

# Transition Rules CoSEM

## 2018-2019

### First year track programme:

#### *Transport & Logistics*

**SEN1731** Analysis and Design of Freight and Logistic Systems (5 EC)

**2018-2019** replaced by SEN173A, with identical content, other course code.

Remaining partial marks will be registered under the new course code.

### **General transition rule regarding MSc thesis project (TER: App 4, article 1):**

Thesis duration arrangement starting from academic year 2018-2019 for all students of all cohorts: when a student does not pass the first green-light meeting 17 working weeks after the kick-off meeting, the graduation committee may extend the graduation process of the student by a maximum time period of 3 months (13 weeks).

The motivation to extend duration of the master thesis project has to be indicated on the green-light form, which has to be signed by a full professor or an associate professor with ius promovendi in the graduation committee, or by the former or current director of studies.

When a student does not pass the second green-light meeting within 3 months, he/she has to start with a new graduation topic and new graduation committee for which the same duration arrangement is applicable.

In case of special circumstances the Board of Examiners may deviate from the thesis duration arrangement, however only in favour of the student.

### **Only for cohorts 2016-2017 and earlier:**

- When the student worked on his/her master thesis project before 1 September, 2018, then:
  - these weeks are not taken into account when monitoring the thesis duration arrangement.
  - the monitoring and thesis duration arrangement will start from the 1 September, 2018 on.
- When the student starts his/her thesis in academic year 2018-2019 or later the thesis duration arrangement will be applicable.

## 2017-2018

### First year track programme

#### *Information & Communication*

**SEN1621** I&C Service Design (5 EC)

2017-2018 replaced by **SEN1622** I&C Service Design (5 EC), same course, other course code

Additional change November 2017

#### *Energy*

**SEN1521 Electricity and Gas: Market Design and Policy Issues (5EC)**

**Course code changed into SEN1522.**

Students who have not completed **SEN1521** yet and passed **one of the 2 exams** (the individual written exam OR the individual (modelling) exercises) can still fulfil the course SEN1521.

For the remaining transition rules, see next page.

### **General rules:**

- The 2nd year CoSEM courses 'old style' will no longer be offered in 2017-2018.
- If some parts of the old courses are already fulfilled, 2 retakes for written-exams are offered in 2017-2018 for these 2nd year courses.
- If the replacement course contains a different amount of credit points than the original old course, a compensation can be made by choosing a "transitional course" of 1 EC, 2 EC, 3 EC or 4EC (SENTRO1; SENTRO2; SENTRO3, SENTRO4) and/or an extra elective course of 5EC, so that the whole CoSEM programme remains 120 EC.
- Skills are a part of respective replacement course.

Students should check the roster for the courses and the exam schedule; it may occur that courses/exams are in a different period compared to the old programme.

Module Man "old" COSEM programme	Course code	Course name	EC	Formal transitional rule OER/UR 2017-2018 (2 <sup>nd</sup> year courses)	Formal transitional rule OER/UR after 2017-2018
Jolien Ubacht	SPM5905	CoSEM master thesis preparation	6	<b>2017-2018</b> If the 7 assignments of spm5905 are fulfilled (besides the article and project plan): - 1x possibility Scientific Article - 1x possibility Project Plan (=research proposal) <b>otherwise:</b> SPM5905 is replaced by SEN2321 <i>Preparation Master Thesis</i> (5 EC) + 1x possibility for an extra literature review assignment for 1EC	<b>After 2017-2018</b> SPM5905 is replaced by SEN2321 <i>Preparation Master Thesis</i> (5 EC)
<b>E&amp;I domain</b>					
Gijsbert Korevaar	SPM9539	Economy, Ecology and Technology of Networked Ind Complexes	3	<b>2017-2018</b> SPM9539 is replaced by a 2 <sup>nd</sup> year Energy track course	<b>After 2017-2018</b> SPM9539 can be replaced by a 2 <sup>nd</sup> year Energy track course
Zofia Lukszo	SPM5520	Engineering Optimization in Energy and Industry	3	<b>2017-2018</b> - 2x written exam	<b>After 2017-2018</b> SPM5520 (3 EC) is replaced by SEN1511 <i>Engineering Optimization and Integrating Renewables in Electricity Markets</i> (5 EC)
Jaco Quist	SPM5530	System Innovation in Energy & Industry	3	<b>2017-2018</b> SPM5530 is replaced by a 2 <sup>nd</sup> year Energy track course	<b>After 2017-2018</b> SPM5530 is replaced by a 2 <sup>nd</sup> year Energy track course
<b>I&amp;C domain</b>					
Wolter Pieters	SPM5440	Cyber Security Essentials	4	<b>2017-2018</b> If assignment specific to spm5440 done, then - 2x possibility midterm exam of spm5442 <b>otherwise:</b> SPM5440 is replaced by a 2nd year I&C track elective	<b>After 2017-2018</b> SPM5440 is replaced by a 2nd year I&C track elective
<b>T&amp;L domain</b>					
Ron van Duin	SPM5620	Design and management of multi modal logistics chains	4	<b>2017-2018</b> SPM5620 is replaced by SEN9710 <i>Multi-modal Freight Transport Policy</i> (5EC)	<b>After 2017-2018</b> SPM5620 is replaced by SEN9710 <i>Multi-modal Freight Transport Policy</i> (5EC)

