

# Information Management II

CSU 34041

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# Course Overview

- 12 Week Course
  - Monday 13:00-14:00 L2.15(TBSI)
  - Wednesday 16:00 – 18:00 2043(Arts Building)



# Course Overview

- Assessment
  - Exam (75%)
  - Continuous Assessment (25%)
    - We will do a number of CA tasks, each contributing equally to the final 25% CA mark

# Course Outline

- Information Design & Modelling:
  - Relational Data Model & Algebra; Entity Relational Modelling, Mapping to RDBMs, Design Optimisation and Database Applications. DB Constraints
- System Engineering:
  - DB Security; Transaction Processing; Transactions & Concurrency Control; Recovery; Web Databases and Emerging Database Technologies e.g. NoSQL
  - General Data Protection Regulations & Data Governance.

# Course Layout

1. Introduction to Databases
2. Database Architectures
3. Database Models
4. Relational Algebra for Data Manipulation
5. Designing Databases: The Entity Relationship (ER) approach
6. Designing Databases: Mapping from ER to Relations
7. Design Optimisation (Normalisation & Functional Dependency)
8. Weak Entities and Enhanced ER Modelling
9. Database Constraints
10. Database Security
11. Transactions and Concurrency Control
12. NoSQL
13. GDPR

# Recommended Reading

- Database Systems: Models, Languages, Design and Application Programming
  - Elmasri & Navathe
  - ISBN-10: 0132144980 | ISBN-13: 9780132144988 | Edition: 6<sup>th</sup> edition



Yvette Graham

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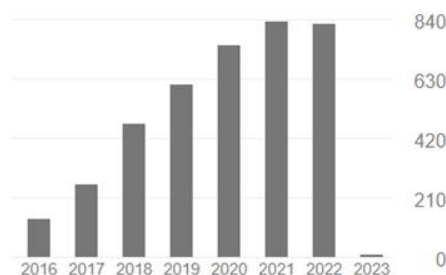
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<input type="checkbox"/>	<a href="#">Results of the WMT17 Metrics Shared Task</a> O Bojar, Y Graham, A Kamran Proceedings of the Second Conference on Machine Translation, Volume 2 ...	241 *	2017
<input type="checkbox"/>	<a href="#">Results of the wmt16 metrics shared task</a> O Bojar, Y Graham, A Kamran, M Stanojević Proceedings of the First Conference on Machine Translation: Volume 2, Shared ...	487	2016
<input type="checkbox"/>	<a href="#">Can machine translation systems be evaluated by the crowd alone</a> Y Graham, T Baldwin, A Moffat, J Zobel Natural Language Engineering 23 (1), 3-30	153	2017
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