NARAYANA ENGINEERING COLLEGE::NELLORE

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Accorded 'A' grade by Govt. of AP, Recognized by UGC 2(f) & 12(B),
ISO 9001:2015 certified Institution, Approved with 'A+' Grade by NAAC

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A REPORT ON "PYTHON"

1	Name of the Activity/Event	Value Added course on "**PYTHON**"		
2	Date of Activity/Event	**22nd July to 31st August 2019**		
3	Organized by	**Department of Electronics And Communication Engineering**		
4	Place of Activity/event	Visvesvaraya auditorium		
5	Resource persons / guest / organization	**Dr.B.Sunil Kumar, Professor,CSE Department, Narayana Engineering College,Nellore**		
6	Type of activity/Event	Value Added Course		
7	Activity/Event objectives	The **objectives** of this **course** are: 1. To acquire programming skills in core **Python**. 2. To acquire Object Oriented Skills in **Python** 3. To develop the skill **of** designing Graphical user Interfaces in **Python** 4. To develop the ability to write database applications in **Python** Pre-requisites		
8	Participation	Students	Faculty	Total Participation
		62	-	62
9	General remarks	• To understand why **Python** is a useful scripting language for developers. • To learn how to design and program **Python** applications. • To learn how to use lists, tuples, and dictionaries in **Python** programs. • To learn how to identify **Python** object types.		
10	Suggested Improvements	Need Hands-on session and more real time examples.		
11	Enclosures	1. Program report with Snapshots 2. Participants List 3. Attendance sheet 4. Certificates		
12	Signature of Incharge/Convener			

The **E**lectronics and **C**ommunication **E**ngineering department has organized a **Value added course** on "**PYTHON"** from **22nd July to 31st August 2019**. The resource person was Dr.B.Sunil Kumar, Professor CSE Department, Narayana Engineering College, Nellore. The IV B.Tech students from the ECE department have attended this value added course.

Python Programming Value added course was intended for both hardware and software engineers for generating different applications. The Objectives behind the arrangement of this course was to understand why Python is a useful scripting language for engineers, to learn how to design and program Python applications, to learn how to use lists, tuples, and dictionaries in Python programs. Moreover to learn how to use indexing and slicing to access data in Python programs, to learn how to write loops and decision statements in Python.

Introducing about Python Programming to the students

The important part of this course was to learn how to write functions and pass arguments in Python as well as to learn how to read and write files for image and video processing in Python, as these could come up with some great applications in image processing domain. Around **62 students** of final B.Tech ECE department have participated. The resource person Dr.B.Sunil kumar was an expert in the field of python programming who have delivered all the sessions. He explained very humbly to all the students about the importance of this Python language with real time examples.

The resource person delivering a lecture during the session to the students

The resource person started with the introduction of Python along with programming and coding techniques. Students were taught about basic syntax of interactive mode, script mode programming and python identifiers, reserved words were explained with some simple examples.

In the next week, different variable types like assigning values to variables, how to assign multiple variables, standard data types and python numbers were explained to the students and the doubts which were asked by the students were cleared by the resource person.

In the next sessions, strings, Lists & Tuples, dictionary, date & time, Functions & modules of Python programming i.e., defining a function, calling a function, function arguments and different type of required keywords and keyword arguments were taught to the students.

In the following sessions input/output files, exceptions, classes / objects, generics and regular expressions like math function, search function and replacing functions, CGI programming, multithreading, sending Email, networking and GUI programming were taught to the students along with hands on experience.

Pictures during the hands on session

At the concluding part of the course students' feedbacks were also collected for the future scope and suggestions towards the course. Students performed some of the python programs themselves from the handout examples provided to them.