

# Experience with training to become a master craftsman and civil engineer

BACHELOR  
& MEISTER 



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# Analysis of the vocational group: Construction occupations

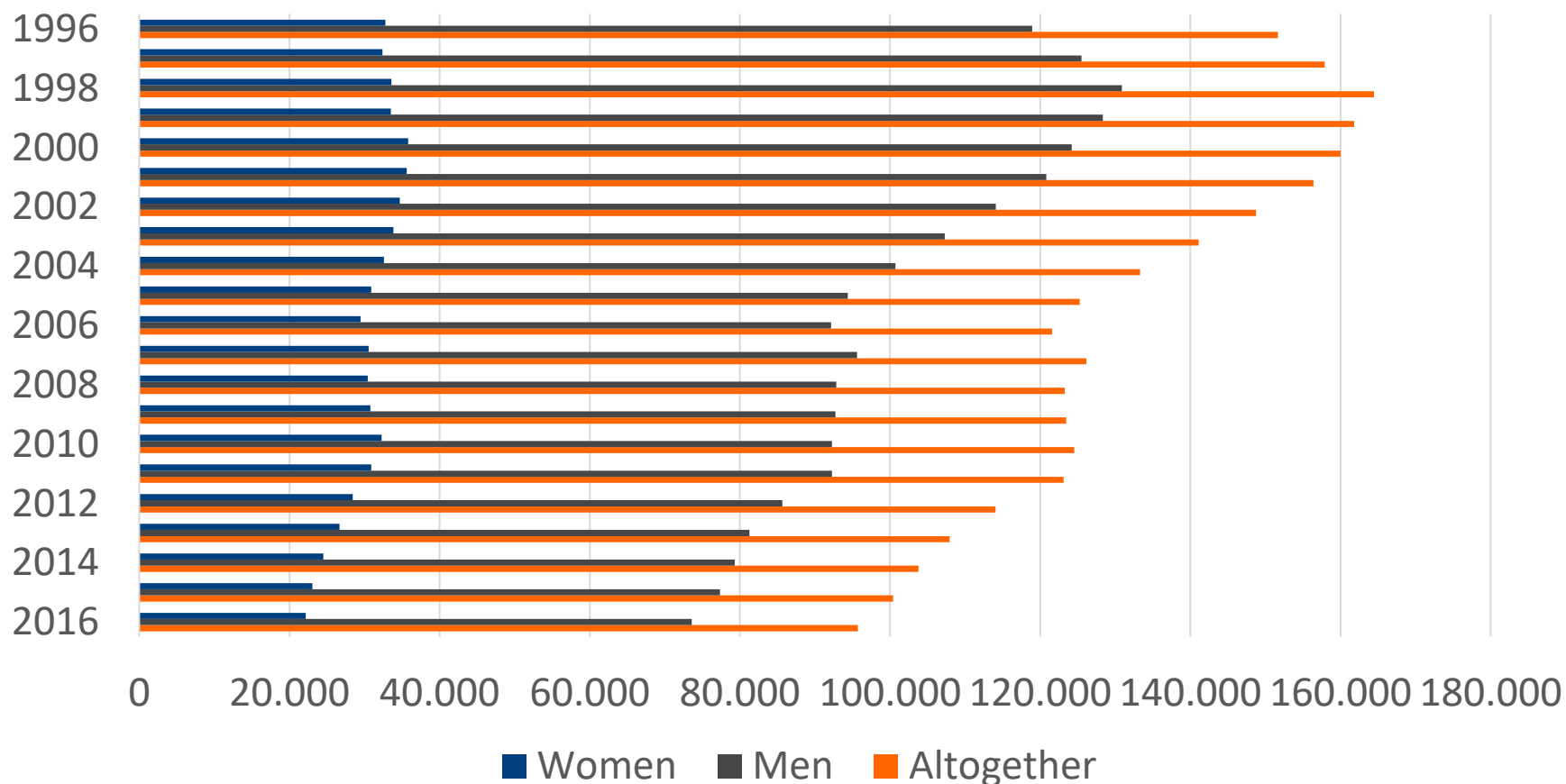


Figure 1.1: Successfully completed final examinations for trade apprenticeships up to 2016 [1]

