

A IT professionals

IT professionals are all persons employed in the national economy, whose principal activity comes within the following two sub-groups of the International Standard Classification of Occupations (ISCO-88):

Computing professionals (CZ ISCO code 213)

- Computer systems designers and analysts (2131)
- Computer programmers (2132)
- Computing professionals not elsewhere classified (2139)

Computer associate professionals (CZ ISCO code 312)

- Computer assistants (3121)
- Computer equipment operators (3122)
- Industrial robot controllers (3123)
- Computer associate professionals not elsewhere classified (3129)

Computing professionals conduct research, plan, develop and improve computer based information systems, software and related concepts, develop principles and operational methods as well as maintain data dictionary and management systems of databases to ensure integrity and security of data.

Computer associate professionals provide assistance to users of computers and standard software packages, control and operate computers and peripheral equipment and carry out limited programming tasks connected with the installation and maintenance of computer hardware and software.

Data on the **numbers of IT professionals** come from the **Labour Force Sample Survey (LFSS)** of the Czech Statistical Office (CZSO). LFSS provides population estimates of IT professionals for the main socio-demographic characteristics, such as sex, age or level of education. Further information on the LFSS can be found at:

<http://www.czso.cz/csu/2011edicniplan.nsf/engp/3104-11>

Tables present average annual data for the reference year. Numbers lower than 3 000 persons must be considered as a data with very low reliability. As in 2010 the methodology slightly changed data on IT professionals by occupation therefore these data are not comparable in full with those for previous years.

The **Eurostat Labour Force Survey Database** was used as a data source for the international comparison.

Data on average monthly gross **wages of IT professionals'** come from the **Structural Wage Statistics (SWS)** and are based on the Information System on Average Earnings of the Ministry of Labour and Social Affairs for the business sphere and on the Salary Information System of the Ministry of Finance for the non-business sphere. Further information on the SWS can be found at:

<http://www.czso.cz/csu/2010edicniplan.nsf/engpubl/3109-10->

The amount of average gross monthly nominal wage given in this chapter is not grossed up to the whole population and holds for the survey sample (approx. 1.7 mil. employed persons) and therefore is not identical with the average wage obtained from other sources.

Data on the **numbers of university students of Computing** were provided by the former **Institute for Information on Education (IIE)** and come from the **Union Students' Registers**. The table contains the total number of university students (ISCED97 levels 5A and 6) in the field of Computing (ISCED97 group 48). Data on students of universities are always related to 31 December of the relevant year.

Further information on IT professionals' statistics can be found at:

http://www.czso.cz/eng/redakce.nsf/i/information_economy

A IT professionals

Table A1 IT professionals in the Czech Republic

	thous. persons (HC)		
	2008	2009	2010
Total	110,8	114,2	121,6
Gender			
Males	96,1	101,8	108,7
Females	14,7	12,4	12,9
Age group			
15-24 years	12,2	9,7	10,3
25-34 years	50,6	52,9	54,5
35-44 years	25,6	28,6	32,0
45-54 years	16,8	14,4	17,2
55+ years	5,5	8,7	7,5
Level of education			
Tertiary	45,0	55,0	60,5
Upper secondary	54,8	50,7	53,6
Other	11,0	8,5	7,6
Field of study			
Basic programmes	10,0	6,8	5,8
Business and administration	6,1	7,2	7,1
Computing	12,9	18,7	18,7
Engineering and engineering trades	54,8	50,8	55,7
Other	27,0	30,8	34,2

Figure A1 IT professionals

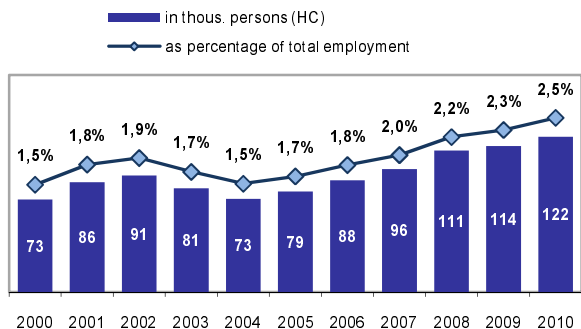
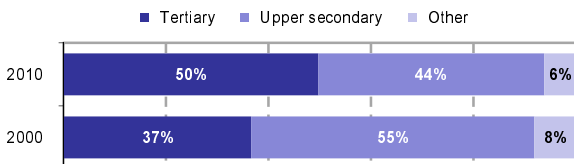


