

Practicing Engineers

Employer Questionnaire

Dear Sir, dear Madam,

for the first time, the Department of Z of the University XY is conducting a survey on the professional whereabouts and the employment of engineers of the University of XY. For its future planning, the Department of Z would like to take into account the experience and opinions of employers.

We ask you, therefore, to please contribute to the success of this survey by your participation. Thank you very much for your support.

(Signature of the Dean)

Dean of the Department of Z of the University XY

Dear Sir, dear Madam,

As head of the research group conducting the survey of employers in 1992, I also may request your participation in the survey. The research group consists of collaborators of the Department of Z of the University of XY.

As you will notice, the questionnaire mainly deals with your requirements concerning the qualifications of engineers and the kind of professional tasks of engineers in your company/organization. We are very interested in details about offers concerning the professional further education of your engineers, and in your opinions, experience, and expectations in order to gain indicators for the improvement of the university education.

We assure you that your answers provided in this questionnaire will only be used within the framework of this survey. In descriptions of results of this survey, it will not be possible to identify any company/organization.

All information you provide will be handled in strict confidence.

The results of this survey will be published. Should you be interested in the results, we would be glad to send you an overview of the most important ones.

Please, return the completed questionnaire as soon as possible to the address below.

Thank you very much for your kind support.

Name and address of the head of the project

NOTES ON THE COMPLETION OF THE QUESTIONNAIRE

If possible, please answer each of the following questions.

If some of the questions are not applicable to your company/organization, please go on to the question identified by an arrow (e.g. → GO TO QUESTION 39).

Most of the questions can be answered by ticking boxes. In some cases you will be asked to write down numbers () and for some questions space is left (.....) to write down the answer.

For each topic we indicate whether the questions should be answered by the Head of the Personnel Department or by the Head of the Technical Department in which engineers, especially graduates of the University of XY, are working.

1. CHARACTERISTICS OF THE EMPLOYING ORGANIZATION (Personnel department)

May we first ask you to provide some information concerning the company/organization

1 Is the company/organization you are working for part of a (bigger) company/organization?

- 1 Yes, it is the head office/central unit of a company/organization
 2 Yes, it is a branch of the company/organization

3 No → PLEASE GO TO QUESTION 3

2 How many employees work for the branch of the company/organization you are working for?

approx. Employees

3 How many people are employed by the whole company/ organization?

approx. People

If you are working for a branch of a company/organization, please answer all the following questions in respect of this branch only.

4 Please specify the field in which the company/organization can be best classified. Please tick one item only.

Educational Institutions

- 01 School
 02 University
 03 Research Institution

Agriculture/Mining/Energy/Water

- 04 Agriculture and forestry, fishing
 05 Mining
 06 Electricity supply and other energy industry
 07 Water supply and water industry

Processing Trade/Industry

- 08 Chemistry, mineral oil manufacturing
 09 Synthetics, rubber, asbestos manufacturing
 10 Stone, earth, fine ceramics, glass (production and manufacturing)
 11 Iron and metal production and manufacturing
 12 Mechanical engineering, automotive engineering, steel erection and tank construction
 13 Electrical engineering

- 14 Precision engineering, optics, toys, and jewellery
 15 Wood, paper and printing industry
 16 Textile, leather and clothing industry
 17 Food and semi-luxury food industry
 18 Building and construction trade
- Services**
- 19 Trade (wholesale and retail trade)
 20 Transport (carriage, storage, shipping, railway, etc.)
 21 Communications (post, broadcasting, television, etc.)
 22 Health system
 23 Banking
 24 Insurance
 25 Legal and commercial consultancy (personnel consultants)
 26 Engineering consultants (also architects)
 27 Other services (e.g. journalism, publishing, housing/real estate, tourism)
- Associations and Organizations (non profit-oriented)**
- 28 Professional organizations and business associations, parties
 29 Church organizations
 30 International organizations
 31 **General Public Administration** (regional administrative body, state, county, and local authorities) *Please tick this category only if you cannot assign yourself to any other category*
 32 Other:
(please specify)

5 To which of the following sectors does the company/organization belong?
Please tick one item only

- 1 Private sector (private economic organization/private service industry)
- 2 Public enterprise/parastatal/
- 3 Public administration/government
- 4 Other:
(please specify)

6 How many engineers are employed in the company/organization?

- approx. Engineers altogether
of these
- approx. female Engineers
- approx. Engineers of the University XY

7 If you do not employ any engineers from the University of XY: what are the decisive reasons for this?

.....
.....
.....

8 How many technicians and skilled workers are employed in the company/organization?

- approx. technicians (FTC-Diploma)
- approx. skilled workers

2. RECRUITMENT PROCEDURES AND CRITERIA (Personnel department)

Please indicate the way in which you select your ENGINEERS in recruitment procedures and what experience you have gained.

