## **COURSE GUIDE – short form**

Academic year 2024 - 2025

Course name <sup>1</sup>	Maintenance and Diagnostics of Industrial Systems				Discipline code			SITM IA 109DS	
Course type <sup>2</sup>	DS	Category <sup>3</sup>	DI	Year of study	1	Semester	2	N cre	umber of dit points 4

Faculty	Material Science and Engineering	Number of teaching and learning hours <sup>4</sup>			ng		
Field	Mechanical Engineering		L	Т	LB	Р	IS
Specialization	Specialization Industrial systems for Modern Technologies		28		14		58

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	-
	Recommended	-

General objective <sup>6</sup>	Students who successfully complete the coursework and laboratory activities in the course <i>Maintenance and Diagnosis of Industrial Systems</i> will gain knowledge of current trends in industrial systems diagnostics and will develop a deep understanding of the principles and methods used in the maintenance of these systems.
Specific objectives <sup>7</sup>	Students must acquire a sufficiently solid foundation in the field of diagnostics and maintenance of industrial systems to identify optimal solutions in their professional practice.
Course description <sup>8</sup>	The content covered focuses on the fundamentals of maintenance of industrial systems, monitoring systems and equipment, and challenges in the diagnostics of industrial systems.

Assessment			Sche	dule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>		
A. Final assessment form <sup>11</sup> Exam	Final e	xamination	100 %	Exam period	80 % (minimum 5)		
B. Seminar Activity during seminar					% (minimum 5)		
C. Laboratory Activity during laboratory					20 % (minimum 5)		
D. Project Activity during project					% (minimum 5)		
Course organizer Lecturer Ph.D. eng. Viorel GRANCEA							
Teaching assistants Lecturer Ph.D. eng. Viorel GRANCEA							

<sup>&</sup>lt;sup>1</sup>Course name from the curriculum

<sup>11</sup> Exam or colloquium

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

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

<sup>&</sup>lt;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, Pproject, IS-individual study)

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

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

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

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