



Furniture Construction and Furniture Quality Control

This MRU is located in the research laboratories for furniture construction and furniture quality control in the Faculty of Wood Engineering of the University of Applied Sciences in Rosenheim, Germany. The production and development of furniture is subject to the changing economic climate worldwide. There are two main sectors within the furniture industry: The low budget sector, which is essentially offered by countries with low wages and continues to offer mass products in large quantities and little variation. The production environment of design and quality furniture requires a good infrastructure, a high level of training and flexible logistics, which can operate at short notice.

The second sector in particular has to meet high standards in terms of quality, which have to be checked and ensured using appropriate tests and testing procedures. Because of the constantly varying designs of functional parts and hardware, a flexible test-environment is required for this part of the market. Even in the quality sector of the market there are high standards in terms of cost efficiency which have to be met. This applies to both production and quality control.

The principles of the product life cycle together with the overall economic evaluation form the foundation for the construction and development of furniture. Another essential feature of modern furniture design is a functional and design-oriented mixture of materials, in which all materials are used in an appropriate way. Recent trends show an increased use of lightweight construction materials with the purpose of facilitating transport and handling as well as a more energy efficient production and logistics solution.

Course contents

The studies are practically focused and are individually structured depending on your aims and interests. You will acquire in-depth knowledge of the systematic development and construction of furniture as the basis for successful product development. Furthermore, you will extend your expertise in the area of quality control of furniture in both practice and theory as well as in the development of testing methods.





Within the Furniture Construction and Furniture Quality Control MRU you will be able to develop your knowledge in one or several of the following skill sets:

Furniture Construction and Development:

Using the product life cycle as our basis, we train and teach a variety of ways of checking both the development and the construction processes. In order to achieve this, we introduce students to a variety of teambuilding and leadership strategies as well as process management methods. In this manner, you will become skilled in the process of systematic furniture development. Existing methods and the tools of construction technology and development methodology will be applied to work environment and infrastructure of furniture companies in order to revise processes. The essential aim is to minimise the risk that a new product will be placed on the market and does not meet expected demand. At the same time, you will learn to minimise product development costs and product development times due to a shorter product life on the market. The development of furniture is a technical and yet partly emotional process which will always be guided by a target-group oriented design. For this reason an in-depth approach to product management and design management will be encouraged.

As a specialist in Furniture Construction and Furniture Development you will use your skills and expertise in the entire process from market research right up to the retail and distribution of furniture. You will be familiar with the complex issues surrounding the development of furniture. With this ability, you will be able to shape and enhance the prospects of your company and will ensure its sound economic basis.

Furniture Quality Control

Research activity will be based on current issues in business practice, in particular functionality, strength and durability tests of furniture and their components. New constructions, especially those using innovative materials and hardware, will be tested according to up to date testing criteria and enhanced, so that they meet demands in terms of safety and use. Testing methods need to be optimised in terms of their actual relevance, practicability and feasibility. These different aspects require close links to established furniture producers. The research laboratory cooperates with other test centres such as the Landesgewerbeanstalt Bayern (LGA) and numerous other international partners. Practical skills will be supplemented with lectures in areas such as «furniture statics and fixings technology» or «product control of furniture». For complex fittings and complex weight stresses the use of Finite Elements Method is taught and practiced. With these skills in the area of quality control of furniture and furniture components you will enhance your knowledge of furniture development, construction, quality control and quality standards.

As a specialist in Furniture Quality Control you will be able to use your expertise in various test centres and institutes and contribute to ensuring quality standards and the development of new standards in the area of furniture quality control.

Contact

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