



Shiv Chhatrapati Shikshan Sanstha's

Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

> **DEPARTMENT** OF **INFORMATION TECHNOLOGY**

RSML MOOCs

(Online Certificate Courses)



Special Features

- → RSML MOOCs launched Firstly in the year 2020-2021
- → Contents are Created by Faculty Members
- → Registration from all over the world



Objectives of the Certificate Courses

To develop an understanding of how computing technology presents new ways to address problems and to use computational thinking to analyse problems and to design, develop and evaluate solutions.

Process of joining Course

- Student Registrations were made online using Google Form
- → After registration the course material were made available to students through video links.
- → At the end of every week, One Test was conducted in Online Mode.
- → After fourth week, final exam was conducted in Online Mode.
- → The certificates were issued to the those students who have successfully passed all four tests and the final exam.

(Online Certificate Courses)

Courses Designed and Developed by

Coordinators



Mrs. Manjusha Shinde (Understanding Python)



Dr. Shivraj Patil (Advanced Concepts of Computer Networking)



Mrs. Chandraprabha Kulkarni (C#.NET Programming)

Understanding Python

Advanced Concepts of Computer Networking



Mr. Vishwanath Panchal



Mr. Shaikh Riyaj

C# .NET Programming

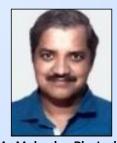


Ms. Jyoti Mashalkar



Mr. Manoj Birajdar

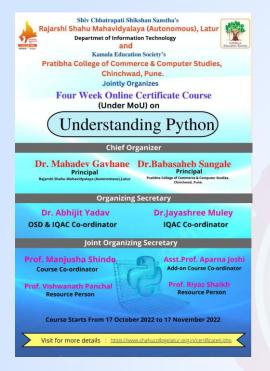
Mr. Aman Shaikh



Mr. Mahadev Bhatade



Brochures















Syllabus: Understanding Python

Week 01:

Course Introduction:

What Is Python? Python Features

Downloading, Installing, Running Python Working with Python (IDLE)

Basic Syntax First Python Program, Variable and Data Types Operator

Week 02:

Conditional Statements:

If, If- else, Nested if-else Looping Statements: For, While, Nested loops

Control Statements: Break, Continue, Pass

Working with Strings:

Accessing StringsBasic Operations, String slices Function and Methods

Week 03:

Working with Lists: Introducation Accessing list Operations

Function and Methods

Working with Tuple:

Introduction Accessing tuples, Operations Functions and Methods

Working with dictionaries:

Introduction Accessing values in dictionaries Properties

Week 04:

Working with Functions:

Defining a function, Calling a function. Types of functions,

Function Arguments

Exception Handling:

Exception Handling Except clause Try? finally clause

OOPs concept:

Class and object, Attributes, Inheritance, Overloading, Overriding, Data hiding



Syllabus: C#.Net Programming

Week 01:

Course Introduction
Software development life cycle
Introduction to .net
.net framework

Week 02:

Introduction of Visual Studio IDE

Hello world program

Windows Form Application

Message Box

Week 03:

Use of Text Box, Button and Label
Input Validation
Use of Combo Box, ListBox
Use of Date Time picker, Timer
Play Audio/Video

Week 04:

Database Architecture

Data Set, Data Adapter, Data Reader class

Database Connectivity

Show Database table record in Data GridView

Insert/Update/Delete operation on Database.



Syllabus: Advanced Concepts of Computer Networking

Week 01:

Course Introduction.

Client Server Concept.

Network Topologies.

Components and Physical Media.

Week 02:

Introduction of Wireless Network.

Comparison between Wired and Wireless Network.

Why we use Wireless Network.

Disadvantages of Wireless Network.

Radio Frequencies signal (RF Signals)

Week 03:

Types of Wireless Networks.

Requirement to create wireless Network.

Wi-Fi (Wireless Fidelity)

Bluetooth

Li-Fi

Week 04:

2G and 3G Network.

4G and 5G Network.

Security Options in Wireless Network.

IEEE Wireless Standards.

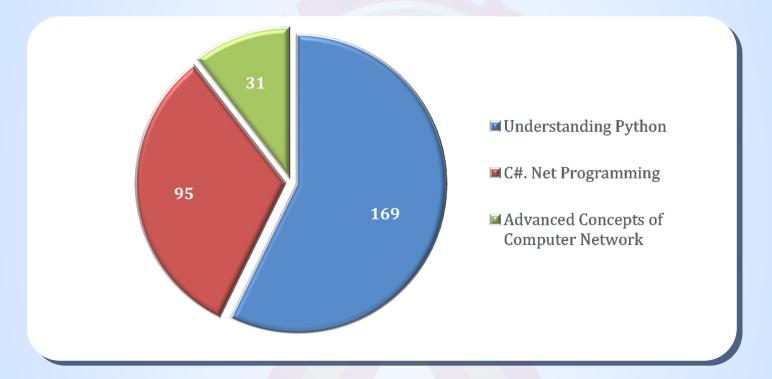
Ad-hoc and Sensor Network.