9 What kind of procedures does the company/organization use to recruit engineers? Multiple reply possible

- Advertisements of vacancies in newspapers (daily papers, special periodicals, etc.)
- Internal advertisements of vacancies
- Direct application of graduates
- Career advisory agency at the University XY
- Other contacts to the University of XY
- Personal contacts to graduates
- Manpower allocation
- Public work administration (public placement services, manpower allocation system, etc.)
- Private employment agencies
- Binding students by scholarships
- Other:
(please specify)

10 Does the company/organization support the recruitment of female engineers?

- 1 Yes, by:
(please specify)
- 2 No

11 How important in general are the following aspects for the recruitment of engineers? Please indicate the importance of each of the following aspects with the help of the 5-grade scale.

- | very
impor-
tant | 1 | 2 | 3 | 4 | 5 | not at
all
important |
|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Field of study |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Main focus of subject area/specialization |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Subject of the examination |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Grades of examinations at the university |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Practical experience acquired during course of study |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Practical experience acquired previous to course of study |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reputation of candidate's university |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reputation of the department |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Experience abroad |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Recommendations/references from third persons |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Results of recruitment tests |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Behaviour during interview |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Personality |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Candidate's world view/religion |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Other:
(please specify) |

3. TRAINING PERIOD (Personnel department)

In general, subsequent to university studies a training period is inevitable in order to acquire all the necessary knowledge and skills for the specific tasks required in the new job. The following questions aim at the duration and concept of the training period in the company/organization.

12 In your opinion, how long does it take before newly employed engineers who have just finished their university studies are able to carry out professional tasks properly?

approx. months for **engineers** in general

approx. months for **engineers** of the
University XY

13 If the times required by the two groups of graduates are different, which - in your opinion - are the decisive reasons for this?

.....
.....

14 As a rule, how would you describe the training period of engineers in the company/organization? Please tick one item only

- 1 Immediate start with normal tasks without any support
- 2 Advice/help from experienced colleagues
- 3 Advice/help from superiors also
- 4 Participation in an extensive formal trainee programme/training course
- 5 Other:
(please specify)

15 What are the different essentials of the training period? Multiple reply possible

- Getting to know different departments
- Training periods inside the company/organization
- Training periods in external education institutions
- Other:
(please specify)

16 What kind of knowledge and abilities are usually acquired during the training period? Multiple reply possible

- Knowledge of the organizational structure of the enterprise or of single sections
- Workplace-oriented technical knowledge
- Application-oriented EDP-knowledge
- Knowledge/capability in the field of personnel management
- Knowledge/capability in the field of financial management
- Skills in dealing with other persons (sales seminars, courses for group dynamics)
- Other:
(please specify)

17 Are engineers prepared for the undertaking of future management posts when they start to work in the company/organization?

- 1 Yes
- 2 No

4. FURTHER PROFESSIONAL TRAINING *(Personnel department)*

The questions in this sector deal with the contents, structures, and basic conditions of further professional training offered in the company/organization.

18 Does the company/organization offer engineers any internal or external possibilities for further professional training?

- 1 Yes
- 2 No

19 Which topics/subject areas are concerned? Please indicate also whether (a) the courses of further professional training were offered by the company/organization itself or by another organization (employers' federation, trade organizations, universities, etc.); (b) how many courses are offered annually on average and (c) how long do they last?

Company/ organization itself	Supplier Other organiza- tions	courses annually	Number of duration of course units (in days)	Average
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	<p>Topics/Subject areas</p> <p>Workplace-oriented technical knowledge</p> <p>EDP application</p> <p>Personnel management</p> <p>Preparation for the undertaking of management tasks</p> <p>Financial management</p> <p>Dealing with customers/clients (sales seminars, courses in group dynamics, etc.)</p> <p>Other courses in the field of personality development (creativity training, resolution of conflicts, etc.)</p> <p>Other:</p>
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	
<input type="checkbox"/>	<input type="checkbox"/>	_ _	_ _	

20 Are possibilities for further professional training abroad offered to engineers by the company/organization (courses, training on the job, etc.)?

- 1 Yes
- 2 No

22 If further professional training for engineers is offered by external (education)institutions, to what extent are costs paid by the company/organization (attendance fees, accommodation, travelling costs)?

completely					not at all
1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

21 To what extent does the company/organization support the participation of engineers in further professional training by releasing them from company-specific tasks?

to a very high degree					not at all
1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

23 Does the company/organization offer grants to engineers for courses of further study ending with an academic degree (secondary studies, research studies, PhD)?

- 1 Yes
- 2 No

5. TASKS OF ENGINEERS AND QUALIFICATION REQUIREMENTS (Technical department(s))

5.1 What is the main occupation and the main field of activity for **engineers** in the company/organization? Please tick one item of "major activity" and, if necessary, further items of "additional activities".

