



**Sri Venkateshwara College of Engineering**  
**Department of Information Science and Engineering**

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Rev. No.	01
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Programme: ISE

Meeting No. 2018-19/EVEN/01

Date: 23-01-19

**Faculty Members Present**

S.No.	Faculty Name	Signature	S.No.	Faculty Name	Signature
1.	Dr. SHOBAM				
2.	Dr. A V V SATYANARAYANA				
4.	Dr. LOKESH A				
5.	Mr. MARIA NAVIN J R				
6.	Mr. YERRISWAMY T				
7.	Mrs. PANKAJA R				
8.	Ms. ARUNA TM				
9.	Mr. RAGHAVENDRA S N				
10.	Mrs. DIVYA RAJ G N				
11.	Mr. CHETHAN C				
12.	Mr. SHIVAPRAKASH RANGA				

**Agenda:**

1. Course allocation
2. LIC visit Preparation
3. NBA Work Preparation
4. Planning of Professional activities
5. Organization of OOC Bridge Course
6. Certification Courses for students



**Sri Venkateshwara College of Engineering**  
**Vidyanagar, Bengaluru - 562157**

**Minutes of Meeting Register**

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Review of Previous Meeting Minutes:  
Previous Meeting No.

Previous Meeting Date:

S. No.	Action Plan	Responsibility	By Date	Status (C \ IP)
1.	Completion of odd Semester			C
2.	Completion of Practical & Theory Exams			C

**Minutes of Meeting:**

**Action Plan for this Meeting**

S. No	Action Plan	Responsibility	By Date
1	Allocation of courses to faculty members	Faculty	
2	Preparation of required files for LIC visit	Faculty	
3	Preparation of respective criterion documents for NBA SAR.	Faculty	
4	All the faculty members are informed to plan events for next upcoming Even Semester.	Faculty	
5	Informed to organize bridge course for OOC 17CS42 before the commencement of next semester.	Respective Faculty Incharge	
6	All the Faculty Members are informed to motivate & guide Final Year and Pre final year students to do certification courses in NPTEL, Microsoft Virtual Academy etc by the end of next semester.	All the faculty Members	End of Next Semester ( May 2019)

*ACM*  
Programme Coordinator

Copy to:

Principal for kind information  
All faculty members



Estd:2001

# Sri Venkateshwara College of Engineering

Vidyannagar, Bengaluru - 562157

## Information Science & Engineering

### Certificate Programs Introduced in AY 2018-19

Sl. No	Name of the Certification Course
1.	NPTEL
2.	Microsoft Virtual Academy
3.	RPA Awareness Training

11/26/19  
Programme Coordinator





**Sri Venkateshwara College of Engineering**  
**DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING**

**Student Online Certification**

S.No	CERTIFICATION COURSE	COURSES TAKEN
1.	NPTEL	PROGRAMMING, DATA STRUCTURES AND ALGORITHMS USING PYTHON
		CLOUD COMPUTING
2.	MICROSOFT VIRTUAL ACADEMY	INTRODUCTION TO PROGRAMMING WITH PYTHON
3.	RPA AWARENESS TRAINING	AWARENESS TRAINING

Programme Coordinator







# PROGRAMMING, DATA STRUCTURES AND ALGORITHMS USING PYTHON



**PROF. MADHAVAN MUKUND**  
Dept. of Computer Science and Engineering

**TYPE OF COURSE** : Rerun | Core | UG/PG  
**COURSE DURATION** : 8 weeks (29 Jul'19 - 20 Sep'19)  
**EXAM DATE** : 29 Sep 2019

**INTENDED AUDIENCE** : B.E/B.Tech, B.Sc, M.E/M.Tech, M.S, M.Sc

**PRE-REQUISITES** : School level mathematics.

**INDUSTRIES APPLICABLE TO** : This course should be of value to any company requiring programming skills.

## COURSE OUTLINE :

This course is an introduction to programming and problem solving in Python. It does not assume any prior knowledge of programming. Using some motivating examples, the course quickly builds up basic concepts such as conditionals, loops, functions, lists, strings and tuples. It goes on to cover searching and sorting algorithms, dynamic programming and backtracking, as well as topics such as exception handling and using files. As far as data structures are concerned, the course covers Python dictionaries as well as classes and objects for defining user defined datatypes such as linked lists and binary search trees.

