


5.00 crédits	30.0 h + 30.0 h	Q2
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Enseignants	Contino Francesco ;Jeanmart Hervé ;
Langue d'enseignement	Anglais
Lieu du cours	Louvain-la-Neuve
Thèmes abordés	<ul style="list-style-type: none"> • Experimental characterization of energy conversion technologies • Introduction to the metrology specific to the energy systems • Application of uncertainty analysis to energy systems • Introduction to the safety aspects of lab work
Acquis d'apprentissage	<p>A la fin de cette unité d'enseignement, l'étudiant est capable de :</p> <p>Contribution of the course to the program objectives (N°)</p> <ul style="list-style-type: none"> • AA1.1, AA1.2, AA1.3 • AA3.1, AA3.2 • AA5.3, AA5.4, AA.5.5, AA5.6 • AA6.1, AA.6.3 <p>¹ Specific learning outcomes of the course</p> <ul style="list-style-type: none"> • Identify the different components of energy conversion technologies • Operate machines in laboratory • Collect and report experimental data • Analyze, interpret and appraise experimental results including their uncertainty analysis • Compare theoretical and actual performances of energy conversion technologies
Modes d'évaluation des acquis des étudiants	<p>Suggested evaluation methods :</p> <ul style="list-style-type: none"> • Continuous assessment during the labs • Oral examination based on the lab reports
Méthodes d'enseignement	<ul style="list-style-type: none"> • Laboratory activities • Formal lectures
Contenu	<p>Suggested energy conversion technologies:</p> <ul style="list-style-type: none"> • IC engines (CHP units) • Gas turbines • Wind turbines • PV panels • Heat pump • Compressor • Solar thermal • Cooling technologies • Batteries • Fuel cell
Faculté ou entité en charge:	ELME

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Crédits	Prérequis	Acquis d'apprentissage
Master [120] : ingénieur civil mécanicien	MECA2M	5		
Master [120] : ingénieur civil électromécanicien	ELME2M	5		