Card of Course

Description of Course:	
Code of course	-------------------
Name of course	**Modeling of the Interlocking Systems with UML**
Version of course	2013/2014

A. Place of the course in system of study

Level of education	Intermediate
Degree of education	First
Kind of education	Full-time studies
Field of study	Transport
Profile of study	General academic profile
Specialisation	Main field
Place of teaching of course	Faculty of Transport
Place of realization of course	Faculty of Transport. Division of Traffic Control
Coordinator of course	Andrzej Kochan

B. General characteristic of the course

Block of courses	Main field
Group of courses	specialization
Level of course	Intermediate
Status of course	Faculty with choice limited
Language of course	English
Nominal semester	4
Academic year	2
Preliminary requirements	The basic knowledge on the object-oriented programming or the object-oriented methodology
Limit of number of students	12

C. Effects of education and manner of teaching

Purpose of course	The aim of the course is to provide knowledge on the use of object-oriented methodology for system modeling. As a modeling language UML is used. The use of traffic control systems as examples allows to broaden students' knowledge on systems of this class.
Methods of evaluation	A presentation and an oral defense of the various stages of the project
Effects of education	Look – table 1
Form of didactic studies and number of hours per week	Lecture – 2 hours
Contents of education	The course provides a knowledge on the object-oriented methodology and its usage for interlocking system modelling. The UML (Unified Modelling Language) as generally accepted standard in the object-oriented field is used for the modelling. The participants of the course learn the basic concepts of the object oriented methodology as well as a construction and purpose of the individual diagrams, defined by the UML. For the given system description its model is built according to the methodology based on the RUP – the iterative modelling process.The model built during the classes allows to meet practical abilities of the diagram usage.
Methods of verification of effects of education	Look – table 1
Examination	Does not have
Literature	G. Booch, J.Rambaugh, I. Jacobson „The Unified Modelling Language. User Guide"
www of course	Does not have

D. Student's job

Number of credits ECTS	3
Number of hours of student's job for achievement of education's effect (description):	75
Number of credits ECTS on the course with direct participation of academic teacher	3
Number of credits ECTS on practical activities on the course	3

E. Additional informations

Notes	Does not have
Date of last modernization	2014-01-23

Table 1

General academic profile		
Course's effects	**Field effects**	**Area effect**
Knowledge		
Effect: Possess the theoretical knowledge on basic concepts of the object-oriented methodology		
Code of effect: W01	Tr1A_W07	T1A_W02 T1A_W07 T1A_W08
Verification: Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Effect: Possess the theoretical knowledge on the UML diagrams		
Code of effect: W02	Tr1A_W12	T1A_W07 T1A_W08
Verification: Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Effect: Possess the theoretical knowledge on the RUP iterative process		
Code of effect: W03	Tr1A_W12	T1A_W07 T1A_W08
Verification: Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Skills		
Effect: Know how to identify elements of the object-oriented model according to a system description or its documentation		

Code of effect:	U01	Tr1A_U10	T1A_U07 T1A_U09
Verification:	Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Effect:	Know how to use UML diagrams for the modelling of the individual parts of the system		
Code of effect:	U02	Tr1A_U10	T1A_U07 T1A_U09
Verification:	Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Effect:	Know how to use elements of the RUP process during the construction of the object-oriented model.		
Code of effect:	U03	Tr1A_U10	T1A_U07 T1A_U09
Verification:	Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		
Social competences			
Effect:	Is able to participate in the project team		
Code of effect:	K01	Tr1A_K03	T1A_K03
Verification:	Implementation of the project, individual and group consultation of the project, oral defense of the concepts used in the project		