# Analysis of the vocational group: Construction occupations

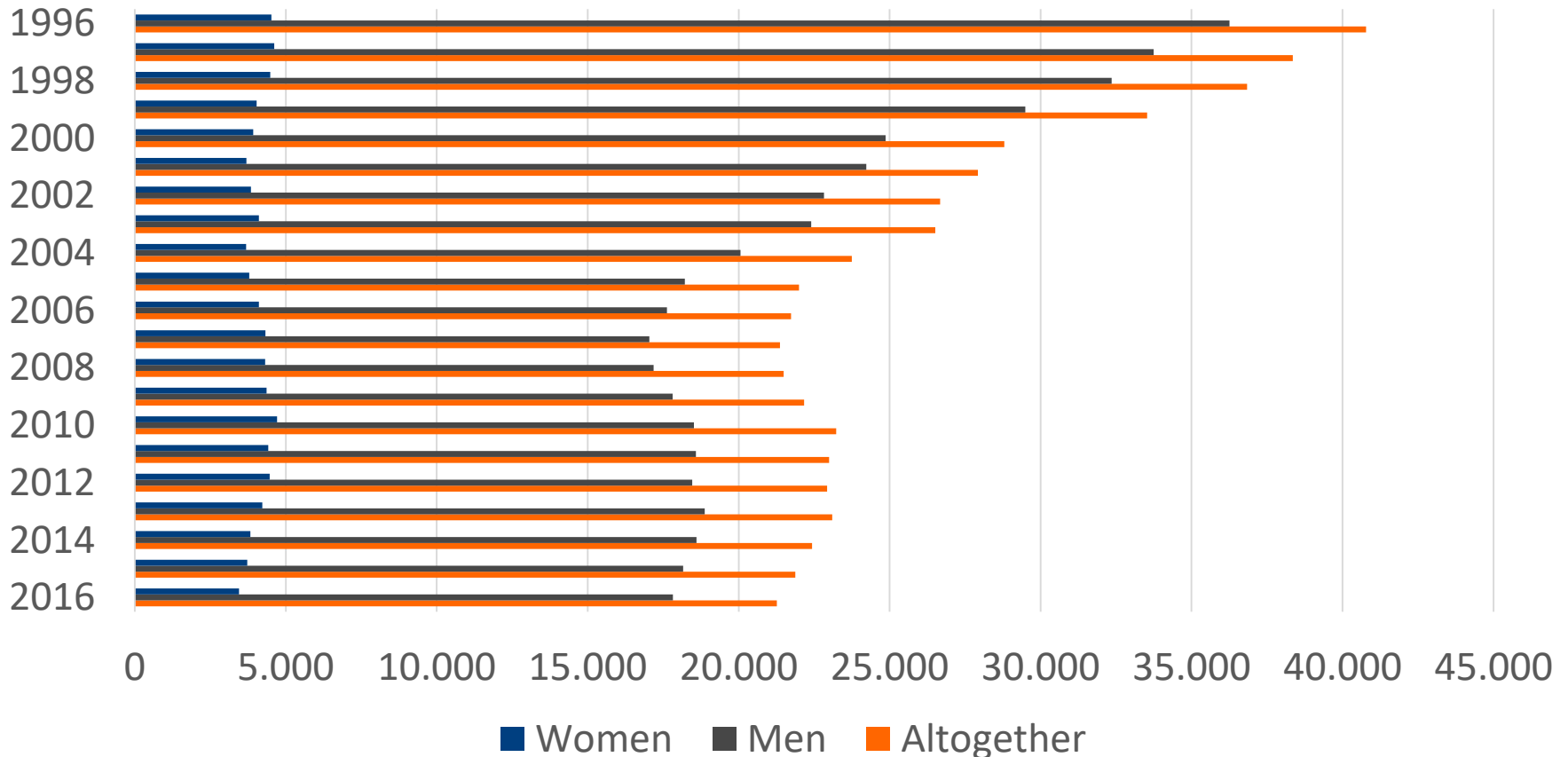


Figure 1.2: Master's certificates gained in trades in Germany up to 2016 [2]

