



**Kielce University of Technology**

**Faculty of Civil Engineering and Architecture**

Field of studies:

CIVIL ENGINEERING

Level of education:

First cycle (Bachelor)

Form of studies:

Full - time

No.	Course code	Course name	Exams	semester I					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-1-101	Mathematics 1	1	30	60				7
2	B1-1-102	Chemistry		30			30		4
3	B1-1-103	Building Materials		15			30		3
4	B1-1-104	Geology	1	30			15		3
5	B1-1-105	Descriptive Geometry and Technical Drawing 1		15			15		2
6	B1-1-106	Methods of Computer Aided Design 1					30		2
7	B1-1-107	Spatial Planning		30					2
8	B1-1-108	Freehand Drawing					15		1
9	B1-1-109	Information Technology		15			15		2
10	B1-1-110	English 1					30		2
11	B1-1-111	Humanities course 1*		15					1
	B1-1-111a	Academic Good Manners							
	B1-1-111b	Polish Engineers							
12	B1-1-112	Occupational Safety and Ergonomics		15					1
13	B1-1-113	OHS Training		4					
Total			2	199	60	0	180	0	30
					240				
					439				

\* one of the courses to choose from

No.	Course code	Course name	Exams	semester II					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-2-201	Mathematics 2	1	15	30				4
2	B1-2-202	Theoretical Mechanics	1	15	30	30			6
3	B1-2-203	Physics		15	15		15		3
4	B1-2-204	Descriptive Geometry and Technical Drawing 2		15			15		2
5	B1-2-205	Surveying	1	45			30		5
6	B1-2-206	Fundamentals of Transport Engineering		15			15		2
7	B1-2-207	Fundamentals of Architectural Design		15		15			2
8	B1-2-208	Plastics		15			15		2
9	B1-2-209	English 2				30			2
10	B1-2-210	Humanities course 2*		30					2
	B1-2-210a	Selected Issues from the History of European Civilization							
	B1-2-210b	History of Construction and Architecture							
	B1-2-210c	History of Inventions							
11	B1-2-211	Fundamentals of Standardization		8					
Total			3	188	75	75	90	0	30
					240				
					428				

No.	Course code	Course name	Exams	semester III					ECTS
				Lectures	Classes	Project	Laboratory	Other	
1	B1-3-301	Mathematics 3		15	15				2
2	B1-3-302	Strength of Materials 1		30	15	30			5
3	B1-3-303	General Construction	1	30		30			4
4	B1-3-304	Actions on Building Structures		15		15			2
5	B1-3-305	Transport Engineering *	1	15		30	30		6
	B1-3-305a	Transport Engineering 1							
	B1-3-305b	Transport Engineering 2							
6	B1-3-306	Concrete Technology		15			30		3
7	B1-3-307	Concrete Works Technology		15		15			2
8	B1-3-308	Hydraulics and Hydrology		15			15		2
9	B1-3-309	Technical course 1**		15					2
	B1-3-309a	Some Aspects of Materials Strength							
	B1-3-309b	Selected Issues of Traffic Engineering							
	B1-3-309c	Underground infrastructure of cities							
10	B1-3-310	English 3					30		2
11	B1-3-311	Physical Education					30		
Total			2	165	30	120	135	0	30
				285					
				450					

\* one of the courses to choose from

\*\* one of the courses to choose from

No.	Course code	Course name	Exams	semester IV					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-4-401	Strength of Materials 2	1	15	15	15	15		5
2	B1-4-402	Structural Mechanics 1		15	15	15			3
3	B1-4-403	Soil Mechanics	1	15	15		30		4
4	B1-4-404	Timber and Masonry Structures		30		30			4
5	B1-4-405	Building Physics		15		15			2
6	B1-4-406	Mathematical Statistics		15	15				2
7	B1-4-407	Technology of Construction Works 1		30		15			3
8	B1-4-408	English 4	1				30		2
9	B1-4-409	Physical Education					30		
10	B1-4-410	Humanities course 3*		30					2
	B1-4-410a	History of Urban Planning							
	B1-4-410b	Culture and Arts							
11	B1-4-411	Przedmiot kierunkowy 1**		15		15			2
	B1-4-411a	Special Technologies of Road Building							
	B1-4-411b	Building Repairs 1							
12	B1-4-412	Construction Law		15					1
Total			3	195	60	105	105	0	30
				270					
				465					

\* one of the courses to choose from

\*\* one of the courses to choose from

No.	Course code	Course name	Exams	semester V					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-5-501	Computational Methods in Structural Mechanics*		15		30			3
	B1-5-501a	Computational Methods in Structural Mechanics 1							
	B1-5-501b	Computational Methods in Structural Mechanics 2							
2	B1-5-502	Structural Mechanics 2	1	15	30	15	15		5
3	B1-5-503	Foundations	1	30		15			3
4	B1-5-504	Concrete Structures 1		30		30	15		4
5	B1-5-505	Metal Structures 1		30	15	15	15		4
6	B1-5-506	Technology of Construction Works 2		15		15			2
7	B1-5-507	Fundamentals of Precasting		15		15			2
8	B1-5-508	Building Systems		30		15			3
9	B1-5-509	Major course 2**		30					2
	B1-5-509a	Road Traffic Management							
	B1-5-509b	Construction Plant and Equipment							
	B1-5-509c	Building Repairs 2							
10	B1-5-510	Technical course 2***		15					2
	B1-5-510a	Structure Materials Behavior under Service Load							
	B1-5-510b	Innovative Solutions for Road Technology							
Total			2	225	45	150	45	0	30
						240			
						465			

