

**Confederation of German Employers' Associations (BDA)**

# **Memorandum**

**on**

## **the tiered study structure**

**(bachelor/master)**

**September 2003**

## **Employers endorse consistent implementation of the new study structure**

German business has long called for a **modernisation** of university education in Germany, following the guiding principles of competition and autonomy. This must comprise a root-and-branch reform of course structures. The main aims are:

- a university education geared to **practical realities** which leads to the acquisition of generally applicable skills as well as a professional discipline;
- a shorter **effective study period** so that graduates become more competitive on the national and international labour market;
- greater **internationalisation** of university education entailing periods spent abroad as well as course modules in foreign languages.

The “Bologna process” initiated jointly by universities and policy-makers with the move to the international standard of bachelor and master degrees offers the opportunity to achieve these objectives in Germany. Employers in Germany are in favour of **blanket introduction** of these degrees and will adjust to the new qualifications when recruiting university graduates. In the medium to long term, the aim is to bring to an end to co-existence of the current German system of diplomas or state examinations and the new qualifications, leaving only bachelor and master degrees.

## **Alignment on employability indispensable**

The main object of university study is to provide future graduates with optimal preparation for **subsequent professional activity** in the private sector, administration or academia. In the framework of the graduated study structure which has long been normal internationally but is largely new for university education in Germany, this means:

- The bachelor should be established in Germany as the first **standard degree** in German universities conferring eligibility for employment. The business community will work to give bachelor graduates an attractive start on the labour market. In this context, it should be borne in mind that the work prospects of bachelor graduates vary depending on the subject studied. An essential precondition for a bachelor degree giving a realistic chance of entry into the labour market is a university education in the relevant bachelor course geared to consistent transmission of basic and core skills that confer employability.
- The master course should give students a single-subject or cross-disciplinary **consolidation and extension** of their academic qualifications. The primary aim should be to prepare them for professional specialisations. This also includes the possibility of incorporating new interdisciplinary combinations. Universities should decide to accept applicants on the basis of a selection procedure; politically imposed quotas for numbers of graduate students should be rejected. Alongside consecutive courses, it should be possible for students to embark on a master degree after several years of employment. Universities should develop courses that enable this target group to take such master courses in a manner which is aligned as closely as possible on career development. Models which allow short-term job breaks, e.g. in the form of sabbatical leave, are suitable for this purpose.
- A change in the study structure is not enough on its own to meet the employability demands on first and higher degrees. The **study content** of bachelor and master courses also needs to be redesigned. To that end, intensive cooperation between

universities and the business community is indispensable. A re-labelling of old courses is not acceptable and will permanently damage acceptance of the new degrees.

- The restructuring of university education presupposes that universities and businesses practice a **culture of ongoing education**. Bachelor graduates should be placed in customised trainee programmes in order to develop and gain further skills in line with the specific operational challenges faced by and requirements of companies. Master courses give suitable candidates the opportunity to improve their professional promotion and development prospects, including after several years in a work environment.

### **Redrawn relationship between specialisation-related and cross-disciplinary higher education goals**

When the study content of the new courses is being designed, appropriate consideration must be given to the proven value of cross-disciplinary **core skills**. In this context, the essential task of universities is primarily to provide an academic education which addresses, forms and challenges a student's entire personality. Both specialisation-related and cross-disciplinary higher education goals have to be pursued, and their achievement attested in performance assessments:

- **Specialisation-related** course offers and learning results must have an object that can be described primarily in terms of a given discipline, and to which a range of different professional activities can be assigned in addition to the "classical" core syllabus. The specialisation-related skills should be described in consultation with the relevant sectoral and professional associations.  
*In the company*, specialisation-related skills and qualifications ensure the necessary knowledge and capacity for further development as a basic condition for achieving business goals.
- **Cross-disciplinary** course offers and learning results should promote an individual's mental organisation, capacity for work, ability to order his own work effectively, approach to team work and the capability to pass on knowledge in real social and business situations. In this regard, the intellectual, emotional and social components of the employee's personality occupy the foreground.  
*In the company*, cross-disciplinary skills ensure social interaction, successful deployment of knowledge and concepts as well as personal development potential:
  - The capacity for **social interaction** presupposes those skills which enable an individual to interact sensibly, in a targeted fashion and successfully with others:
    - communication skills (ability to listen, speaking and writing skills, also in English and where possible a second foreign language);
    - team spirit;
    - social acceptance;
    - willingness and ability to manage (integrity, motivation, delegation, moderation, presentation);
    - self-confidence;
    - intercultural skills.

- Successful **deployment** of knowledge and concepts depends on the following factors:
  - analytical skills;
  - methodological skills;
  - system skills, ability to grasp essential points, a knowledge of the limits of definition and application, i.e. the ability to reflect on preconceptions and axiomatic principles.
- The following are of particular importance for an employee's **development potential**:
  - linguistic and general intellectual abilities;
  - creativity and flexibility in application of knowledge, experience and methods;
  - investigation and work techniques (target management, ability to structure work packages, project management);
  - ability to reflect on one's own actions and behaviour;
  - willingness to learn on a continuous basis.

