



Data Science Synoptic Project and End Point Assessment Course Descriptor

Course Title	Data Science Synoptic Project and End Point Assessment	Faculty	EDGE Innovation Unit (London)
Course code	NCHNAP692	Course Leader	Professor Scott Wildman (interim)
Credit points	60	Teaching Period	This course will typically be delivered over a 6-month period.
FHEQ level	6	Date approved	June 2020
Compulsory/Optional	Compulsory		
Prerequisites	None		

COURSE SUMMARY

This module is a data science project, conceived and executed by the learner in an external organisation. The project will demonstrate a high-level of technical and analytical skill, aligned to achieving organisational goals and enabling effective institutional change. The project may focus on any element of the data science workflow and will culminate with a dissertation. The dissertation will combine technical research with organisational needs and project management and will enable the learner to deepen his or her understanding of a particular area of data science. Project assessment includes a compulsory knowledge test and professional discussion (*viva voce* examination) at the end of the process, as per the end point assessment for apprenticeships (see [EPA](#) for Data Scientist [Integrated Degree] apprenticeship, for more details).

COURSE AIMS

- Give learners the opportunity to carry out independent research and in-depth analysis in data science.
- Train learners to write up their findings and ideas clearly, coherently and to a high-professional standard.
- Train learners to present their own arguments logically and competently, to engage specialist and non-specialist stakeholders.

LEARNING OUTCOMES

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

KNOWLEDGE AND UNDERSTANDING

- K1c Reflect, in depth, on the body of academic knowledge in a particular specialist field of data science.
- K2c Understand how to systematically apply critical analysis and the appropriate data science methodologies to achieve a successful outcome.

SUBJECT SPECIFIC SKILLS

- S1c Apply project delivery techniques and appropriate tools to plan, organise and manage resources to successfully run the project.
- S2c Communicate and disseminate project findings through high impact, creative storytelling, tailored to specialist and non-specialist audiences.

TRANSFERABLE AND PROFESSIONAL SKILLS

- T1c Use academic and industry-specialist literature to build an argument and carry out sophisticated analysis of the chosen topic.
- T2c Present findings concisely and clearly.
- T3ci Make meaningful conclusions on the basis of a long period of independent study.
- T3cii Utilise an advanced level of technical proficiency of written English, while effectively applying scholarly terminology, to critically evaluate, analyse and make judgements and apply these appropriately to a range of diverse contexts.

TEACHING AND LEARNING

The contact hours on this course are formed predominantly of supervisory meetings, typically 4 x 1 hour.

Learners are expected to carry out independent research into the topic. Readings should include a mix of books, journal articles, policy papers and other relevant documents, depending on the topic and the approach taken in the dissertation.

Course information and supplementary materials are available on the College's Virtual Learning Environment (VLE).

Learners are required to attend and participate in all the formal and timetabled sessions for this course. Learners are also expected to manage their directed learning and independent study in support of the course.

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

- Off-the-job learning (18 days x 7 hours) = 126 hours (e.g. 1 day per week for 18 weeks)

- On-the-job learning (54 days x 7 hours) = 378 hours (e.g. 3 days per week for 18 weeks)
- Private study (5 hours per week for 18 weeks) = 90 hours

ASSESSMENT

FORMATIVE

Learners will be formatively assessed during the course by means of a project plan review. This will not count towards the final degree but will provide learners with developmental feedback.

SUMMATIVE

Assessment will be in two forms:

AE	Assessment Type	Weighting	Online submission	Duration	Length
1	Examination (MCQ)	20%	Yes	1 hour	-
2	Dissertation	50%	Yes	-	7,500 words +/- 10%
3	Oral Assessment	30%	Yes	90 mins +/- 10%	-

FEEDBACK

Learners will receive formal feedback in a variety of ways: written (via email or VLE correspondence) and indirectly through online discussion groups. Learners will also attend a formal meeting with their Academic Mentor (and for apprentices, including their Line Manager). These bi- or tri-partite reviews will monitor and evaluate the learner's progress.

INDICATIVE READING

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

BOOKS

- Walliman, N., (2004), *Your Undergraduate Dissertation: The Essential Guide for Success*, London: Sage.
- Swetnam, D., (2001), *Writing Your Dissertation: How to Plan, Prepare and Present Your Work Successfully*, Begbroke: How To Books Ltd.

JOURNALS

Learners are encouraged to consult relevant journals on their relevant specialism.

ELECTRONIC RESOURCES

Learners are encouraged to consult relevant electronic resources on their relevant specialism.

INDICATIVE TOPICS

- How to solve a technological problem based on an organisation’s problem
- Managing technology projects to a successful outcome
- Using real-world data and scenarios

Title: NCHNAP692 Data Science Synoptic Project and End Point Assessment Approved by: Academic Board Location: Academic Handbook/Programme specifications and Handbooks/ Undergraduate Apprenticeship Programmes/BSc (Hons) Data Science Programme Specification/Course Descriptors					
Version number	Date approved	Date published	Owner	Proposed next review date	Modification (As per AQF4) & category number
2.1	May 2022	May 2022	Scott Wildman	September 2026	Category 1: Corrections/clarifications to documents which do not change approved content.
2.0	January 2022	April 2022	Scott Wildman	September 2026	Category 3: Changes to Learning Outcomes
1.0	June 2020	June 2020	Scott Wildman	June 2025	