

## Double Programme Applied Mathematics and Technical Computer Science 2018 -2019

### First academic year (81 EC)

<b>Quartile 1 (21 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Linear Structures I</i>	6 EC	<i>Pearls of Computer Science</i>	11 EC
	<i>Introduction to Mathematics + Calculus 1A</i>	4 EC		
<b>Quartile 2 (20 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Calculus 1B</i>	3 EC	<i>Programming Theory &amp; Project</i>	8 EC
	<i>Analysis</i>	3 EC		
	<i>Linear structures II</i>	3 EC		
	<i>Prooflab II</i>	2 EC		
<b>Quartile 3 (18 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Vector Calculus EE + AT</i>	3 EC	<i>Network Systems</i>	12 EC
	<i>Presentation skills</i>	3 EC		
<b>Quartile 4 (22 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Probability Theory</i>	5 EC	<i>Data &amp; Information</i>	12 EC
	<i>Signals &amp; Transforms</i>	5 EC		

### Second academic year (81,5 EC)

<b>Quartile 5 (21 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Statistics</i>	6 EC	<i>Computer Systems</i>	15 EC
<b>Quartile 6 (20 EC)</b>	<i>Applied Mathematics components</i>		<i>Technical computer Science components</i>	
	<i>Differential Equations</i>	4 EC	<i>Intelligent Interaction Design</i>	12 EC
	<i>Systems Theory</i>	4 EC		

<b>Quartile 7 (16 EC)</b>	<b>Applied Mathematics components</b>		<b>Technical computer Science components</b>	
	Introduction Mathematical Modelling	1 EC	Discrete Structures & Efficient Algorithms	15 EC
<b>Quartile 8 (20 EC)</b>	<b>Applied Mathematics components</b>		<b>Technical computer Science components</b>	
	Modelling & Analysis of Stochastic Processes	15 EC		
	Project Signals & Uncertainty	5 EC		

### Third academic year (67 EC)

<b>Quartile 9 (12 EC)</b>	<b>Applied Mathematics components</b>		<b>Technical computer Science components</b>	
	Analysis II	5 EC		
	Project Statistics (from Module 5)	2 EC		
	Reflection I	5 EC		

<b>Quartile 10 (15 EC)</b>	<b>Minor Profile</b> <a href="http://www.utwente.nl/en/education/electives/minor">http://www.utwente.nl/en/education/electives/minor</a>			
--------------------------------	---	--	--	--

<b>Quartile 11 (20 EC)</b>	<b>Applied Mathematics components</b>		<b>Technical computer Science components</b>	
	5 EC of AM Electives: Graph Theory	5 EC	Design Project	15 EC
	Introduction to PDE	5 EC		
	Random Signals & Filtering	5 EC		
	Mathematical Optimization	5 EC		

<b>Quartile 12 (20 EC)</b>	<b>Applied Mathematics components</b>		<b>Technical computer Science components</b>	
	Bachelor Assignment	10 EC	Extension TCS Bachelor Assignment	5 EC
	Complex Function Theory	3 EC		
	Reflection II	2 EC		