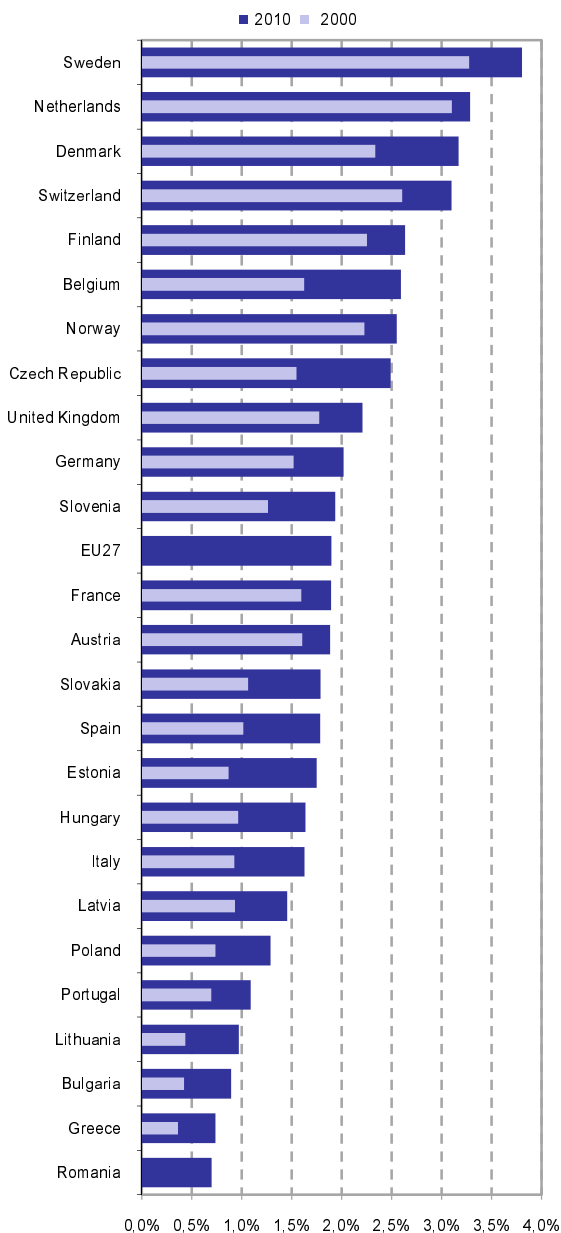
Figure A2 Composition of IT professionals by level of education



Source: CZSO, Labour force survey

A IT professionals

**Figure A3 IT professionals
(as a percentage of total employment)**



Source: Eurostat, European Labour Force Survey

A IT professionals

Table A2 IT professionals in the Czech Republic by occupation, 2010

thous. persons (HC)

	IT profess. total	Computing profess.	Computer associate profess.
Total	121,6	48,9	72,7
Gender			
Males	108,7	44,7	64,0
Females	12,9	4,2	8,7
Age group			
15-24 years	10,3	1,2	9,1
25-34 years	54,5	23,1	31,4
35-44 years	32,0	12,4	19,6
45-54 years	17,2	7,2	10,0
55+ years	7,5	5,0	2,5
Level of education			
Tertiary	60,5	43,7	16,8
Upper secondary	53,6	5,0	48,5
Other	7,6	0,2	7,4
Field of study			
Basic programmes	5,8	0,8	5,0
Business and administration	7,1	2,6	4,6
Computing	18,7	11,1	7,6
Engineering and engineering trades	55,7	19,0	36,7
Other	34,2	15,4	18,8

Figure A4 IT professionals by occupation, 2010 (thous.)

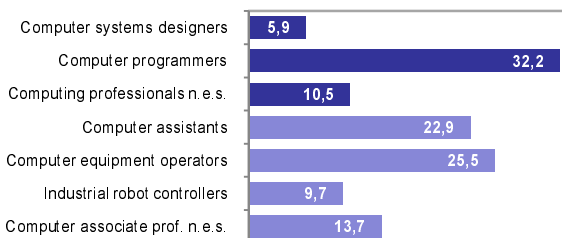
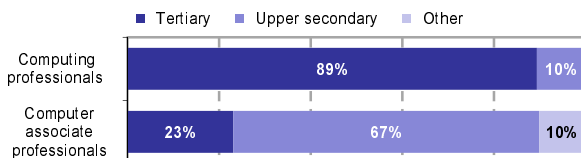


