



# **CCEK – NSQF ALIGNED PROGRAM**

## **COURSE SYLLABUS**

### **FOR**

### **Data Analytics**

## CCEK - NATIONAL SKILL DEVELOPMENT TRAINING PROGRAM

### Data Analytics

CCEK – NSDC course package covers the following Qualification Packs and leads to the following NSDC certifications. The students who successfully completed the course programs are entitled to get NSDC certification after undergoing the assessment process of NSDC as per the rules and regulations stipulated by NSDC from time to time.

SL. NO.	QUALIFICATIONS PACK	QUALIFICATIONS PACK CODE	NSQF LEVEL
1	<p><b><u>JUNIOR DATA ASSOCIATE</u></b></p> <p><b>Brief Job Description:</b></p> <p>The ideal candidate will assist in data collection, entry, validation, and preliminary analysis tasks to support business decisions and analytics initiatives. This is an entry-level role, ideal for individuals looking to launch a career in data and analytics.</p>	<b>SSC/Q0401</b>	<b>7</b>

**COURSE DETAILS**

**Data Analytics**

**EXAMINATION DETAILS**

COURSE NAME	COURSE CODE	ELIGIBILITY	DURATION
Data Analytics	G03	SSLC	400

SL. NO.	EXAM	EXAM CODE	MAXIMUM MARK	INTERNAL	TOTAL MARK
<b>THEORY PAPERS</b>					
1	Foundations and Applications of Data Analytics	T001	100	50	150
<b>PRACTICAL PAPERS</b>					
1	Data Analytics: Methods, Tools, and Real-World Applications	L001	100	50	150
<b>TOTAL MARKS</b>					
1	Total Examination Marks (Theory Online + Practical Examination)				200
2	Total Internal Marks				100
3	<b>Total Marks (Total Internal Marks + Total Examination Marks )</b>				<b>300</b>

**Data Analytics**

**INTERNAL MARK CRITERIA FOR EACH**

<b>SL NO.</b>	<b>MODULE</b>	<b>MODULE CODE</b>	<b>MAXIMUM MARK</b>	<b>INTERNAL MARK</b>	<b>TOTAL MARK</b>
1	Foundations and Applications of Data Analytics	T001	100	50	150
2	Data Analytics: Methods, Tools, and Real-World Applications	L001	100	50	150
	<b>TOTAL</b>		200	100	300

<b>ATTENDANCE</b>	<b>GENERAL PERFORMANCE</b>	<b>INTERNAL EXAMINATIONS/ PROJECTS/ ASSIGNMENTS</b>	<b>TOTAL MARKS</b>
5	5	40	50

# **COURSE SYLLABUS**

**FOR**

**Data Analytics**

<b>COURSE</b>	Data Analytics	
<b>TOTAL MARKS</b>	Mark: 300	Internal Mark: 100
<b>TOTAL HOURS</b>	400 Hrs	

**DEFENITION OF CREDIT**

1 Credit	15Hrs Theory/ 30Hrs Practical
Skill Components	60 – 70 % of Total Credit

**MODULES INCLUDED IN THIS SUBJECT**

<b>SL NO</b>	<b>MODULE NAME</b>	<b>CREDIT BREAKUP</b>
1	Module 1: Data Science Fundamentals	<b>1.5</b>
2	Module 2: Basics of Statistics	<b>1.5</b>
3	Module 3: Managing Data from Disparate Sources	<b>3.5</b>
4	Module 4: Self and work Management	<b>1.5</b>
5	Module 5: Team Work and Communication	<b>1.5</b>
6	Module 6: Managing Health and Safety	<b>1</b>
7	Module 7: Data and Information Management	<b>1.5</b>
8	Module 8: Learning and Self Development	<b>1</b>
	Total	<b>13</b>

## **Training Outcomes**

- Analyze data from multiple disparate sources
- Manage their work to meet requirements
- Work effectively with colleagues
- Maintain a healthy, safe and secure working environment
- Provide data/information in standard formats
- Develop their knowledge, skills and competence

## **MODULES**

### **Module 1: Data Science Fundamentals**

#### **THEORY & PRACTICAL**

- Collate data from multiple data sources using appropriate software tools
- Clean data and make it ready for analysis using appropriate software tools

