

# ISS9AD INFORMATION SYSTEMS RISKS AND SECURITY

<b>ISS9AD</b> Information systems risks and security	<b>Duration : 42 hours</b>	<b>Credits : 2 ECTS</b>	<b>Half term: S7</b>	
<b>Person(s) in charge :</b> Guillaume Bonfante, Associate Professor, <a href="mailto:guillaume.bonfante@univ-lorraine.fr">guillaume.bonfante@univ-lorraine.fr</a>				
<b>Keywords :</b> Security, Confidentiality, Integrity, Cryptography, model-checking, time logic				
<b>Prerequisites :</b> None				
<b>Objective :</b> Security issues of information systems				
Content:  <b>Digital security</b> <ul style="list-style-type: none"><li>• Cryptography</li><li>• Access control</li><li>• Protocols</li><li>• Malwares</li></ul> <b>Software security</b> <ul style="list-style-type: none"><li>• State of the art of the issue</li><li>• Model checking</li><li>• TLA</li><li>• Automatized proof</li></ul>				
<b>Abilities:</b>				
<b>Levels</b>	<b>Description and operational verbs</b>			
<b>Know</b>	The risks of information systems, the different types of threats, the protection methods, their limits, the security issues, the links with security			
<b>Understand</b>	The ordeals of security, the protection methods, the model checking, the TLA language, the link between modelling and security			
<b>Apply</b>	Implement the methods linked to security issues System Verification			
<b>Analyse</b>	Threats, system security issues, entry ports, failures costs			
<b>Summarise</b>	Information System models			
<b>Assess</b>				
<b>Evaluations:</b>				
<input type="checkbox"/> Written test	<input type="checkbox"/> Continuous Control	<input type="checkbox"/> Oral Report	<input checked="" type="checkbox"/> Project	<input type="checkbox"/> Written Report