. The librarians are at service for more information, guidance and help.

7.4 CAD/CAM-Zentrum (CAD/CAM-Centre)

The CAD/CAM Centre of Aalen University is a centre for virtual product development. The CAD centre is equipped with different CAD Systems such as CATIA V5, Pro/Engineer and Unigraphics NX. The centre provides support in the educational scheme of Aalen University's students during their university year and also during their thesis with contact person for applied industrial research.

7.5 Career- und Gründercenter (Career and Start-Up Centre)

The Career Centre offers student of Aalen University a variety of seminars and trainings in the field of interdisciplinary competences, such as Soft Skills, Conflict Management, and Business Etiquette. As for the companies, the Career Centre is a contact point to the faculties and students. The companies are able to inform students about vacancies for internships, theses, and trainees, as well as direct job opportunities for graduates.

The Start-Up Centre offers students in technical courses various subjects of entrepreneurship through workshops on business plan development. The students with developed ideas and plans are supported with single coaching in cooperation with the regional economic development and regional banks, providing them with grants and funding advice.

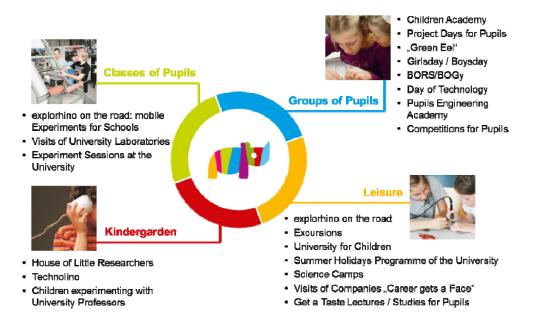


7.6 EDA Centre (Electronic Design Automation Centre)

Electronic Design Automation is the CAD of electronics engineers. This centre at Aalen University was founded in 1989 and concentrated since then on four main branches of EDA: circuit simulation, circuit board design, microcontrollers, and chip design. For these four areas various software systems are available, generally installed on UNIX or Windows work stations. These systems are up to industry standards and always available in their newest versions. In cooperation with different university departments, the EDA Centre offers seminars in each field. In addition to students' education, the EDA Centre serves as a contact partner for firms in the Ostwürttemberg region for problems in circuit design. Small and medium-sized businesses have the chance to access information from EDA and their software. This technology transfer can also be achieved through students' degree thesis conducted and completed in the EDA Centre.

7.7 Explorhino (Kinder - Uni)

Explorhino is a programme for children and teenagers in Aalen to experience the exciting side of science and the technological advancements. This programme supports permanently the education in the region by reaching out to the young ones.



7.8 Grundlagenzentrum

Since November 2011 Aalen University has a new facility. The Foundation Centre was created as a part of the joint programme of the Federal and State Government for better studying conditions and



teaching quality. The task of this centre is to support the teaching at Aalen University, primarily in mathematics and basic engineering/science disciplines and quantitative methods in economics.

This centre was founded to relieve the pressure the students are getting during the transition between school education and university educational system. It is offered for them to support the success of their studies.

7.9 Hochschuldidaktik (University Didactics)

This centre provides an overview of the academic teaching activities and referrals to educational resources at the Aalen University. Available in this centre is some information on past and future academic teaching events (sets of slides of past presentation, information about the LARS-Programme, and links and references to academic teaching topics.

7.10 IT Service

The central IT- Service of Aalen University is responsible for the IT Infrastructure of the university, students and staffs. It supports them in handling problems and issues of information technology and computing infrastructure of the university.

7.11 Medienzentrum (Media Centre)

The Media Centre provides various services beginning from professional film shooting in a modern A/V studio to 3D animation. Different equipment can be used for external and internal projects.

7.12 Physikzentrum (Physics Centre)

In the Physics Centre the fundamentals of physics are conveyed to students in their first semester by means of practical experiments. Numerous experiments are performed in connection with the lectures. For students in advanced semesters, the Physics Centre is available for the completion of degree theses. Experiments are completed in modified forms. Additionally, the Physics Centre possesses a collection of diverse physics equipment, in which the most modern equipment is to be found next to rare instruments from the past.

