

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

5 credits	30.0 h + 30.0 h	Q1
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Teacher(s)	Bollen Xavier (compensates Raucent Benoît) ;Jacqmot Christine (compensates Raucent Benoît) ;Pecheur Charles ;Raucent Benoît (coordinator) ;Soares Frazao Sandra ;
Language :	French
Place of the course	Louvain-la-Neuve
Aims	<p>At the end of the course the students will be able to:</p> <ul style="list-style-type: none"> • to use technical drawing (by hand) as a design and communication tool: 2D plan and simple perspectives (cavalier and axonometric). • to build a kinematic model of a mobile robot, to compute internal efforts of a simplified robot model, to measure torques and internal frictions, to measure power and work produced by robot motors, to establish a balance of electrical and mechanical energy. • to develop and test a JAVA program that allows the robot to perform, at scale, arbitrary manoeuvres and trajectories. <p>1</p> <p>The project aims at developing the following cross-cutting skills:</p> <ul style="list-style-type: none"> • Working in team to carry through an engineering-type project. • Carrying a multi-disciplinary project. • Exercising scientific research practices. • Communicate verbally in an efficient manner. • Communicate in writing in an efficient manner. • Self-appraise with respect to target training objectives in order to progress. <p>-----</p> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Evaluation methods	<p>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</p> <p>Oral presentation of the teamwork, with a synthetic visual support.</p> <p>Individual exam.</p>
Teaching methods	<p>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</p> <p>Project based learning</p>
Faculty or entity in charge	BTCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Engineering	FSA1BA	5		