














## **CONL722 BIG DATA: CHALLENGES AND OPPORTUNITIES**

### Weekly Checklists












Print out these weekly checklists and keep them with you as you work through the module, ticking off the activities as you complete them.

Make sure you check the announcements and your emails each week, so you don't miss out on any updates.









## Week 1 – Introduction to Big Data

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Read	<b>1.1.0: Lesson 1 – Data Science and Big Data</b>		Friday		
	Watch	1.1.1: Business Intelligence and Data Science		Friday		
	Watch	1.1.2: What is Big Data?		Friday		
	Read	1.1.3: Big Data Fundamentals	1,2	Friday		
	Submit	1.1.4: Check your understanding: Big Data Fundamentals		Day 3-5		
	Discuss	1.1.5: Discussion 1 – The V's of Big Data		Day 3 - 5		
	Read	<b>1.2.0: Lesson 2 – Big Data Technologies</b>		Friday		
	Watch	1.2.1: Databases		Friday		
	Watch	1.2.2: Machine Learning		Friday		
	Watch	1.2.3: Hadoop Architecture		Friday		
	Read	1.2.4: Big Data Technologies	1,2,3	Friday		
	Discuss	1.2.5: Discussion 2: Big Data Technology		Day 5 - 7		
	Read	<b>1.3.0: Week 1 Summary</b>		Friday		











## Week 2 – Data Objectives and Data Types

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Read	<b>2.1.0: Lesson 1 – Structured and unstructured Data</b>				
	Watch	2.1.1: Structured and Unstructured Data				
	Watch	2.1.2: Data identifiers				
	Read	2.1.3: Data types and identifiers	1,2			
	Submit	2.1.4: Check your understanding: Data types and identifiers		Day 3-5		
	Read	<b>2.2.0: Lesson 2 – Metadata, Classification and Ontologies</b>				
	Watch	2.2.1: Metadata, Classification and Ontologies				
	Read	2.2.2: Metadata, Classification and Ontologies	3,4			
	Discussion	2.2.3: Discussion 1 - Big Data Analytics in pandemic time		Day 5 -7		
	Do	2.3.0: Week 2 Check in				
	Read	2.4.0: Week 2 Summary				









Week 3 – xxx

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Watch	<b>3.1.0: Lesson 1 -Big Data integration</b>		Friday		
	Read	3.1.1 Data Collection, integration and standardisation	1,2	Friday		
	Discuss	3.1.2: Discussion 1 – The future		Wednesday Friday		
	Watch	<b>3.2.0: Lesson 2 – Data Analysis</b>		Friday		
	Read	3.2.1: Immortality and adequacy of Big data	3	Friday		
	Discuss	3.2.2: Discussion 2 – Big data in practice		Wednesday Friday		
	Submit	3.3.0: Portfolio task 1 – Data in big analytics Quiz		Sunday, 23:59		
	Read	3.4.0: Week 3 Summary		Sunday		










## Week 4 – Big Data Techniques

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Watch	<b>4.1.0: Lesson 1 – Measurement</b>				
	Read	4.1.1: Measurement	1,3			
	Submit	4.1.2: Check your understanding: Measurement				
	Watch	<b>4.2.0: Lesson 2 – Speed, scalability and large collections</b>	1,3			
	Read	4.2.1: Speed, scalability and large collections	1,3			
	Submit	4.2.2: Check your understanding: Speed, scalability and large collections	1,2,3			
	Watch	<b>4.3.0: Lesson 3 – Random numbers</b>	1,3			
	Read	4.3.1: Random Numbers	2,3			
	Submit	4.4.0: Portfolio task 2: Discussion 1 – Compare & evaluate techniques				
	Read	4.5.0: Week 4 Summary				

## Week 5 – Big Data Applications

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Watch	<b>5.1.0: Lesson 1 - Biases</b>				
	Watch	5.1.1: Lesson 2 - Subsets				
	Read	5.1.2: Special considerations in Big Data Analysis	1,2			
	Submit	5.1.3: Check your understanding: Biases and Subsets				
	Watch	5.2.0: Lesson 3 - Failure				
	Read	5.2.1: Big data failures & how to avoid them	3			
	Submit	<b>5.3.0: Portfolio Task 3 – Big Data Failures</b>		Monday of Week 6, 13:00 UK time		
	Read	5.4.0: Week 5 Summary		Sunday		

## Week 6 – Big Data Analysis

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	☑
	Watch	<b>6.1.0: Lesson 1 - Reanalysis</b>		Friday		
	Read	6.1.1 Reanalysis	1,2	Friday		
	Discuss	6.1.2: Discussion 1 – Purpose and the need for data Reanalysis		Friday Sunday		
	Watch	<b>6.2.0: Lesson 2 - Repurposing</b>		Friday		
	Read	6.2.1: Repurposing	1,2	Friday		
	Watch	<b>6.3.0: Lesson 3 - Security</b>		Friday		
	Read	6.3.1: Security	1,2	Friday		
	Submit	<b>6.4.0: Quiz</b>		?		
	Read	Week 6 Summary		Sunday		

## Week 7 – Big Data in Society

	Activity	Task	Weekly Outcomes	Due date	Approx time on task (hrs)	<input checked="" type="checkbox"/>
	Watch	<b>7.1.0: Lesson 1 – Big Data: Legal, Security and Privacy issues</b>		Wednesday		
	Read	7.1.1 Big Data: Legal, Security and Privacy issues	1,2,3	Wednesday		
	Discuss	7.1.2: Discussion 1 – Big Data and Privacy		Wednesday Friday		
	Watch	<b>7.2.0: Lesson 2 – Social Implications of Big Data Applications</b>		Friday		
	Read	7.2.1: Social Implications	1,2,3	Friday		
	Discuss	7.2.2: Discussion 2 – Social implications of Big Data Application		Saturday Sunday		
	Submit	7.3.0: Submission – Assignment 2: Report (40%)		Monday of Week 9, 13:00 UK time		
	Read	7.4.0: Week 7 Summary		Sunday		