

COURSE DETAIL

SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING

Country

United Kingdom - England

Host Institution

University of London, Queen Mary

Program(s)

University of London, Queen Mary

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

144

UCEAP Course Suffix**UCEAP Official Title**

SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING

UCEAP Transcript Title

SEMI-STRUCTURD DATA

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

In this course, student learn to process XML (with XSLT and Java), to model data with XML (XML native, RDF), and to query XML data (XQuery). The course teaches many concepts of data modelling and knowledge representation that are beyond the syntactic issues of XML or RDF. The knowledge students acquire in the course is fundamental to the many data design and data analytics tasks occurring in todays IT and business landscapes. The second part of the course is dedicates to advanced DB concepts including active databases, mobile databases, spatial and temporal databases, triggers, performance tuning, distributed databases, and indexing and query optimization. The third part of the course covers the modern, agile world of data processing: NoSQL. It is about the processing of semi-structured data, transforming data streams into formats (triplets, JSON) to be processed by new DB systems (e.g. MongoDB, CouchDB).

Language(s) of Instruction

English

Host Institution Course Number

ECS789P

Host Institution Course Title

SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING

Host Institution Course Details

<https://www.qmul.ac.uk/modules/>

Host Institution Campus

Queen Mary

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electronic Engineering and Computer Science

Course Last Reviewed

2023-2024

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