

# COMP8101 - Advanced Topics in Data Engineering

Semester 1, 2023-24

This is a <b>Graduate Course</b> . MPhil/PhD students in the Department of Computer Science should read the Coursework Requirement.														
Instructor	Prof. Nikos Mamoulis													
Syllabus	This course will discuss and study research topics and current problems of interest in the field of data engineering.													
Topics	Review of RDBMS, Query Evaluation, Query Evaluation and Optimization, Spatial Data Management, Spatial Networks, Temporal and Spatiotemporal Data Management, Multidimensional Data Management, Top-k Search, Skyline Queries, Text and Set-valued Data Management, Graph Data Management, Learned and Adaptive Indexing, Processing Data Streams.													
Pre-requisites	Introduction to Data Structures and Algorithms, Introduction to Database Management Systems													
Compatibility														
Instructor's web	<a href="https://www.cs.uoi.gr/~nikos/">https://www.cs.uoi.gr/~nikos/</a>													
Assessment	<ul style="list-style-type: none"> <li>In-course assessment:</li> </ul>													
Timetable	<p>Teaching Period: September 1, 2023 - November 30, 2023  Reading Week: October 16, 2023 - October 21, 2023</p> <table> <tr> <th><i>Date</i></th><th><i>Start Time</i></th><th><i>End Time</i></th><th><i>Venue</i></th><th><i>Remark</i></th></tr> <tr> <td>every weekday (Mon to Fri) from 4 to 22 September, 2023</td><td>19:00</td><td>21:30</td><td>Sept 4,11,18 (Mon): LE6 Sept 5,12,19 (Tue): LE3 Sept 6,13,20 (Wed): LE8 Sept 7,14,21 (Thur): LE4 Sept 8,15,22 (Fri): CPD2.16</td><td>N/A</td></tr> </table>				<i>Date</i>	<i>Start Time</i>	<i>End Time</i>	<i>Venue</i>	<i>Remark</i>	every weekday (Mon to Fri) from 4 to 22 September, 2023	19:00	21:30	Sept 4,11,18 (Mon): LE6 Sept 5,12,19 (Tue): LE3 Sept 6,13,20 (Wed): LE8 Sept 7,14,21 (Thur): LE4 Sept 8,15,22 (Fri): CPD2.16	N/A
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