**COURSE OVERVIEW**

1. **Course Code**: ICT/001
2. Mode: Blended Online Mode
3. **Title**: **Computer Programming**
4. **Type of Course**: (Foundation/ Discipline/ Elective): Foundation
5. **Cohort for which it is compulsory**: **6th Semester**
6. **No of Credits**: 2
7. **Semester and Year Offered**: Winter Semester 2018
8. **Course Coordinator and Team**: Prof. K. Srinivas / Email :[drksvasu@gmail.com](mailto:drksvasu@gmail.com)
9. **Pre-requisites**: Knowledge of high school mathematics is essential and adequate Exposure to pre-calculus is desirable
10. **Aim**:

Basic concepts of computer programming are introduced starting with the notion of an algorithm. Emphasis is on developing the ability to write programs to solve practical computational problems.

1. **Level**:
   1. Introductory
   2. Length: 4 weeks
   3. Estimated Effort: 3 hours/week
   4. Subject: Computer Science
   5. Institution: NIEPA
   6. Languages: English
   7. Video Transcripts: English
   8. Price: FREE
2. **Brief description of modules/ Main modules**: [ **FOR 4 WEEKS COURSE** ]
3. Algorithms
4. Elements of C/C++ programming languages
5. Basic data types
6. Sequential and conditional execution
7. Iterative solutions
8. Arrays, matrices and their applications
9. Functions
10. Sorting and searching
11. Elements of string processing
12. Introduction to pointers
13. Basics of Software Engineering
14. Structures

### Learning Outcomes of the Course

* 1. Learn to write C++ programs, compile, and execute using the gcc/simplecpp compiler
  2. How to inculcate good programming practices
  3. How to write programs and develop the ability to solve practical real world computational problems
  4. How to logically think and produce a solution (program)

1. **Course Evaluation**

|  |
| --- |
| * 1. Online Examination Method      1. MCQ – 20%      2. Assignments – 20% [ Cumulative ]      3. Case Studies/Collaborative Learning - 20% [ Cumulative ]   2. OFF LINE Examination Method      1. Mid-term test – 20%      2. Semester-end examination – 20% |

1. **Suggested Readings**
   1. Goyal, D.P. (2006). Management Information Systems: Managerial Perspectives (2nd Edition), Macmillan India
   2. Laudon, K.C., Dass, R. and Laudon, J.P. (2010). Management Information Systems: Managing The Digital Firm (11th Edition), Pearson
   3. Mohapatra, S. and Joseph, P.T. (2009). Management Information Systems in a Knowledge Economy (1st Edition), Phi Learning
   4. O’brien, J.A. (2006). Management Information Systems (7th Edition), Tata McGraw Hill
   5. Robert, M.G., Joel, R.E. and Claggett, R. J. (2009). Information Systems for Modern Management (3rd Edition), Phi Learning
2. **Code: Course Introduction Video**

<iframe width="420" height="315" src="https://www.youtube.com/embed/HCfca1ad03E" frameborder="0" allowfullscreen></iframe>

[ YOUTUBE EMBEDDED LINK ]