WALBROOK Institute London

BSc (Hons) Data Science

Distance Learning

Semester FT	Semester PT I	Semester PT II	Module	Module Code	Credit Points	Type of Assessment
1. Semester (Level 4)	1. Semester	1. Semester	Introduction to Data Science	LIBFEXDLBCSICS	15	Oral Assignment + Reflection Paper
			Introduction to Programming with Python	LIBFEXDLBDSIPWP	15	Exam
		2. Semester	Mathematics: Analysis	LIBFEXDLBDSMFC	15	Exam
	2. Semester		Statistics - Probability and Descriptive Statistics	LIBFEXDLBDSSPDS-01	15	Exam
2. Semester (Level 4)		3. Semester	Object Oriented and Functional Programming with Python	LIBFPDLBDSOOFPP	15	Portfolio
			Data Quality and Data Wrangling	LIBFOARPDLBDSDQDW	15	Oral Assignment + Reflection Paper
	3. Semester	4. Semester	Mathematics: Linear Algebra	LIBFEXDLBDSMFLA	15	Exam
			Statistics - Inferential Statistics	LIBFEXDLBDSSIS	15	Exam
3. Semester (Level 5)		5. Semester	Introduction to Academic Work	LIBFAWDLBCSIAW	15	Advanced Workbook
	4. Semester		Database Modeling and Database Systems	LIBFEXDLBCSDMDS	15	Exam
		6. Semester	Explorative Data Analysis and Visualization	LIBFAWDLBDSEDAV	15	Advanced Workbook
			Data Science Software Engineering	LIBFAWDLBDSDSSE	15	Advanced Workbook
4. Semester (Level 5)	5. Semester	7. Semester	Machine Learning - Supervised Learning	LIBFWACSDLBDSMLSL	15	Written Assessment: Case Study
			Machine Learning - Unsupervised Learning and Feature Engineering	LIBFWACSDLBDSMLUSL	15	Written Assessment: Case Study
	6. Semester	8. Semester	Elective A1		15	
			Elective A2		15	
5. Semester (Level 6)	7. Semester	9. Semester	Neural Nets and Deep Learning	LIBFWAWADLBDSNNDL	15	Written Assessment: Written Assignment
			Ethical Considerations in Data Science	LIBFWAREDLBDSSECDS	15	Written Assessment: Research Essay
		10. Semester	Elective B1		15	
			Elective B2		15	
6. Semester (Level 6)	8. Semester	11. Semester	Elective C1		15	
			Elective C2		15	
		12. Semester	Bachelor Thesis	LIBFBTDLBBT	30	Bachelor Thesis
Total			**360**			

☑

FT: Full-Time, 36 months
PT I: Part-Time I, 48 months
PT II: Part-Time II, 72 months

☑

The sequence of the modules is to be strictly followed

Electives

☑

Electives: You can choose two elective modules from each elective area. You can freely choose these modules or follow our suggested combinations to stay in a specific subject area (only relevant for elective areas B and C). In total, a subject area consists of four elective modules (the exception being: Banking and Finance).

Elective A		Elective B	Elective C
Project: From Model to Production	**Business Intelligence & Data Analytics**	*Business Intelligence*	*Advanced Data Analysis*
Project: Build a Data Mart in SQL		*Project: Business Intelligence*	*Project: Data Analysis*
Agile Project Management	**Marketing & Sales**	*Applied Sales I*	*Online Marketing*
Internship I		*Applied Sales II*	*Social Media Marketing*
Internship II	**Supply chain management & Industry 4.0**	*Supply Chain Management I*	*Product Development in Industry 4.0*
		Supply Chain Management II	*Project: Smart Product Solutions*
	Data Engineeing & Big Data Technologies	*Big Data Technologies*	*Data Engineering*
		Cloud Computing	*Project: Data Engineering*
	Artificial Intelligence	*Artificial Intelligence*	*Self-Driving Vehicles*
		Project: Artificial Intelligence	*Current Topics and Trends in Self-Driving Technology*
	Banking and Finance	*Crypto and Blockchain*	
		FinTech	