7.13 Rechenzentrum (Computer Centre)

The Computer Centre at Aalen University is a service and competence centre for the support of teaching, research, and studies. Computer hardware and fundamental software as well as special software of general interest are available. Additionally, the Computer Centre operates the campuswide data network as well as the connection with the web and its accompanying services. The Computer Centre is a member of the Centre for Communication and Information, a nationwide



consortium of university computer centres, as well of the German National Research and Education Network (DFN).

7.14 Sprachenzentrum (Language Centre)

The Language Centre is responsible for language and cultural education for students from all courses of study. Besides general language courses, there is increased interest in technical language offerings. The Language Centre offers a wide spectrum of courses for diverse languages and study requirements.

7.15 ZOT – Zentrum für Optische Technologien (Centre for Optical Technologies)

The Centre for Optical Technologies (ZOT) is a research institution for the development of new deterministic and industrial manufacturing processes for innovate optical components. The Centre for Optical Technologies and its research associates and student assistants are engaged in several application-oriented research projects in collaboration with industrial and university partners.

7.16 Further Facilities and Services of Aalen University

Accommodations

Students of Aalen University can choose either to live in a private residence or in student halls (Jugendwerk Aalen). In the website students can find some advertisement and contacts to search for the residence.

Student Initiatives:

• <u>AStA</u>

Allgemeiner Studierendenausschuss or AStA is a student council in Aalen University. The executives of this council are, therefore, representatives of the students. AStA represents interest of the students both in and out of the University. As a public board of committee, AStA represents the student in both Higher Education Laws and Regulations

• Amateurfunkgruppe Hochschule Aalen

The amateur radio group at the Aalen University is an association of university members and external experts in the field of amateur radio. It exists since summer 1997 and established at first by students, professors and staffs of the university to serve their interest and hobby in amateur radio.



Freie technische Verbindung Hohenstaufen

F.t.V. Hohenstaufen is a vibrant fraternity of Aalen University with competences and traditional background. The establishment of this fraternity goes back to 1963 when the university was a school of electroplating and surface technology in Schwäbisch Gmünd. The purpose of this fraternity is to offer students the opportunities besides the theoretical knowledge, such as social competences and rhetoric competences

UStA

Unabhängiger Studierendenausschuss or UStA is an independent students union at Aalen University. In 2008 UStA has turned to UStA Services Ltd. This company was established by students at the Aalen University to offer better services for students, professors and employees of the university.

UStA is responsible in organizing cultural and sporting events for students, events that support the connection between the students and industry, other projects, services and events to promote education, training and research and most of all, offering students services for a better student life at the Aalen University.

Student Christian Fellowship

Protestant and Catholic Community of Aalen or EKHG Aalen is an ecumenical community. It is open for questions and emphasises tolerance between the members and non-members. Therefore this community is welcoming everyone who is interested in joining no matter what their belief and religion is.

Hausdruckerei

Aalen University has authorized a printing company to work for the university. The office is located in the main building (Beethovenstrasse). The company offers various services including management of copy and printer stations, some binding types, poster printing (A3 Size) and so on. Other services are available by requests (in their main office in the city centre).

Kinderbetreuung an der Hochschule

The nursery Einsteinchen is a support for students, professors and staffs with infants from 8 weeks up to pre-school or kindergarten age. It offers a full-day care for them. The combination between family and study/work is supported by the location of the nursery which is directly next to the university. The qualified nursery teachers are responsible for 10 children. A good relationship between the nursery teacher, parents and child is a foundational and an important part of the educational matter.



8 Mission, Vision and Strategic Plan of Aalen University

Our Mission

Aalen University is the lighthouse of the region in the academic matter in the fields of technology and business. Aalen University provides excellent both theoretical and practical education to the students as a sustainable basis for challenges in their professional life and support them in their personal development.

Aalen University is shaping the future through innovation in research and transfer.

