

## Double Programme Applied Mathematics and Technical Computer Science

### First year

Quartile 1				
21 EC	AM		TCS	
	<i>Mathematics A en B1</i>	4 EC	<i>Pearls of computer science</i>	8 EC
	<i>Linear Structures I</i>	6 EC	<i>Project</i>	3 EC

Quartile 2				
21 EC	AM		TCS	
	<i>Mathematics B2</i>	3 EC	<i>Programming Theory</i>	8 EC
	<i>Linear Structures II</i>	3 EC	<i>Programming project</i>	
	<i>Analysis</i>	3 EC		
	<i>ProofLab</i>	4 EC		

Quartile 3				
20 EC	AM		TCS	
	<i>Signals and Transformations</i>	5 EC	<i>Network systems</i>	12 EC
	<i>Probability (part 1)</i>	3 EC		

Quartile 4				
19 EC	AM		TCS	
	<i>Vector calculus</i>	5 EC	<i>Data e&amp; Information</i>	12 EC
	<i>Probability (part 2)</i>	2 EC		

### Second year

Quartile 5				
15 EC	AM		TCS	
	<i>Statistics</i>	5 EC	<i>Computer Systems</i>	15 EC

Quartile 6				
18 EC	AM		TCS	
	<i>Differential Equations</i>	4 EC	<i>Intelligent Interaction Design</i>	12 EC
	<i>Systems Theory</i>	4 EC		

Quartile 7			
21 EC	AM	TCS	
	<i>Discrete Struct &amp; Algorithms</i>	5 EC	
	<i>Algebra &amp; Finite Automata</i>	6,5 EC	
	<i>Research Project: Similarity</i>	3,5 EC	
	<i>Module 3 Project (5 EC) plus Intro to Math Modelling (1 EC)</i>		

Quartile 8			
15 EC	AM	TCS	
	<i>Stochastic Models</i>	5 EC	
	<i>Stochastic Models Project</i>	1,5 EC	
	<i>Markov Chains</i>	2,5 EC	
	<i>Stochastic Simulation Project</i>	4 EC	
	<i>Multidisciplinary Project</i>	2 EC	

### Third year

Quartile 9			
10 EC	AM	TCS	
	<i>Analysis II</i>	5 EC	
	<i>Project</i>	3 EC	
	<i>Presentation Skills</i>	2 EC	

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

Quartile 11 Bachelor Assignment			
15-20 EC	AM	TCS	
	<i>one of the following subjects:</i> <i>Graph theory</i> <i>Introduction to PDE</i> <i>Random Signals and Filtering</i> <i>Optimisation</i>		<i>Design assignment</i>
		<i>Reflection on Mathematical Research I</i>	

Quartile 12 Thesis			
15-20 EC	AM	TCS	
	<i>Complex Function Theory</i>	3 EC	
		<i>Reflection on Mathematical Research II</i>	