## 2016-2017

### General rules:

- The 1<sup>st</sup> year SEPAM courses “old style” below will no longer be offered in 2016-2017; and the 2<sup>nd</sup> year courses will be not offered in 2017-2018.
- If some parts of the old courses are already fulfilled, 2 retakes for written-exams are offered in 2016-2017 for the 1<sup>st</sup> year courses and resp. in 2017-2018 for the 2<sup>nd</sup> year courses.
- If the replacement course contains a different amount of credit points than the original old course, a compensation can be made by choosing a “transitional course” of 1 EC, 2 EC, 3 EC or 4EC (the course codes will be shortly defined) and/or an extra elective course of 5EC, so that the whole SEPAM programme remains 120 EC.
- Skills are a part of respective replacement course.
- Students should check the roster for the courses and the exam schedule; it can happen that the courses/exams are in a different period as in the old programme.

Module manager “old” SEPAM programme	Course code	Course name	EC	Formal transitional rule OER/UR 2016-2017 (1 <sup>st</sup> year courses) and 2017-2018 (2 <sup>nd</sup> year courses)	Formal transitional rule OER/UR after 2016-2017 resp. 2017-2018
Els van Daalen	SPM4111	Introduction to designing in multi-actor systems	2	SPM4111 is replaced by SEN1111 <i>Introduction to Designing in Complex Systems</i> (2 EC).	SPM4111 is replaced by SEN1111 <i>Introduction to Designing in Complex Systems</i> (2 EC).
Stephan Lukosch	SPM4123	Designing MAS from an Engineering Perspective	8	If the Dialog session (1) and Design briefing (2) and Method laboratory exercises (3) and Mid-term method laboratory test (4) are fulfilled: - 2x possibility exam spm4123. <b>otherwise</b> SPM4123 is replaced by SEN1121 <i>Complex Systems Engineering</i> (5 EC) and <i>Capita Selecta Modelling Lab</i> (3 EC).	SPM4123 is replaced by SEN1121 <i>Complex Systems Engineering</i> in Q1 (5 EC)
Bauke Steenhuisen	SPM4133	Designing MAS from an actor perspective	8	If the design-assignment (1) and argumentative essay (2) are fulfilled: -2x possibility written exam; <b>otherwise:</b> SPM4133 is replaced by SEN1133 <i>Managing multi-actor decision making</i> in Q2 (5 EC) and <i>Institutional Economics</i> (3 EC).	SPM4133 is replaced by SEN1133 <i>Managing multi-actor decision making</i> in Q2 (5 EC) and <i>Institutional Economics</i> (3 EC).
Michel Oey	SPM4142	MAS design: an integrative perspective	3	If the project-product is done - 2x possibility oral exam; <b>otherwise</b> SPM4142 is replaced by SEN1311 <i>SEPAM Research Challenges</i> (5 EC)	SPM4142 is replaced by SEN1311 <i>SEPAM Research Challenges</i> (5 EC)
Heide Lukosch	SPM4416	Strategic Management of Large Engineering Projects	6	If the casework-portfolio is done - 2x possibility written Q3-exam - 2x possibility written Q4-exam <b>otherwise</b> SPM4416 is replaced by SPM8000 <i>SEPAM project management</i> (7 EC)	SPM4416 is replaced by SPM8000 <i>SEPAM project management</i> (7 EC)

