

### **About ICT Academy**

ICT Academy program is officially recognized by the All India Council for Technical Education, ensuring its credibility and quality. It offers a Certification for this program. This program is ideal for individuals seeking to enhance their career prospects or explore new opportunities in the tech industry.

### **How To Apply**

The applicants should register at ICT ACADEMY web portal at the earliest.

Website: <http://member.ictacademy.in>

### **Eligibility and Selection**

Technical Department Faculty members from member and non-member institutions. Selection is on "First come First Serve" basis. Selection will be intimated through mail and selected participants should confirm their participation.

### **Registration**

- No Registration Fee
- Last date for Registration: 19.09.2024
- Selected Participants should attend the program at CSE Department, GCE, Bodinayakanur for the entire duration to get the course certificate.

### **Patron**

**Dr.C.VASANTHANAYAKI, M.E.,Ph.D.,  
Principal,**  
Government College of Engineering,  
Bodinayakanur-625582.

### **Coordinator**

**Dr. C.RANI , M.E., Ph.D.,  
Associate Professor & HOD( i/c) / CSE**

### **Organizing Committee**

Prof.C.Satheesh Pandian, AP/CSE  
Dr. B.Sivaranjani, AP/CSE  
Prof.C.Sathish,AP/CSE  
Prof.R.Vimala, AP/CSE  
Dr.V.Ramya, ASP(CAS) / CSE

### **Address for Correspondence**

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ICTACADEMY



**Government College of Engineering  
Bodinayakanur – 625 582**

**Department of Computer Science and Engineering**

**in association with  
ICT Academy**

**Organizes**

**Faculty Development Programme  
on**

***“Data Analytics Using Python”***

**September 23 - 27, 2024**



**Coordinator**

**Dr. C. RANI**  
**Associate Professor & HOD (i/c)**  
**Department of Computer Science and Engineering**

### **About The Institution**

Government College of Engineering, Bodinayakkanur, a spice valley of Tamil Nadu, affiliated to Anna University, Chennai is one of the esteemed institutions in India. It was founded in 2012 for the welfare of students in the western region of Tamil Nadu. It occupies 10.06 acres of space. GCE, Bodinayakkanur offers five undergraduate courses. More than fifty permanent faculty members provide them with excellent teaching and training. All departments have set up laboratories equipped with cutting edge technology to conduct research.

### **Institute Vision**

To be a global, vibrant and innovative center for Technical Education, to equip students with knowledge and skills in Engineering, expose hidden talents, opportunities to realize their full potential, inculcate national and human values and thus shape them into future professional engineers, entrepreneurs and above all good human beings.

### **Institute Mission**

The mission of the College is to contribute to society through promotion of teaching, learning and knowledge by developing the personality of students in a holistic manner by combining skills and values and by assimilating global development in education and adopting the latest technology.

### **CSE Department**

The Computer Science and Engineering department was established in the year 2012 with the intake of 60 seats. Students are also admitted under the lateral entry scheme. It has dedicated and specialized faculty members in different areas of Computer Science and Engineering with rich experience in academics and research. The department is approved by AICTE, New Delhi and affiliated to Anna University, Chennai.

### **About The Course**

Data analytics has become an indispensable tool in today's data-driven world. Python, with its simplicity, versatility, and extensive libraries, has emerged as a preferred language for data analysts. A comprehensive course in data analytics using Python equips learners with the skills to extract valuable insights from raw data.

The course typically begins with foundational concepts, including data structures, control flow, and functions. Faculty then delve into the powerful libraries that make Python a data analysis powerhouse. NumPy provides efficient numerical operations, while Pandas offers robust data manipulation and analysis capabilities. Matplotlib and Seaborn enable the creation of informative visualizations, allowing analysts to communicate their findings effectively. Beyond these core libraries, the course may also help faculty explore advanced tools like Scikit-learn for machine learning and Statsmodels for statistical modeling.

In addition to the technical skills, a comprehensive data analytics course using Python often emphasizes problem-solving and critical thinking. Faculty learn how to formulate questions, collect relevant data, and apply appropriate analytical techniques to answer those questions. By the end of the course, faculty are equipped to tackle complex data challenges and contribute meaningfully to the data-driven decision-making in various fields.

### **Programme Highlights**

#### **Module 1: Python Fundamentals**

- Python Basic Concepts
- Python Data Structures
- Python Scope
- OOPS Concepts in python
- File Handling in python
- Special functions
- Exception Handling in python

#### **Module 2 : Python Analytics**

- Numpy
- Pandas
- Matplotlib, Seaborn and Scipy