# Analysis of the vocational group: Construction occupations

are five categories in the building industry:

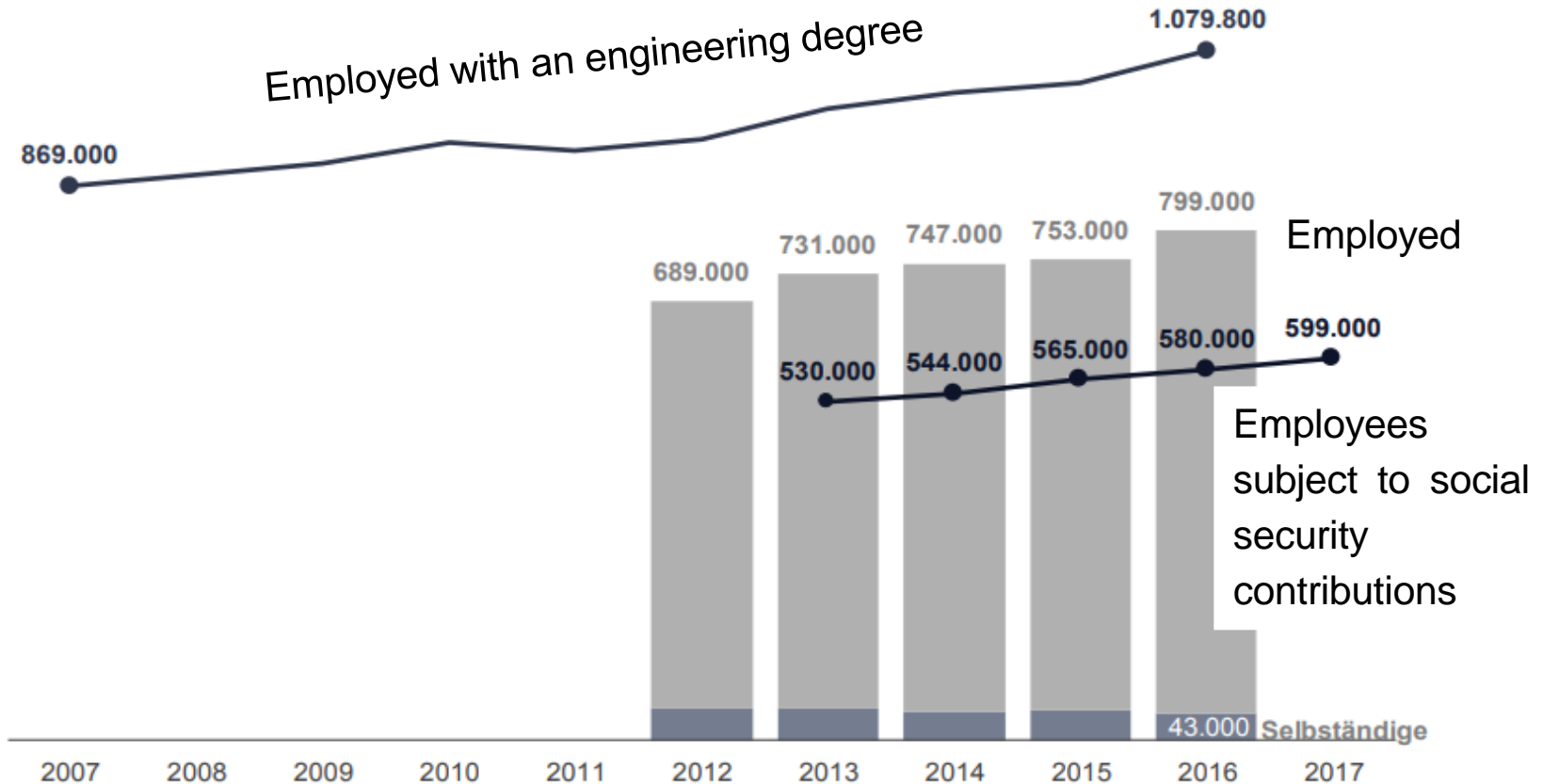
- Preparatory site work,
- Building and civil engineering,
- Building installations,
- Other construction works,
- Leasing of building machines and equipment with operating personnel.

