

## Curriculum Advanced Technology 2014/2015

### First year (B1) – cohort 2014

Course code	Block	Module name	Study load (EC)
201300119	B1.1A	Man & machine	15
201300147	B1.1B	Thermodynamics	15
201300159	B1.2A	Fundamentals of Materials	15
201300160	B1.2B	Dynamics	15
Total			60

### Second year (B2) – cohort 2013

Course code	Block	Module name	Study load (EC)
201400157	B2.1A	Signals, Modelling and Systems	15
201400158	B2.1B	Materials Engineering	15
201400159	B2.2A	Fields and Waves	15
201400160	B2.2B	System Engineering & Entrepreneurship	15
Total			60

### Third year (B3) – cohorts 2012 and earlier

Course code	Module/course name	SL (EC)	Block
<b>Specialisation Programme (30 EC, depends on master of choice)*</b>			
Master admission modules (check master admission matrix)		30,0	
<b>Electives (free choice 15 EC)*</b>			
Elective subjects		15,0	
<b>Final Assignment (15 EC)</b>			
<i>Final Assignment (1 of 2 – 15 EC)</i>			
193999010	Bachelor Assignment AT	15,0	2B
193999028	Internship**	15,0	2B
Total		60,0	

\* Depending on master choice and interest the student chooses the two 15 EC modules required for admission. 15 EC is free choice (either as a module or as separate courses, as long as these courses are still available).

\*\* The internship is an option for students that don't continue with a master program. It provides an opportunity to gain experience in an industry setting.

### Third year (B3) AT courses and Modules

Course code	Course name	SL (EC)	Block
<b>Courses and Modules offered by AT</b>			
<i>Science module</i>			
201200179	Science	15,0	1A

### Module coordinators

201300119	Man & machine – Gijs Krijnen
201300147	Thermodynamics – Marcel ter Brake
201300159	Fundamentals of Materials – Gertjan Koster
201300160	Dynamics – Ruud van Damme
201400157	Signals, Systems and Modelling – Herbert Wormeester/Jeroen Verschuur
201400158	Materials Engineering – Mark Huijben
201400159	Fields and Waves – Michel de Jong
201400160	System Engineering & Entrepreneurship – to be announced
201200179	Science – Alexander Brinkman

**Second year (B2) discontinued courses**

These courses were taught last in the academic year 2013/2014. The last exams will be in 2014/2015.

Course code	Course name	Study load (EC)
193902010	Engineering of Complex Systems I	5
193902030	Engineering of Complex Systems II	5
193902410	Mathematical Modeling	5
193902320	Modeling of Physical Systems	5
193902210	Project III – Lab on a Chip	5
193902220	Project IV – Startrix	5
191560380	Differential Equations	5
194111700	Long Term Development of Science and Technology	5
191211730	Electronic Basic Circuits and Functions	5
193902810	Interfaces and Catalysis	5
193902610	Production Technology	5
193902710	Molecular and Cellular Biophysics	5
193902910	Vibrations and Waves	5
193902020	Basic Chemistry	5

**Third year (B3) discontinued AT courses and modules**

These courses were taught last in either the academic year 2013/2014 or 2014/2015. The last exams will be in 2014/2015 or 2015/2016 respectively.

Course code	Course name	SL (EC)	Block
<i>Engineering module</i>			
201200176	Systems and Control for Mechatronics **	5,0	1A
201200177	Manufacturing Systems and Technical Drawing *	5,0	1A
201300153	Manufacturing Systems **	3,0	1A+1B
201300154	Technical Drawing **	2,0	1A
201200178	Introduction to the Finite Element Method for AT **	5,0	1A
	* discontinued after 2012/2013; replaced by 201300153 + 201300154		
	** discontinued after 2013/2014; last exam opportunities 2014/2015		
<i>Materials module</i>			
201200179	Materials Science and Engineering (Discontinued after 2013/2014; last exam opportunities 2014/2015) (Contents moved to AT module 6 (B2.1B))	15,0	1B

Note: the transitional arrangements for the discontinued courses are under discussion.