University of Oulu
Degree structure diagram 2017-2018
Bachelor of Science, Electrical Engineering, 180 ECTS credits

Course code	Course name	ECTS	Recommended timing, year and periods											
			1. year				2. year				3. year			
			1. autumn		1. spring		2. autumn		2. spring		3. autun		3. spring	
			1	2	3	4	1	2	3	4	1	2	3	4
Basic and subject studies														
521004P	Orientation Course for New Electrical Engineering Students	1.0	0.5	0.5										
031010P	Calculus I	5.0	5.0											
031078P	Matrix Algebra	5.0		5.0										
521077P	Introduction to Electronics	5.0	5.0											
521109A	Electrical Measurement Principles	5.0	2.5	2.5										
521141P	Elementary Programming	5.0	5.0											
Selection of Swedish or Finnish:			1.0	1.0										
901048Y 900081Y	Second official language Swe / Fin, written skills	1.0												
901049Y 900082Y	Second official language Swe / Fin, oral skills	1.0												
031075P	Calculus II	5.0			5.0									
031076P	Differential Equations	5.0				5.0								
031021P	Probability and Mathematical Statistics	5.0			5.0									
521301A	Digital Techniques I	8.0			4.0	4.0								
521302A	Circuit Theory 1	5.0				5.0								
761114P	Wave motion and optics	5.0				5,0								
031077P	Complex Analysis	5.0					5.0							
031080A	Signal Analysis	5.0						5.0						
766319A	Electromagnetism	7.0					3.5	3.5						
521104P	Introduction to Material Physics	5.0					5.0							
521303A	Circuit Theory 2	5.0						5.0						
521287A	Introduction to Computer Systems	5.0					2.5	2.5						
902011P 903010P	Technical English or Technical German	4.0							2,0	2.0				
521337A	Digital Filters	5								5.0				
521330A	Telecommunication Engineering	5								5.0				
521071A	Principles of Semiconductor Devices	5							5.0					
521431A	Principles of Electronics Design	5							5.0					
521432A	Electronics Design I	5								5.0				
521329A	Hands-on Course in Wireless Communication	5									5,0			
521404A	Digital Techniques II	5										5.0		
521384A	Radiotekniikan perusteet	5									5.0			
521070A	Introduction to Microfabrication Techniques	5										5.0		
521307A	Laboratory Exercises on Analogue Electronics	5									2.5	2.5		
521241A	Optical Systems	5									5.0			
521304A	Filters	5											5.0	

521092A	Electronic Measurement Techniques	5												5.0
031005P	Information Skills	1											0.5	0.5
	Optional studies, minimum	7											3.5	3.5
Bachelor's thesis and related studies														
523990A	Bachelor's Thesis (el. eng. or telecom.)												4.0	4.0
900060A	Technical Communication												1.0	1.0
	Semester total		28		33		32		29		30		28	
	Year total		61				61				58			