### **Module 2: Basics of Statistics**

#### **THEORY & PRACTICAL**

- Establish clearly the objectives and scope of the analysis
- Conduct agreed analysis on the data
- Draw justifiable inferences from their analysis
- Present results and inferences from their analysis using standard templates and tools

### **Module 3: Managing Data from Disparate Sources**

#### **THEORY & PRACTICAL**

- Establish clearly the objectives and scope of the analysis
- Access their organization's knowledge base for relevant data sources and methodological approaches
- Obtain guidance from appropriate people to identify suitable data sources
- Collate data from multiple data sources using appropriate software tools
- Clean data and make it ready for analysis using appropriate software tools
- Obtain guidance from appropriate people to agree the analysis to be performed on the data
- Conduct agreed analysis on the data
- Draw justifiable inferences from their analysis
- Present results and inferences from their analysis using standard templates and tools
- Obtain advice and guidance from appropriate people on issues with data analysis outside their area of competence or experience
- Review the results of their analysis with appropriate people
- Undertake modifications to their analysis based on inputs from appropriate people
- Comply with their organization's policies, procedures and guidelines when analysing data from multiple disparate sources

## **Module 4: Self and work Management**

### **THEORY & PRACTICAL**

- Establish and agree work requirements with appropriate people
- Keep immediate work area clean and tidy
- Utilize time effectively
- Use resources correctly and efficiently
- Treat confidential information correctly
- Work in line with organization's policies and procedures
- Work within the limits of job role
- Obtain guidance from appropriate people, where necessary
- Ensure work meets the agreed requirements

## **Module 5: Team Work and Communication**

### **THEORY & PRACTICAL**

- Obtain guidance from appropriate people to agree the analysis to be performed on the data
- Obtain advice and guidance from appropriate people on issues with data analysis outside their area of competence or
- Review the results of their analysis with appropriate people
- Undertake modifications to their analysis based on inputs from appropriate people
- Communicate with colleagues clearly, concisely and accurately
- Work with colleagues to integrate their work effectively with them
- Pass on essential information to colleagues in line with organizational requirements
- Work in ways that show respect for colleagues
- Carry out commitments they have made to colleagues
- Let colleagues know in good time if they cannot carry out their commitments, explaining the reasons
- Identify any problems they have working with colleagues and take the initiative to solve these problems
- Follow the organization's policies and procedures for working with colleagues

## **Module 6: Managing Health and Safety**

### **THEORY & PRACTICAL**

- Comply with an organization's current health, safety and security policies and procedures
- Report any identified breaches in health, safety, and security policies and procedures to the designated person
- Identify and correct any hazards that they can deal with safely, competently and within the limits of their authority
- Report any hazards that they are not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected
- Follow their organization's emergency procedures promptly, calmly, and efficiently
- Identify and recommend opportunities for improving health, safety, and security to the designated person
- Complete any health and safety records legibly and accurately

## **Module 7: Data and Information Management**

### **THEORY & PRACTICAL**

- Establish and agree with appropriate people the data/information they need to provide, the formats in which they need to provide it, and when they need to provide it
- Obtain the data/information from reliable sources
- Check that the data/information is accurate, complete and up-to-date
- Obtain advice or guidance from appropriate people where there are problems with the data/information
- Carry out rule-based analysis of the data/information, if required
- Insert the data/information into the agreed formats
- Check the accuracy of their work, involving colleagues where required
- Report any unresolved anomalies in the data/information to appropriate people
- Provide complete, accurate and up-to-date data/information to the appropriate people in the required formats on time

## **Module 8: Learning and Self Development**

### **THEORY & PRACTICAL**

- Obtain advice and guidance from appropriate people to develop their knowledge, skills and competence
- Identify accurately the knowledge and skills they need for their job role
- Identify accurately their current level of knowledge, skills and competence and any learning and development needs
- Agree with appropriate people a plan of learning and development activities to address their learning needs
- Undertake learning and development activities in line with their plan
- Apply their new knowledge and skills in the workplace, under supervision
- Obtain feedback from appropriate people on their knowledge and skills and how effectively they apply them
- Review their knowledge, skills and competence regularly and take appropriate action