SYLLABUS

1. Data about the program of study

1.1	Institution	Technical University of Cluj-Napoca
1.2	Faculty	Faculty of Automotive, Mechatronics and Mechanical Engineering
1.3	Department	Department of Mechatronics and Machine Dynamics
1.4	Field of study	Mechatronics and Robotics
1.5	Cycle of study	Bachelor of Science
1.6	Program of study/Qualification	Mechatronics
1.7	Form of education	Full time
1.8	Subject code	19.00

2. Data about the subject

2.1	Subject name			***Practical Work***		Subject code	**19.00**
2.2	Course responsible/lecturer			*Conf.dr.ing. Teutan Emil-emil.teutan@mdm.utcluj.ro*			
2.3	Teachers in charge of seminars			*Conf.dr.ing. Teutan Emil-emil.teutan@mdm.utcluj.ro*			
2.4 Year of study	1	2.5 Semester	2	2.6 Assessment			V
2.7 Subject category DID DOB	Formative category						DF
	Optionality						DOB

3. Estimated total time

3.1 Number of hours per week	30	of which	3.2 Course	0	3.3 Seminar	0	3.3 Laboratory	0	3.3 Project	30
3.4 Total hours in the curriculum	60	of which	3.5 Course	0	3.6 Seminar	0	3.6 Laboratory	0	3.6 Project	60

3.7 Individual study:	
(a) Manual, lecture material and notes, bibliography	5
(b) Supplementary study in the library, online and in the field	3
(c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays	-
(d) Tutoring	-
(e) Exams and tests	5
(f) Other activities	2

3.8 Total hours of individual study (sum (3.7(a)…3.7(f)))	15
3.9 Total hours per semester (3.4+3.8)	75
3.10 Number of credit points	3

4. Pre-requisites (where appropriate)

4.1	Curriculum	
4.2	Competence	

5. Requirements (where appropriate)

5.1	For the course	
5.2	For the applications	Machine tools, specific equipment and devices

6. Specific competences

Professional competences	C1.1 Express through written and oral communication in technical language the theoretical fundamentals of engineering C1.2 Formulate hypotheses and operationalize key concepts to explain and interpret mechanical engineering processes
Cross competences	CT1. Compliance with the principles, rules and values of the professional code of ethics by approaching a rigorous, efficient and responsible work strategy in problem solving and decision making CT2. Application of effective teamwork and relationship techniques, multidisciplinary, on various hierarchical levels, within the work collective - specific project management

7. Expected learning outcomes

Knowledge	
Skills	
Responsibility and autonomy	

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

8.1	General objective	Knowledge of the principles and rules in force concerning industrial activities
8.2	Specific objectives	Demonstrate an ability to understand

9. Contents

9.1. Lecture (syllabus)	Number of hours	Teaching methods	Notes
Bibliography 1.			
9.2. Seminars /Laboratory/Project	Number of hours	Teaching methods	Notes

Bibliography 1.

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

It is achieved through regular discussions with representatives of significant employers

11. Evaluation

Activity type	11.1 Assessment criteria	11.2 Assessment methods	11.3 Weight in the final grade
11.4 Course	-		
11.5 Seminars /Laboratory/Project	Themes presented throughout the lessons	colloquium	100%
10.6 Minimum standard of performance		Admitted/rejected	

Date of filling in:	**Responsible**	**Title Surname Name**	**Signature**
20.05.2026	Courses	-	
	Applications	Coordinating teacher for the practicum	

Date of approval in the Department of Mechatronics and Machine Dynamics 28.05.2026	Head of Department Prof.dr.eng. Mircea Bara
Date of approval in the Faculty of Automotive, Mechatronics and Mechanical Engineering 16.09.2026	Dean Prof.dr.eng. Nicolae Filip