

5.0 credits	30.0 h + 30.0 h	2q
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Teacher(s) :	Bonaventure Olivier ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Prerequisites :	Networks (informations transfert, protocols, ...) as provided by INGI2141
Main themes :	<ul style="list-style-type: none"> <li>-- network architectures and the role of virtual networks</li> <li>-- quality of service</li> <li>-- provision of multicast</li> <li>-- network reliability</li> <li>-- principles of network management</li> </ul>
Aims :	Students completing successfully this course will be able to <ul style="list-style-type: none"> <li>-- design, deploy and manage data networks</li> <li>-- explain the threats against networks and the defense strategies</li> <li>-- deploy mechanisms to ensure quality of service, security and reliability</li> </ul> <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>
Evaluation methods :	<ul style="list-style-type: none"> <li>-- Oral exam</li> <li>-- Projects</li> </ul>
Teaching methods :	Lectures 4-5 projects by groups of 4 related to the design and configuration of networks <ul style="list-style-type: none"> <li>-- sessions in computer rooms with the teaching assistants at the beginning of the projects (to get used with the main commands)</li> <li>-- sessions of feedback at the end of the projects</li> </ul>
Content :	<ul style="list-style-type: none"> <li>-- Traffic control in IP networks</li> <li>-- IP Multicast</li> <li>-- IPv6</li> <li>-- QoS</li> <li>-- MultiProtocol Label Switching</li> <li>-- BGP/MPLS VPNs</li> <li>-- Evolution of the Internet architecture</li> </ul>
Bibliography :	slides online
Cycle and year of study :	<ul style="list-style-type: none"> <li>&gt; <a href="#">Master [120] in Electrical Engineering</a></li> <li>&gt; <a href="#">Master [120] in Computer Science and Engineering</a></li> <li>&gt; <a href="#">Master [120] in Computer Science</a></li> </ul>
Faculty or entity in charge:	INFO