

COM121β

Data Structures and Algorithms

Learning Outcomes

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Upon the successful completion of this course unit

Students will be able to

- Describe the foundations of the data structures.
- Explain about different data structures
- Apply different algorithm in sorting and searching process.
- Conduct practical's using Java programming language

Course Structure and Evaluation Method

- **Credits** - **2.5**
- **Lecture Hours** - **30**
- **Practical Hours** - **22.5**
- **Evaluation**
 - When – End of second semester
 - How – Theory based paper & Practical examination

Topics

- Introduction to Data Structures
- Stacks
- Queues and lists
- Trees
- Graphs
- Analyzing algorithms
- Sorting algorithms
- Hashing