

# COURSE GUIDE – short form

Academic year 2014-2015

Course name <sup>1</sup>	<b>ROBOTS FOR MEASUREMENT AND PRODUCTION</b>					Course code	CMPA.DI. DA.111		
Course type <sup>2</sup>	DA	Category <sup>3</sup>	DI	Year of study	M1	Semester	2	Number of credit points	6

Faculty	MECHANICS	Number of teaching and learning hours <sup>4</sup>					
Field	AUTOMOTIVE ENGINEERING	Total	L	T	LB	P	IS
Specialization	MASTER	42	28	-	14	-	

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	Algebra, Special Mathematics, Machining Technologies, Tool-Machines and Machining
	Recommended	Programming-MATLAB, Electrotechics and Electric Machines, Hydraulically and Pneumatically Driving

General objective <sup>6</sup>	General knowing about industrial robots and the ways of its integration in the automotive industry.
Specific objectives <sup>7</sup>	<ul style="list-style-type: none"> <li>Structure of industrial robots; mechanical architecture</li> <li>Fundamentals of kinematics and dynamics; workspace</li> <li>Robots working in specific fields of automotive industry</li> </ul>
Course description <sup>8</sup>	Introduction to robotics, generalities, clasifications, Structure of industrial robots, components, mechanical architecture, Direct and inverse kinematics; Workspace; Singularities; Fundamental of dynamics, Industrial robots with specific destinations in automotive industry.

Assessment			Schedule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>
Continuous assessment	Class tests along the semester			-
	Activity during tutorials/laboratory works/projects/practical work		Week 1-14	40%
	Assignments			-
Final assessment	Final assessment form <sup>11</sup>	Exam	Examperiod	60%
	Examination procedures and conditions: 1. Exam with three subjects from the curriculum, percent of the final grade 60% 2. Applications weeks 1-14 ; percent of the final grade 40%			

Course organizer	S.I.dr.ing. Buium Florentin	
Teaching assistants	S.I.dr.ing. Buium Florentin	

<sup>1</sup>Course name from the curriculum

<sup>2</sup>DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

<sup>3</sup>DI – imposed, DO –optional, DL – facultative (from the curriculum)

<sup>4</sup>Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)

<sup>5</sup>According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>6</sup>According to 7.1 from the Course guide – extended form

<sup>7</sup>According to 7.2 from the Course guide – extended form

<sup>8</sup>Short description of the course, according to point 8 from the Course guide – extended form

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<sup>9</sup> For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

<sup>10</sup> A minimum grade might be imposed for some assessment stages

<sup>11</sup> Exam or colloquium