|  |  |  |
| --- | --- | --- |
| **Course Name** | CSC 217: INTRODUCTION TO ARTIFICIAL INTELLIGENCE | |
| Credit Units | 3 | |
| Pre-requisite | CSC 114: Introduction to Computing Essentials  CSC 111: Introduction to programming | |
| Purpose | The purpose of this course is to introduce learners to Artificial Intelligence and its sub-disciplines so that they can appreciate symbolic systems, their processing and application. | |
| Expected Learning Outcomes | By the end of this course, the learner should be able to: -   1. Discuss main sub-disciplines of Artificial Intelligence. 2. Describe the key ideas and concepts of each sub-discipline of Artificial Intelligence. 3. Apply symbolic systems and their processing in Artificial Intelligence | |
| Course Content | Introduction to Artificial Intelligence: Goal of AI, AI Approaches, AI Techniques, Application of AI, History of AI, Branches of AI, AI Languages, Features of AI; Problem Solving, Search and Control Strategies: General Problem Solving, Search and Control Strategies, Exhaustive Searches, Heuristic Search Techniques; Knowledge representation issues: Introduction to knowledge-based Representation, Framework of Knowledge Representation, Knowledge Representation System Requirements, Knowledge Representation Schemes, Issues in Knowledge Representation, Important Attributes; Predicate Logic: Logic as a KR Language, Logic Representation, Propositional Logic , Statement, Variables and Symbols, Predicate Logic; | |
| Mode of Delivery | Lectures, directed reading, practical, hands-on laboratory sessions and projects. | |
| Instructional Material and/or Equipment | Audio visual equipment, writing boards, computer simulation software, computer programming tools | |
| Course Assessment | Type | Weighting (%) |
| Examination | 70 |
| Continuous Assessment | 30 |
| Total | 100 |
| Core Reading Material | 1. Russell S., Norvig P.,(2010) Artificial Intelligence : A Modern Approach. Prentice Hall 2. Rich,E., and Knight.K (2003)., Artificial Intelligence.2nd Ed., Tata Mcgraw-Hill , New Delhi India | |
| Recommended Reading | 1. Robert S.F, (1990). Artificial Intelligence: An Engineering Approach, McGraw Hill College | |