

# Lecturing Plan

<b>Topic</b>			
<b>DIMA - Cloud Computing (Block 4)</b>			
<b>Location</b> Techpark	<b>Material Doz</b> - Notebook - RPi	<b>Material Stud</b> - Notebook - RPi	<b>Duration</b>  255'
<b>Learning Objectives</b> - Can send Data to the Cloud - Can model their Assets in MindSphere - Can check if Data is received - Can visualize Data in a Dashboard			<b>Participants</b>  10
<b>Approach</b> Theory and exercises			
<b>Course</b>	<b>Lecture Notes</b>		<b>Time</b>
Example Communication	Demo; <a href="http://hsr.ch">http://hsr.ch</a> --> <a href="https://www.ost.ch">https://www.ost.ch</a>		255
Introduction to API			9
REST & SOAP			3
HTTP Methods			6
HTTP Request & HTTP Response			3
Demo with Postman	Demo		3
			6

BREAK		5
Introduction to the Cloud		3
Video (Hello World)		6
XaaS		6
Introduction to MindSphere		3
Class Diagram Recap		3
Modeling		9
BREAK		5
Modeling Physical Asset	Ex	15
Modeling Virtual Asset	Ex	15
BREAK		5
Pros & Cons of the Cloud		6
Introduction to Security		3
Data Representation		3
Hash Functions		3
Symmetric & Asymmetric Encryption		6

JWT		3
MindSphere Token		6
BREAK		5
Beginning to create a Dashboard with Edge2Web	Ex (incl. Break)	65
BREAK		5
Introduction to the Exercise		6
Tasks		6
Project	Ex	24
Closing/Objectives		3
Feedback		6