

IT Data Analytics Yr12 & Yr13 Roadmap

Yr12 Subject Aim: The subject aims to build confidence and teach both theory and real-world practice in data handling—preparing students for further study and careers in areas like data analytics, business intelligence, data science, and IT. It combines exam-based learning (F200) with hands-on project work (F202) to develop technical, analytical, project management, and communication skills.

	Yr12 AUTUMN TERM TOPICS	ASSESSMENT IN Yr12
AUTUMN TERM	Students will work towards learning about the fundamentals of data analytics. You will learn about data, introduced to Big Data and the different formats that can be used. You will learn about how data is gathered, the data lifecycle management and the legislation that needs to be compiled with then working with data. You will also learn about the different methods of data visualisation and about the range of relevant job roles.	Due to the unit-based nature of the qualification, Assessment will be formal assessment set by the exam boards. You will undertake an externally assessed exam in January. There will be a mock for each of these exams with enough time to provide you with relevant feedback. The coursework unit work will be conducted within the timetabled lessons.
	Yr12 SPRING TERM TOPICS	HOMEWORK IN Yr12
SPRING TERM	You will learn how to communicate with a client to identify the information and data which must be gathered to solve a problem. You will also learn how to use a range of tools and techniques used in spreadsheets to develop inputs and complete processes to produce outputs. You will use these tools and techniques to design and develop solutions to a client's problems. You will also test your models thoroughly to ensure that they meet a client's needs.	Students can expect to be given 3 different types of homework throughout the year: 1). Quizzes to help with your knowledge recall. 2). Essays based on a wide range of material aimed at developing discussion and evaluative skills. 3). Topic Packs of past paper questions.
	Yr12 SUMMER TERM TOPICS	ENRICHMENT THEMES IN Yr12
SUMMER TERM	F205 - In this unit you will learn skills required to process data sets effectively to draw out meaningful insights. To do this you will learn how to prepare data for analysis and design a dashboard for the visualisation of information. F206 - In this unit you will learn the basics of digital marketing and how to create digital marketing campaigns for a specified purpose.	They are encouraged to participate and mentor younger students throughout KS3 & KS4.

Where Next?

After completing the 1st year of study, students could choose to no longer continue with the course and achieve the Certificate level of qualification (1/2 full course UCAS points).

In the 2nd year students will study content in preparation for the Big Data & Machine Learning element of the course. They will also continue and complete the F205 & F206 coursework units that were started during the summer term of the 1st year.

IT Data Analytics Yr13 Roadmap on Next Page

IT Data Analytics Yr12 & Yr13 Roadmap

Yr13 Subject Aim: The subject aims to further build confidence and build upon both theory and real-world practice in data handling that were learnt within the 1st year of study. It combines exam-based learning (F201) with hands-on project work (F205 & F206) to develop technical, analytical, project management, and communication skills.

	Yr13 AUTUMN TERM TOPICS	ASSESSMENT IN Yr13
AUTUMN TERM	You will learn about the challenges of managing big data. You will also learn about data analytics, artificial intelligence (AI) and machine learning (ML). It will lead to big innovations in the future. Finally, you will learn about the legal and ethical issues in data management and how big data can be used in environmental work and social developments.	Due to the unit-based nature of the qualification, Assessment will be formal assessment set by the exam boards. You will undertake an externally assessed exam in January. There will be a mock for each of these exams with enough time to provide you with relevant feedback. The coursework unit work will be conducted within the timetabled lessons.
	Yr13 SPRING TERM TOPICS	HOMEWORK IN Yr13
SPRING TERM	F205 - In this unit you will learn skills required to process data sets effectively to draw out meaningful insights. To do this you will learn how to prepare data for analysis and design a dashboard for the visualisation of information. F206 - In this unit you will learn the basics of digital marketing and how to create digital marketing campaigns for a specified purpose.	Students can expect to be given 3 different types of homework throughout the year: 1). Quizzes to help with your knowledge recall. 2). Essays based on a wide range of material aimed at developing discussion and evaluative skills. 3). Topic Packs of past paper questions.
	Yr13 SUMMER TERM TOPICS	ENRICHMENT THEMES IN Yr13
SUMMER TERM	If there is a requirement for a student to retake an exam in the summer of the 2 nd year, the remaining time available during this term can be spent preparing for that exam. All other elements of the course will have been completed.	They are encouraged to participate and mentor younger students throughout KS3 & KS4.

Where Next?

Achievement of this qualification can support you to go on and study relevant IT degrees in a Higher Education institution such as, Computing and IT, Computing Science, Software Developments, Software Engineering or Business Information Systems.

Contacts

Enterprise Department: Mr Brown. Based in the Enterprise Office (the portacabin in the quad next to the main hall, up the ramp, room 27). Student issues - please do not hesitate to ask for help (Computing Teacher or at the Enterprise Office). We also run "drop-in" sessions (open to students for any help / questions etc.) in CR3 on Monday, Tuesday and Wednesday after school