

WHAT IS R PROGRAMMING LANGUAGE AND

R PROGRAMMING LANGUAGE:

The primary uses of R is and will always be, statistic, visualization, and machine learning. It is a clear and accessible programming tool. R is made up of a collection of libraries designed specifically for data science. Investigate the data, refine your hypothesis and analyze them. R provides a wide array of tools to capture the right model for your data. Integrate codes, graphs, and outputs to a report with R Markdown or build Shiny apps to share with the world.

MACHINE LEARNING:

Machine learning is the solicitation of Artificial Intelligence (AI) that provides systems the ability to automatically learn and reinforce from experience without being explicitly programmed. Machine Learning focuses on the development of computer programs that can access data and enables the self-learning mode.

SKILLS AGE FOUNDATION IN ASSOCIATION WITH

**CST UP INCUBATION CENTER
IIT(BHU), VARANASI**

OFFERS

1. **CERTIFICATE IN
STATISTICS AND R
(FOUNDATION AND ADVANCED)**
2. **MACHINE LEARNING
(FOUNDATION AND ADVANCED)**

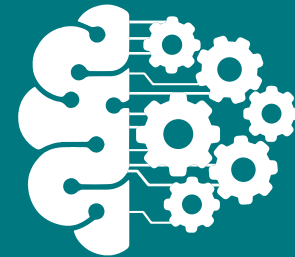
**ONLINE AND INTERACTIVE
LEARNING**



**Certification by
IIT(BHU), VARANASI**

WHAT WE OFFER ?

- 1) EXPERIENTIAL - LEARNING
- 2) LIVE CASE-STUDY
- 3) INTERNSHIP OPPORTUNITIES



DURATION

R AND STATISTICS:

**FOUNDATION(L1):60 HRS
ADVANCED(L2):76HRS**

MACHINE LEARNING:

**FOUNDATION(L1):40 HRS
ADVANCED(L2):40 HRS**



ABOUT



Skills Age Foundation established in 2014, as a not-for-profit Initiative, operating in the Vocational Education domain to empower employability skills. Our aim is to build employment avenues for the career aspirants by reinforcing competencies through new-edge skills

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CLICK FOR ADMISSION

<https://www.aspireks.com/Skillagefoundation/Skillageform>

Email: info@skillsage.org



FAQ'S

Q1: THE DURATION AND NAME OF EACH COURSE:

FOUNDATION CERTIFICATION IN
STATISTICS WITH R
(LEVEL-1) - 60 HRS

ADVANCED CERTIFICATION IN
STATISTICS WITH R
(LEVEL-2) - 76 HRS

Q2: ELIGIBILITY TO APPLY FOR THE COURSE:

- A. LEARNER/TRAINEES MUST BE PASSIONATE ABOUT DATA SCIENCE.
- B. NO PRIOR WORK EXPERIENCE REQUIRED.
- C. 12TH PASS WITH MATH/STATISTICS BACKGROUND
- D. ANY UNDERGOING OR GRADUATES STUDENTS WITH MATH / STATISTICS / BCA / IT BACKGROUND
- E. ANY WORKING PROFESSIONAL HAVING WORKING EXPERIENCE IN PROGRAMMING, MATHEMATICS, STATISTICAL, COMPUTATION, SIMULATIONS AND DATA ANALYTICS.

Q3: COST OF EACH COURSE:

A. LEVEL-1 CERTIFICATION FEE IS INR 5000

B. LEVEL-2 CERTIFICATION COST IS INR 7500

(EXCLUDING TAXES). OFFLINE VIDEO RECORDING SESSION TRAINING FEE IS INR 5000 FOR ONE YEAR FOR BOTH THE TRAINING CERTIFICATIONS.). A GROUP OF 10 STUDENTS CAN AVAIL A FLAT DISCOUNT OF 20% FOR BOTH THE COURSES.

Q4. CAN I DO THIS COURSE, IF I AM A BEGINNER?

A. LEVEL-1 IS SUITABLE FOR BEGINNERS, BUT HAVING A BACKGROUND IN MATHEMATICS / STATISTICS / BCA / IT WOULD HELP TO UNDERSTAND THE CONCEPT BETTER.

