


<div><div></div><div>NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA</div></div> <div>Post-Graduate Program in Big Data Engineering</div>							
Program Schedule							
Course	Dates	Week Day	Module	Live/Self-Paced/One-on-One	Test	Assignment	Doubt Clearing Session
October 2019							
Building Blocks for Big Data	19/10/2019	Saturday	Introduction to Big Data, Data Structures and Algorithms	Live (3 hrs)			
	20/10/2019	Sunday	Non - Linear Data Structures for Big Data	Live (3 hrs)		Assignment 1 Starts	
	26/10/2019	Saturday	Designing High Performant Distributed Algorithms	Live (3 hrs)			
	27/10/2019	Sunday	Tool Stack Options for Big Data	Live (3 hrs)			
November 2019							
Building Blocks for Big Data	2/11/2019	Saturday				Assignment 1 Ends	DCS 1 (2 hrs)
	03/11/2019	Sunday			End Course Test 1 (3 hrs)		
Distributed & Parallel Computing for Big Data	09/11/2019	Saturday	Background of Distributed & Parallel Computing Systems	Live (3 hrs)			
	10/11/2019	Sunday	Hadoop: A Distributed and Highly Scalable Computing Platform	Live (3 hrs)		Assignment 2 Starts	
	16/11/2019	Saturday	Storing Big Data in a Distributed Cluster: HDFS	Live (3 hrs)			
	17/11/2019	Sunday	Advanced HDFS Concepts	Live (3 hrs)			
	23/11/2019	Saturday	MapReduce Computational Model	Live (3 hrs)		Assignment 2 Ends	
	24/11/2019	Sunday	Advanced MapReduce Concepts	Live (3 hrs)		Assignment 3 Starts	
	30/11/2019	Saturday					DCS 2 (2 hrs)
December 2019							
Distributed & Parallel Computing for Big Data	01/12/2019	Sunday	Scala Essentials for Spark – I	Live (3 hrs)			
	07/12/2019	Saturday	Scala Essentials for Spark – II	Live (3 hrs)		Assignment 3 Ends	
	08/12/2019	Sunday	In-memory Computation for Big Data	Live (3 hrs)		Assignment 4 Starts	
	14/12/2019	Saturday	Advanced RDDs Concepts in Spark	Live (3 hrs)			
	15/12/2019	Sunday					
	21/12/2019	Saturday				Assignment 4 Ends	DCS 3 (2 hrs)
	22/12/2019	Sunday			End Course Test 2 (3 hrs)		
Big Data Models and Management	28/12/2019	Saturday	Introduction to Relational Database Management System	Live (3 hrs)		Assignment 5 Starts	
	29/12/2019	Sunday	Storing, Handling and Managing Data in Relational Database	Live (3 hrs)			
January 2020							
Big Data Models and Management	04/01/2020	Saturday	SQL Like Query Processing Engine for Big Data: Hive	Live (3 hrs)		Assignment 5 Ends	
	05/01/2020	Sunday	Advanced Hive Concepts	Live (3 hrs)		Assignment 6 Starts	
	11/01/2020	Saturday	Relational Data Processing with Spark: SparkSQL and DataFrames	Live (3 hrs)			
	12/01/2020	Sunday					DCS 4 (2 hrs)
	18/01/2020	Saturday	Handling Heterogeneous Data with NoSQL	Live (3 hrs)		Assignment 6 Ends	
	19/01/2020	Sunday	Exploring Column Based NoSQL Database: HBase	Live (3 hrs)		Assignment 7 Starts	
	25/01/2020	Saturday	Working with NoSQL Database Cluster: Apache Cassandra	Live (3 hrs)			
Big Data Models and Management	26/01/2020	Sunday	Deep Diving into Apache Cassandra	Live (3 hrs)			
February 2020							
Big Data Models and Management	01/02/2020	Saturday				Assignment 7 Ends	DCS 5 (2 hrs)
	02/02/2020	Sunday			End Course Test 3 (3 hrs)		
Mid Project 1	08/02/2020	Saturday			Mid Program Project 1		
	09/02/2020	Sunday			Mid Program Project 1		
Data Warehousing & Big Data Pipeline	15/02/2020	Saturday			Mid Program Project 1 Submission		
	16/02/2020	Sunday	Introduction to Data Warehousing	Live (3 hrs)		Assignment 8 Starts	
