



P G DEPARTMENT OF COMPUTER SCIENCE

A Bridge Course on Basic of Syllabus for computer Science and Application <u>Eligibility</u>: BCA and Computer Science Sem 1 (For those students who got admission in CS and BCA Sem 1 in this College)

About the Bridge Course:

A bridge course is conducted for the students every year by the computer science faculty to get the students the knowledge of computer science. The main objective of the course is to bridge the gap between subjects studied at Pre-university level and subjects they would be studying in computer science department. A Bridge course aims to cover the gap between the understanding level of the high school courses and higher educational courses. Bridge course is preparative course for college level course with an academic curriculum that is offered to enhance the knowledge of the students by means of preparing for the intellectual challenges of computer science subject and to know basic information about core subject.

Bridge courses are the tool to help students to success in their graduate level. It is also a pre requisite and foundational course to know the basic information about computer science subjects.

Objective for the students

The bridge course aims to act as a buffer for the new entrants with an objective to provide adequate time for the transition to hard core of degree courses. This gives them a breather, to prepare themselves before the onset of courses for first year degree programe. During this interaction of twelve hours with the faculty and their classmates the students will be equipped with the knowledge and the confidence needed to take on bigger challenges in future.

Design

The course consist of 12 Hrs of interactive sessions and an internal examination designed by the computer science departments which is compulsory for all students. The result will be published in the website as well as on the notice board.

Bridge Course Syllabus BCA and COMPUTER SCIENCE

Unit:-I

Fundamentals of computers, Generations, components –input, output, storage, processing, hardware, software system, application, languages

Unit:-II

computer networks-types-communication medium, data communication devices, topologies, logical classification of networks-client server, peer to peer, identification of computer over a network- MAC ,IP, network protocols-HTTP,TCP/IP, FTP, DNS

Unit:-III

Principles of programming – phases in programming- problem identification, algorithms and flow charts, coding, transilation, debugging, execution and testing, documentation

Unit:-IV

Getting started with C- character set, tokens, identifiers, keywords, literals, punctuators, operators, conditional and iterative statements, functions

Unit:-V

HTML-Basic concepts, markup languages, versions, tags, linking, images, forms ,tables, frameset, introduction to PHP.

Unit:-VI

Database concepts, advantages and disadvantages, entity, relation, tuple, attribute, degree, cardinality, domain, schema, instance, keys, relational algebra, SQL

Course outcome:

- \blacktriangleright To make the students familiar with the basic concepts of computers and languages.
- \blacktriangleright To encourage and motivate the Students for programming.
- To make the students aware towards the various branches of computer Science for Example- coding, testing, networking, web page development, binding database.