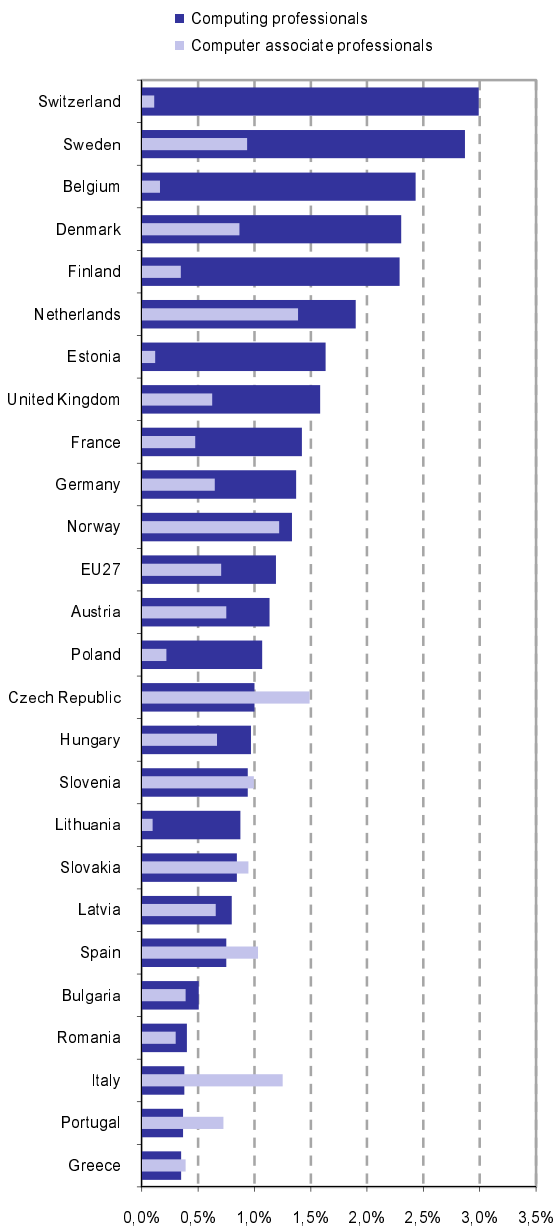
Figure A5 Composition of IT professionals by occupation and level of education, 2010



Source: CZSO, Labour force survey

A IT professionals

**Figure A6 IT professionals by occupation, 2010
(as a percentage of total employment)**



Source: Eurostat, European Labour Force Survey

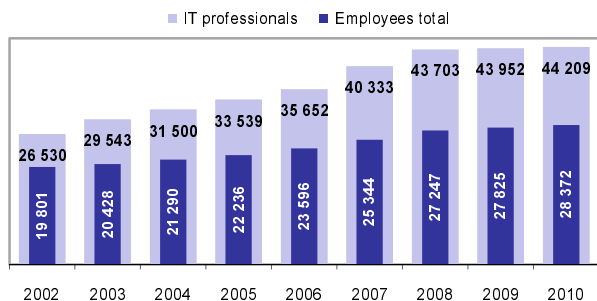
A IT professionals

Table A3 Average monthly gross wage of IT professionals, 2010

CZK

	2008	2009	2010
Total	43 703	43 952	44 209
Gender			
Males	45 484	45 590	45 934
Females	35 000	35 583	35 478
Age group			
20-24 years	26 015	25 950	25 132
25-29 years	36 864	36 126	34 960
30-34 years	48 522	47 800	46 739
35-39 years	51 637	51 992	52 204
40-44 years	49 392	50 031	51 381
45-49 years	46 257	47 111	48 209
50-54 years	43 558	44 269	45 161
55-59 years	41 185	41 308	42 076
60-64 years	43 018	44 182	44 206
Level of education			
Master and doctoral	54 255	53 784	53 800
Higher professional, bachelor	39 037	38 799	39 404
Upper secondary	36 193	36 907	37 221
other	25 977	26 056	27 576
Size class of enterprises			
10-49 employees	36 822	36 628	40 453
50-249 employees	38 013	42 013	40 829
250-999 employees	48 268	47 816	48 833
1 000-4 999 employees	40 888	40 974	40 547
5 000+ employees	44 158	44 202	45 791
Sector			
Business sector	45 246	45 443	45 654
Non-business sector	26 607	27 905	27 976

Figure A7 Average monthly gross wage* (CZK)



*Average monthly gross wage presented in this publication is different from average monthly gross wage in other documents. In this publication are presented data about the sample of the survey (not grossed up results) cover c. 1,7 mil. engaged persons.

