



The German dual education system

More than 150 years of history

The history of Germany's vocational educational training roots in Germany's medieval history, when guilds of craftsmen organized the educational process of becoming a journeyman (*Geselle*) and the additional Master (*Meister*) qualification. The vocational educational training remained within crafts until the 19th century, when occupations in trade adopted the system.

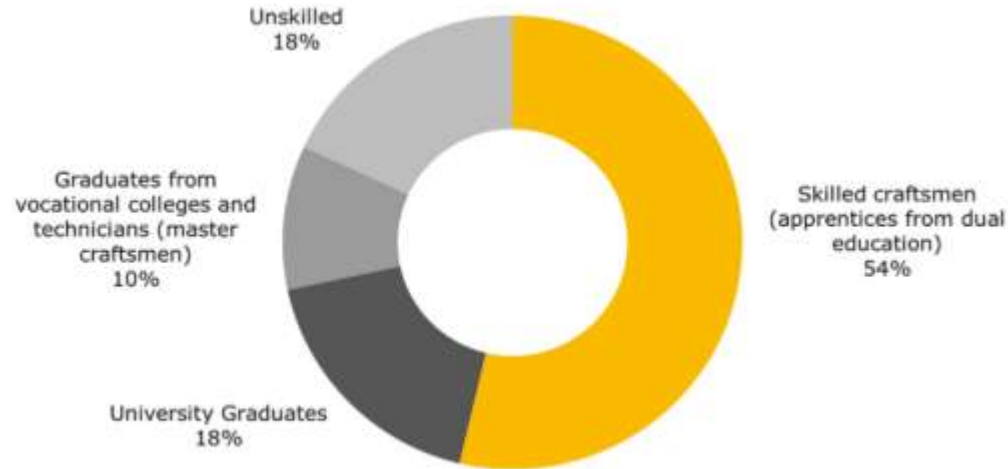
1869:	First trade regulated act (Gewerbeordnung), including compulsory education for minors to improve work-related skills
1897:	Amendment of trade regulated act, including supervision of vocational crafts training by chambers of skilled crafts
1895-1914:	Improvement of industry-related education in specialized training schools
1920:	Introduction of vocational trainings for commercial occupations
1969:	Ratification of Germany Vocational Training Act to bundle different (regional) regulations in one federal act.
1969-1990:	Modernization of 229 training regulations (of 375 training regulations)
2005:	Amendment of the vocational training act (general modernization of vocational training act)

Low unemployment rates

	Total Unemploy- ment	Youth Unemploy- ment	Gap**
Germany	5.3	7.9	2.6
Austria*	4.3	8.7	4.4
Netherlands	6.7	11.0	4.3
Czech Republic	7.0	18.9	11.9
United Kingdom*	7.9	21.0	13.1
EU-28	10.9	23.5	12.6
France	10.8	25.5	14.7
Poland	10.4	27.4	17.0
Slovakia	14.2	33.6	19.4
Spain	26.4	55.7	29.3



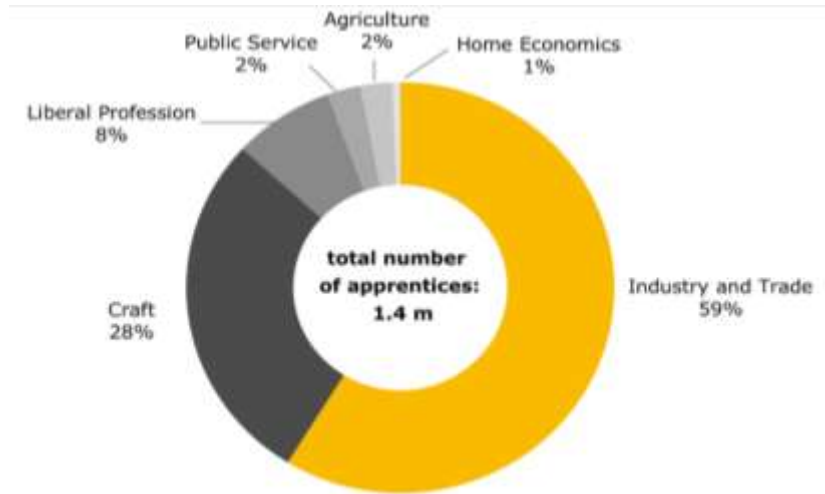
Workforce in Germany by level of Education



Vocational contracts by area

Germany's apprenticeship system provides 344 certified trained occupations.