# Analysis of the vocational group: Construction occupations

	2004	2005	2006	2007	2008	2009	2010	2011	2012*	2013*	2014*
<b>Total (all occupations)</b>	26,548,000	26,299,600	26,533,900	27,050,500	27,695,400	27,603,300	27,966,600	28,643,600	29,280,000	29,615,700	30.174.500
<b>Non-academic building occupation.</b>	1,050,000	969,800	967,000	973,600	963,400	953,600	966,300	982,500	-	-	-
Building workers	666,600	607,800	609,700	609,800	601,300	598,300	611,600	622,700	-	-	-
<b>of which</b> Bricklayers, concrete workers	240,900	216,500	214,700	207,800	202,800	199,300	200,900	202,000	-	-	-
Joiner, scaffolders	143,500	133,000	134,000	138,600	135,700	134,400	141,100	145,300	-	-	-
Road+ civil engineering workers	117,700	112,000	112,500	113,300	111,600	111,600	111,700	112,600	-	-	-
Labourer	164,600	146,200	148,500	150,100	151,200	153,000	157,900	162,700	-	-	-
Fitters (general)	383,400	362,000	357,300	363,800	362,100	355,300	354,700	359,800	-	-	-
<b>of which</b> Building fitters	111,100	101,900	100,600	102,900	101,200	100,100	100,400	101,700	-	-	-
Interior fitters, upholsterers	44,100	41,400	39,800	40,300	39,900	38,800	38,200	38,800	-	-	-
Painter	228,200	218,800	216,800	220,600	221,100	216,300	216,100	219,200	-	-	-
<b>Academic building occupations.</b>	122,200	117,200	116,300	117,600	121,100	122,500	124,700	128,100	-	-	-

Figure 1.3: Numbers gainfully employed in building trades, as of 30 June (rounded) [8]

