CCEK – NSQF ALIGNED PROGRAM

COURSE SYLLABUS

FOR

Statistical Analysis and

Problem Solving

CCEK - NATIONAL SKILL DEVELOPMENT TRAINING PROGRAM

Statistical Analysis and Problem Solving

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	**<u>Introduction to Statistical Analysis and Problem Solving</u>** **Brief Job Description**: In the role of data engineer, one should understand and apply various statistical tools and develop a detailed understanding of basic statistical concepts.	**HCLT/N0029/IT/2024**	**5**

COURSE DETAILS

Statistical Analysis and Problem Solving

EXAMINATION DETAILS

COURSE NAME	COURSE CODE	ELIGIBILITY	DURATION
Statistical Analysis and Problem Solving	G51	Pursuing UG 2nd year(No experience)	30

SL. NO.	EXAM	EXAM CODE	MAXIMUM MARK	INTERNAL	TOTAL MARK
	THEORY PAPERS				
1	Probability and Probability Distributions	T001	100	50	150
	PRACTICAL PAPERS				
1	Hypothesis Testing Practicals	L001	100	50	150
	TOTAL MARKS				
1	Total Examination Marks (Theory Online + Practical Examination)				200
2	Total Internal Marks				100
3	**Total Marks (Total Internal Marks + Total Examination Marks)**				**300**

Statistical Analysis and Problem Solving

INTERNAL MARK CRITERIA FOR EACH

SL NO.	MODULE	MODULE CODE	MAXIMUM MARK	INTERNAL MARK	TOTAL MARK
1	Probability and Probability Distributions	T001	100	50	150
3	Hypothesis Testing Practicals	L001	100	50	150
	TOTAL		200	100	300

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

COURSE SYLLABUS

FOR

Statistical Analysis and

Problem Solving

COURSE	Statistical Analysis and Problem Solving	
TOTAL MARKS	Mark: 300	Internal Mark: 100
TOTAL HOURS	30 Hrs	

DEFENITION OF CREDIT

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

MODULES INCLUDED IN THIS SUBJECT

SL NO	MODULE NAME	CREDIT BREAKUP
1	Module 1: Descriptive Statistics and Problem Solving	0.5
2	Module 2: Inferential Statistics and Hypothesis Testing	0.5
	Total	1

Training Outcomes

- Understand Fundamental Statistical Concepts
- Apply Statistical Methods using tools using Excel
- Interpret Statistical Results for Decisions

MODULES

Module 1: Descriptive Statistics and Problem Solving

THEORY

- Application of problem-solving techniques
- Understand Basic Statistical Concepts
- Explore probability distributions.

PRACTICAL

- Application of problem-solving techniques
- Understand Basic Statistical Concepts
- Explore probability distributions.

Module 2: Inferential Statistics and Hypothesis Testing

THEORY

- Explore concepts of Hypothesis Testing.
- Identify the need for usage of Correlation and Regression Analysis.

PRACTICAL

- Perform t-tests, chi-square tests, ANOVA depending on the data set and business requirement.
- Apply simple and multiple regression on the data set provided