**BSCS**

**Data of courses form**

<table>
<thead>
<tr>
<th>Lecturer’s name:</th>
<th>Vassilis Cutsuridis</th>
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<tbody>
<tr>
<td>Position:</td>
<td>Lecturer</td>
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<td>Division of Engineering, King’s College, London, U.K.</td>
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**Title of the course:** Cognitive Informatics

**Detailed syllabus of the course:**

**Day 1: Introduction: what is cognitive informatics**
1. Computers and the brain, what can we learn about computation from studying about the brain, computational principles on how the brain works, levels of investigation
2. Overview of experimental cognitive techniques
3. Overview of the brain: basic structure and functional view

**Day 2: Basic neural information processing**
4. What is a biological neuron and how it transmits information.
5. What is an artificial neuron and how it transmits information.
6. Intro to connectionist modelling

**Day 3: Learning, memory and knowledge representation**
7. Psychological studies, biological correlates and computational principles of learning and memory: encoding, storage and retrieval.
8. Knowledge representation: biology, psychology and computational modelling

**Day 4: Introduction to visual perception**
9. Definition of visual perception, perception as a constructive act, perception as modelling the environment, perception as apprehension of meaning, optical information.
10. Theoretical approaches to vision.

No textbooks will be used. All relevant papers for discussion during a lecture will be distributed during the previous lecture.

**Assessment:**
40% - participation in the group discussions.
60% - written examination (test)