KALINGA UNIVERSITY
RAIPUR|INDIA

— INTERNSHIP PROGRAM IN —

BIG DATA

Faculty of Information Technology and
Department of Computer Science

Date: 23rd May to 6th July 2023

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Mission

Kalinga University aims to be an outstanding institution for Talent Development and Knowledge Creation for a vibrant and inclusive society.

KALINGA UNIVERSITY

Our **University**

Kalinga University, Raipur is a NAAC accredited University with Grade B+ and the Only Private University in Chhattisgarh ranked in Top 101-150 Universities in NIRF Ranking 2022 and has emerged as a centre of excellence of higher education in Central India. Strategically located in the Smart City of New Raipur, this University has started carving a niche for itself in the education domain and is rising as a shining star on the horizon of quality education.

Infrastructure – Kalinga offers World Class Infrastructure and student facilities with student centric approach. Highest attention is paid to hands on learning approach and students are encouraged to come up with innovative ideas for projects and practical's. The University has more than 90 laboratories and workshops, all well equipped with the latest, state of the art apparatus and tools. Special emphasis is given to the development of communication skills through the language lab. More than 1000 computers are available for the use of the students.

Establishment – Established in 2013, this University has been able to win the confidence of over 8000 students. Meritorious students from all over the country and various foreign countries like Afghanistan, Angola, Bangladesh, Cameroon, Gambia, Ivory Coast, Kenya, Lesotho, Liberia, Malawi, Namibia, Nepal, Nigeria, Papua New Guinea, South Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe, etc have chosen this University for their education and career.

Schools of Excellence – Currently the University is serving the student community through various UG and PG programs namely Engineering, Law, Pharmacy, Arts & Humanities, Science, Commerce & Management, Biotechnology, Information Technology, Library Science, Fashion Design & Interior Design.

About **Internship Program**

- Learn job critical skills like Big Data & Hadoop frameworks, and leverage the functionality of AWS services.

- The Big Data Engineer course helps you learn to use the database management tool and MongoDB via interactive sessions & projects.

Advantages

• Understand Big Data and its analytics in the real world.

• Analyze the Big Data framework like Hadoop and NoSQL to efficiently store and process Big Data to generate analytics.

• Design of Algorithms to solve Data-Intensive Problems using the Map Reduce Paradigm.

• Design and Implementation of Big Data Analytics using pig and spark to solve data-intensive problems and generate analytics.

• Implement Big Data Activities using Hive.

Who Should **Attend**

Beneficial for - Students of UG/PG Programs & Research Scholars of Information Technology and Computer Science, etc.

Resource Persons

Mr. Omprakash Dewangan
HoD incharge,
Dept. of Computer Science &
Faculty of Information Technology

Mr. Pawan Kumar Jaiswal
Assistant Professor,
Faculty of Information Technology

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Program Details

Duration : 45 Days
Date: 23rd May to 6th July 2023
Monday to Saturday
Time: 10:00 am to 4:00 pm
VENUE: Kalinga University

PROGRAM FEE
RS 10,000/-

NOTE -

1. Accommodation facility is available on a chargeable basis: Rs 6,500/- for 45 days inclusive of Food (Air Cooled Room- 4 Students/Room, 3 Meals per day & other amenities).
2. Transport Facility available from common pickup point (Free).

Steps For **Registration**

STEP 1: Participants have to make payment on the given bank details

Account Name: Kalinga University

Bank Name: ICICI Bank

A/c No.: 390701000010

IFSC Code No.: ICIC0003907

SWIFT CODE: ICICINBBCTS

STEP 2: Take a screenshot of the payment & send it to

omprakash.dewangan@kalingauniversity.ac.in

STEP 3: Fill out the registration form with all the necessary information.

SCAN TO PAY

REGISTER HERE

CONTACT DETAILS

+91-7024133429 | omprakash.dewangan@kalingauniversity.ac.in

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Program **Schedule**

Module-I
Introduction to BIG DATA

S.No.	Topics	Duration
1.	Introduction to Big data	
2.	The three Vs of big data	
3.	The value—and truth—of big data	
4.	The history of big data	5 days
5.	Big data use cases	
6.	Big data challenges	
7.	How big data works	

Module-II
Introduction to Enabling Technologies for Big Data

S.No.	Topics	Duration
1.	Predictive Analytics	
2.	NoSQL Databases	
3.	Knowledge Discovery Tools	
4.	Stream Analytics, In-memory Data Fabric	
5.	Distributed Storage	5 days
6.	Data Virtualization	
7.	Data Integration	
8.	Data Preprocessing	
9.	Data Quality	

Module-III
Introduction to Big Data Platforms

S.No.	Topics	Duration
1.	Apache Hadoop, Apache storm	
2.	Cloudera	
3.	Amazon Web Services	5 days
4.	Oracle	
5.	Snowflake	

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Module-IV
Big Data and Analytics

S.No.	Topics	Duration
1.	Classification of Digital Data	
2.	Structured and Unstructured Data	
3.	Data Warehouse	
4.	Environment Big Data Analytics	5 days
5.	Classification of Analytics	
6.	Big Data Analytics importance	

Module-V
Introduction to Mongodb and Mapreduce

S.No.	Topics	Duration
1.	Why Mongo DB	
2.	Terms used in RDBMS and Mongo DB	
3.	Data Types	5 days
4.	MongoDB Query Language	
5.	Introduction to Big Data	

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Module-VI
Introduction to Mapreduce

S.No.	Topics	Duration
1.	What is MapReduce	
2.	Mapper- Reducer	
3.	Combiner - Partitioner	
4.	Searching	5 days
5.	Sorting	
6.	Compression	

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Module-VII
Introduction to Hive and Pig

S.No.	Topics	Duration
1.	Introduction Hive	
2.	Introduction Architecture	
3.	File Formats	
4.	Hive Query Language Statements	
5.	Partitions – Bucketing – Views	5 days
6.	Features – Philosophy - Use Case for Pig - Pig Latin Overview - Pig Primitive Data Types	
7.	Complex Data Types - Piggy Bank - User-Defined Functions - Parameter Substitution – Diagnostic	
8.	Example using Pig Technology	

Module-VIII
Introduction to Data Analytics with R

S.No.	Topics	Duration
1.	Introduction to Machine Learning	
2.	Supervised Learning	
3.	Unsupervised Learning	
4.	Regression Model	
5.	Clustering	10 days
6.	Collaborative Filtering	
7.	Associate Rule Making	
8.	Decision Tree	
9.	Big Data Analytics with BigR	