

Curriculum for the students coming from the UoP

**Wireless Communications Engineering – Radio Access and Networks
DD-WCE–RAN study option**

Code of the course	Name of the course	Course credits	Suggested timing									
			First year (at UoP)					Second year (at UOulu)				
			Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	
			1	2	3	4	5	1	2	3	4	5
Obligatory Studies, Total 24 UoP crs + 13 ECTS crs												
EE 669	Optimization of Communication Systems	3	x									
EE 664	Random Signal Analysis in Communications and Signal Processing	3	x									
EE 663	Advanced Digital Communications	3	x									
EE 665	Data Networks	3	x									
EE 681	Microwave Communications	3	x									
EE 680	Wireless Communication Systems	3			x							
EE 683	Advanced Technologies in Telecommunications	3			x							
EE 686	Advanced Digital Signal Processing	3			x							
521324S	Communication Signal Processing I	5							o			
521317S	Wireless Communications II	8							o			
Elective Obligatory Studies, Total 10 ECTS crs or 3 UoP crs + 7 ECTS crs												
521279S	Signal Processing Systems	5							x			
521325S	Communication Signal Processing II	5							o			
	or											
EE 687	Internetworking	3			x							
521377S	Communication Networks II	7							o			
Other Obligatory Studies, Total 30 ECTS crs												
521998S	Master's Thesis	30								x		
Elective Studies, Total ≥ 3 UoP crs + ≥ 7 ECTS crs												
EE685	Antenna Theory and Design* **	3			x							
EE 684	Telecommunication Regulation, Policy and Management	3			TBD							
EE 682	Optical Communication Systems	3			TBD							
900017Y	Survival Finnish Course I	2							x			
900013Y	Beginner's Finnish Course I	3							x			
900053Y	Beginner's Finnish Course II	5									x	
521318S	Modern Topics in Telecommunications and Radio Engineering	3-7								x		
521388S	Antennas (even years)**	5										x
521386S	Radio Channels (odd years)	5										x
521327S	Radio Engineering II	6								x		
521322S	Telecommunication Engineering Project	5							x			
521097S	Wireless Measurements	5								x		
521225S	RF Components and Measurements	5										x
521401S	Electronics Design II	6							x			
521435S	Electronics Design III	5								x		
521405S	Electronic System Design	5							x			
521402S	Telecommunication Circuit Design	5							x			
521300S	Electronics Design and Construction Exercise	6								x		
813621S	Research Method	5								x		
521273S	Biosignal processing	5								x		
521145A	Human Computer Interaction	5								x		
521279S	Signal Processing Systems	5								x		
521148S	Ubiquitous Computing Fundamentals	5								x		
521281S	Application Specific Signal Processors	5							x			
521140S	Computer Graphics	7										x
521290S	Distributed Systems	5									x	
521466S	Machine Vision	5									x	
521045S	Mobile Computing	5									x	
521044A	Social Computing	5									x	
521260S	Programmable Web Project	5									x	
521479S	Software Project	7								x		

UoP crs
ECTS crs

Master's Degree at UoP is 60 UoP crs. The first study year in DD-WCE study program is 30 crs which is 50% of the whole study load at the UoP.

Master's Degree at UOulu is 120 ECTS crs. The second study year in DD-WCE study program is 60 crs which is 50% of the whole study load at the UOulu.

o = video course or classes * recommended ** alternative courses