

## Description of individual course units

*(a preencher, no máximo uma página, por cada unidade curricular)*

<b>•Course title:</b>	Information Extraction and Question Answering systems for Textual Bases
<b>•Course code:</b>	
<b>•Type of course</b> (e.g. major/minor, elective, vd projecto Tuning):	Optional
<b>•Level of course:</b>	Advanced (PhD)
<b>•Year of study:</b>	1
<b>•Semester:</b>	1
<b>•Number of credits allocated (workload based):</b>	6
<b>•Name of lecturer:</b>	Paulo Quaresma
<b>•Objective of the course (expected learning outcomes and competences to be acquired):</b>	The main goal is to give the necessary competences needed to analyse, compare and build computational systems with the capacity to process large collections of documents and to answer queries in Natural Language.
<b>•Prerequisites:</b>	Information Retrieval in Text Bases and Machine Learning or Data Mining (from the Msc in Informatics Engineering)
<b>•Course contents:</b>	<ol style="list-style-type: none"> <li>1. Basic concepts: document collections; question/answering systems.</li> <li>2. Evaluation of QA systems. Standard evaluation measures. Conferences: <a href="#">QA@CLEF</a>; TREC QA.</li> <li>3. Symbolical approaches: lexical, syntax, semantic, pragmatic, ontologies.</li> <li>4. Statistical approaches: information extraction through machine learning techniques.</li> <li>5. “Mixed” approaches.</li> <li>6. Case Study.</li> </ol>
<b>•Recommended reading:</b>	<p>Conference proceedings::</p> <p>QA@CLEF: Question-Answering Track of the Cross Language Evaluation Forum</p> <p>TREC QA: Question Answering Track at the Text Retrieval Conference</p>
<b>•Teaching methods:</b>	Theoretical concepts +Scientific papers + experimental work
<b>•Assessment methods:</b>	Experimental work + oral presentation
<b>• Language of instruction:</b>	Portuguese (or English, if needed)