

Semester	Teaching unit	Course titles	code	Credit	Coefficient	Hourly Volume Weekly			SHV	Assessment method	
						Cours	TD	TP		Continuous assessment	Final exam
5	UE Fondamentale Code : UEF 5.1 Credits : 8 Coefficients : 4	Mechanical Construction 1	IGMF5.1	4	2	1h30	1h30		45h00	40%	60%
		Analytical Mechanics	IGMF5.2	4	2	1h30	1h30		45h00	40%	60%
	UE Fondamentale Code : UEF 5.2 Credits : 16 Coefficients : 9	Fracture Mechanics and Fatigue	IGMF5.3	4	2	1h30	1h30		45h00	40%	60%
		Crystallography	IGMF5.4	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Non-metallic Materials	IGMF5.5	2	1	1h30			22h30		100%
		Automation of Industrial Systems	IGMF5.6	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
	UE Méthodologique Code : UEM 5.1 Credits : 4 Coefficients : 4	Supervised Project 1	IGMF6.7	2	2		3h00		45h00	100%	
		Maintenance Organization and Methods	IGMF5.8	1	1	1h30			22h30		100%
		Preventive Maintenance	IGMF5.9	1	1	1h30			22h30		100%
	UE Découverte Code : UED 5.1 Credits : 1 Coefficients : 1	Recycling and Waste Valorization	IGMF5.10	1	1	1h30			22h30		100%
	UE Transversale Code : UET 5.1 Credits : 1 Coefficients : 1	Technical English related to the specialty	IGMF5.11	1	1	1h30			22h30		100%
Total Hourly Volume for Semester 5				30	19	15h00	10h30	3h00	427h30		

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6	UE Fondamentale Code : UEF 6.1 Credits : 12 Coefficients : 7	Mechanical Construction 2	IGMF6.1	4	2	1h30	1h30		45h00	40%	60%
		Rheology of Materials	IGMF6.2	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Heat Treatment	IGMF6.3	3	2	1h30		1h30	45h00	40%	60%
	UE Fondamentale Code : UEF 6.2 Credits : 13 Coefficients : 7	Structural Dynamics	IGMF6.4	4	2	1h30	1h30		45h00	40%	60%
		Theory of Mechanisms	IGMF6.5	4	2	1h30	1h30		45h00	40%	60%
		Internal Combustion Engine	IGMF6.6	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
	UE Méthodologique Code : UEM 6.1 Credits : 2 Coefficients : 2	Internship 1	IGMF6.7	1	1	Volume horaire hors quota (En moyenne 100 heures) Tutorat : 1h30 TP hebdomadaire				100%	
		Fault Diagnosis and Management	IGMF6.8	1	1	1h30			22h30		100%
	UE Découverte Code : UED 6.1 Credits : 1 Coefficients : 1	Logistics and Inventory Management	IGMF6.9	1	1	1h30			22h30		100%
	UE Transversale Code : UET 6.1 Credits : 2 Coefficients : 2	Entrepreneurship and Start-ups	IGMF6.10	1	1	1h30			22h30		100%
		Introduction to Industrial Property	IGMF6.11	1	1	1h30			22h30		100%
Total Hourly Volume for Semester 6				30	19	15h00	7h30	4h30	405h00		

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						Cours	TD	TP		Continuous assessment	Final exam
7	UE Fondamentale Code : UEF 7.1 Credits : 9 Coefficients : 5	Finite Element Method	IGMF7.1	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Elasticity	IGMF7.2	4	2	1h30	1h30		45h00	40%	60%
	UE Fondamentale Code : UEF 7.2 Credits : 12 Coefficients : 7	Metal Cutting 1	IGMF7.3	3	2	1h30	1h30		45h00	40%	60%
		Forming Processes	IGMF7.4	4	2	1h30	1h30		45h00	40%	60%
		Mechanical Manufacturing	IGMF7.5	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
	UE Méthodologique Code : UEM 7.1 Credits : 8 Coefficients : 6	Advanced Python Programming		2	2	1h30	-	1h30	45h00	40%	60%
		Personal Professional Project	IGME7.6	2	1	Volume horaire hors quota (En moyenne 100 heures) Tutorat : 1h30 TP hebdomadaire				100%	
		Measurement Techniques	IGMF7.8	2	1	1h30		1h30	45h00	40%	60%
		Defect Detection Techniques	IGMF7.6	2	2	1h30		1h30	45h00	40%	60%
	UE Transversale Code : UET 7.1 Crédits : 1 Coefficients : 1	Occupational Health and Safety in Mechanical Manufacturing	IGMF7.10	1	1	1h30			22h30		100%
Total Hourly Volume for Semester 7				30	19	13h30	7h30	7h30	427h30		