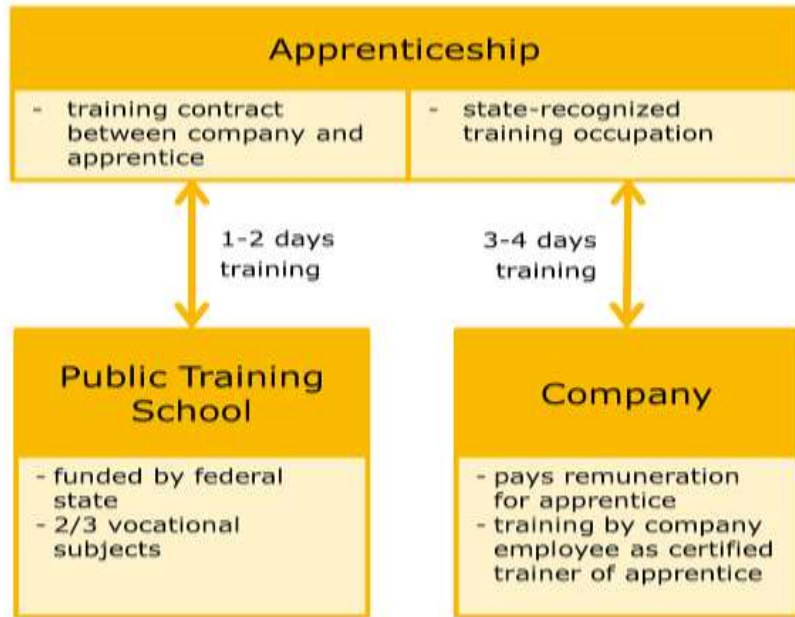
More than 500,000 vocational contracts are signed every year.



German dual system key points

- The German apprenticeship system is called “Dual System” because training takes place in both firms and public training schools. It relies on the sharing of costs among companies, governments and apprentices.
- The remuneration paid by the company is approx. one third of the salary of a skilled worker.
- The practical training is provided in the company supported by teaching in part time schools.
- Two thirds of the apprenticeship takes place in an appropriate company that is qualified to train apprentices.
- Two thirds of the curriculum in vocational schools consists of vocational subjects.
- Apprenticeships last 24, 36, or 42 months. Most apprenticeships (250 of 344) last 36 months.
- An apprenticeship prepares students directly for the labor market.
- The Dual System enjoys a high reputation in Germany, especially from the employer side since all apprentices are highly involved in many day to day processes.

German dual system key points



- Requirement for apprenticeship: full compulsory education (9-10 years).
- Remuneration paid by company, amounts to approx. one third of a skilled worker's salary.
- Average apprenticeship period: 36 months.
- The major share of apprentices receive an employment contract after the training (68%).
- For the dual education in specialized schools, the federal and regional governments spent about EUR 2,400 per apprentice

Some more numbers

More than **1.4 million apprentices** support German companies, 83% in companies with less than 500 employees. Companies with 50 to 499 employees have the largest amount of apprentices.

On average, one certified trainer trains **2.2 apprentices**.

Almost **90%** of large companies employ apprentices.

About **455,000 companies** take part in vocational education training.

