



## The industrial semester - Information for companies

### General remarks

#### The German "Fachhochschule"

In Germany's Higher education system the Fachhochschulen are the second largest group of Higher Education institutes besides the universities. There are more than 130 Fachhochschulen in Germany. They offer a wide variety of subjects such as Design, Engineering, Social-Sector Studies or Business. The main characteristics of Fachhochschulen are:

- close links between academic work and practical work in both instruction and studies,
- shorter periods of study than other types of Higher Education Institutes,
- applied research and development.

Professors hired by Fachhochschulen must have - as a rule - a doctor's degree and at least five years of professional experience. Students must have completed at least 12 years of schooling. They need not necessarily have the general higher education entrance qualification (Abitur). After the final examination, the students get a degree.

#### The industrial semester

The industrial semester is very different from practical work, which would be completed before the course of study. Students in their industrial semester have completed about half of their studies and passed an intermediate exam. They are able to solve tasks rather independently. These tasks should be suited to the basic and specialised knowledge they possess at this stage of their studies.

Places for practicals during the semester can be located in companies, administrative units and other institutes where suitable tasks have to be taken care of.

### Duration

20 weeks (5day week, holidays not included)

### Start

March or October, other arrangements are possible if the Fachhochschule agrees.

### Insurance

Students in the industrial semester remain members of the Fachhochschule. Due to this, they are insured against illness or accidents. You are recommended to have liability insurance.

### Study courses concerned

- Business engineering
- Computer science with specialisation in
  - media
  - technology
  - economics
  - general computer science

- Electrical engineering with specialisation in electronics and automation
  
- Mechanical engineering with specialisation in
  - plastics processing
  - metal processing
  - construction / design
  - industrial management

**Advantages for the company**

The students will be able to complete tasks which, due to lack of time or by virtue of capacity shortfalls, cannot be carried out. During the industrial semester the companies will have a first-rate opportunity of getting to know potential future employees and their capabilities. This will be of help if a student were to be employed later. It will help shorten the probationary period and you would avoid hiring the wrong person.

The students can constitute a useful link to the Fachhochschule and its teaching staff through which a permanent transfer of information can be guaranteed (e.g. theses, continuation of the students-in-industry plan, feedback with professors).

**Examples of tasks solved**

1. Selection of a new manufacturing technique for the production of certain items (assessment of the present position: time, costs, quality required, development of a new method: market analysis, calculation of costs, selection of method)
2. Analysis of trouble spots in the companies (assessment of the present position, propositions for improvements)
3. Novel construction or standardization of old production programmes retaining as many components as possible.
4. Programming or adapting programmes to the specific needs of a company.

**Requirements for the company**

The company should

- give students a specific task to work on that corresponds to their level of knowledge,
- allocate someone to oversee the student at the place of work,
- pay adequate wages,
- give a certificate stating the content, duration and success of the industrial semester.

**Requirements for the student**

The students

- will be obliged to respect corporate confidentiality, a stipulation which can also be laid down in the working contract;
- must fulfill the requirements of the company as far as working hours and other matters are concerned.

**For further information please contact:**

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**N.B.:** THERE HAS BEEN A POSITIVE RESONANCE IN GERMANY AND ABROAD REGARDING THE WORK OF STUDENTS IN THE INDUSTRIAL SEMESTER AND THE COMPANIES FEEL THAT THE EFFORT HAS BEEN WORTH IT.