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						Cours	TD	TP		Continuous assessment	Final exam
8	UE Fondamentale Code : UEF 8.1 Credits : 10 Coefficients : 6	Machine Tool Elements	IGMF8.1	7	4	1h30	3h00	1h30	90h00	(20% TD+20%TP)	60%
		Metal Cutting 2	IGMF8.2	3	2	1h30	1h30		45h00	40%	60%
	UE Fondamentale Code : UEF 8.2 Credits : 14 Coefficients : 8	Welding Techniques	IGMF8.3	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Corrosion and Surface Protection	IGMF8.4	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Hydraulic and Pneumatic Systems and Devices	IGMF8.5	4	2	1h30	1h30	-	45h00	40%	60%
	UE Méthodologique Code : UEM 8.1 Credits : 3 Coefficients : 2	Mechanical Properties of Materials	IGMF8.6	2	1	1h30		1h30	45h00	40%	60%
		Internship 2	IGMF8.7	1	1	Volume horaire hors quota (En moyenne 100 heures) Tutorat : 1h30 TP hebdomadaire				100%	
	UE Transversale Code : UET 8.1 Credits : 3 Coefficients : 3	Applied AI Elements in Mechanical Engineering		2	2	1h30	1h30		45h00	40%	60%
		Compliance with Standards and Ethics and Integrity Rules	IGMF8.9	1	1	1h30			22h30		100%
Total Hourly Volume for Semester 8				30	19	12h00	10h30	6h00	427h30		

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						Cours	TD	TP		Continuous assessment	Final exam
9	UE Fondamentale Code : UEF 9.1 Credits : 13 Coefficients : 7	Advanced Structural Dynamics	IGMF9.1	4	2	1h30	1h30		45h00	40%	60%
		High-Speed Machining	IGMF9.2	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Equipment Installation	IGMF9.3	4	2	1h30	1h30		45h00	40%	60%
	UE Fondamentale Code : UEF 9.2 Credits : 11 Coefficients : 6	Dynamics of Rotating Machines	IGMF9.4	4	2	1h30	1h30		45h00	40%	60%
		Tribology and Lubrication of Mechanical Systems	IGMF9.5	5	3	1h30	1h30	1h30	67h30	(20% TD+20%TP)	60%
		Industrial Robotics	IGMF9.6	2	1	1h30			22h30		100%
	UE Méthodologique Code : UEM 9.1 Credits : 3 Coefficients : 3	Methods Engineering Office	IGMF8.7	1	1	1h30	1h30		45h00	40%	60%
		Industrial Computing (Computerized Maintenance Management System - CMMS)	IGMF9.8	2	2	1h30		1h30	45h00	40%	60%
	UE Transversale Code : UET 9.1 Credits : 3 Coefficients : 3	Literature Research and Thesis Design	IGMF9.9	1	1	1h30			22h30		100%
		Reverse engineering	IGMF9.10	2	2	1h30	1h30 Atelier		45h00	40%	60%
Total Hourly Volume for Semester 9				30	19	15h00	9h00	6h00	450h00		

Semester10	Teaching unit	Course titles	Code	Credit	Coefficient	Hourly Volume Weekly	SHV	Assessment method	
						Cours TD TP		Continuous assessment	Final exam
	UE Fondamentale Code : UEF 10.1 Credits : 30 Coefficients : 19	Final Year Project	IGMF10.1	30	19				
		Total Hourly Volume				28h30	427h30		100%