SYLLABUS

1. Data about the program of study

1.1	Institution	The Technical University of Cluj-Napoca
1.2	Faculty	Faculty of Automation and Computers
1.3	Department	Automation
1.4	Field of study	System Engineering
1.5	Cycle of study	Bachelor of Science
1.6	Program of study/Qualification	Automation and Applied Informatics/
1.7	Form of education	Full time
1.8	Subject code	58.00

2. Data about the subject

2.1	Subject name			Graduation project			
2.2	Subject area			Graduation project			
2.3	Course responsible/lecturer			Diploma supervisor			
2.4	Teachers in charge of seminars						
2.5 Year of study	4	2.6 Semester	2	2.7 Assessment	A/R	2.8 Subject category	DS/DI

3. Estimated total time

3.1 Number of hours per week	4	3.2 of which, course:	0	3.3 applications:	4
3.4 Total hours in the curriculum	100	3.5 of which, course:	0	3.6 applications:	56
Individual study					hours
Manual, lecture material and notes, bibliography					24
Supplementary study in the library, online and in the field					10
Preparation for seminars/laboratory works, homework, reports, portfolios, essays					0
Tutoring					10
Exams and tests					0
Other activities					0

3.7	Total hours of individual study	44
3.8	Total hours per semester	100
3.9	Number of credit points	4

4. Pre-requisites (where appropriate)

4.1	Curriculum	Working in the diploma field
4.2	Competence	Research and development

5. Requirements (where appropriate)

5.1	For the course	N/A
5.2	For the applications	The presence is mandatory.

6. Specific competences

Professional competences	**C4** Design, implementation, testing, operation and maintenance of systems with generic and dedicated equipments, including computer networks for control engineering and applied informatics. **C5** Development and implementation of automatic control structures and algorithms based on project management principles, software environments and technologies based on microcontrollers, signal processors, programmable logic controllers and embedded systems. **C6** Applying the knowledge related to law, economy marketing, business, and quality assurance in business and managerial contexts.
Cross competences	**CT1** Application, in the context of law compliance, of the intellectual property rights (including technology transfer), product certification methodology, principles, norms and values of professional ethics code for the own rigorous, effective and accountable work strategy. **CT2** Identifying the roles and the responsibilities in a multicompetent team, taking decisions and delegating tasks by applying professional networking techniques and effective teamwork techniques. **CT3** Identify opportunities for continuing professional development and effective utilization of learning resources and techniques for own professional development.

7. Discipline objectives (as results from the *key competences gained*)

7.1	General objective	• practical application of theoretical knowledge acquired • working in R&D
7.2	Specific objectives	• increasing practical skills • developing research capacity

8. Contents

8.2. Applications/Seminars	Teaching methods	Notes

1.	Research and design activities	supervisory and guidance by the diploma supervisor	

9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field

N/A

10. Evaluation

Activity type	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight in the final grade
Course	N/A	N/A	0%
Applications	Practice notebook	Practical exam	100%
10.4 Minimum standard of performance			
Supervisor permission practical exam grade A			

Date of filling in

Teachers in charge of seminars

Date of approval by the Department Board ……..

Head of Departament .....
Prof.dr.ing. Honoriu VĂLEAN

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Date of approval by the Faculty Council ……

Dean
Prof.dr.ing. Liviu Cristian MICLEA

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