17.10.2022 to 17.11.2022

MOOCs under MoU

- The Department of Information Technology signed a MoU with Pratibha College of Commerce & Computer Studies, Chinchwad, Pune.
- → Under MoU, the Pratibha College, Pune will run our Certificate Courses for their students and transfer the credits to their students.



Understanding Python

• Registered Students : 169 Appeared for Examination : 169

Qualified Students : 84 + 2 (teachers)

C#. Net Programming

• Registered Students : 95 • Appeared for Examination : 95

• Qualified Students : 57 + 2 (teachers)

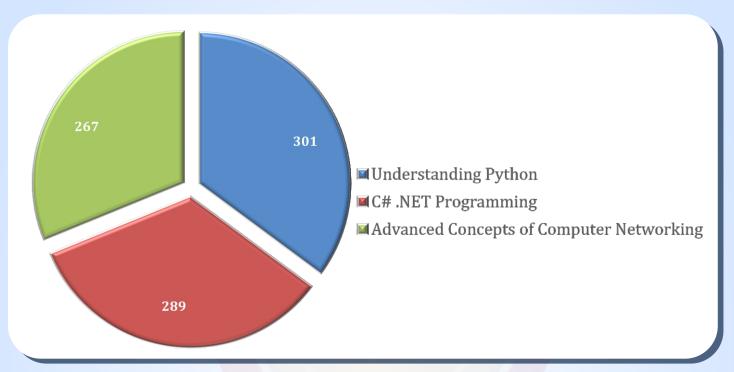
Advanced Concepts of Computer Network

• Registered Students : 31 • Appeared for Examination : 31

• Qualified Students : 27 + 2 (teachers)



22.08.2022 to 25.09.2022



Understanding Python

Registered Students : 301
 Appeared for Examination : 301
 Qualified Students : 43

C# .NET Programming

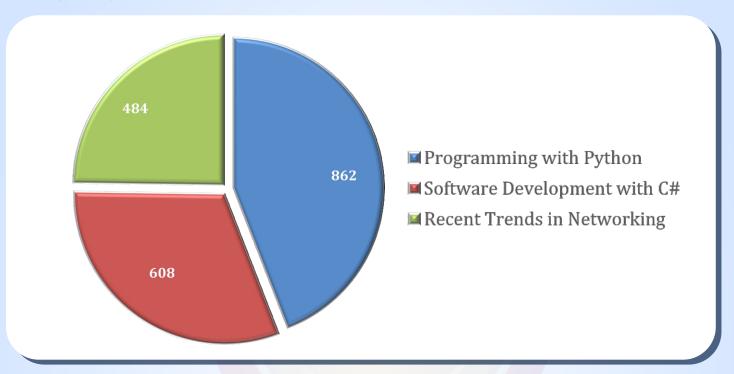
Registered Students : 289
Appeared for Examination : 289
Qualified Students : 63

Advanced Concepts of Computer Networking

Registered Students : 267
Appeared for Examination : 267
Qualified Students : 66



01.02.2022 to 26.02.2022



Programming with Python

Registered Students : 862
 Appeared for Examination : 132
 Qualified Students : 75

Software Development with C#

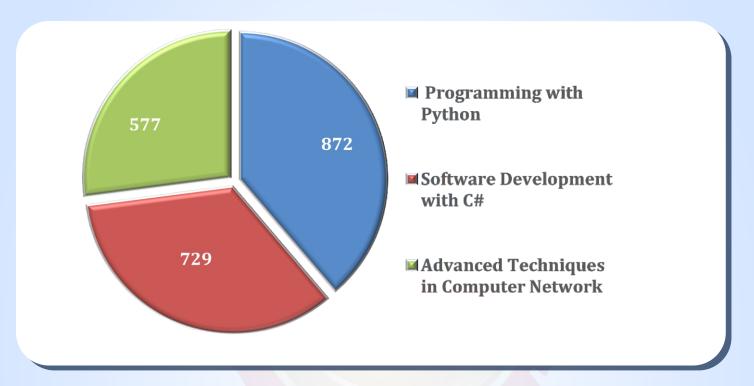
Registered Students : 608
Appeared for Examination : 120
Qualified Students : 68

Recent Trends in Networking

Registered Students : 484
Appeared for Examination : 81
Qualified Students : 52



04.09.2020 to 12.10.2020



Python Programming

Registered Students : 872
 Appeared for Examination : 229
 Qualified Students : 127

Software Development with C#

Registered Students : 729
Appeared for Examination : 185
Qualified Students : 107

Advanced Techniques in Computer Network

Registered Students : 577
Appeared for Examination : 161
Qualified Students : 137



Certificate



Rank 1st Gold

(Online

Rank 2nd Silver





Participant