Nienke Saanen	SPM4423	Legal Aspects of MAS Design	5	-2x possibility written exam;	Spm4423 is replaced by SEN1151 <i>Law and Institutions</i> (5 EC)
Henk Zandvoort	SPM4115	Ethical aspects	3	-2x possibility written exam;	SPM4115 is replaced by WM0320TU <i>Ethics and Engineering</i> (3EC)
Tineke Ruijgh	SPM5920	Design Project	7	SPM5920 is replaced by SEN1161 <i>Design Project</i> (5 EC) and - 1x possibility for a new assignment (2 EC)	SPM5920 is replaced by SEN1161 <i>Design Project</i> (5 EC)
Jolien Ubacht	SPM5905	SEPAM master thesis preparation	6	<b>2017-2018</b> If the 7 assignments of spm5905 are fulfilled (besides the article and project plant): - 1x possibility Scientific Article - 1x Possibility Project Plan (=research proposal) <b>otherwise:</b> SPM5905 is replaced by SEN2321 <i>Preparation Master Thesis</i> (5 EC) + 1x possibility an extra literature review assignment for 1EC	<b>After 2017-2018</b> SPM5905 is replaced by SEN2321 <i>Preparation Master Thesis</i> (5 EC)

B&S Domain					
Wil Zonneveld	SPM4710	Design of spatial concepts	4	If the student has fulfilled the attendance, 1 presentation and portfolio of spm4710, then - 2x possibility written exam <b>otherwise:</b> SPM4710 is replaced by AR2U090 <i>Research &amp; Design Methodology for Urbanism</i> (5 EC)	SPM4710 is replaced by AR2U090 <i>Research &amp; Design Methodology for Urbanism</i> (5 EC)
Harry v.d. Heijden	SPM4720	Design of housing programmes	5	If the paper is done, - 2x written exam <b>otherwise:</b> SPM4720 is replaced by SEN1411 <i>Design of Housing Programs</i> (5 EC).	SPM4720 is replaced by SEN1411 <i>Design of Housing Programs</i> (5EC)
Reinout Kleinhans	SPM4730	Strategies of Urban Restructuring	4	If the paper and the game are done, -2x written exam <b>otherwise:</b> SPM4730 is replaced by SEM1421 <i>Design of Urban Restructuring Strategies</i> (5 EC)	SPM4730 is replaced by SEM1421 <i>Design of Urban Restructuring Strategies</i> (5 EC)
Herman de Wolff	SPM4740	Value capturing in land management	5	If the student has fulfilled the preparation papers: - 2x written exam <b>otherwise:</b> SPM4740 is replaced by SEN1441 <i>Value Capturing Strategies and Urban Development</i> (5 EC)	SPM4740 is replaced by SEN1441 <i>Value Capturing Strategies and Urban Development</i> (5 EC)
Laure Itard	SPM9750	Environmental Sustainability in the Built Environment	4	<b>2017-2018</b> If the student has fulfilled the participation in the design game and the Assignment Design Game is done - 2x written exam <b>otherwise:</b> SPM9750 is replaced by an elective course B&S track 2 <sup>nd</sup> Year	<b>After 2017-2018</b> SPM9759 is replaced by an elective course B&S track 2 <sup>nd</sup> Year
Marjolein Spaans	SPM5710	Integrative regional development	5	<b>2017-2018</b> If the student has fulfilled the the attendance, presentation, portfolio and essay: - 2x written exam <b>otherwise:</b> SPM5710 is replaced by SEN1431 <i>Design of Regional Development Strategies</i> (5 EC)	<b>After 2017-2018</b> SPM5710 is replaced by SEN1431 <i>Design of Regional Development Strategies</i> (5 EC)