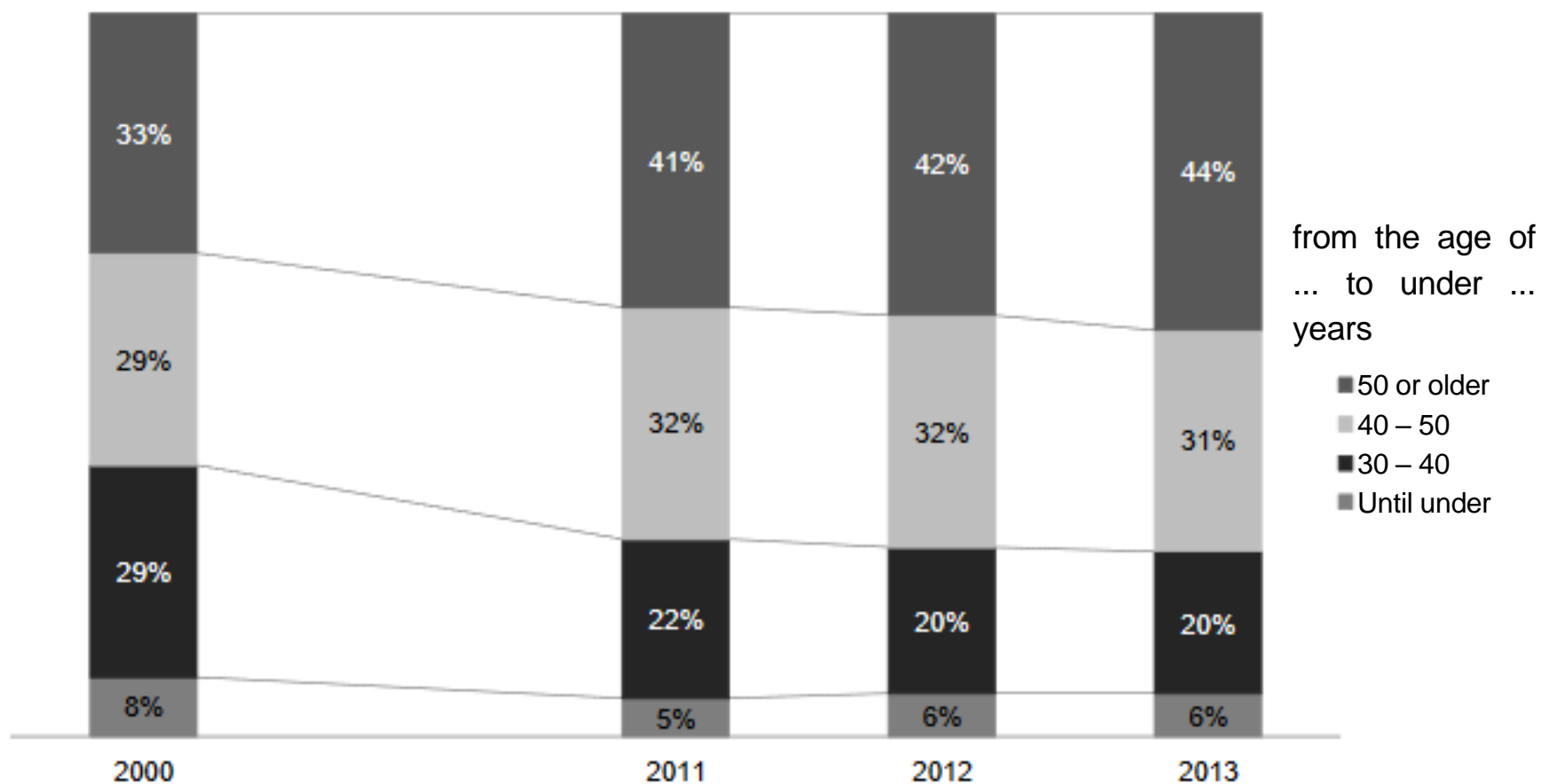
# Analysis of the vocational group: Construction occupations



Datenquellen: Statistisches Bundesamt, Statistik der Bundesagentur für Arbeit

\* Ingenieurwesen allg., Maschinenbau, Verfahrenstechnik, Verkehrstechnik, Energietechnik, Elektrotechnik und Produktionstechnik

