



UNIVERSITI TEKNOLOGI MARA

CSC785: PHILOSOPHY OF COMPUTER SCIENCES

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| Course Name (English) | PHILOSOPHY OF COMPUTER SCIENCES APPROVED |
| Course Code | CSC785 |
| MQF Credit | 2 |
| Course Description | Philosophy of Computer Science is a philosophical investigation at a level in which questions of knowledge (epistemology), existence (ontology), and value (ethics) are posed within the context of computer science. It seeks to address philosophical problems that arise from within the discipline of computer science. While real world processes amenable to modelling by computer are limitless, philosophy of computer science delineates the limits by putting forth models of human mind in terms of computer science. |
| Transferable Skills | <ol style="list-style-type: none">1. Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts.2. Demonstrate ability to manage personal performance to meet expectations and demonstrate drive, determination, and accountability.3. Demonstrate ability to communicate clearly and confidently, and listen critically.4. Demonstrate practical and contemporary knowledge of relevant professional, ethical and legal frameworks.5. Demonstrate enthusiasm, leadership and the ability to positively influence others. |
| Teaching Methodologies | Lectures, Inquiry-based Learning, Reading Into Writing Task, Small Group Sessions , Self-directed Learning, Directed Self-learning |
| CLO | <p>CLO1 Explain the significance of computability and computation in the context of philosophy of computer science. Test and quiz as required in MQF LOD 1.</p> <p>CLO2 Integrate values, attitude and professionalism in discussing social and ethical issues in computer science.</p> <p>CLO3 Synthesize concepts, ideas, opinions and arguments in justifying positions in philosophy of computer science.</p> |
| Pre-Requisite Courses | No course recommendations |
| Topics | |
| 1. PHILOSOPHY AND SCIENCE 1.1) n/a | |
| 2. PHILOSOPHY AND COMPUTER SCIENCE 2.1) n/a | |
| 3. METHODOLOGY OF COMPUTER SCIENCE 3.1) n/a | |
| 4. COMPUTABILITY THEORY 4.1) n/a | |
| 5. COMPUTATIONAL COMPLEXITY THEORY 5.1) n/a | |
| 6. PHILOSOPHY AND ARTIFICIAL INTELLIGENCE 6.1) n/a | |
| 7. COMPUTER ETHICS 7.1) n/a | |

| Assessment Breakdown | % |
|-----------------------|---------|
| Continuous Assessment | 100.00% |

| Details of Continuous Assessment | Assessment Type | Assessment Description | % of Total Mark | CLO |
|----------------------------------|-----------------|------------------------|-----------------|------|
| | Discussion | Debate 1 | 20% | CLO2 |
| | Discussion | Debate 2 | 20% | CLO3 |
| | Test | Test | 20% | CLO1 |
| | Written Report | Written Report 1 | 20% | CLO2 |
| | Written Report | Written Repory 2 | 20% | CLO3 |

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| Reading List | Reference Book Resources <ul style="list-style-type: none"> • Reynolds, G. 2014, <i>Ethics in Information Technology</i>, 5 Ed., Course Technology • Colburn, T. 2000, <i>Philosophy and Computer Science</i>, Ed., , M.E.Sharpe Armonk, New York [ISBN:] • Müller, V. C. 2015, <i>Computing and Philosophy: Selected Papers from IACAP 2014</i>, Springer • Floridi, L. 2008, <i>Philosophy of Computing and Information</i>, Automatic Press/ VIP • Dickerson, M. 2011, <i>Mind and the Machine: What It Means to Be Human and Why It Matters</i>, Brazos Press |
| Article/Paper List | This Course does not have any article/paper resources |
| Other References | This Course does not have any other resources |