E&I domain					
Igor Nikolic	SPM4530	Agent Based Modelling of complex energy and industrial networks	4	If the modeling project is done - 2x written exam <b>otherwise:</b> SPM4530 (4 EC) is replaced by SEN1211 Agent-based Modelling (5 EC)	SPM4530 (4 EC) is replaced by SEN1211 <i>Agent-based Modelling</i> (5 EC)
Paulien Herder	SPM4510	Design of systems in energy and industry	5	- 2 x written exam	SPM4510 is replaced by a 2 <sup>nd</sup> year Energy track course (5 EC)
Laurens de Vries	SPM4520	Electricity and Gas: Market Design and Policy Issues	3	- 2x written exam	SPM4520 is replaced by SEN1521 <i>Electricity and Gas: Market Design and Policy Issues</i> (5 EC)
Daniel Scholten	SPM4540	Technology and Economy of Future Energy Systems	5	If the student has fulfilled the participation during class and on Blackboard for SPM4540: - 2 x possibility written exam. otherwise SPM4540 is replaced by SEN1541 <i>Sociotechnology of Future Energy Systems</i> (5 EC)	SPM4540 is replaced by SEN1541 <i>Sociotechnology of Future Energy Systems</i> (5 EC)
Gijsbert Korevaar	SPM9539	Economy, Ecology and Technology of Networked Industrial Complexes	3	<b>2017-2018</b> SPM9539 is replaced by a 2 <sup>nd</sup> year Energy track course	<b>After 2017-2018</b> SPM9539 can be replaced by a 2 <sup>nd</sup> year Energy track course
Zofia Lukszo	SPM5520	Engineering Optimization in Energy and Industry	3	<b>2017-2018</b> - 2x written exam	<b>After 2017-2018</b> SPM5520 (3 EC) is replaced by SEN1511 <i>Engineering Optimization and Integrating Renewables in Electricity Markets</i> (5 EC)
Jaco Quist	SPM5530	System Innovation in Energy & Industry	3	<b>2017-2018</b> SPM5530 is replaced by a 2 <sup>nd</sup> year Energy track course	<b>After 2017-2018</b> SPM5530 is replaced by a 2 <sup>nd</sup> year Energy track course

I&C domain					
Marijn Janssen	SPM4340IA	Design of innovative ICT-infrastructure and services	6	If the assignment is done, then - 2x possibility written exam <b>otherwise:</b> Spm4340IA is replaced by SEN1611 <i>I&amp;C Architecture Design</i> (5 EC) + extra assignment (1 EC)	SPM4340IA is replaced by SEN1611 <i>I&amp;C Architecture Design</i> (5 EC)
Marijn Janssen	SPM4430	ICT Infrastructures architectures	3	- 1x possibility report	SPM4430is replaced by a 2nd year I&C track elective
Jolien Ubacht	SPM4440	Revolution in ICT Infrastructures (Q3)	4	If the student has fulfilled the weekly assignments: - 1x Scientific Article <b>otherwise</b> SPM4440 is replaced by <i>SEN1641 I&amp;C Inverse Infrastructure Design</i> (5 EC)	SPM4440 is replaced by <i>SEN1641 I&amp;C Inverse Infrastructure Design</i> (5 EC)
Jan v.d. Berg/ Andre Teixeira	SPM4450	Fundamentals of Data Analytics	5	SPM4450 is replaced by SEN1631 <i>Data Analytics for Critical Infrastructures</i> (5 EC)	SPM4450 is replaced by SEN1631 <i>Data Analytics for Critical Infrastructures</i> (5 EC)
Wolter Pieters	SPM5440	Cyber Security Essentials	4	<b>2017-2018</b> If assignment specific to spm5440 done, then - 2x possibility midterm exam of spm5442 <b>otherwise:</b> SPM5440 is replaced by a 2nd year I&C track elective	<b>After 2017-2018</b> SPM5440 is replaced by a 2nd year I&C track elective
Mark de Reuver	SPM5430	Service systems engineering	5	<b>2017-2018</b> If the student has fulfilled the attendance, design assignments and presentation: -2x possibility written exam <b>otherwise:</b> SPM5430 (5 EC) is replaced by SEN1621 <i>I&amp;C Service Design</i> (5 EC)	<b>After 2017-2018</b> SPM5430 (5 EC) is replaced by SEN1621 <i>I&amp;C Service Design</i> (5 EC)
I&C domain – IA track					
Alessandro Bozzon	IN4325	Information Retrieval	5	IN4325 will continue. No transitional rule needed.	IN4325 will continue. No transitional rule needed.
Arie van Deursen	IN4315	Software architecture		IN4315 will continue. No transitional rule needed.	IN4315 will continue. No transitional rule needed.
Virginia Dignum	SPM5920IA	Design project IA	6	SPM5920IA is replaced by SEN1161 <i>Design Project</i> (5 EC) and 1 x possibility extra assignment of 1 EC	SPM5920IA is replaced by SEN1161 <i>Design Project</i> (5 EC)
Geert-Jan Houben	IN4252	Web Science & Engineering	5	IN4252 will continue. No transitional rule needed.	IN4252 will continue. No transitional rule needed.