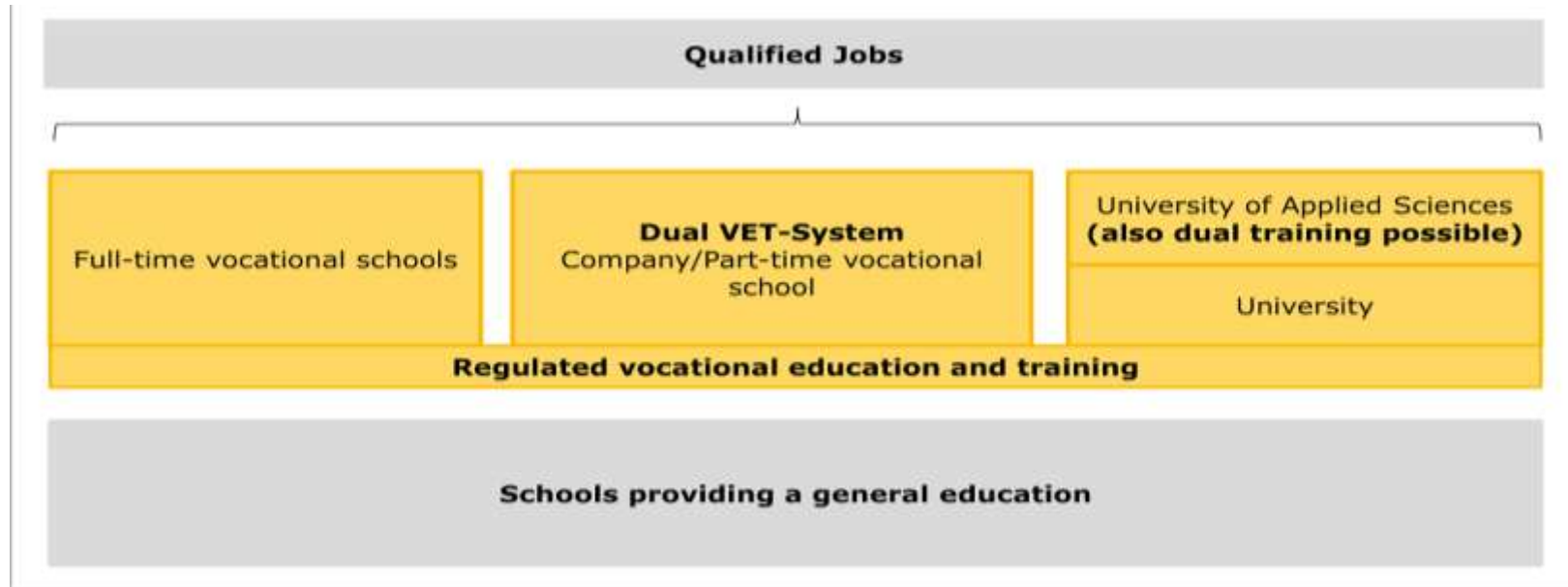
More than **every fifth German company** employs apprentices.

Almost **566,000 signed new apprenticeship** contracts.

More than **530,000 apprentices** take part in final exams, of which 95% successfully pass.

The average age of a graduated apprentice is **22**. Apprentices are on average **19,5** years old when they begin their vocational training.

From education into the labour market



A multilevel governance

Legal basis: Vocational Training Act (Berufsbildungsgesetz, BBiG)

Federal Government	Federal States	Industry	
<ul style="list-style-type: none"> • Recognizes Training • Requirements for training and examinations • Training regulations 	<ul style="list-style-type: none"> • Issue curricula for part-time vocational schools • Finance teaching staff • Supervise chamber activities 	Employers <ul style="list-style-type: none"> ▪ Creation and updating of training occupations ▪ Nominate experts for training regulations ▪ Negotiate provisions in collective agreements like remuneration 	Chamber of Industry and Commerce / German Confederation of Skilled Crafts <ul style="list-style-type: none"> ▪ Advise stakeholders in training ▪ Supervise training in the company ▪ Verify the aptitude of companies and training instructors ▪ Register training contracts ▪ Administer examinations

With dual education, German companies turn apprentices into customized specialists at low net costs through inhouse training.

Why take companies part in dual education? (survey results¹)

own trainees fit company's needs	94%
acquisition of specialists not available on labor market	93%
low labor turnover through loyal employees	71%
possibility to choose best candidate when considering employment after end of apprenticeship	72%
improving competitiveness in future	64%
avoiding risk of wrong hiring of external candidates	58%
time and cost saving instead of settling-in of external personnel	56%

Annual Net Costs for Companies per Apprentice (2007, in EUR)

	average	with training workshop	without training workshop
investments ²	15,288	20,063	14,564
./. Revenues ³	11,692	6,890	12,419
= annual net costs	3,596	13,174	2,145
hiring costs ⁴		4,214	

2) *Investments*: Labor costs for trainers and apprentices, costs for workplace/ training workshop, inhouse-training, fees for the chamber

3) *Revenues*: Productive participation of apprentices in daily business.

