

# CAREER DEVELOPMENT CENTRE, B.I.T. SINDRI

# (TRAINING & PLACEMENT CELL) (Department of Higher & Technical Education) Government of Jharkhand

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# **NOTICE**

## Attention: All the students of BIT SINDRI

All the students are hereby informed that AICTE, in collaboration with CYBERVIDYAPEETH is organising 200 HOURS OF INTENSIVE FREE CYBER ENGINEERING SKILL BUILDING Workshop.

**Last Date**: August 26, 2022 (10PM)

Mode: Online

Starting Date: - 1st Sept. 2022

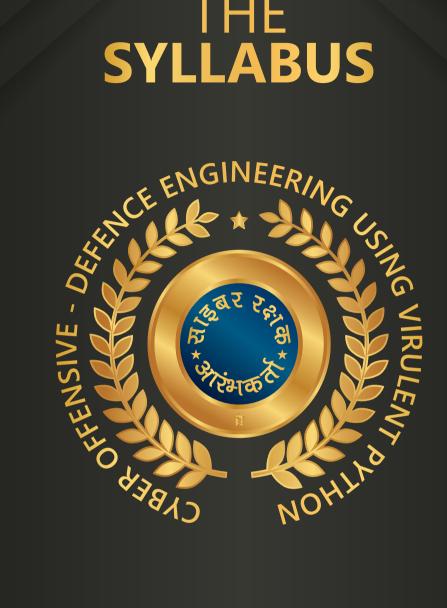
Link: <a href="https://forms.gle/EbqF7pBWdPpEZ1mQ8">https://forms.gle/EbqF7pBWdPpEZ1mQ8</a>

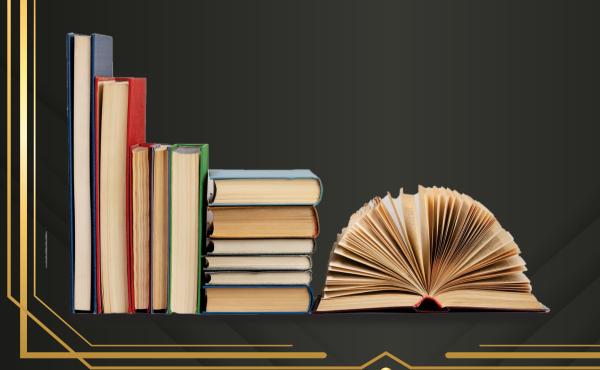
➤ Note:-

- ❖ It is mandatory for all the student to register for the webinar.
- Attendance of the webinar will be shared to the respective departments for further proceedings
- ❖ Link for registration in Cyber Vidyapeeth Portal is at the end of the form

Prof. (Dr) Ghanshyam, Chairman, Career Development Centre, B.I.T. Sindri, Dhanbad

# THE SYLLABUS





## **PYTHON PROGRAMMING**

#### **PYTHON PROGRAMMING-I**

- Install & Setup
- Basic syntax
- Keywords and identifiers
- Comments, variable and data types
- Operators ,control flow (decision making , looping, branching )
- String manipulation
- List ,tuples,set and dictionary(Basics)
- Arrays
- Functions(User defined and built-in)

#### **PYTHON PROGRAMMING-II**

- Modules
- File Handling
- Exception handling
- Networking Programming
- Web Scraping
- Working With Images
- Working With PDFs and Spreadsheet CSV Files
- Project: Automating Job Applications on LinkedIn
- Project:Create an Automated Amazon Price Tracker

# DATA SCIENCE

#### **DATA SCIENCE-I**

- Installation of Python, Jupyter Notebook
   & Google Colab
- Data Type, List, Functions, Loops
- NumPy Math Operations & Array, Pandas Dataframe
- Reading CSV file & DB data
- Basic Statistics Mean, Median & Mode
- Variance, SD, Population vs. Sample
- Central Tendency Theory
- Charts & Graphs for Analysis Distribution-Normal, Uniform & Poisson, p-value
- Hypothesis Testing

### **DATA SCIENCE-II**

- Overview of ML Training
- Confusion Matrix
- R-Square
- Supervised Vs. Unsupervised
- Regression
- Decision Tree & Random Forest
- K-Means Clustering
- Packet Capture, Metadata Extraction And Anomaly Detection
- Network Flow Analytics & Anomaly Detection
- Dns Fast Flux Attack Detection

# DATA SCIENCE

#### **PYTHON FOR SECURITY-I**

- Building a port scanner
- Constructing a SSH Botnet
- Dictionary password cracker
- ZIP file Brute-Force crackerIntroduction to python shell
- Write python reverse shell (Windows)
- Write python reverse shell (Linux)
- Write python bind shell
- Handling Url's using python
- Write customised port scanner using python
- Perform banner grabbing

#### **PYTHON FOR SECURITY-II**

- Sniffing wireless network for personal information
- Lisntening for preferred networks and indentifying hiddenn wireless networks
- Stalking Bluetooth Radios
- Exploiting Bluetooth vulnerablities
- Anonymously browsing the internet with the mechanize class
- Interacting with Google using python
- Interacting with Twitter using python
- Python for OSINT
- Threat Intel & Osint Using Python & Opensource Libraries



# Launching World's Unique "Cyberversity Certified Cyber Rakshak-Beginner"