Source: Structural statistics on earnings of employees

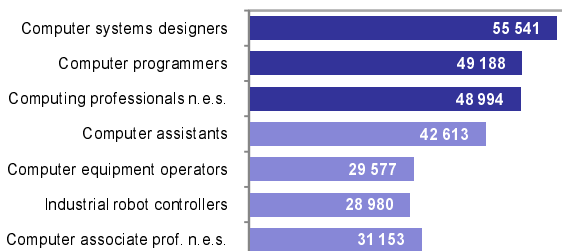
A IT professionals

Table A4 Average monthly gross wage of IT professionals by occupation in the Czech Republic, 2010

CZK

	IT profess. total	Computing profess.	Computer associate profess.
Total	44 209	50 185	35 333
Gender			
Males	45 934	51 440	37 209
Females	35 478	42 687	27 685
Age group			
20-24 years	25 132	29 321	23 458
25-29 years	34 960	39 119	30 161
30-34 years	46 739	51 934	37 999
35-39 years	52 204	57 873	41 953
40-44 years	51 381	56 772	41 875
45-49 years	48 209	52 798	40 010
50-54 years	45 161	49 955	35 740
55-59 years	42 076	47 182	33 331
60-64 years	44 206	50 186	33 045
Level of education			
Master and doctoral	53 800	56 191	46 921
Higher professional, bachelor	39 404	42 942	33 723
Upper secondary	37 221	43 287	31 245
other	27 576		27 576
Size class of enterprises			
10-49 employees	40 453	43 913	36 236
50-249 employees	40 829	45 357	34 419
250-999 employees	48 833	53 786	41 098
1 000-4 999 employees	40 547	47 678	31 559
5 000+ employees	45 791	51 813	31 766
Sector			
Business sector	45 654	52 011	36 241
Non-business sector	27 976	29 985	24 881

Figure A8 Average monthly gross wage of IT professionals by occupation, 2010 (CZK)



Source: Structural statistics on earnings of employees

A IT professionals

Table A5 University students of Computing in the CR

	2008	2009	2010
Total	19 473	21 495	22 478
Gender			
Males	17 231	18 842	19 655
Females	2 242	2 653	2 823
Educational programme			
Bachelor and master programmes	18 524	20 433	21 158
Bachelor programmes	14 624	15 962	15 988
Master programmes	3 917	4 488	5 182
Doctoral programmes	949	1 062	1 321
Field of education			
Computer sciences	12 744	14 612	15 316
Computers usage	6 799	6 944	7 229
Nationality			
Czech republic	16 979	18 550	19 211
Foreign	2 494	2 945	3 267

Figure A9 University students of Computing

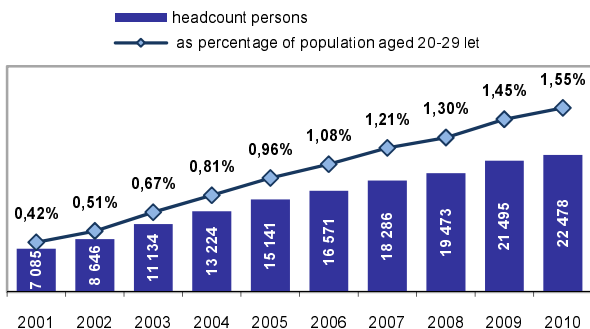
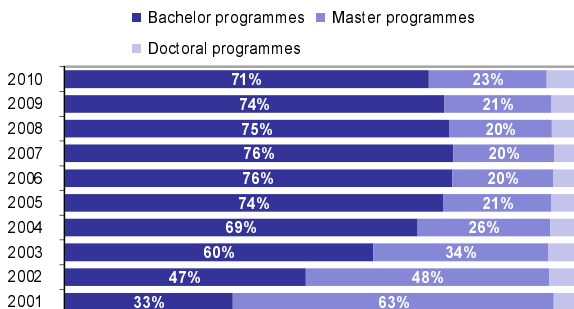


Figure A10 Composition of university students of Computing by educational programmes



Source: Institute for information on education