\* one of the courses to choose from

\*\*one of the majors to choose from

\*\*\* one of the courses to choose from

No	Course code	Course name	Exams	semester VI					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-6-601	Concrete Structures 2	1	30		30			4
2	B1-6-602	Metal Structures 2	1	30		15			3
3	B1-6-603	Economics and Cost Estimation		15		30			3
4	B1-6-604	Principles of Bridge Design		15		15			2
5	B1-6-605	Przedmiot kierunkowy 3*		15		15			2
	B1-6-605a	Road Geotechnics							
	B1-6-605b	Building Diagnostics and Maintenance							
6	B1-6-606	Work Placement - 6 weeks							8
		Degree path courses **							8
Total			2	105	0	105	0	0	30
						105			
						210			

\* one of the majors to choose from

\*\* degree – path related courses

Degree pathway – Highway Building									
No.	Course code	Course name	Exams	semester VI					ECTS
				Lecture	Classes	Project	Laboratory	Other	
7	B1-6-BD-607	Fundamentals of Road Design		30		15			3
8	B1-6-BD-608	Road Building Technology		30		30	30		5
Total			0	60	0	45	30	0	8
						75			
						135			

Degree pathway – Structural Engineering									
No.	Course code	Course name	Exams	semester VI					ECTS
				Lecture	Classes	Project	Laboratory	Other	
7	B1-6-KB-607	Introduction to Computer-aided Structural Design					30		2
8	B1-6-KB-608	Principles of Dynamics and Stability of Structures		15		30			3
9	B1-6-KB-609	Bridge Infrastructure Management System		15					1
10	B1-6-KB-610	Prestressed Concrete Structures		15		15			2
Total			0	45	0	45	30	0	8
				75					
				120					

  

Degree pathway – Bridge Design and Construction									
No.	Course code	Course name	Exams	semester VI					ECTS
				Lecture	Classes	Project	Laboratory	Other	
7	B1-6-M-607	Fundamentals of Prestressed Structures		15		15			2
8	B1-6-M-608	Fundamentals of Road Design		30		15			3
9	B1-6-M-609	Bridge Diagnosis Techniques		15			30		3
Total			0	60	0	30	30	0	8
				60					
				120					

  

Degree pathway – Construction Technology and Project Management									
No.	Course code	Course name	Exams	semester VI					ECTS
				Lecture	Classes	Project	Laboratory	Other	
7	B1-6-TiOB-607	Energy Efficiency in Construction		15		30			3
8	B1-6-TiOB-608	Technology of Frost-Resistant Concretes 1		15					1
9	B1-6-TiOB-609	Modern Building Materials		15			15		2
10	B1-6-TiOB-610	Durability of Buildings and Structures		15		15			2
Total			0	60	0	45	15	0	8
				60					
				120					

Degree pathway – Construction Technology and Project Management									
No.	Course code	Course name	Exams	semester VII					ECTS
				Lecture	Classes	Project	Laboratory	Other	
1	B1-7-701	Construction Works Management	1	30		15			3
2	B1-7-702	Investment Process Management		15		15			2
3	B1-7-703	Intellectual Property Protection		15					1
4	B1-7-704	Degree Seminar						30	2
5	B1-7-705	Undergraduate Thesis							15
				Przedmioty ścieżki dyplomowania *					7
Total			1	60	0	30	0	30	30
				60					
				120					

Degree pathway - Highway Building									
No.	Course code	Course name	Exams	semester VII					ECTS
				Lecture	Classes	Project	Laboratory	Other	
6	B1-7-BD-706	Fundamentals of Road Traffic Engineering		30			30		3
7	B1-7-BD-707	Road Maintenance		30		15	15		4
Total			0	60	0	15	45	0	7
				60			120		

Degree pathway - Highway Building									
No.	Course code	Course name	Exams	semester VII					ECTS
				Lecture	Classes	Project	Laboratory	Other	
6	B1-7-KB-706	Principles of Industrial Construction		30		15			3
7	B1-7-KB-707	Object-Oriented Modelling of Building Structures					30		2
8	B1-7-KB-708	Steel and Concrete Composite Structures		15		15			2
Total			0	45	0	30	30	0	7
				60			105		

Degree pathway - Bridge Design and Construction									
No.	Course code	Course name	Exams	semester VII					ECTS
				Lecture	Classes	Project	Laboratory	Other	
6	B1-7-M-706	Maintenance of Bridges		15		30			3
7	B1-7-M-707	Bridge Equipment and Systems		15					1
8	B1-7-M-708	Culverts and Temporary Bridges		15		30			3
Total			0	45	0	60	0	0	7
				60			105		

Degree pathway - Construction Technology and Project Management									
No.	Course code	Course name	Exams	semester VII					ECTS
				Lecture	Classes	Project	Laboratory	Other	
6	B1-7-TiOB-706	Evaluation of Concrete Quality in Structures		15			30		3
7	B1-7-TiOB-707	Technology of Frost-Resistant Concretes 2					15		1
8	B1-7-TiOB-708	Building Economics		30		30			3
Total			0	45	0	30	45	0	7
				75			120		