Transition ruling ASM MSc track – dd. 8 May 2014

In September 2014 the ASM MSc track will undergo a drastic curriculum innovation. This innovation will also affect delayed student who started in the ASM track prior to September 2014. This document outlines the transition rulings affecting these students.

These ruling were created by the Track coordinator dr. ir. Gillian Saunders-Smits in close cooperation with the ASM track Management team, the lecturers and the profile coordinators and was approved by the Board of Examiners on 21 May 2014.

The document is divided into three parts:

1. General transition rules pertaining to entire MSc track
2. Course by course transition rules
3. Transition Procedure

1. General transition rules

- Students who have not completed any courses in an old version of the ASM MSc track by 1 September 2014 will have to start in the new MSc track and choose a new profile
- Students who wish to switch to the new track programme and profiles may do so.
- Students who have not yet completed all courses of their old programme after the relevant resit and repair options will have their remaining courses converted to the new track programme based on the rules as listed in section 2 of this document. With regards to the total number of EC the following applies:
    - If due to reduction of EC in courses and merger of courses the student ends up with a total of 119 EC in their MSc they will not have to pick an additional elective.
    - If due to reduction of EC in courses and merger of courses the student ends up with 118 EC or less they will have to select additional electives to ensure their total number of EC for their MSc programme equals 120 EC or more

2. Course by course transition rules

This section details the transition rules and last re-sit opportunities (where applicable) for each ASM taught course in the previous ASM MSc track programme to their replacements in the new programme.

Old course code	Old Course name	#EC	Type of course	Completion/ Resit opportunity	Transition Rule	Comments
AE4632	Composites: Materials, Structures and Production Processes	3	Core	Until 31 Dec 2014, students contact lecturer for individual arrangement	Take AE4ASM001	New Course partly similar – EC equal
AE4735	Fatigue of Structures & Materials	4	Core	If MSc students registered in 2013 or earlier took exam AE4735 or of its replacement course AE4ASM005 before 31 Jan 2015 they can hand in the assignment until 31 Jan 2015 to get grade for AE4735 if they so choose. After 31 Jan 2015 they will get grade for AE4ASM005. MSc students registered per 1 Sept 2014 must do AE4ASM005.	Take AE4ASM005	Replacement course – 1 EC less
AE4X02	Designing Materials with	3	Core	None necessary	Becomes AE4ASM002	Replacement course – no

	AE Specific Properties					changes
AE4536	Buckling of Structures	4	Core	In p4 of 2013/2014 an extra class was run	Take AE4ASM106	New Course partly similar – 1 EC less
AE4653	Composite Trinity Exercise	4	Profile	None necessary	Take AE4ASM105	Replacement course – no changes
AE4640	Polymers and polymer composite manufacturing	4	Profile	Students who failed assignment contact lecturer until 31 Oct 2014	Take AE4ASM004	New Course partly similar – 1 EC less
AE4684	Fibre Reinforced Materials in AE Structures	3	Profile	Students may hand in until 31 Dec 2014	Take AE4ASM109	New Course partly similar – 2 EC more
AE4628	Structural Design of Composite Aircraft	3	Profile	All outstanding assignments in by 31 August 2014 Students who failed assignment may amend until 31 Oct 2014	Take AE4ASM501 (or other relevant ASM elective if course already chosen)	Course disappears
CH2071TU	Polymer Science	4	Profile	Until 31 Dec 2014, students contact lecturer for individual arrangement	Take ASM101TU	New Course partly similar 2 EC more
AE4X04	Material Selection for Mechanical Design	3	Profile	None necessary	Take AE4ASM516	Replacement course – no changes
AE4X05	New Developments in Aerospace Polymers	3	Profile	Until 31 Dec 2014, students contact lecturer for individual arrangement	If CH2071 completed pick relevant ASM track elective, else take AE4ASM101TU	Course disappears
AE4X09	Sensor and Smart Materials	3	Profile	None necessary	Take AE4ASM104	Replacement course – no changes
AE4X10	Self-Healing Materials	3	Profile	None necessary	Take AE4ASM508	Replacement course – no changes
AE4736	Experimental Techniques in Structural Analysis	3	Profile	None necessary	Take AE4ASM108	Replacement course – no changes
AE4760	Aircraft Structural Integrity and Maintenance	3	Profile	None necessary	Take AE4ASM504	Replacement course – no changes
AE4740	Joining Techniques	4	Profile	None necessary	Take AE4ASM107	Replacement course – no changes
AE4786	Sheet Metal Forming	3	Profile	None necessary	Take AE4ASM503	Replacement course – no changes
AE4520	Advanced Structural Analysis	3	Profile	In p4 of 2013/2014 an extra class was run. Students who failed may contact lecturer until 31 December 2014	If AE4536 completed take AE4ASM511 else take AE4ASM106	New Course partly similar – 1 EC less
AE4509	Advanced Design and Optimization of Composite Structures I	4	Profile	None Necessary	Take AE4ASM109	New Course partly similar 1 EC more
AE4526	Linear (Structural) Modelling	4	Profile	None Necessary	Take AE4ASM003	Replacement course – 1 EC less