	Major activity	Additional activities	
01	<input type="checkbox"/>	<input type="checkbox"/>	Settlement/preparation of accounts
02	<input type="checkbox"/>	<input type="checkbox"/>	Supervision of production facilities/maintenance
03	<input type="checkbox"/>	<input type="checkbox"/>	Training
04	<input type="checkbox"/>	<input type="checkbox"/>	Export
05	<input type="checkbox"/>	<input type="checkbox"/>	Supervision of construction sites
06	<input type="checkbox"/>	<input type="checkbox"/>	Preparation of construction sites/construction/super-ion of visconstruction
07	<input type="checkbox"/>	<input type="checkbox"/>	Advisory services/consulting
08	<input type="checkbox"/>	<input type="checkbox"/>	Maintenance and repair of production facilities
09	<input type="checkbox"/>	<input type="checkbox"/>	Controlling
10	<input type="checkbox"/>	<input type="checkbox"/>	Data processing
11	<input type="checkbox"/>	<input type="checkbox"/>	Development/experiments
12	<input type="checkbox"/>	<input type="checkbox"/>	Production
13	<input type="checkbox"/>	<input type="checkbox"/>	Preparation of production
14	<input type="checkbox"/>	<input type="checkbox"/>	Finances
15	<input type="checkbox"/>	<input type="checkbox"/>	Research and development
16	<input type="checkbox"/>	<input type="checkbox"/>	Research/science
17	<input type="checkbox"/>	<input type="checkbox"/>	Estimating/costing
18	<input type="checkbox"/>	<input type="checkbox"/>	Construction
19	<input type="checkbox"/>	<input type="checkbox"/>	Construction/design
20	<input type="checkbox"/>	<input type="checkbox"/>	Management
21	<input type="checkbox"/>	<input type="checkbox"/>	Marketing
22	<input type="checkbox"/>	<input type="checkbox"/>	Market research
23	<input type="checkbox"/>	<input type="checkbox"/>	Materials management
24	<input type="checkbox"/>	<input type="checkbox"/>	Measurement and testing technology
25	<input type="checkbox"/>	<input type="checkbox"/>	Installation/commissioning
26	<input type="checkbox"/>	<input type="checkbox"/>	Standardization and licensing
27	<input type="checkbox"/>	<input type="checkbox"/>	Personnel affairs
28	<input type="checkbox"/>	<input type="checkbox"/>	Planning of functions/use of buildings/plants
29	<input type="checkbox"/>	<input type="checkbox"/>	Planning and organization
30	<input type="checkbox"/>	<input type="checkbox"/>	Project management
31	<input type="checkbox"/>	<input type="checkbox"/>	Accountancy
32	<input type="checkbox"/>	<input type="checkbox"/>	Security engineering
33	<input type="checkbox"/>	<input type="checkbox"/>	Tax affairs
34	<input type="checkbox"/>	<input type="checkbox"/>	System analysis
35	<input type="checkbox"/>	<input type="checkbox"/>	Project execution
36	<input type="checkbox"/>	<input type="checkbox"/>	Environmental engineering
37	<input type="checkbox"/>	<input type="checkbox"/>	Processing development
38	<input type="checkbox"/>	<input type="checkbox"/>	Sales management
88	<input type="checkbox"/>	<input type="checkbox"/>	Other:

25 What is the main occupation and the main field of activity of **engineers** from the University XY in the company/organization? Please enter the corresponding number(s) from question 24. If no engineers from the are employed or have been employed → PLEASE GO TO QUESTION 26

Main field of activity:

Further fields of activity:

26 Do **engineers** in the company/organization take on tasks which could be performed by technicians or skilled workers?

- 1 Yes
- 2 No → PLEASE GO TO QUESTION 28

27 If **engineers** in the company/organization have to take on professionally untypical tasks, what are the decisive reasons for this? Multiple reply possible

- There is a lack of **technicians/skilled workers**
- Engineers** are working in jobs which are usually occupied by people without a university degree
- Engineers** are given these tasks during their training period only in order to enlarge their practical experience
- Engineers** are given these tasks outside their training period also in order to train other persons in these fields
- Other:
(please specify)

The following questions concern qualifications required by the company/organization of the employed engineers and the assessment of qualifications of engineers from the University of XY