T&L domain					
Marcel Ludema	SPM4621	Supply Chain Analysis and Engineering	6	SPM4621 will continue in 2016-2017. No transitional rule needed.	SPM4621 is replaced by SEN9720 <i>Logistics and Supply Chain Innovations</i> (5EC)
Caspar Chorus	SPM4612	Statistical methods for choice behaviour analysis	6	If exam_part1 done, then 2x exam_part2, If exam_part2 done, then 2x exam_part1, <b>otherwise:</b> - SPM4621 is replaced by SEN1221 <i>Statistical Analysis of Choice Behaviour</i> (5 EC) and an extra assignment of 1 EC	SPM4621 is replaced by SEN1221 <i>Statistical Analysis of Choice Behaviour</i> (5 EC)
Hans van Ham	SPM4631	Transport Policy	6	- 1x possibility assignments	SPM4631 is replaced by SEN9715 <i>Designing Transport Policy</i> (5 EC)
John Baggen	SPM5610	Planning and Design of Multi-Modal Infrastructure Networks	5	SPM5610 is replaced by SEN1711 <i>Advanced Evaluation Methods for Transport Policy Decision-making</i> (5 EC)	SPM5610 is replaced by SEN1711 <i>Advanced Evaluation Methods for Transport Policy Decision-making</i> (5 EC)
Ron van Duin	SPM5620	Design and management of multi modal logistics chains	4	<b>2017-2018</b> SPM5620 is replaced by SEN9710 <i>Multi-modal Freight Transport Policy</i> (5EC)	<b>After 2017-2018</b> SPM5620 is replaced by SEN9710 <i>Multi-modal Freight Transport Policy</i> (5EC)

## 2015-2016

In September 2016 a renewed first-year SEPAM programme will start. The current SEPAM programme will be taught for the last time during the academic year 2015-2016. Four opportunities to sit an examination will be granted: an examination at the end of the teaching period involved, a resit in the same academic year (2015-2016), and two resits in the subsequent academic year (2016-2017).

### *Sepam IA*

From 1 September 2015 SEPAM IA will no longer be a SEPAM track, but IA will then be one of the SEPAM domains.

Students who started SEPAM IA in academic year 2014-2015 or earlier will receive a diploma with a special IA remark. Students who started SEPAM IA 1 September 2015 or later will not receive a special remark on the diploma.

### *Built Environment & Spatial Development*

#### **SPM4710 Design of urban concepts** (4 ECTS)

2015-2016 replaced by SPM4710 Design of spatial concepts (4 ECTS), same course, other title

#### **SPM5710 Integral Regional Development** (5 ECTS)

2015-2016 replaced by SPM 5710 Integrative Regional Development (5 ECTS), same course, other title

## 2014-2015

### *Information & Communication*

**SPM5440** Cyber Security & Warfare (4 EC) is replaced by SPM5440 Cyber Security Essentials (4 EC) same course, other title.

