

জাতীয় কম্পিউটার প্রশিক্ষণ ও গবেষণা একাডেমী (নেকটার)
কারিগরি ও মাদ্রাসা শিক্ষা বিভাগ
শিক্ষা মন্ত্রণালয়, বাংলাদেশ
www.nactar.gov.bd

Class Routine of Machine Learning and Data Science (Batch 05 & 06)
Module 02: Programming with Python (Duration: 45 hours)

SL	Day/Time	Time/slot	Location	Class Description	Instructor
1	03-Aug-2024 (Saturday)	02:00-05:00 PM	Zoom Virtual Class Room	Module Overview Introduction to Python and Programming Fundamentals.	MD.MOHIUDDON Instructor (ICT), NACTAR
2	04-Aug-2024 (Sunday)	02:00-05:00 PM	Zoom Virtual Class Room	Basic syntax of Python, including data types	MD.MOHIUDDON Instructor (ICT), NACTAR
3	05-Aug-2024 (Monday)	02:00-05:00 PM	Zoom Virtual Class Room	Variables, Basic arithmetic and logical operations	MD.MOHIUDDON Instructor (ICT), NACTAR
4	06-Aug-2024 (Tuesday)	02:00-05:00 PM	Zoom Virtual Class Room	Hands-on exercises for basic data type and variable operations	MD.MOHIUDDON Instructor (ICT), NACTAR
5	11-Aug-2024 (Sunday)	02:00-05:00 PM	Zoom Virtual Class Room	Syntax of if statements. Syntax of else statements	MD.MOHIUDDON Instructor (ICT), NACTAR
6	12-Aug-2024 (Monday)	02:00-05:00 PM	Zoom Virtual Class Room	Syntax of nested if statements. Syntax of elif statements	MD.MOHIUDDON Instructor (ICT), NACTAR
7	13-Aug-2024 (Tuesday)	02:00-05:00 PM	Zoom Virtual Class Room	Basic syntax and examples of for and while loop in Python. Range function and its usage in loops	MD.MOHIUDDON Instructor (ICT), NACTAR
8	14-Aug-2024 (Wednesday)	02:00-05:00 PM	Zoom Virtual Class Room	Nested Loops and their applications, Loop control statements (break and continue)	MD.MOHIUDDON Instructor (ICT), NACTAR
9	18-Aug-2024 (Sunday)	02:00-05:00 PM	Zoom Virtual Class Room	Overview of functions in Python: Creating and calling a function. Function arguments and parameters: Default parameters	MD.MOHIUDDON Instructor (ICT), NACTAR
10	19-Aug-2024 (Monday)	02:00-05:00 PM	Zoom Virtual Class Room	Importing modules and libraries; Using functions from libraries	MD.MOHIUDDON Instructor (ICT), NACTAR
11	20-Aug-2024 (Tuesday)	02:00-05:00 PM	Zoom Virtual Class Room	Understanding the Python standard library and popular third-party libraries	MD.MOHIUDDON Instructor (ICT), NACTAR

12	21-Aug-2024 (Wednesday)	02:00-05:00 PM	Zoom Virtual Class Room	Understanding the difference between lists and tuples; Creating, indexing, and slicing lists and tuples	MD.MOHIUDDON Instructor (ICT), NACTAR
13	22-Aug-2024 (Thursday)	02:00-05:00 PM	Zoom Virtual Class Room	Introduction to dictionaries and their use cases in data science; Common dictionary methods: keys(), values(), items()	MD.MOHIUDDON Instructor (ICT), NACTAR
14	25-Aug-2024 (Sunday)	02:00-05:00 PM	Zoom Virtual Class Room	Introduction to sets and their use cases in data science; Set operations: union(), intersection(), difference(), symmetric_difference()	MD.MOHIUDDON Instructor (ICT), NACTAR
15	26-Aug-2024 (Monday)	02:00-05:00 PM	Zoom Virtual Class Room	Introduction to Numpy arrays and their use cases in data science; Introduction to Pandas DataFrames and their use cases in data science	MD.MOHIUDDON Instructor (ICT), NACTAR