Specialisation-related and cross-disciplinary areas **overlap, complement each other** and are **mutually dependent**: for instance, intellectual core skills form part of the ability to innovate within the specialisation. In addition to subject knowledge, the specialisation-related components also require cross-disciplinary skills, inter alia in order to allow effective assimilation (methodological skills, analytical skills) and classification (system skills, ability to grasp essential points) of new material; also needed is the ability to integrate in work-sharing processes (team spirit) and generation of social acceptance for deployment of knowledge and concepts. On the other side, cross-disciplinary skills require exemplary explanation and implementation of specific activities based on objective knowledge. This interdependence between the two areas should be taken consistently into account in learning modules.

### **Work-oriented bachelor degree**

A work-oriented bachelor degree is not possible without a **basic education in a specific discipline** and the associated acquisition of subject-related knowledge. Cross-disciplinary skills must be acquired in parallel and practised in real situations. Hence, the core qualifications of a discipline must be ensured in the framework of the relevant bachelor course. By contrast, it is not feasible to separate out specialist knowledge in a compact bachelor course which places priority on sound acquisition of the basic knowledge and skills of a discipline. Nevertheless, motivated students with better than average talents should have the possibility to move on to a structured doctoral studies-programme immediately after gaining a bachelor degree.

- A bachelor who has specialised in economics should be familiar with the various functions of a company (R&D, purchasing, production, marketing, distribution, finance, accounting, controlling, personnel, general administration, etc.) and understand how they interrelate. In addition, he should be familiar with the basic elements and concepts of macro-economics and be able to work with them. This profile should be complemented by the principles of information processing and the relevant jurisprudence (social and commercial law).
- A bachelor who has specialised in engineering should have mastered the principles of mathematics and physics, technical principles, basic information technology skills (information technology, informatics, microcomputer technology, computer organisation, software technology) as well as a basic knowledge of a technical application area and a methodology for solving engineering problems. This profile should be supplemented by

elements of management accounting and a knowledge of quality, environmental and energy management.

- A bachelor who has specialised in educational science should be familiar with and understand the typical structures, functions, sequences and steering processes in the different fields of employment, for instance in a company. Alongside general principles of higher education sciences should be knowledge relating to specific fields of employment, for instance vocational and economic education. In addition, he must be familiar with and capable of applying the most important legal principles, financing concepts, methodological principles (e.g. for vocational training). The profile should be complemented by the acquisition of application-oriented methods for higher education and social research.

That said, from the perspective of employers, a bachelor degree only promises success on the labour market if specialist and cross-disciplinary higher education goals (social interaction, successful deployment of knowledge and concepts, individual development potential) are pursued and achieved on an equal footing.

### **Allow differentiated structures for master courses**

For the master phase, employers are in favour of a differentiation by targeted concepts for **education geared to specific fields of employment**. These can be outlined as follows:

- academic in the narrow sense, i.e. as a preparation for doctoral studies and academic careers;
- acquisition of in-depth knowledge and skills in a specialist area and closely associated disciplines;
- development of related and new areas of competence;
- extension of master competences already acquired in a second master course.

### **Bachelor and master degrees in traditional universities and universities of applied science**

Development of a student's learning capacity through establishment of a solid basis for lifelong learning is of central importance for all bachelor courses. Only then will the working graduate be able to come to grips successfully with the challenges of ongoing training in order to maintain his employability in a knowledge-based world of work and society. This approach must be consistently followed in master courses. This applies **equally** for universities of applied science and traditional universities. The individual strengths of teaching in traditional universities and universities of applied science should be exploited to build profiles and developed further in competition.

### **No standardisation of course offers**

Business regards standardisation of course curricula as the wrong approach, since this would impede **course innovations**. A competitive higher education system in line with employers' wishes is necessarily one in which higher education institutions build up their own profiles with differentiated study offers. Harmonisation of courses would run counter to this and fails to meet the expectations of an increasingly differentiated labour market. Quality standards can be ensured without restrictive detailed curriculum requirements.

Employers also reject standardisation of **study periods**. The higher education institution should decide what study period is appropriate, based on the shape and profile of the course. The legislator gives them discretion to offer bachelor courses lasting three up to four years and master courses lasting one up to two years. Employers also believe that bachelor and master courses taken consecutively should together not exceed five years.

The available flexibility should be used primarily to implement necessary **practical components** in individual courses.

### **Make acquired skills transparent**

Business expects higher education institutions to provide a high level of transparency regarding study requirements and content as well as the qualifications and skills acquired during a course. Transparency can be achieved through **publication** of study offers.

