

Project Acronym: MEDIS

Project Title: A Methodology for the Formation of Highly Qualified Engineers at Masters Level in the Design and Development of Advanced Industrial Informatics Systems

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Report on WP5 Implementation AIISM

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The pilot implementation of the WP5 started on September 2015 (I semester). AIISM modules were integrated into Curricula as the alternative Modules by student's choice. In the curriculum of the Master Programme 8.05010101 – “Information Control Systems and Technologies” – there are three modules for selecting by students.

During I semester 2 modules were implemented:

- Programming of Industrial Computers (4 ECTS)
- Programming of Microcomputers (5 ECTS)

Module “Programming of Industrial Computers” was conducted by Mykola Babych. Two groups of Master students were attending these classes. Each group consists of 22 students.

The distribution of academic hours is shown in the Table 1.

Subject	Semester	ECTS Credits	Academic Hours per Semester						Contact Hours per Week	
			Total	Contact Hours	Lectures	Laboratory Lessons	Seminars	Unsuper-vised Work	1 Semester	2 Semester
Programming of Industrial Computers	1	4	120	58	30	14	14	62	4	
Programming of Microcomputers	1	5	150	58	30	14	14	92	4	

Module “Programming of Microcomputers” was conducted by Prof. Oleg Galchonkov. Two groups of Master students were attending these classes. Each group consists of 22 students. The distribution of academic hours shown at the Table 1.

Every subject has various number of ECTS credits, 1 ECTS credits that is an equivalent of 30 academic hours. This total number of academic hours is divided to 28-58 contact hours and 62-128 academic hours of unsupervised student’s work. Contact hours include 14-30 academic hours of lectures, 6-14 academic hours of seminars and 14 academic hours of laboratory lessons. Education process at ONPU assumes that the number of contact academic hours in module by student’s choice may not exceed 8 hours per week. Contact hours of 58 academic hours per semester correspond to 4 academic hours per week that include 2 academic hours per week for lectures, 1 academic hour per week for seminars and 1 academic hour per week for laboratory lessons. Usual practice for lessons scheduling in ONPU is that laboratory lessons and seminars are scheduled as 2 academic hours per 2 weeks, what gives the same total number of laboratory lessons and seminars.

During II semester 3 modules will be implemented:

- Programming of Controllers and Simulators (6 ECTS)
- Mobile and Cloud Computing (3,5 ECTS)
- Industrial Networks and Fieldbuses (3 ECTS)

The distribution of academic hours shown in the Table 2.

Subject	Semester	ECTS Credits	Academic Hours per Semester						Contact Hours per Week	
			Total	Contact Hours	Lectures	Laboratory Lessons	Seminars	Unsupervised Work	1 Semester	2 Semester
Programming of Controllers and Simulators	2	6	180	52	30	14	8	128		3,5
Mobile and Cloud Computing	2	3,5	105	36	16	14	6	69		2,5
Industrial Networks and Fieldbuses	2	3	90	28	14	14	-	62		2