### *Transport & Logistics*

**SPM4611** Transport and Logistic Systems from an Engineering and Actor Perspective (6 EC)

2014-2015 Two examinations for SPM4611. SPM4611 will be offered in 2014-2015 (contact the module manager M. Ludema). Replaced by **SPM4612** Statistical Methods for Behavioural Analysis (6 EC).

2015-2016 Two examinations for SPM4611.

## 2013-2014

### **MSc SEPAM**

### *Information and Communication*

**SPM4450** Fundamentals of Business Intelligence (5 EC) is replaced by SPM4450 Fundamentals of Data Analytics (5 EC). – same course other title.

### **SEPAM IA**

**SPM4450** Fundamentals of Business Intelligence (5 EC) is replaced by SPM4450 Fundamentals of Data Analytics (5 EC). – same course other title

**IN4324** Web & Semantic Web engineering (5 EC) replaced by IN4252 Web Science & Engineering (5 EC). see the transitional regulations of Computer Science (Implementation Regulations).

## 2012-2013

### **MSc SEPAM**

### ***Information & Communication***

**Spm4140** Service Systems Engineering (4 ec). Contact Dr. W.A.G.A. Bouwman.  
2012-2013 spm4140 two examinations. Spm4140 can be replaced by spm5430.  
2013-2014 spm4140 two exams.

**Spm9750** Environmental sustainability in the built environment (4ec). Contact L.C.M. Itard  
2012-2013 spm9750 two examinations. Spm9750 can be replaced by spm5440 (5ec).  
2013-2014 spm9750 two exams.

**IN4325** Information retrieval [5] will be scheduled at 2012-2013 and two examinations at 2013-2014 .

**IN4308:** Model-driven Software Development [5] **OR**

**IN4332:** Business Process Modelling [5] (only Q3) : Both will be scheduled at 2012-2013 and two examinations at 2013-2014 .

### ***Transport & Logistics***

**SPM4620** Supply Chain Analysis [3 ec]  
2012-2013: Two examinations for spm4620. Spm4620 can be replaced by part 'Analysis' (3 ec) of spm4621 (6 ec)  
2013-2014: Two examinations for spm4620

**SPM4640** Supply Chain Engineering (4 ec)  
2012-2013: Two examinations for spm4640. Spm4640 can be replaced by part 'Engineering' (3 ec) **OF** spm4621 (6 ec) + an extra assignment.  
2013-2014: Two examinations for spm4620

**SPM4610** Transport and Logistics System Engineering [6]  
2012-2013: Two examinations for spm4610. Spm4610 can be replaced by spm4611 (6 ec)  
2013-2014: Two examinations for spm4610

**Spm4630** Transport Policy (5 ec)  
2012-2013: Two examinations for spm4630. Spm4630 (5 ec) can be replaced by spm4631 (6 ec)  
2013-2014: Two examinations for spm4630

**CIE5750** Spatial Planning for the Metropolis [4] will be scheduled at 2012-2013 and two examinations at 2013-2014

**MT725** Inland Shipping [2] will be scheduled at 2012-2013 and two examinations at 2013-2014

### ***Built Environment & Spatial Development***

**SPM4840IE** Urban Environments and Infrastructures (6 EC) can be replaced by 4413UEINFY (same module, but new course code).

### **SEPAM IA**

**Spm4140** Service Systems Engineering (4 ec). Contact Dr. W.A.G.A. Bouwman.  
2012-2013. spm4140 two examinations. Spm4140 can be replaced by spm5430.  
2013-2014 spm4140 two exams.

## 2011-2012

### **SPM4122** Designing MAS from an Engineering Perspective (9 EC)

- 2011-2012 Two examinations for SPM4122. SPM4122 can be replaced by SPM4123 (8 EC) and an extra assignment (1 EC).
- 2012-2013 Two examinations for SPM4122.

### **SPM4132** Designing MAS from an Actor Perspective (9 EC)

- 2011-2012 Two examinations for SPM4132. SPM4132 can be replaced by SPM4133 (8 EC) and an extra assignment (1 EC).
- 2012-2013 Two examinations for SPM4132.

