

Metropolia UAS Degree Programme in Information Technology COMMON CORE REQUIREMENT		extent of credits	Mathematics and natural sciences skill	Hardware skills	Network engineering skills	Software skills	ICT business skills	ICT application skills	Communication skills	Learning competence	Ethical competence	Working community competence	Innovation competence	Multicultural competence	Technological competence
1st year of study	Orientation	15	x	x	x	x		x	x	x	x	x	x	x	x
	Mobiles	15	x	x		x	x	x	x			x		x	x
	Smart Devices	15	x	x		x		x	x			x		x	x
	Linux and Networks	15	x	x	x		x	x	x			x		x	x
	Finnish for Foreigners 1	5							x	x	x			x	
	Finnish for Foreigners 2	5							x	x	x			x	
3rd year of study	Engineering Finnish and Communication Skills	5							x			x		x	
	Engineering Swedish	5							x			x		x	
	Finnish as a Second Language: Finnish at Work	5							x			x		x	
4th year of study	Multidisciplinary Innovation Project	10				x	x	x	x		x	x	x	x	x
	Academic English and Project Communication Skills	5						x	x			x			
	Methodological Studies	5						x	x						
	Work Placement 1	15			x	x	x	x	x			x	x	x	x
	Work Placement 2	15			x	x	x	x	x			x	x	x	x
	Bachelor's Thesis	15			x	x		x	x	x	x	x	x	x	x

Metropolia UAS Degree Programme in Information Technology MAJOR: MOBILE SOLUTIONS		extent of credits	Mathematics and natural sciences skills	Hardware skills	Network engineering skills	Software skills	ICT business skills	ICT application skills	Communication skills	Learning competence	Ethical competence	Working community competence	Innovation competence	Multicultural competence	Technological competence
2nd year of study	Object-Oriented Programming and Datacommunication	15	x			x				x		x		x	x
	Basic Concepts of Web Technology	15	x		x	x				x		x		x	x
	Web Based Mobile Applications	15	x		x	x				x		x		x	x
	Mobile Application Development	15				x				x		x		x	x
3rd year of study	Sensor Based Mobile Applications	15	x	x		x			x			x	x	x	x
	Mobile Project	15			x	x	x	x			x	x	x	x	x

Metropolia UAS Degree Programme in Information Technology MAJOR: SMART IOT SYSTEMS		extent of credits	Mathematics and natural sciences skills	Hardware skills	Network engineering skills	Software skills	ICT business skills	ICT application skills	Communication skills	Learning competence	Ethical competence	Working community competence	Innovation competence	Multicultural competence	Technological competence
2nd year of study	Internetworks	5		x	x			x		x		x		x	x
	Virtual Area Networks	5		x	x			x		x		x		x	x
	C Programming in IoT Devices	5		x		x		x		x		x		x	x
	Object-Oriented Programming in IoT Devices	5		x		x		x		x		x		x	x
	Engineering Mathematics	5	x							x		x		x	x
	Probability, Statistics and Discrete Mathematics with Python	5	x					x		x		x		x	x
	IoT Connecting Things	5		x	x			x		x		x		x	x
	Modern Computer Architecture	5		x		x		x		x		x		x	x
	Mathematics and Physics for IoT	5	x							x		x		x	x
	Linux Servers and Databases	5		x	x	x		x		x		x		x	x
	IoT Devices and Wireless Communication	5		x	x	x		x		x		x		x	x
	Sensor Physics	5	x							x		x		x	x
3rd year of study	<i>Embedded IoT Devices</i>														
	Internet of Things	5		x		x		x		x		x	x	x	x
	Embedded Systems Programming	5		x		x		x		x		x		x	x
	Digital Signal Processing	5	x	x		x		x		x		x		x	x
	Internet of Things (IoT) Project	5		x		x		x		x		x	x	x	x
	ARM-Processors and Embedded Operating Systems	5		x		x		x		x		x		x	x
	Managing Linux Systems with Embedded Perspective	5		x	x	x		x		x		x		x	x
	<i>IoT and Networks</i>														
	Advanced Routing	5		x	x			x		x		x		x	x
	IoT Security	5		x				x		x		x		x	x
	Windows Servers	5		x				x		x		x		x	x
	Internet of Things (IoT) Project	5		x		x		x		x		x		x	x
	Virtualization and Cloud Computing	5		x				x		x		x		x	x
	Multilayer Switching	5		x	x			x		x		x		x	x