Virtuelle Hochschule Bayern (vhb) / Bavarian Virtual University (BVU)

The Virtuelle Hochschule Bayern (vhb) / Bavarian Virtual University (BVU) was established in 2000 as a network organization of the universities and universities of applied sciences of the Free State of Bavaria, one of the 16 German federal states. Its primary goal is to improve studying conditions for the growing number of students who require flexibility both in terms of time and place. In the face of the challenges in the digital summer semester 2020, the BVU proved to be a stable partner of the universities, offered support for professors and lecturers and made it possible for many students to successfully continue their studies by taking courses of BVU. The BVU is a unique model across Europe.

Organization

The BVU network currently encompasses 32 member universities with some 374,000 students. Around 246,000 students are enrolled at the twelve universities in the network and around 118,000 at the universities of applied sciences. Several hundred professors in Bavaria are involved in the BVU either in a teaching capacity or as committee members. The Assembly of Member Universities is the basic governing body of the BVU; it comprises delegates from each member university. On proposal of the Association of the Bavarian Universities and the Association of the Bavarian Universities of Applied Sciences (UAS) the Assembly elects the three members of the Steering Committee and the eight members of the Programme Committee. The Steering Committee develops the strategic guidelines for the BVU. The Programme Committee advises the Steering Committee on all questions related to the course programme and quality management. The committees are supported by the BVU Office in Bamberg.

![Figure 1: vhb Organisational structure](image-url)
Courses – Funding Guidelines – Programme Structure

a) CLASSIC vhb – Blended Learning for Degree Programmes

The BVU portfolio includes approx. 580 online courses across 15 subject groups and there are around 50 additional courses currently in development. The online courses are tailored to and usually integrated into degree programmes at multiple member universities. With its portfolio, the BVU considerably extends the range of courses offered at Bavarian universities. Each course provides students the possibility to earn credit points (ECTS). Interactive teaching and learning is a central aspect of all BVU courses; all participants are supervised by trained e-tutors. Because interaction has such an extraordinary bearing on learning success, the BVU funds the supervision of the participants and the training of the tutors, besides funding the actual development of the courses.

More than 50 % of BVU course participants complete the examination associated with their course. Students who do not complete the examination use the courses as additional drilling, practice, or simply to acquire new knowledge, in order to improve their performance on examinations at their home university.

The academic year 2019 / 2020 saw more than 225,000 course enrolments by 72,590 students. The exchange between all our member universities has proved successful. Approximately 60 % of all course registrations by students are for courses that are not offered by their home university. This positive effect is also true across the different types of higher education institutions: every year thousands of universities of applied sciences (UAS) students take courses offered by universities and thousands of university students take courses offered by UAS.

Figure 2: Development of the absolute number of users in CLASSIC vhb courses
Producing online courses takes time and costs money. That is why the state government, via the BVU, funds the coordinated and demand-oriented development of such courses for use across all higher education institutions in the BVU network. The courses are developed and provided on the basis of funding proposals from member universities. Proposals for new courses must be submitted by a consortium of at least two member universities. The universities in the consortium guarantee that the course will be a required course or a required elective course in their degree programmes and that the credits earned in the course will be accepted as transfer credits. The BVU will also fund preparatory courses (introductory courses, preparatory courses for examinations, etc.) that are not integrated into any set curriculum, on a case-by-case basis. For students at member universities, BVU courses are free of cost; other participants can participate in supervised courses for a fee.

Currently, the BVU offers courses from across 15 subject groups: introductory courses, computer science, economic sciences, engineering, health care / health management, humanities, information systems, key skills, languages, law, medicine / medical science, natural sciences, social work, social sciences and teacher education. See kurse.vhb.org.
b) SMART vhb – Blended Learning for Lectures

With “SMART vhb” the BVU funds and promotes the development of digital learning units that are designed for flexible use in blended learning in individual lectures. Instructors and students from our member universities can use the units. The units can comprise diverse instructional material such as exercises, videos, text elements, or simulations related to a given topic. They are available in a central repository smart.vhb.org. Around 1,200 units are currently accessible, more than 700 are in development.

![SMART vhb repository](image)

Figure 4: SMART vhb repository

c) OPEN vhb – University Knowledge freely accessible for Everyone

Within the framework of the Bayern Digital II initiative of the Bavarian government, the BVU is extending its course catalogue with courses that are open to all interested individuals. OPEN vhb courses make university knowledge freely accessible. Courses that are included in OPEN vhb are not necessarily linked to the academic schedule (semesters). To use OPEN vhb courses, you do not need to be enrolled at a university, nor do you need a university entrance certificate. It is not planned to award credits for OPEN vhb courses, nor will they be supervised. Our member universities are also given the opportunity to engage audiences that are of particular interest to them (e.g. prospective students, students from abroad, refugees/migrants). The course platform open.vhb.org has been open to the public since July 2019. 67 courses are currently available, 38 are being newly developed. More than 50,000 learners from 142 countries have registered so far.

![OPEN vhb Homepage](image)

Figure 5: OPEN vhb Homepage
**Cooperation and Coordination**

The coordination and cooperation managed by the BVU results in an efficient use of public funds. The BVU supports the higher education institutions and strengthens the university landscape in Bavaria. Online courses and so-called blended learning units supplement and complement on-campus study. With assistance from the BVU our member universities make use of distance learning and offer their students more flexibility – both in location and scheduling.

**Technology**

As much as possible, the current infrastructure at the member universities is used. The standard courses with tutorial supervision are hosted on the member universities’ respective servers. In order to make accessing the courses as simple as possible, a Single-Sign-On access system based on Shibboleth is used in cooperation with the member universities; this means students can log in to the BVU portal and the campus Learning Management Systems (LMS) using their personal university login information. The course catalogue and participant registration, as well as the learning management systems for courses in OPEN vhb and the blended learning units in SMART vhb, are centrally managed by the BVU Office.

**Quality Management**

Quality management is especially valued at the BVU. All online courses are evaluated by the participants. In addition, every standard online course is evaluated on its content, use of media in instructional design and the technological implementation by two experts from outside of Bavaria; these peer evaluations take place regularly—once after the first two semesters and, thereafter, after five sessions of a given course. Evaluations by participants and external experts of the courses in OPEN vhb are also implemented. If improvements or revisions to the courses are recommended, the BVU will fund such measures.

![Quality management in the entire process](image)

More information is available on our website at [www.vhb.org](http://www.vhb.org)

(As of 25 February 2021)