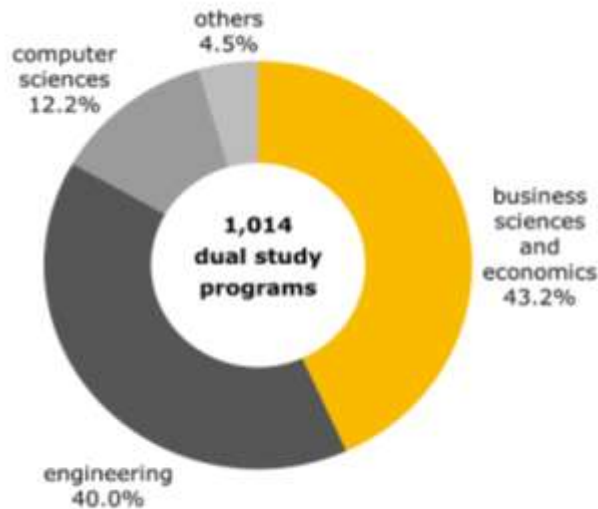
4) *Hiring Costs*: nonrecurring costs for job ads, selection process, performance gap in settling-in period, further education.

Training occupations

	Men	Women
1	Motor vehicle mechatronics technician	Medical assistant
2	Industrial mechanic	Office clerk*
3	Electronics technician	Management assistant for retail services
4	Plant mechanic for sanitary, heating and air conditioning systems	Industrial clerk
5	Management assistant for retail services	Qualified dental employee
6	Information technology specialist	Sales assistant for retail services
7	Mechatronics fitter	Hairdresser
8	Management assistant in wholesale and foreign trade	Office clerk for communication*

- Almost 550,000 vocational contracts were signed in 2012.
- All training occupations are state-recognized and constantly revised: Since 2002, 44 new occupations have been created and 187 have been modernized.
- In 2011, about 23% of all new apprentices in dual education own a university entrance certificate. About 42% graduated from secondary school.
- list of occupations with English descriptions can be obtained from the Federal Institute for Vocational Education and Training (BIBB, link).

Dual programs in higher education



- Since 2004, the number of dual study programs rose from 500 up to more than 1000.
- With a share of 59%, most of the dual study programs are offered by universities of applied sciences.
- More than 40,600 companies recruit participants for dual study programs.
- The dual character can include long internships, distant learning for the academic part or the overlap with vocational training of certified training occupations.

Summing up

1. With the lowest unemployment rate in Europe, Germany's dual VET-system is highly recognized abroad.
2. The majority of German's workforce received its high qualification through the dual VET-system.
3. The dual VET-system is an integral part of the general education and training system in Germany.
4. The German apprenticeship system is called a "Dual System" because training takes place both in firms and public training schools.
5. With dual education, German companies turn apprentices into customized specialists at low net costs through inhouse training.

Summing up

7. Germany's apprenticeship system provide 344 certified trained occupations, designed by the government and industry.
8. The key success factor of the German dual apprenticeship system is the close partnership among all social partner.
9. The dual VET-system is strongly integrated into the German economy and society.
10. Germany's VET-system has a long tradition and is constantly revised.
11. In higher education, dual study programs are on the rise.

For more info

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These institutions provide useful further information about the Dual Education System in Germany:

- Federal Ministry of Economics and Technology (BMWi, www.bmwi.de)
- Federal Ministry of Education and Research (BMBF, www.bmbf.de)
- Association of German Chambers of Commerce and Industry (DIHK, www.dihk.de)
- German Confederation of Skilled Crafts (ZDH, www.zdh.de/en)
- Federal Institute for Vocational Education and Training (BIBB, www.bibb.de)
- AusbildungPlus-database for dual higher education (www.ausbildungplus.de)

Note: A detailed structure of Germany's educational structure, can be found here.
Source: Germany Trade and Invest, Federal Ministry of Education and Research 2013