AE4527	Non-Linear Structural Modelling	3	Profile	None Necessary	Take AE4ASM505	Replacement course – no changes
AE4515	Introduction into Adaptive Aerospace Structures	3	Profile	None Necessary	Take AE4ASM507	Replacement course – no changes
AE4510 II	Advanced Design and Optimization of Composite Structures II	3	Profile	None Necessary	Take AE4ASM510	Replacement course – no changes
AE4900TU	Continuum Mechanics	4	Elective	None Necessary	Take AE4ASM514TU	Replacement course – no changes
AE4930	Aero elasticity	3	Elective	None Necessary	Take AE4ASM506	Replacement course – no changes
AE4633	Composite materials for durable structures	3	Elective	Until 31 Jan 2015, students contact lecturer for individual arrangement	Take AE4ASM501	New Course, partly similar
AE4634	Fracture of advanced materials	6	Elective	Until 31 Dec 2014, students contact lecturer for individual arrangement	Pick relevant ASM elective	Course disappears
AE4645	Design & manufacturing of wind turbine rotor blades	3	Elective	None Necessary	Take AE4ASM509	Replacement course – no changes
AE4530	Special Topics in Vibrations	3	Elective	None Necessary	Take AE4ASM511 else pick relevant ASM elective	Replacement course – no changes
AE4X03	Design and metallurgy of aerospace alloys	3	Elective	None Necessary	Take AE4ASM102	Replacement course – no changes
AE4770	Holistic Structural Integrity Processes	3	Elective	None Necessary	Take AE4ASM502	Replacement course – no changes
AE4457	Forensic Engineering	3	Elective	None Necessary	Take AE4ASM513	Replacement course – no changes

There are two profile courses in the old programme taught by other departments: ME1303 and AE4454. It is assumed they remain in existence. Students may swop these out for more suitable ASM courses in agreement with their track coordinator.

3. Transition procedure

The track coordinator and the student will draw up a document outlining the individual changes to the student's ISP and submit this document, signed by both parties, to the Board of Examiners for approval. Final approval lies with the Board of Examiners. This will be done for each ASM MSc track student that has courses outstanding in the first year of the Master with the exception of AE4010 Research Methodologies, AE4020 Literature Study and WM0324 Ethics and Engineering for Aerospace Engineering

Transitioning will start from 1 September 2014.

Students with queries on any of the transition rulings in this document with respect to their own personal circumstances are strongly advised to first contact the ASM MSc Track Coordinator, Dr. ir. Gillian Saunders-Smits, G.N.Saunders@tudelft.nl or visit her open office hours: Every Friday from 09.30 – 10.30.

Appendix I: List of New ASM MSc track courses

Course code	Course name	#EC	Period	Contact hours
AE4ASM001	Design of lightweight structures I: Composites & Metals	3	1	4/0/0/0
AE4ASM002	Designing Materials with Aerospace Specific Properties	3	1	2/0/0/0
AE4ASM003	Linear Modeling (incl. F.E.M)	3	1	2+2P/0/0/0
AE4ASM004	Manufacturing of Aerospace Structures & Materials	3	1	4/0/0/0
AE4ASM005	Fatigue of Structures & Materials	3	1	4/0/0/0

Course code	Course name	#EC	Period	Contact hours
AE4ASM101TU	Polymer Science	5	2	0/x/0/0 (8 colleges)
AE4ASM102	Advanced Alloys	3	2	0/2/0/0
AE4ASM103	Functional Coatings	3	2	0/2/0/0
AE4ASM104	Sensor Materials	3	3	0/0/2/0
AE4ASM105	Trinity Exercise	4	2,3	0/4/4/0
AE4ASM106	Stability & Analysis of Structures I	3	2	0/4/0/0
AE4ASM107	Joining Methods	3	2	0/4/0/0
AE4ASM108	Experimental Techniques & NDT	3	2	0/4/0/0
AE4ASM109	Design & Analysis of Composite Structures I	5	3	0/0/4/0

Course code	Course name	#EC	Period	Contact hours
AE4ASM501	Design of Lightweight Structures II	3	3	0/0/4/0
AE4ASM502	Holistic Structural Integrity Process	3	3	0/0/4/0
AE4ASM503	Sheet Metal Forming	3	3	0/0/4/0
AE4ASM504	Structural Integrity and Maintenance	3	3	0/0/4/0
AE4ASM505	Non-Linear Modeling (using F.E.M.)	3	3	0/0/2+2P/0
AE4ASM506	Aeroelasticity	3	3	0/0/4/0
AE4ASM507	Adaptive Aerospace Structures	3	3	0/0/4/0
AE4ASM508	Design of Self-healing materials	3	3	0/0/2/0
AE4ASM509	Design & Manufacturing of Wind turbine blades	3	3	0/0/2/0
AE4ASM510	Design & Analysis of Composite Structures II	3	4	0/0/0/4
AE4ASM511	Stability & Analysis of Structures II	3	3	0/0/4/0
AE4ASM512	Aerospace Structures & Materials Industry Best Practice	3	4	0/0/0/2
AE4ASM513	Forensic Engineering	3	3	0/0/4/0
AE4ASM514TU	Continuum Mechanics	4	3	0/0/4/0
AE4ASM515	Materials Characterization	3	4	0/0/0/2
AE4ASM516	Material Selection for Mechanical Design	3	3	0/0/2/0