

5.0 credits	30.0 h + 30.0 h	1q
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Teacher(s) :	Craeye Christophe ; Janvier Danielle ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Identical to the contents of the course
Aims :	<p>After the course, students will be able to :</p> <ol style="list-style-type: none"> 1. Calculate a link budget in various propagation conditions 2. Calculate the radiation pattern of an antenna when the current distribution is known. Choose the best type of antenna for a given application 3. Design a resonator and different technological form 4. Match an antenna or a passive microwave circuit 5. Draw a block diagram for a transmit and receive system according to specifications 6. Exploit a basic beamforming algorithm 7. Understand concepts appearing in various microwave systems <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>
Content :	<ol style="list-style-type: none"> 1. Introduction 2. Free space propagation 3. Antennas and radiating systems 4. Guided waves and resonators 5. Smith chart and matching 6. Components of input and output ends of a communications system 7. Application to a multiple-antenna system 8. Communications systems and derived microwave systems
Other infos :	<p>Teaching and learning method Laboratory reports</p> <p>Assessment Exams during control period based on solution of problems</p>
Cycle and year of study :	<p>> Master [120] in Computer Science and Engineering</p> <p>> Master [120] in Electrical Engineering</p> <p>> Master [120] in Biomedical Engineering</p>
Faculty or entity in charge:	ELEC