COURSE DETAILS
Course Code: F28XO
Full Course Title: Data Structures and Algorithms
SCQF Level: 8
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes  Postgraduate Taught: No  Postgraduate Research: No
Additional Information:

COURSE AIMS
Basic concepts of data, data structure, algorithm and algorithm analysis

LEARNING OUTCOMES – SUBJECT MASTERY
Basic concepts of data, data structure, algorithm and algorithm analysis
Data structure and its operation
Several basic logical structures, physical representations, operations, and implementation methods of data
Mathematical models of several basic logical structures, abstract data type representations, and algorithm description methods
Analysis and comparation the performance of the algorithm
Meaning of algorithm analysis
Basic methods of algorithm analysis

LEARNING OUTCOMES – PERSONAL ABILITIES
Ability to design complex algorithms
Team spirit
Team working skills
F28XO Data Structures and Algorithms

SYLLABUS

Introduction to the storage structure, access strategy and calculation of data in computer systems

Basic concepts of data, data structure, algorithm and algorithm analysis

Basic logical structure, physical representation, operation, and implementation of the data

Analysis and design of the algorithm

Design of complex algorithms

COURSE RELATIONSHIPS

N/A

LOCATION AND ASSESSMENT METHODS

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