### **SPM4141** MAS design: an Integrated View (4 EC)

- 2011-2012 Two examinations for SPM4141. SPM4141 can be replaced by SPM4142 (3 EC) and an extra assignment (1 EC).
- 2012-2013 Two examinations for SPM4141.

### **SPM4370** LUD systems engineering (9 EC)

- 2011-2012 For students who have not yet started SPM4370, this course can be replaced by SPM4710 (4 EC) and SPM4720 (5 EC). Students who already started SPM4370 but have not yet finished it, can contact the module manager.
- 2012-2013 For students who have not yet started SPM4370, this course can be replaced by SPM4710 (4 EC) and SPM4720 (5 EC). Students who already started SPM4370 but have not yet finished it, can contact the module manager.

### **SPM4341** Design of Innovative ICT Infrastructures and Services (9 EC)

- 2011-2012 For students who have not yet started SPM4341, this course can be replaced by SPM4430 (3 EC) and SPM4340IA (6 EC). Students who already started SPM4341 but have not yet finished it, can contact the module manager.
- 2012-2013 For students who have not yet started SPM4341, this course can be replaced by SPM4430 (3 EC) and SPM4340IA (6 EC). Students who already started SPM4341 but have not yet finished it, can contact the module manager.

### **SPM4361** TIL Systems Engineering (9 EC)

- 2011-2012 For students who have not yet started SPM4361, this course can be replaced by SPM4610 (6 EC) and an extra assignment (3 EC). Students who already started SPM4361 but have not yet finished it, can contact the module manager.
- 2012-2013 For students who have not yet started SPM4361, this course can be replaced by SPM4610 (6 EC) and an extra assignment (3 EC). Students who already started SPM4361 but have not yet finished it, can contact the module manager.

### **SPM4352** Design of Innovative Systems in Energy and Industry (9 EC)

- 2011-2012 For students who have not yet started SPM4352, this course can be replaced by SPM4510 (6 EC) and an extra assignment (3 EC). Students who already started SPM4352 but have not yet finished it, can contact the module manager.
- 2012-2013 For students who have not yet started SPM4352, this course can be replaced by SPM4510 (6 EC) and an extra assignment (3 EC). Students who already started SPM4352 but have not yet finished it, can contact the module manager.

### **SPM4422** Legal Aspects of Project Design (6 EC)

- 2011-2012 Two examinations for SPM4422. SPM4422 can be replaced by SPM4423 (5) and an extra assignment (1 EC).
- 2012-2013 Two examinations for SPM4422.

### **SPM9423** Supply Chain Engineering and Management (6EC)

2011-2012 SPM4620 (3 EC) + SPM4640 (4 EC).  
2012-2013 SPM4620 (3 EC) + SPM4640 (4 EC).

**SPM9534** Technology and Economy of Future Energy Systems (9 EC)  
2011-2012 SPM4540 (5 EC) and an extra assignment for 4 EC.  
2012-2013 SPM4540 (5 EC) and an extra assignment for 4 EC.

**SPM9618** (R)evolution in ICT Infrastructures (6 EC)  
2011-2012 SPM4440 (4 EC) and an extra assignment for 2 EC.  
2012-2013 SPM4440 (4 EC) and an extra assignment for 2 EC.

## 2010-2011

**SPM4121** Designing MAS from an Engineering Perspective  
2010-2011 Replaced by SPM4122  
2011-2012 Replaced by SPM4122

**SPM4131** Designing MAS from an Actor Perspective  
2010-2011 Replaced by SPM4132  
2011-2012 Replaced by SPM4132

**SPM4415** Strategic Management of Large Engineering Projects  
2010-2011 Replaced by SPM4416  
2011-2012 Replaced by SPM4416

## 2009-2010

Transition rules of *first* year courses for study year 2008-2009 and 2009-2010. These rules apply to students, who started the programme at study year 2008-2009 or earlier.

