

These programme regulations should be read in conjunction with the University's <u>core regulations for postgraduate</u> <u>programmes</u>, and the <u>marking and classification conventions for postgraduate programmes</u>.

MSc Scientific Computing and Data Analysis (G5K609)

- 1. Location: Durham City
- 2. Duration: 12 months (full-time)

Programme structure

3. Candidates shall study and be assessed in the following modules:

		Credit value
Core Ia: Introduction to Machine Learning and Statistics ~	PHYS51915	15
Core lb: Introduction to Scientific and High Performance Computing ~	PHYS52015	15
Professional Skills	COMP51915	15
Project ~	COMP52060	60

4. Candidates shall also study and be assessed in modules to the value of 30 credits from List A and 45 from List B:

List A:		Credit value
Advanced Statistical and Machine Learning: Foundations and	<u>MATH52015</u>	15
Unsupervised Learning		
Advanced Statistics and Machine Learning: Regression and Classification	MATH52115	15
Data Acquisition and Image Processing	PHYS52115	15
Performance Engineering and Advanced Algorithms	COMP52315	15
Continuous and Discrete Systems	COMP52215	15

List B:		Credit value
Astrophysics	PHYS51545	45
Particle Physics	PHYS51645	45
Financial Technology: Algorithmic Trading and Market Making in Options	COMP52415	15
Software Development Project *	PHYS51715	15
Financial Mathematics	<u>MATH52230</u>	30

5. Modules marked with * are not available in 2020/21.

Assessment, progression and award

- 6. Modules Marked with a ~ must be passed at 50% or above; a mark of 40-49% cannot be compensated.
- 7. If a candidate fails a module he/she may be given the opportunity to resit the relevant examination(s) before the end of the academic year at a time to be determined by the Department.
- 8. There is no resit opportunity for the project (COMP 52060).