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| Module code | SS-4307 | | |
| Module Title | Information Retrieval | | |
| Degree/Diploma | Bachelor of Science (Computer Science) | | |
| Type of Module | Major Option | | |
| Modular Credits | 4 | Total student Workload | 10 hours/week |
| | | Contact hours | 4 hours/week |
| Prerequisite | SS-2202 Algorithms and Data Structures | | |
| Anti-requisite | None | | |
| Aims | | | |
| <p>This module provides an understanding on how very large collections of data are represented, stored, organized and retrieved efficiently.</p> <p>This module is a compulsory module for Soft Computing stream.</p> | | | |
| Learning Outcomes | | | |
| <i>On successful completion of this module, a student will be expected to be able to:</i> | | | |
| Lower order : | 20% | <ul style="list-style-type: none"> - discuss the fundamental technology used in information retrieval system - explain how information is indexed and cross-referenced for quick retrieval | |
| Middle order : | 60% | <ul style="list-style-type: none"> - compare and assess various retrieval models, clustering algorithms and text categorisation techniques | |
| Higher order: | 20% | <ul style="list-style-type: none"> - build a search engine based on a theoretically sound text indexing and clustering algorithms | |
| Module Contents | | | |
| <ul style="list-style-type: none"> - Techniques to represent and organize data to allow effective use - Techniques to analyze non-structured data so that subsequent processing is more efficient - Building comprehensive indexes and cross references for document and Web retrieval, Image and audio retrieval - Mapping of user query to provide optimal sequence of primitive accesses - Data mining techniques: clustering algorithms, building association rules based on some retrieval models (such as Boolean, vector space, probabilistic) and performing automatic text categorisation - Techniques in experimental evaluation | | | |
| Assessment | Formative assessment | Interactive Quizzes and Feedback | |
| | Summative assessment | Examination: 50% | |
| | | Coursework: 50% <ul style="list-style-type: none"> - 2 class tests (20%) - 2 written assignments (30%) | |