28 To what extent are engineers required to have knowledge and skills in the following fields?

to a		not			
very high		at all			
extent					
1	2	3	4	5	
Technical knowledge					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mathematics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Natural sciences (physics, chemistry), material technology
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ecology and conservation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Theoretical basics of engineering sciences (technical mechanics, thermodynamics, structural engineering, electrical engineering, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Operation, measurement, and control technology
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Applied technical fields (technical sets, machine systems, installations, connections)
Knowledge of methods					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	System analysis and optimization
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Planning, design, calculation, and construction (product and process-oriented)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Experimental and practical work
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EDP applications (CAD, CIM, etc.)
Knowledge of non-technical fields					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Social sciences (psychology, sociology, politics)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Economics (finance, costing, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Law (elements relevant to discipline/subject)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Knowledge of the English language

29 To what extent are engineers confronted with the following requirements in the company/organization?

to a		not			
very high		at all			
extent					
1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Willingness to learn
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to solve problems
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to reflect upon one's own conduct
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to express oneself in writing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unconventional thinking
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Willingness to perform/commitment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to coordinate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to improvise
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reliability
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to work under pressure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Independence
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sense of responsibility
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Innovativeness
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Creativity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Economically efficient thinking
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determination
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loyalty to the institution and its objectives
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Persistence
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to cooperate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ability to assert oneself
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Self-confidence
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adaptability
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Empathy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Leadership qualities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Initiative

30 How do you assess the knowledge and ability of engineers from the University XY in the following fields? If at present you do not employ or if you have not employed any engineers from the University XY → PLEASE GO TO QUESTION 33.

very good very bad
1 2 3 4 5

Technical knowledge

- Mathematics
- Natural sciences (physics, chemistry), material technology
- Ecology and conservation
- Theoretical basics of engineering sciences (technical mechanics, thermodynamics, etc.)
- Operation, measurement, and control technology
- Applied technical fields (technical sets, machine systems, installations, connections)

Knowledge of methods

- System analysis and optimization
- Planning, design, calculation, and construction (product and process-oriented)
- Experimental and practical work
- EDP applications (CAD, CIM, etc.)

Knowledge of non-technical fields

- Social sciences (psychology, sociology, politics)
- Economics (finance, costing, etc.)
- Law (elements relevant to discipline/subject)
- Knowledge of the English language

31 How do you assess the non-professional oriented qualifications of engineers from the University XY in the following fields?

very good very bad
1 2 3 4 5

- Willingness to learn
- Ability to solve problems
- Ability to reflect upon one's own conduct
- Ability to express oneself in writing
- Unconventional thinking
- Willingness to perform/commitment
- Ability to coordinate
- Ability for improvise
- Reliability
- Ability to work under pressure
- Independence
- Sense of responsibility
- Innovativeness
- Creativity
- Economically efficient thinking
- Determination
- Loyalty to the institution and its objectives
- Persistence
- Ability to cooperate
- Ability to assert oneself
- Self-confidence
- Adaptability
- Empathy
- Leadership qualities
- Initiative

32 How do you assess knowledge and abilities of engineers from the University XY compared to engineers from other universities with regard to the following aspects?

much better much worse
1 2 3 4 5

- Technical basic knowledge
- Special technical knowledge
- Knowledge in non-technical fields
- Non-professionally oriented qualifications

6. PROSPECTS

These questions deal with changes in the company/organization

33 Do you expect extensive changes in the company/organization within the next five years? *Multiple reply possible*

- Implementation of new **domestic** production and manufacturing technologies
- Implementation of new **foreign** production and manufacturing technologies
- Development/marketing of new products/diversification of products
- Implementation/expansion of computer technology
- Internal organizational restructuring of the firm
- Building up/expanding of international business connections
- No, extensive changes are not expected
- Other:

34 In your opinion, will the number of employed engineers change within the next five years?

- 1 No, the number of employed **engineers** will remain nearly constant.
- 2 Yes, the number of employed **engineers** will increase.
- 3 Yes, the number of employed **engineers** will decrease
- 4 I don't know.

7. PERSONAL BACKGROUND OF THE INTERVIEWEE

Finally, we would like some brief information about your personal background

35 Your position in the establishment

Personnel department:

Technical department:

Technical department:

Technical department:

36 Exact name of the technical department you work for

Technical department:

Technical department:

Technical department:

37 Number of engineers in your technical department

□ □

38 How did you get to know about the degree course for engineers at the University of XY? *Multiple reply possible*

- Through contacts with students who did a period of practical training/graduates of the University of XY
- Through contacts with university staff
- Through my own studies or through attending courses at the University XY
- Through working as a lecturer at the University XY
- Through information material/information courses of the University XY
- Through information from others (e.g. other establishments)
- Other:
(please specify)

Thank you very much for your kind cooperation.

Please enter the name and the address of the company/organization in the space below. If you wish, we will send you the most important results of this survey.



This slip will be cut off (for data protection) immediately after receipt of the questionnaire



Please tick this box if you are interested in receiving the report of the results

Address	
Company/Institution	
Name, first name:	
Phone/Fax	
Street or PO Box	
Town	
Country	