Our culture and values

Responsibly

We take responsibility for the university and create a sustainable society.

Own Initiative

We are entrepreneurial, motivated and open to change.

Togetherness

We create a good working atmosphere based on trust, reliability and fairness. We work together as a team player. Our academic culture is diverse.

Service oriented

We assist our students, internal and external customers.

Vision

Aalen University is, in its fields, one of the three universities in Baden-Württemberg with high quality. The university is, among the University of Applied Sciences in Baden-Württemberg, a leader in applied researches



9 Link to ECTS Module Handbook

School of Chemistry

Bachelor of Science in Chemistry

Master of Science in Analytical and Bio-analytical Chemistry

School of Electronics and Computing Sciences

Bachelor of Engineering in Electronics and Information Technology

Bachelor of Science in Informatics

Bachelor of Science in Informatics – IT- Security

Bachelor of Science in Informatics – Media Computing Science

Bachelor of Science in Informatics – Software Engineering

Bachelor of Science in Informatics- Business Computing Science

Master of Science in Computer Controlled Systems

School of Management and Business Sciences

Bachelor of Arts in Business Studies Small and Medium Enterprises

Bachelor of Arts in Health Management

Bachelor of Arts in International Business Studies

Bachelor of Engineering in Industrial Management

Master of Arts in Management / International Business

Master of Engineering in Industrial Management



School of Mechanical Engineering and Materials Science

Bachelor of Engineering in Mechanical Engineering

Bachelor of Engineering in Plastics Engineering

Bachelor of Engineering in Mechanical Engineering / Production and Management

Bachelor of Engineering in Mechanical Engineering / Business and Management

Bachelor of Engineering in Mechanical Engineering / Product Development and Simulation

Bachelor of Engineering in Surface and Materials Technologies

Bachelor of Engineering in Materialography

Bachelor of Engineering in International Technical Sales Management

Master of Engineering in Applied Surface and Materials Sciences

Master of Science in Polymer Technology

Master of Engineering in Product Development and Production

Master of Science in Advanced Materials and Manufacturing (Master by Research)

School of Optics and Mechatronics

Bachelor of Engineering in Mechatronics

Bachelor of Engineering in Technical Communication

Bachelor of Engineering in Technical Teacher Education

Bachelor of Engineering in Optoelectronics / Laser Technologies

Bachelor of Science in Optometry / Optometry and Audiology

Master of Science in Technical Teacher Education

Master of Science in Photonics



Master of Science in Vision Science and Business - Optometry

10 References

Aalen University Website

(Internet page of Aalen University in German, some features are also available in English)

Aalen University at a Glance

(Presentation of Aalen University in English)

Limes International 7th edition – The Magazine for International Partners, Students & Parents

(Electronic and English version of our university magazine that is published in German for everyone twice a year)

Aalen University Brochure

(English Brochure that shows an overview of Aalen University)

Aalen University Strategy Brochure

(German version of the strategy, vision and mission of Aalen University)

English Taught Lectures Catalogue

(List of Courses or Subjects that are taught in English for the exchange students)

Materials & Processing Technologies

(new English programme from the school of mechanical engineering and materials science for Bachelor-level exchange students)

MSc in Advanced Materials and Manufacturing (Master by Research)

(new Master programme that emphasizes Research in Advanced Materials and Manufacturing)

German Academic Exchange Service - Deutscher Akademischer Austausch Dienst (DAAD)

(The German Academic Exchange Service (DAAD) is the largest funding organisation in the world supporting the international exchange of students and scholars. It is a registered association and its



members are German institutions of higher education and student bodies. It provides not only information for students and university in and outside the country, but also information for everyone who is interested in German's higher educational matter)

<u>Baden-Württemberg Study Guide – Map of the HEIs in Baden-Württemberg</u>

Baden-Württemberg StudyGuide – List of HEIs in Baden-Württemberg

(This is the official site of StudyGuide Baden-Württemberg. It provides information in English not only about studying and researching in Baden-WürtteOberg, but also the life and information about the state itself)





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