UNIVERSITATEA TEHNICĂ „GHEORGHE ASACHI" DIN IAȘI
FACULTATEA DE CONSTRUCTII DE MASINI SI MANAGEMENT INDUSTRIAL
Domeniul de masterat: **INGINERIE INDUSTRIALA**
Programul de masterat: **FABRICARE ȘI AUTOMATIZARE INTELIGENTĂ (în lb.engleză)/**
INTELLIGENT MANUFACTURING AND AUTOMATION
Tipul programului: **Master Profesional**
Titlul absolventului: Master în inginerie industrială
Durata studiilor: 2 ani, 120 credite de studiu
Forma de învățământ: cu frecventa

Aprobat în ședința Senatului din
Președinte Senat,
Prof.univ.dr.ing. Iulian Aurelian CIOCOIU

CURRICULUM

YEAR 1 — Academic Year 2025/2026

	No.	Course name	Course code	Course category	1st Semester								2nd Semester							
					Assisted activities* No. of hours / week					Non-assisted activities (SI)**	Eval.	K	Assisted activities* No. of hours / week					Non-assisted activities (SI)**	Eval.	K
					C	S	L	P	PA				C	S	L	P	PA			
DI	1	Simularea producției/ Manufacturing Simulation Software	FAI-IA-101	DA	1		2			83	E	5								
	2	Cercetare experimentală asistată/ Computer Aided Experimental Research	FAI-IA-102	DS	1		3			69	E	5								
	3	Aplicații tehnologice ale fizicii/ Technological Applications of Physics	FAI-IA-103	DA	1		1			97	E	5								
	4	Etică și integritate academică/ Ethics and Academic Integrity	FAI-IA-104	DC	1	1				72	E	4								
	5	Laborator de proiectare-cercetare 1/ Design&Research Laboratory 1	FAI-IA-105	DS					12	0	VP	7								
	6	Sisteme de control și instrumentație virtuală/ Control Systems and Virtual Instrumentation	FAI-IA-106	DS									1		2			58	E	4
	7	Proiectare tehnologică avansată/ Advanced Computer Aided Technological Design	FAI-IA-107	DA									1		1			72	E	4
	8	Teoria avansată a sudurii / Advanced Welding Theory	FAI-IA-108	DS									2		1			58	E	4
	9	Procese neconventionale de fabricație/ Non-Traditional Manufacturing Processes	FAI-IA-109	DA									2		1			58	VP	4
	10	Dezvoltarea durabilă a produselor/ Sustainable Product Development	FAI-IA-110	DS									1			1		72	VP	4
	11	Sisteme hidraulice și pneumatice/ Fluid Power Systems	FAI-IA-111	DC									2		1			33	C	3
	12	Laborator de proiectare-cercetare 2/ Design&Research Laboratory 2	FAI-IA-112	DS													10	35	VP	7
DO	13	Prelucrarea statistică a datelor/ Statistical Data Processing	FAI-IA-113	DA	2			1		58	E	4								
		Managementul riscului in fabricație/ Risk Management in Manufacturing	FAI-IA-114	DA																
DL	14	Abilități antreprenoriale*/ Entrepreneurial Skills*	FAI-IA-115	DC	1		1			47	C	3								
	15	Abilități profesionale de comunicare*/ Professional Communication Skills*	FAI-IA-116	DC									1			1		47	C	3
		Number of hours per week for assisted activities, number and type of assessment activities and credit points per semester, and total hours of non-assisted activities			**6**	**1**	**6**	**1**	**12**	**379**	**4E 1VP**	**30**	**9**	**0**	**6**	**1**	**10**	**386**	**3E 1C 3VP**	**30**
					14				**12**				**16**				**10**			
					26								**26**							

YEAR 2 — Academic Year 2026/2027

	No.	Course name	Course code	Course category	1st Semester								2nd Semester							
					Assisted activities* No. of hours / week					Non-assisted activities (SI)**	Eval.	K	Assisted activities* No. of hours / week					Non-assisted activities (SI)**	Eval.	K
					C	S	L	P	PA				C	S	L	P	PA			
DI	1	Procese avansate de automatizare a producției/ Advanced Manufacturing Automation Processes	FAI-IA-201	DS	2		1			83	VP	5								
	2	Tehnologii avansate de fabricație a materialelor compozite/ Advanced Manufacturing Technologies of Composite Materials	FAI-IA-202	DA	2		1	1		69	E	5								
	3	Tehnologii avansate de sudare/ Advanced Welding Technologies	FAI-IA-203	DS	1		1			97	E	5								
	4	Inteligența artificială în producția industrială/ Artificial Intelligence in Manufacturing	FAI-IA-204	DS	1		2			83	E	5								
	5	Laborator de proiectare-cercetare 3/ Design&Research Laboratory 3	FAI-IA-205	DS					12	0	VP	7								
	6	Practică profesională/ Professional Training	FAI-IA-206	DS													10	110	VP	10
	7	Elaborarea disertației/ Preparing of Master's Thesis	FAI-IA-207	DS													8	138	VP	10
	8	Practică pentru disertație/ Master's Thesis Training	FAI-IA-208	DS													8	138	VP	10
DO	9	Planificarea resurselor intreprinderii/ Entrerprise Resource Planning	FAI-IA-209	DA	1			1		47	E	3								
		Dezvoltare durabilă prin inovare tehnologică/ Sustainable Development by Technological Innovation	FAI-IA-210	DA																
		Number of hours per week for assisted activities, number and type of assessment activities and credit points per semester, and total hours of non-assisted activities			**7**	**0**	**5**	**2**	**12**	**379**	**3E 2VP**	**30**	**0**	**0**	**0**	**0**	**26**	**386**	**3VP**	**30**
					14				**12**				**0**				**26**			
					26								**26**							
		Dissertation Exam	FAI-ED																**E**	**10**

** Assisted activities are fully assisted (C,S,L,P) and partly assisted (PA) and are conducted over 14 weeks.*

*** Non-assisted activities (SI) are calculated as total hours per academic year, by the credit points of the subjects (25 hours per credit point); the exam sessions are also included.*

RECTOR, Prof.univ.dr.ing. Dan CAȘCAVAL
DECAN, Conf.univ.dr.ing. Florin NEGOESCU
COORDONATOR DOMENIU DE MASTERAT, Conf.univ.dr.ing. Vasile MERTICARU