## ABOUT INSTRUCTOR :

Madhavan Mukund studied at IIT Bombay (B.Tech) and Aarhus University (PhD). He has been a faculty member at Chennai Mathematical Institute since 1992, where he is presently Professor and Dean of Studies. His main research area is formal verification. In addition to the NPTEL MOOC programme, he has been involved in organizing IARCS Instructional Courses for college teachers. He is a member of ACM India's Education Committee. He has contributed lectures on algorithms to the Massively Empowered Classroom (MEC) project of Microsoft Research and the QEEE programme of MHRD.

## COURSE PLAN :

- Week 01** : Informal introduction to programming, algorithms and data structures via gcd, Downloading and installing Python, gcd in Python: variables, operations, control flow - assignments, condition-als, loops, functions.
- Week 02** : Python: types, expressions, strings, lists, tuples | Python memory model: names, mutable and immutable values | List operations: slices etc - Binary search | Inductive function denitions: numerical and structural induction | Elementary inductive sorting: selection and insertion sort | In-place sorting.
- Week 03** : Basic algorithmic analysis: input size, asymptotic, complexity,  $O()$  notation | Arrays vs lists | Merge sort | Quicksort | Stable sorting.
- Week 04** : Dictionaries | More on Python functions: optional arguments, default values | Passing functions as arguments | Higher order functions on lists: map, lter, list comprehension.
- Week 05** : Exception handling | Basic input/output | Handling files | String processing.
- Week 06** : Backtracking: N Queens, recording all solutions | Scope in Python: local, global, nonlocal names | Nested functions | Data structures: stack, queue | Heaps.
- Week 07** : Abstract datatypes | Classes and objects in Python | "Linked" lists: find, insert, delete | Binary search trees: find, insert, delete | Height-balanced binary search trees.
- Week 08** : Efficient evaluation of recursive denitions: memoization | Dynamic programming: examples | Other programming languages: C and manual memory management | Other programming paradigms: functional programming.





# CLOUD COMPUTING



**PROF. SOUMYA KANTI GHOSH**  
Dept. of Computer Science and Engineering  
IIT Kharagpur

**TYPE OF COURSE** : Rerun | Elective | UG/PG  
**COURSE DURATION** : 8 weeks (26 Aug'19 - 18 Oct'19)  
**EXAM DATE** : 16 Nov 2019

**PRE-REQUISITES** : Basics of computer architecture and Organisation

**INDUSTRIES APPLICABLE TO** : IT Industries

**INTENDED AUDIENCE** : CSE, ECE, EE

## COURSE OUTLINE :

Cloud computing is a scalable services consumption and delivery platform that provides on-demand computing service for shared pool of resources, namely servers, storage, networking, software, database, applications etc., over the Internet. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources, which can be rapidly provisioned and released with minimal management effort. This course will introduce various aspects of cloud computing, including fundamentals, management issues, security challenges and future research trends. This will help students (both UG and PG levels) and researchers to use and explore the cloud computing platforms.

## ABOUT INSTRUCTOR :

Prof. Soumya Kanti Ghosh, Department of Computer Science & Engineering, IIT Kharagpur, Professor received the Ph.D. and M.Tech. degrees from Department of Computer Science and Engineering, Indian Institute of Technology (IIT), Kharagpur, India. Before joining IIT Kharagpur, he worked for the Indian Space Research Organization in the area of satellite remote sensing and geographic information systems. He has more than 200 research papers in reputed journals and conference proceedings. His research interests include spatial data science, spatial web services and cloud computing.

## COURSE PLAN :

**Week 1** : Introduction to Cloud Computing

**Week 2** : Cloud Computing Architecture

**Week 3** : Service Management in Cloud Computing

**Week 4** : Data Management in Cloud Computing

**Week 5** : Resource Management in Cloud

**Week 6** : Cloud Security

**Week 7** : Open Source and Commercial Clouds, Cloud Simulator

**Week 8** : Research trend in Cloud Computing, Fog Computing