INTRODUCTION TO PYTHON FOR BUSINESS RESEARCH

DATE: JULY 10-12, 2024

ISLAMIC UNIVERSITY OF TECHNOLOGY GAZIPUR, BANGLADESH



About the Short Course

Introduction to Python for Business Research is a short course tailored for beginners be it a student, researcher, academician, or a professional. Anyone with little to no prior programming experience interested in acquiring industry relevant programming skills can enroll in this course organized by the department of Business and Technology Management (BTM) of the Islamic University of Technology (IUT) in Gazipur, Bangladesh. A total of 27 participants enrolled this year in this short course where 18 participants were faculty members of different public and private universities, 7 students from different renowned universities of Bangladesh and abroad.

Course Duration & Venue

- July 10-12, 2024
- Islamic University of Technology (IUT)
 Board Bazar, Gazipur, Bangladesh.
- Accommodation facility was also provided for the participants.



WINNING TEAM OF THE CASE COMPETITION

Course Format

The short course is structured to provide an intensive and practical learning experience over three days. The format includes practical sessions with the instructor, interactive discussions, and hands-on coding exercises. Sessions are supplemented with relevant lecture slides, coding assignments, code examples, and project work. On the last day, the final evaluation is done through a a group project, and a case presentation using python.

Course Objectives

- Introduce participants to the basic syntax and concepts of Python programming.
- Provide a solid foundation in data structures, including lists, tuples, dictionaries, and sets.
- Familiarize participants with statistical analysis using Python and decision-making processes.
- Teach participants how to apply machine learning methods for business and research.
- Explore practical applications of Python in data analysis, visualization, and business analysis.

Reviews

"It went from the very basic to deep topics in a structured flow without being too overwhelming."

"All of you who organized the course are very, very, very helpful. Your hospitality and behavior are charming. The course content is very relevant and exceeded my expectations. The instructor's knowledge and teaching effectiveness were outstanding, and they were extremely approachable and supportive. Overall, my experience in this course was excellent, and I would definitely recommend it to others."

Meet the Instructors

Ishmam Chowdhury
Vice President
Operations at Shikho
Formerly at Grameenphone
BBA, IBA, University of Dhaka





A. K. M. Masum, PhD
Professor
Department of Software Engineering
Daffodil International University
Former Chairman, Dept. of CSE, IIUC
Senior Member, IEEE

Md. Bakhtiar Hasan Assistant Professor Department of Computer Science & Engineering (CSE), Islamic University of Technology





Md. Mohsinul Kabir
Assistant Professor
Department of Computer Science
& Engineering (CSE),
Islamic University of Technology

Course Outline

- Introduction to python
- Data structures
- Basic syntax and data types
- Statistical analysis with python
- Data visualization with matplotlib and seaborn
- Machine learning fundamentals for business research
- Showcasing the application of python in research across various domains (e.g., social sciences, economics)
- Hands-on exercises and projects to reinforce concepts learned throughout the course
- Guidance on applying python to specific research projects and addressing research questions
- Fundamentals of topic selecting for effective business research Design appropriate method for research
- Research design and selection of journals
- Group project, presentation and feedback
- Case Competition

Message from Program Coordinator

Welcome to the "Introduction to Python for Business Research" short course. Our objective is to provide a comprehensive learning experience that covers the fundamental aspects of Python programming and its applications in business research. We hope that this course will enhance your skills and open new opportunities for personal and career development.



Mohammad Shamsu Uddin Program Coordinator Assistant Professor BTM, IUT



Khadija Khanom Organizer Lecturer BTM, IUT

Message from Head of the Department



Dr. Md. Abul Kalam Azad Professor Head of the Department BTM, IUT

We are delighted to present the short course "Introduction to Python for Business Research," designed to provide participants with essential programming skills to solve business problems. The course is designed for novices in the field keeping in mind the growing demand for data analytics, machine learning, and business research competencies in today's modern world. This year, the course was a three day intensive program where the participants attended interactive sessions with the instructors, saw demonstrations as well as practiced themselves different applications of Python in solving business problems. Finally, the course work culminated into a final case competition where the participants teamed up to compete and provide the solution to a real life business problem using Python. It is our hope that not only will the course train the participants with programming skills, but also enhance their critical thinking and problem solving abilities. Moreover, the participants would get ample opportunity to interact with each other and build important connections since this is a course where students, teachers, and professionals come to meet through Python.