	22/02/2020	Saturday	Large Scale Data Ingestion Using Sqoop	Live (3 hrs)			
	23/02/2020	Sunday	Performing ETL Using Hive	Live (3 hrs)			
Data Warehousing & Big Data Pipeline	29/02/2020	Saturday	Building Robust ETL Pipeline with Spark	Live (3 hrs)		Assignment 8 Ends	
March 2020							
Data Warehousing & Big Data Pipeline	01/03/2020	Sunday	Workflow and Job Scheduling – I	Live (3 hrs)		Assignment 9 Starts	
	07/03/2020	Saturday	Workflow and Job Scheduling – II	Live (3 hrs)			
	08/03/2020	Sunday					
	14/03/2020	Saturday			End Course Test 4 (3 hrs)	Assignment 9 Ends	DCS 6 (2 hrs)
Real-Time Big Data Processing	15/03/2020	Sunday					
	21/03/2020	Saturday	Working with Streaming Data	Live (3 hrs)		Assignment 10 Starts	
	22/03/2020	Sunday	Streaming Data Processing With Spark	Live (3 hrs)			
Real-Time Big Data Processing	28/03/2020	Saturday	Structured Streaming in Spark	Live (3 hrs)		Assignment 10 Ends	
	29/03/2020	Sunday	Low Latency and Real Time Data Processing with Kafka – I	Live (3 hrs)		Assignment 11 Starts	
April 2020							
Real-Time Big Data Processing	04/04/2020	Saturday	Low Latency and Real Time Data Processing with Kafka – II	Live (3 hrs)			
	05/04/2020	Sunday	Building Streaming Data Pipeline Using Kafka, Spark & NoSQL	Live (3 hrs)			
	11/04/2020	Saturday				Assignment 11 Ends	DCS 7 (2 hrs)
	12/04/2020	Sunday			End Course Test 5 (3 hrs)		
Mid Project 2	18/04/2020	Saturday			Mid Program Project 2 Review		
	19/04/2020	Sunday			Mid Program Project 2 Review		
	25/04/2020	Saturday			Mid Program Project 2 Submission		
	26/04/2020	Sunday	Maintaining Data Integrity in Big Data Platforms	Live (3 hrs)		Assignment 12 Starts	
May 2020							
Data Governance in Big Data	02/05/2020	Saturday	Access Policies in Big Data Platforms	Live (3 hrs)			
	03/05/2020	Sunday	Security Concepts in Hadoop – I	Live (3 hrs)			
	09/05/2020	Saturday	Security Concepts in Hadoop – II	Live (3 hrs)			
	10/05/2020	Sunday					
	16/05/2020	Saturday				Assignment 12 Ends	DCS 8 (2 hrs)
	17/05/2020	Sunday			End Course Test 6 (3 hrs)		
	23/05/2020	Saturday	Introduction to Big Data Analytics	Live (3 hrs)		Assignment 13 Starts	
Big Data Analytics and Intelligence	24/05/2020	Sunday	Advanced Analytics Using ML – I	Live (3 hrs)			
	30/05/2020	Saturday	Advanced Analytics Using ML – II	Live (3 hrs)		Assignment 13 Ends	
	31/05/2020	Sunday	Business Intelligence & Visualization for Big Data	Live (3 hrs)		Assignment 14 Starts	
June 2020							
Big Data Analytics and Intelligence	06/06/2020	Saturday				Assignment 14 Ends	DCS 9 (2 hrs)
	07/06/2020	Sunday			End Course Test 7 (3 hrs)		
	13/06/2020	Saturday					
	14/06/2020	Sunday	SUPPLEMENTARY AND REST WEEK				
Industry Project	20/06/2020	Saturday	Industry Project Problem Selection	Live (60 mins)			
	21/06/2020	Sunday	Industry Project Problem Selection	Live (60 mins)			
	27/06/2020	Saturday	Stage 1 Assessment	Live (60 mins)			
	28/06/2020	Sunday	Stage 1 Assessment	Live (60 mins)			
July 2020							
Industry Project	04/07/2020	Saturday	Stage 2 Assessment	Live (60 mins)			
	05/07/2020	Sunday	Stage 2 Assessment	Live (60 mins)			
	11/07/2020	Saturday	Final Assessment	Live (60 mins)			
	12/07/2020	Sunday	Final Assessment	Live (60 mins)			
End Of Program	18/07/2020	Saturday	Final Grade Release				
	19/07/2020	Sunday	Transcripts				
	25th July 2020 - Graduate						