



Database Fundamentals Course Descriptor

Course Title	Database Fundamentals	Faculty	EDGE Innovation Unit (London)
Course code	NCHMV463	Course Leader	Marta Rodriguez-Martinez
Credit points	15	Teaching Period	6 weeks
FHEQ level	4	Date approved	March 2021
Compulsory/ Optional	Compulsory		
Prerequisites	None		
Co-requisites	None		

COURSE SUMMARY

This course will familiarise learners with different types of databases, with a focus on the relational database. This includes types of fundamental data structures, the first three stages of database normalisation, and database management systems. Learners will understand the importance of data governance and identify common sources of error within databases as well as some methods of resolution. Learners will be able to model databases and understand conceptual approaches to representing a relational database, including pictorial representations using Barker's notation.

COURSE AIMS

- Teach learners to define a Relational Database and identify the three stages of normal form.
- Train learners on the importance of data standards and policies.
- Teach learners to identify common errors in database systems and how to rectify them.
- Train learners to use data modelling to represent a relational database.

LEARNING OUTCOMES

On successful completion of the course, learners will be able to:

KNOWLEDGE AND UNDERSTANDING

- K1a Describe the conceptual, logical and physical data models.

K2a Identify common data structures.

K3a Explain the role of data governance, data regulation policies and the importance of quality control.

SUBJECT SPECIFIC SKILLS

S1a Apply normalisation rules to an existing database.

S2a Design and represent a database using a graphical schema.

TRANSFERABLE AND PROFESSIONAL SKILLS

T2a Use analytical thinking to break down complex problems into smaller components.

T2a Apply creative thinking to a novel problem.

TEACHING AND LEARNING

The course learning and teaching hours will be structured as follows:

- Seminar = 15 hours
- Applied Seminar = 7.5 hours
- Coaching session = 1 hour
- Academic Drop-ins = 4 hours
- Reading and Assessment Prep = 32.5 hours
- Application of learning = 90 hours

Total = 150 hours

ASSESSMENT

FORMATIVE

Learners will be formatively assessed during the course through a range of techniques. During Seminars, applied learning seminars and one to one coaching, questioning and quizzing are used as formative assessment. The purpose of the formative assessment is to provide learners with developmental feedback to support their learning.

SUMMATIVE

AE	Assessment Type	Weighting	Online submission	Duration	Length
1	Written Assignment	60%	Yes	-	2000 words +/- 10%
2	Set exercises	40%	Yes	Requiring on average 10-20 hours to complete	1500 words +/- 10%

The summative assessment will be assessed in accordance with the assessment aims set out in the Programme Specification.

FEEDBACK

Learners will receive formal feedback in a variety of ways. For summative assessments, feedback is written and provided within 20 days of submission, and for formative assessment it could include verbal or written feedback. Learners will also have a progress review each quarter, see above, with their Multiverse Coach and their Line Manager. These reviews are an opportunity to discuss progress to date both in their role and on the degree programme.

INDICATIVE READING

Note: Comprehensive and current reading lists for courses are produced annually in the Course Syllabus or other documentation provided to learners; the indicative reading list provided below is used as part of the approval/modification process only.

BOOKS

Elmasri, R., 2016. *Fundamentals of database systems*. Pearson Education Limited.

Taylor, A.G., 2018. *SQL for Dummies*. John Wiley & Sons.

JOURNALS/ARTICLES

Ordonez, C., Song, I.Y. and Garcia-Alvarado, C., 2010, October. Relational versus non-relational database systems for data warehousing. In *Proceedings of the ACM 13th international workshop on Data warehousing and OLAP* (pp. 67-68).

INDICATIVE TOPICS

Learners will study the following topics:

- Relational Databases
- Database Modelling
- Common problems and resolutions in RDBMS design
- Entity Relationship Diagrams

Title: NCHMV463 Database Fundamentals Course Descriptor					
Approved by: Academic Board					
Version number	Date approved	Date published	Owner	Location	Proposed next review date
1.0	March 2021	March 2021	Marta Rodriguez-Martinez	Multiverse website	March 2026
Modifications (As per AQF4)					
Version number	Date approved	Date published	Modification (including category number)		