

DEGREE REQUIREMENTS AND CURRICULUM FOR ACADEMIC YEAR

DEGREE PROGRAMME IN CIVIL AND CONSTRUCTION ENGINEERING

Specialisation of Infrastructure Engineering and Production

Unit of Technology/Lappeenranta, valid for the students enrolled in January 2008

STUDY MODULE		Academic year/scope, cr				*)
Code	Course	1.	2.	3.	4.	Lang.
CORE STUDIES OF POLYTECHNIC		11 CR				
KPE0042	Orientation Studies	2	-	-	-	FI
KSU0036	Finnish Communication at Work	3	-	-	-	FI
KRU0042	Swedish Communication at Work	-	-	3	-	FI
KEN0076	English Communication at Work	-	3	-	-	FI
BASIC STUDIES OF SPECIALISATION		29 CR				
000028	COMMUNICATION	7 cr				
KSU0041	Finnish Communication for Technology	1	3	-	-	FI
KEN0079	English for Technology	-	-	3	-	FI
000010	MATHEMATICS	15 cr				
KMA0071	Mathematics I	3	-	-	-	FI
KMA0067	Mathematics II	3	-	-	-	FI
KMA0087	Mathematics III	-	5	-	-	FI
KMA0086	Mathematics IV	-	4	-	-	FI
000012	PHYSICS	7 cr				
KFK0047	Physics I	4	-	-	-	FI
KFK0018	Physics II	-	3	-	-	FI
PROFESSIONAL SPECIALISATION STUDIES		119 CR				
000014	INFORMATION TECHNOLOGY	6 cr				
KTI0029	Information Technology I	3	-	-	-	FI
KTE0044	CAD I (Construction Engineering)	3	-	-	-	FI
209401	STRUCTURAL MECHANICS	11 cr				
KTE0608	Statics (Construction Engineering)	3	-	-	-	FI
KTE0121	Statically Determinated Structures	3	-	-	-	FI
KTE1216	Strength of Materials I (Construction Engineering)	-	5	-	-	FI
209450	CONSTRUCTION ECONOMICS	15 cr				
KTE0049	Fundamentals of Construction Economy	3	-	-	-	FI
KTE1251	Fundamentals of Management of Project Economy	-	3	-	-	FI
KTE1078	Building Developing	-	-	3	-	FI
KLI0975	Industrial Economics I	-	-	-	3	FI
KTE1509	Planning of production	-	-	-	3	FI
209406	STRUCTURAL ENGINEERING	15 cr				
KTE1546	Concrete Materials	5	-	-	-	FI
KTE1246	Fundamentals of Construction planning	-	3	-	-	FI
KTE0131	Concrete Structures I	-	3	-	-	FI
KTE1511	Fundamentals of Structural Steelwork	-	-	4	-	FI
KTE1118	Fundamentals of House Building	3	-	-	-	FI

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			1.	2.	3.	4.	
209405		GEOTECHNICS AND FOUNDATION ENGINEERING					
		21 cr					
	KTE1219	Geotechnology	4	-	-	-	FI
	KTE1220	Foundation Engineering	-	-	5	-	FI
	KTE0903	Environmental Geotechnology	-	-	3	-	FI
	KTE1486	Foundation Engineering of Infrastructure	-	-	-	3	FI
	KTE0839	Rock Engineering	-	-	-	3	FI
	KTE1512	Geotechnical Investigations	-	-	3	-	FI
209449		INFRASTRUCTURAL SYSTEMS					
		30 cr					
	KTE1506	Fundamentals of Land-use Planning and Streets	3	-	-	-	FI
	KTE1513	Traffic and Traffic System Planning	-	3	-	-	FI
	KTE1514	Road Engineering	-	5	-	-	FI
	KTE1515	Maintenance of Infrastructure and Surface Technology	-	-	3	-	FI
	KTE1212	Bridge Engineering	-	-	-	3	FI
	KTE1516	Railway Engineering	-	-	-	3	FI
	KTE1517	Infrastructure Cad	-	3	-	-	FI
	KTE1518	Road Intersection Planning	-	-	3	-	FI
	KTE1519	Project Work in Infrastructure Engineering	-	-	-	4	FI
209448		HYDROTECHNOLOGY					
		11 op					
	KTE1520	Fundamentals of Water and Environmental Engineering	-	3	-	-	FI
	KTE0155	Hydrology and Hydraulics	-	-	3	-	FI
	KTE1521	Water and Sewerage Supply Networks	-	-	5	-	FI
	KTE1522	Treatment and Refining of Water	-	-	-	3	FI
209409		PRODUCTION ENGINEERING					
		10 op					
	KTE1523	Earthwork Technology	3	-	-	-	FI
	KTE0565	Rock blasting Technology	-	3	-	-	FI
	KTE1524	Production of Rock Structures	-	-	4	-	FI
	KTE1505	Health in Work and Labour Law	-	-	3	-	FI
	KTE1525	Surveying Technology	3	-	-	-	FI
	KTE1526	Surveying Technology and Automation	-	3	-	-	FI
209445		ELECTIVE PROFESSIONAL STUDIES OF CIVIL ENGINEERING PRODUCTION					
		6 CR					
		Alternative courses (HOPS)					
		Foundations of Buildings					
		Land-use Planning					
		Mining Technology					
		Natural Stone Production					
ELECTIVE STUDIES			15 cr	2	1	4	8
PLACEMENT			30 cr	6	7	8	9
BACHELOR'S THESIS			15 cr	-	-	-	15
TOTAL			240 cr	60	60	60	60

*) Language; FI = in Finnish, EN = in English