SPM4421 European Law (6 ECTS)  
2009-2010: replaced by SPM4422 with adjustments  
2010-2011: replaced by SPM4422 with adjustments

## 2007-2008

Transition rules of *first* year courses for study year 2007-2008 and 2008-2009. These rules are for students, who started the programme at study year 2006-2007 or earlier. See for more detailed information Blackboard at the course sites. For course descriptions see Study Guide 2006-2007.

Spm 4110 Designing multi-actor systems (6 ECTS), prerequisite spm3130 Functioneel ontwerpen  
2007-2008: courses and two exam-moments will be planned.  
2008-2009 two exam-moments will be planned.

Spm 4130 Design and management of infrastructures (4 ECTS)  
2007-2008 courses and two exam-moments will be planned.  
2008-2009 two exam-moments will be planned.

Spm 4140 Service systems engineering (4 ECTS)  
2007-2008 courses and two exam-moments will be planned.  
2008-2009 two exam-moments will be planned.

Spm 4151 Policy and decision modelling (5 ECTS)

2007-2008 courses and two exam-moments of the second part of spm4121 or EPA2142 and two exam-moments of spm4151 will be planned.

2008-2009 two exam-moments of spm4151 will be planned.

Spm4421 European Law and Administration on Infrastructures (6 ECTS)

This module is replaced from period 4 to period 3. If there are students who will get problems with their study planning, the module will be planned in period 3 and period 4.

Spm 4340/ 4360/ 4351/ 4353 Domain systems engineering (10 ECTS)

2007-2008 replaced by spm 4341/ 4361/ 4352/ 4354 of 9 ECTS. One ECTS is elective.(the student can ask the module manager for an one ECTS assignment or he/she can do another elective). Two exam-moments of 4340/ 4360/ 4351/ 4353 of will be planned.

2008-2009 two exam-moments of 4340/ 4360/ 4351/ 4353 of will be planned

Spm4410 Designing institutions in a global economy (5 ECTS).

2007-2008 courses (parts of spm 4131) and two exam-moments will be planned.

2008-2009 two exam-moments will be planned.

IN4154 Advanced design of information systems and software specification (6 ECTS). This module continues with his courses and exams next years. No transition rule needed.

IN4183 Advanced Database Technology (6 ECTS)

2007-2008 Probably just a few students still have to pass in4183. These students have to contact Faculty TPM, Section ICT (Jan van den Berg). He will take responsibility for the education and the two exam moments.

2008-2009. Students, who still have to pass IN4183: contact Faculty TPM, section ICT (Jan van den Berg). He will take responsibility to arrange the two exam moments.

Spm4110 + spm4410 + spm4130 + spm4140 + spm4151 (total of 24 ECTS) could be replaced for spm4111+ spm4121 + spm4131 + spm4141 (total of 24 ECTS)

Spm4130 + spm4140 + spm4151 + 4410 (total of 18 ECTS) could be replaced for spm4121 + spm4131 (total of 18 ECTS)

Transition rules of *second* year courses for study year 2007-2008 and 2008-2009. These rules are for students, who started the programme at study year 2006-2007 or earlier. See for more detailed information Blackboard at the course sites. For course descriptions see Study Guide 2007-2008.

2007-2008: The courses and two exams will be planned of each module below

2008-2009: Two exams will be planned of each module below.

Spm 5110 Ethics in design and management (4 ECTS)

Spm 5410 Strategic management in engineering projects (7 ECTS)

Spm4910 SEPAM Design Project (7 ECTS, prerequisite spm4110) is the same module as spm5920 (just the module code has been changed. No transition rule needed). Students can replaces spm4910 / spm5920 (7 ECTS) and 2 ECTS electives for wm1203TU D-School Project (9 ects).

Spm4910IA IA Design Project (6 ECTS, prerequisite spm4110) is the same module as 5920IA (just the module code has been changed. No transition rule needed). Students can replaces spm4910IA / spm5920IA (6 ECTS) and 3 ECTS electives for wm1203TU D-School Project (9 ects).

## **2006-2007**

Spm 4420 International management of study year 2005-2006 has changed in spm4421 in European Law and Administration on Infrastructures 2006/2007. Translation rules for spm4420:

- Two examines are planned for spm4420.