

## Bachelor Applied Mathematics

### First Year

<b>Module 1</b>	<b>Structures and Models</b>	<b>15 EC</b>
201800135	<i>Calculus I</i> <span style="float: right;">3 EC</span> <i>Prooflab I</i> <span style="float: right;">1 EC</span> <i>Linear Structures I</i> <span style="float: right;">6 EC</span> <i>Project &amp; Programming and</i> <i>Modelling &amp; Intercultural workshop</i> <span style="float: right;">5EC</span> <div style="text-align: right;"><i>Coordinator: B.M.Geveling</i></div>	

<b>Module 2</b>	<b>Mathematical Proof Techniques</b>	<b>15 EC</b>
201800136	<i>Calculus II</i> <span style="float: right;">4 EC</span> <i>Linear Structures II</i> <span style="float: right;">3 EC</span> <i>Analysis</i> <span style="float: right;">3 EC</span> <i>Linear Optimization</i> <span style="float: right;">3 EC</span> <i>Project: Prooflab II</i> <span style="float: right;">2 EC</span> <div style="text-align: right;"><i>Coordinator: J. de Jong</i></div>	

<b>Module 3</b>	<b>Fields and Electromagnetism</b>	<b>15 EC</b>
201800137	<i>Vector Calculus</i> <span style="float: right;">2 EC</span> <i>Prooflab III</i> <span style="float: right;">1 EC</span> <i>Electromagnetism</i> <span style="float: right;">5 EC</span> <i>Mathematica</i> <span style="float: right;">1 EC</span> <i>Presentation Skills</i> <span style="float: right;">3 EC</span> <i>Project</i> <span style="float: right;">3 EC</span> <div style="text-align: right;"><i>Coordinator: J.J.W.van der Vegt</i></div>	

<b>Module 4</b>	<b>Signals and Uncertainty</b>	<b>15 EC</b>
201800138	<i>Signals and Systems</i> <span style="float: right;">5 EC</span> <i>Probability Theory</i> <span style="float: right;">5 EC</span> <i>Project</i> <span style="float: right;">5 EC</span> <div style="text-align: right;"><i>Coordinator: A.A.Stoorvogel</i></div>	

### Second Year

<b>Module 5</b>	<b>Statistics and Analysis</b>	<b>15 EC</b>
201800139	<i>Statistics</i> <span style="float: right;">6 EC</span> <i>Analysis II</i> <span style="float: right;">5 EC</span> <i>Project</i> <span style="float: right;">2 EC</span> <i>Reflection</i> <span style="float: right;">2 EC</span> <div style="text-align: right;"><i>Coordinator: P.K.Mandal</i></div>	

<b>Module 6</b> 201500103	<b>Dynamical Systems</b>	15 EC
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Differential Equations & Numerical Methods	4,5EC
Systems Theory & Numerical Methods	4,5EC
Numerical Methods Practical	2,25EC
Project	3,75 EC
Coordinator: H.G.E.Meijer	

<b>Module 7</b> 201800141	<b>Discrete Structures and Efficient Algorithms</b>	15 EC
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Discrete Structures and Algorithms	5 EC
Algebra & Finite Automata	6,5 EC
Research Project: Similarity	3,5 EC
Coordinator: M.J.Uetz	

<b>Module 8</b> 201400434	<b>Modelling and Analysis of Stochastic Processes for Math</b>	15 EC
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Stochastic Models	5 EC
Stochastic Models Project	1,5 EC
Markov Chains	2,5 EC
Stochastic Simulation Project	4 EC
Multidisciplinary Project	2 EC
Coordinator: W.R.W.Scheinhardt	

### Third Year

<b>First Semester</b>	<b>Minor Profile</b>	30 EC
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<http://www.utwente.nl/onderwijs/keuzeruimte/minor/>

<b>Module 11</b> 201500379	<b>Bachelor's Assignment &amp; Electives</b>	15 EC
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<i>Student's preference - two out of four Elective courses:</i>	
Graph Theory	5 EC
Introduction to PDE	5 EC
Random Signals and Filtering	5 EC
Mathematical Optimization	5 EC
Reflection on Mathematical research I	5 EC
(this includes the beginning of Bachelor assignment)	
Coordinator: J. Timmer	

<b>Module 12</b> 201500380	<b>Finalising Thesis</b>	15 EC
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Complex Function Theory	3 EC
Reflection on Mathematical research II	2 EC
Bachelor Thesis	10 EC
Coordinator: J. Timmer	