This also corresponds to the route taken in the Bologna process: transparency is served by the instruments it proposes including the **credit-point system (ECTS)** and the diploma supplement; both have to be introduced and made obligatory.

A precondition for successful application of ECTS is consistent **modularity** of study courses. Modularity means that courses are designed on the basis of qualification objectives. Each learning event must be defined with respect to its value for and contribution to achieving these objectives. Related to this, there must be a move away from term-time study hours as a central planning parameter. This should be replaced by a student's average workload. ECTS points should be taken into account in the design of learning events as an indicator of the associated working time. The learning objectives which should be achieved with a module are linked to the estimated time for its completion. For accreditation, it must be demonstrated conclusively that the course has been constructed in suitable and targeted modules, and is provided with a consistent points system.

Linked to modularity is the issue of where learning takes place and which skills and achievements can and should be credited for an higher education course against production of the necessary documentation. To this end, an examination should be carried out to establish which qualifications and skills gained in vocational and other professional training can be taken into account. Employers are in favour of greater **two-way flows** between the various types of education.

### **Develop quality assurance through accreditation**

It is important for employers that **quality transparency** becomes self-evident thanks to ECTS and the diploma supplement, alongside greater transparency in courses and the student's achievements. For this reason, business argues in favour of the principle of accreditation in which business practitioners in companies are involved as well as professors. The accreditation system needs to be further developed so that it can become a true compass for companies and potential students in the European higher education area. Successful participation in a reliable and meaningful accreditation system must represent a quality seal:

- **Quality criteria** are still not defined clearly enough and are therefore difficult to compare. Hence, decisions by assessors lack transparency and meaning. Jointly with the agencies and higher education institutions, business needs to render the list of course requirements operational, i.e. valid criteria for general quality requirements need to be drawn up. This offers business the opportunity to provide stronger input for work-related

aspects in the design of courses. In the necessary second step, it must then be ensured that the overriding quality criteria are applied uniformly by all agencies.

- The agencies should publish not only lists of accredited courses but also their programme profile and **quality profile**. This must make it clear to what extent a course has met which criteria as a precondition for accreditation. The international dimension of higher education makes it necessary that the accreditation system is shaped as a Europe-wide quality assurance instrument, and that the representatives of academia and companies involved in the accreditation procedure help to develop the corresponding European quality profiles against whose criteria every new course must be measured. In this way, a differentiated evaluation of accredited courses would be created, which would further strengthen the compass function of the agencies.
- **Business representatives** should have an appropriate presence (perhaps as much as one third) in accreditation bodies and agencies (e.g. in assessor committees and groups), in order to contribute with their expertise to ensuring that the criteria of “practical relevance” and “employability” are given greater consideration in the conceptual design of courses. This will require a stronger involvement on the part of companies.
- The framework conditions under which courses are currently accredited should be optimised with a view to the application and practical **manageability** of this quality assurance instrument. This means, inter alia, that evaluation as a task of higher education institutions and accreditation as an external form of quality assurance need to be better coordinated in conceptual, institutional and procedural terms. Evaluation is the necessary instrument for ongoing quality management and quality development in higher education institutions. The accreditation system can serve to verify whether the institution and discipline are ensuring internal quality management on a continuous basis.

### Avoid a flood of titles

Inflation in the number of titles and degrees runs counter to the need for transparency. Employers are therefore in favour of limiting the **number of degrees** for bachelor and master courses. The diploma supplement should be used to differentiate by profile type or additional achievements. The degrees associated with courses should be limited to the following basic types:

- For the fields of language and culture; sport and associated sciences; social sciences; educational sciences; aesthetics:  
*Bachelor/Master of Arts*
- For the fields of mathematics and natural sciences; human medicine; veterinary medicine; agriculture, forestry and food sciences:  
*Bachelor/Master of Science*
- For the field of engineering, depending on course content:  
*Bachelor/Master of Science or Bachelor/Master of Engineering*
- For the field of economic sciences, depending on course content:  
*Bachelor/Master of Arts or Bachelor/Master of Science*  
It should be possible to award the internationally recognised *Master of Business Administration (MBA)* for advanced courses.
- For the field of legal sciences:  
*Bachelor/Master of Laws*

- For the field of teaching and education:  
*Bachelor/Master of Education*
- For the fields of art and music:  
*Bachelor/Master of Fine Arts*

In addition, business calls for the degrees of bachelor and master to be awarded exclusively in the framework of **accredited study courses**, taking account of the capacities of accreditation agencies.

### **Job-related remuneration for bachelor and master graduates**

The remuneration and grade of bachelor and master graduates should be based on an **appraisal** of the position taken and the skills and abilities it requires.

### **Cooperation offer**

The business community is willing to play an active part in the process of reforming higher education. Employers offer higher education institutions their **support** for the introduction of new courses. This will allow early consideration of the aspects of the work-relevance and transparency of qualifications. The same applies for quality assurance in higher education institutions.

Further information:

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