# Analysis of the vocational group: Construction occupations





# Concept and special features of the study programme

		ca. 22. Sep. Winteranfang										ca. 22. Dez. Frühlingsanfang										ca. 21. März Sommeranfang										ca. 21. Juni Herbstanfang																							
Kalenderwoche *)		39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
		Oktober			November			Dezember				Januar			Februar				März			April			Mai			Juni			Juli			August			September																		
1. Stud.-jahr	Lehrveranstaltungen	1	2	3	4	5	6	7	8	9	10	11	12	13														1	2	3	4	5	6	7	8	9	10	11	12	13															
	Prüfungsphase													P																																									
	Praxisphase																																																						
	Urlaub														1	2																																							
2. Stud.-jahr	Lehrveranstaltungen	1	2	3	4	5	6	7	8	9	10	11	12	13													1	2	3	4	5	6	7	8	9	10	11	12	13																
	Prüfungsphase													P																																									
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3. Stud.-jahr	Lehrveranstaltungen	1	2	3	4	5	6	7	8	9	10	11	12	13												1	2	3	4	5	6	7	8	9	10	11	12	13																	
	Prüfungsphase													P																																									
	Praxisphase / BA																																																						
	Urlaub																																																						
4. Stud.-jahr	Lehrveranstaltungen	1	2	3	4	5	6	7	8	9	10	11	12	13																																									
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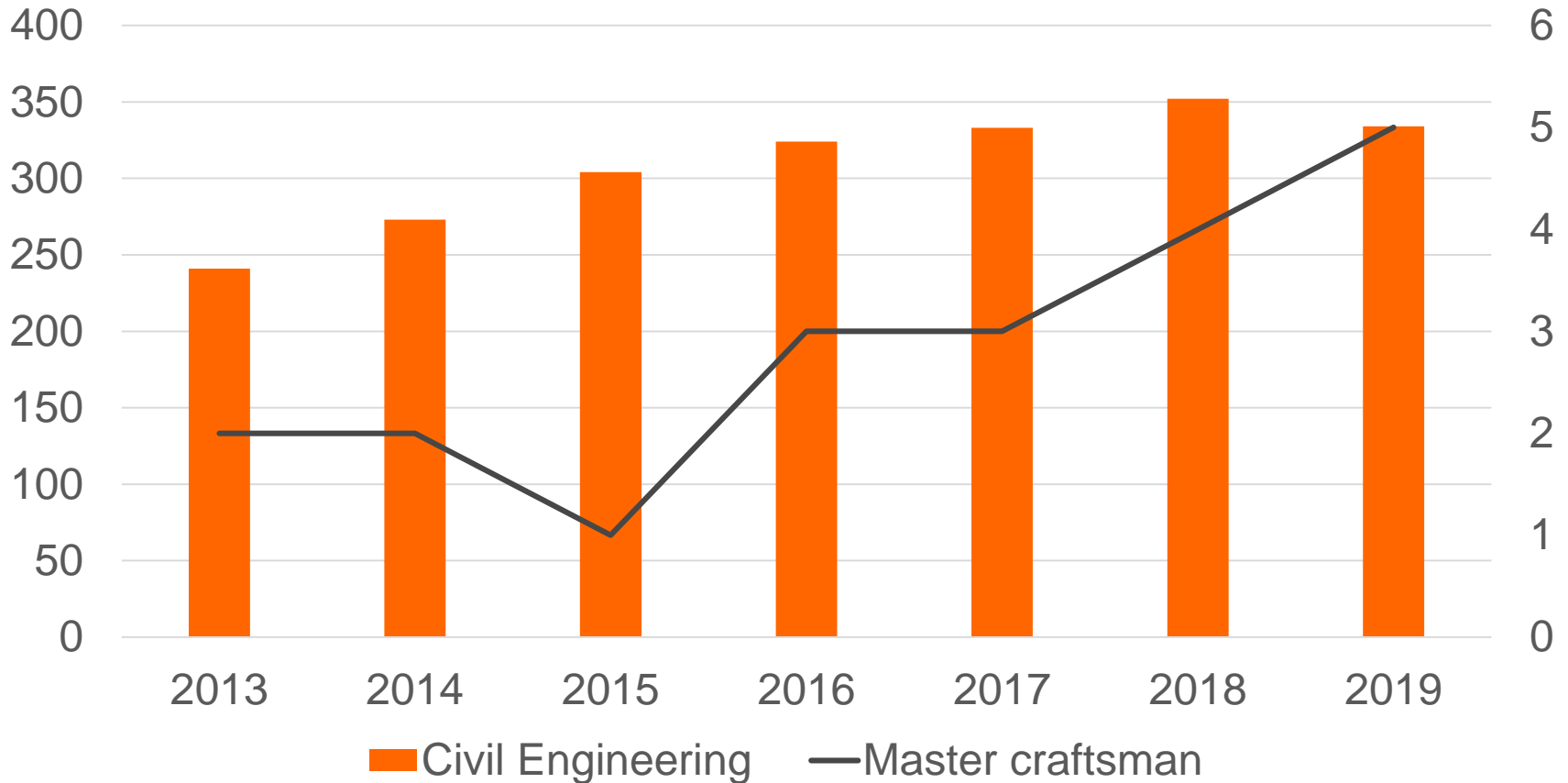
P = Prüfungsphase (keine Lehrveranstaltungen)   
 n = Urlaubswochen in Abstimmung mit dem Partnerunternehmen   
 \*) Die Kalenderwochen können sich um +/- 1 Woche verschieben.  
w = Wiederholungsprüfungen   
 n = Bearbeitungszeit der Bachelorarbeit