Q5: ARE THERE ANY JOB PROSPECTS AFTER THESE COURSES?

A. DATA SCIENCE AND ANALYTICS IS IN DEMAND. THESE IIT BHU COURSES WILL PROVIDE AN EDGE AND WOULD CERTAINLY HELP TRAINEES TO GET THE JOB. TRAINEES WILL HAVE AN OPPORTUNITY TO LEARN ON LIVE SCENARIO AS AN INTERN. PLACEMENTS WOULD BE PROVIDED TO TOP 10 PERFORMERS AFTER THE COURSE.



COURSE CURRICULUM- STATISTICS WITH R

FOUNDATION (L1)

ADVANCED (L2)

FOUNDATION (L1)

CHAPTER I :

INTRODUCTION TO STATISTICAL CONCEPTS (20 HOURS)

- » POPULATION AND SAMPLE (1 HOUR)
- » TYPES OF VARIABLES AND GRAPHS (5 HOURS)
- » MEASURES OF DATA (5 HOURS)
- » TESTS (9 HOURS)

CHAPTER II :

ANALYSIS OF VARIANCE (ANOVA) (10 HOURS)

- » TWO-SAMPLE T-TESTS (2 HOURS)
- » ONE-WAY ANOVA (3 HOURS)
- » ANOVA WITH DATA FROM RANDOMISED BLOCK DESIGN (5 HOURS)

CHAPTER III :

REGRESSION (10 HOURS)

- » EXPLORATORY DATA ANALYSIS (3 HOURS)
- » SIMPLE LINEAR REGRESSION (7 HOURS)

CHAPTER IV (A) : REGRESSION (10 HOURS)

- » CONCEPTS OF MULTIPLE REGRESSION (3 HOURS)
- » MODEL BUILDING AND INTERPRETATION (PART OF R COURSE) (7 HOURS)
- » ESTIMATING AND TESTING THE COEFFICIENTS FOR THE SELECTED MODELS

CHAPTER IV (B) : REGRESSION DIAGNOSTICS (6 HOURS)

- » EXAMINING RESIDUALS (2 HOURS)
- » INFLUENTIAL OBSERVATIONS (2 HOURS)
- » COLLINEARITY (2 HOURS)

CHAPTER V : CATEGORICAL DATA ANALYSIS (15 HOURS)

- » TESTS OF ASSOCIATION (3 HOURS)
- » INTRODUCTION TO LOGISTIC REGRESSION (5 HOURS)
- » LOGISTIC REGRESSION WITH CATEGORICAL PREDICTORS (3 HOURS)
- » STEPWISE SELECTION WITH INTERACTIONS (4 HOURS)

CHAPTER VI : PREDICTIVE MODELING (29 HOURS)

- » SUPERVISED AND UNSUPERVISED LEARNING (4 HOURS)
- » DIFFERENCE BETWEEN CLASSIFICATION AND REGRESSION ALGORITHMS (4 HOURS)
- » UNSUPERVISED LEARNING (8 HOURS)
- » SUPERVISED LEARNING (REGRESSION AND LOGISTIC REGRESSION)
- » WHICH ARE TAUGHT IN CHAPTERS IV AND V COME UNDER SUPERVISED LEARNING. (8 HOURS)
- » TIME SERIES (5 HOURS)

- » INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
- » BASIC STATISTICS
- » PYTHON FOR DATA SCIENCE – SCIKIT, NUMPY, OPENCV, MATPLOTLIB
- » INTRODUCTION TO MACHINE LEARNING APPROACHES
- » REGRESSION – LINEAR, BAYSIAN, LOGISTIC
- » UNSUPERVISED LEARNING
- » CLASSIFICATION – KNN, NAÏVE BAYES, DECISION TREES, SVM
- » UNSUPERVISED LEARNING

ADVANCED (L2)

- » ENSEMBLE METHODS
- » TENSORFLOW
- » REGRESSION – GRADIENT DESCENT, RIDGE, LASSO
- » NEURAL NETWORKS – CNN, RNN
- » REINFORCEMENT LEARNING
- » INTRODUCTION TO DEEP LEARNING