Der erste Tag der Theoriephase als auch der Praxisphase fällt immer auf den Montag, der dem jeweiligen Jahreszeitenwechsel am nächsten liegt.

1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester
<b>Structural design</b> TWL 5 CP	<b>Structural analysis 1</b> BST1, 5 CP	<b>Structural analysis 2</b> BST2, 5 CP	<b>Structural analysis 3</b> BST3, 5 CP	<b>Compulsory optional subject</b> WPFA 2 CP      WPFB 2 CP      WPFC (RWJ) 3 CP			<b>Preparation course</b> VBK 11 CP
<b>Construction material science 1</b> BSL1, 4 CP	<b>Construction material science 2</b> BSL2, 5 CP	<b>Solid construction 1</b> MAB1, 5 CP	<b>Solid construction 2</b> MAB2, 5 CP	<b>Solid construction 3</b> MAB3, 5 CP	<b>Law</b> PBR 5 CP	<b>Law</b> WIR 5 CP	
<b>Building construction 1</b> BKO1, 5 CP		<b>Building construction 2</b> BKO2B, 5 CP	<b>Steel construction</b> STB1, 5 CP      STB2, 5 CP		<b>Timber construction</b> HOB 5 CP		
<b>Business studies A</b> BWLA 4 CP	<b>Building Physics and Technical Building Services A</b> BTAA 5 CP	<b>Construction Physics and Technical Building Services B</b> BTAB 5 CP	<b>Geotechnics</b> GTE1, 4 CP      GTE2, 4 CP		<b>Water engineering</b> WAB 5 CP	<b>Urban water supply and sanitation / waste</b> SIA 5 CP	
<b>EXA</b> 1 CP	<b>Public building law</b> OBR 5 CP	<b>Construction management A</b> BBLA 5 CP		<b>Construction management B</b> BBLB 5 CP	<b>Construction management C</b> BBLC 5 CP		
<b>Technical drawing and surveying</b> CAD 3 CP      VML 3 CP			<b>Traffic infrastructure 1</b> VIS1, 5 CP	<b>Traffic infrastructure 2</b> VIS2, 5 CP	<b>Main emphasis module A</b> SPVA 5 CP	<b>Main emphasis module B</b> SPVB 5 CP	
<b>Mathematics</b> MTE1, 4 CP      MTE2, 4 CP			<b>Excursion</b> EXK 2 CP		<b>Key qualification</b> SQUA 2 CP      SQUB (AVEO) 2 CP		
<b>Practical phase A</b> 4 CP		<b>Practical phase B</b> 5 CP		<b>Practical phase C</b> 5 CP		<b>Bachelor thesis</b> 12 CP	<b>Situational tasks / Master examination</b> MAP 11 CP
30 CP	32 CP	30 CP	31 CP	31 CP	34 CP	32 CP	25
			210 CP				

# Development of student numbers

## Master craftsman and Civil engineering



Thank you.