



# ST XAVIER'S COLLEGE – JAIPUR

Affiliated to the University of Rajasthan  
Approved under Section 2(f) & 12(B) of the UGC Act, 1956  
Nevta - Mahapura Road, Jaipur - 302029, Rajasthan, India



Ref : SXC/ACAD/DoCS/2022/0015

15/09/2022

## NOTICE

### Department of Computer Science

This is to inform that the Department of Computer Science is conducting a **Bridge course on Basics Computers** for BCA first year. The course will be conducted offline during your class Hours.

- Duration: 16-09-2022 onwards for 15 days
- Timing: 9.45 a.m. to 11.25 a.m. (16-09-22 to 20-09-22)  
: 8:55 am to 11.25 a.m. (21-09-22 to 02-10-22)
- Resource Persons: Ms. Keren L Daniel(HOD) and Dr Dharmveer Yadav

**For further enquiry contact:** Ms. Keren L Daniel(HOD) and Dr Dharmveer Yadav

#### **Bridge course details given below: -**

If a student wants to join the rewarding field of computer science, but lack the necessary background to get into, then Bridge course is a fast and convenient way to advance your education. Bridge course is a program designed for students lacking a background in computer science. “Basics Computers” is a bridge course which has been designed for the non-IT students from different streams like arts/science/commerce and were not having Informatics Practice (IP) as subject in school education. This training reduces the gap between the schooling and college and was useful for the students to get knowledge in their subjects and to know college rules and regulations. The students will be given basic training on their computer subjects included in I Year. The basic knowledge in the subjects such as Computer fundamentals will be enhanced in the student’s study group.

#### **Syllabus**

1. Unit I: Number system: Binary number system, Conversion of Number System, Binary arithmetic Operations, Logic Gates: AND, OR, NOT GATES and their Truth tables, NOR, NAND & XOR gates. **(3-Lecture)**
2. Unit II: Computer Languages: Introduction to languages, Compiler, Interpreter and Assembler, High-Level Language to Machine Language Conversion, Evolution of programming language, Classification of Programming Languages, Features of a Good Programming Language. Introduction to header files Token: keyword, identifiers, constant, strings operators, Types of Variables Concepts of operator precedence and associativity **(3-Lecture)**
3. Unit III: Operating System: Basic Concepts of Operating System, Introduction to the Operating System (OS), Types of Operating System: Batch System, Time-Sharing System, Real-Time System. Multi Programming, Distributed System. **(3-Lecture)**



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4. Unit IV: Computer Networks: Goals and Applications of Networks, Network structure, and architecture, the OSI reference model, Web Designing: Clients, Servers, and Communication. The Internet Protocols, Markup Languages: An Introduction to HTML. **(3-Lecture)**
5. Unit V: Introduction to Internet: WWW and Web Browsers: Basic of Computer networks; LAN, WAN; Concept of the Internet; Knowing the Internet; Basics of internet connectivity, World Wide Web; Web Browsing software's, Search Engines; Understanding URL; Domain name; IP Address; Using e-governance website. **(3-Lecture)**

## Course Outcomes

- CO 1) To understand and study the concept of computer programming from its evolution.
- CO 2) To understand and study about the internet operations and basic protocols.
- CO 3) Gaining knowledge on web development process.
- CO 4) Understanding the functioning of the working process of an operating system.
- CO 5) To understand and examine the structure of various number systems and its application in digital design.
- CO 6) Understanding the data communication between various devices.

## Text Books:

- Sinha P.K., Computer Fundamentals, BPB Publishing.
- Silbershatz and Galvin, "Operating System Concepts", 10<sup>th</sup>, Wiley.
- Terry Ann Felke-Morris, Ed.D Web Development & Design Foundations with HTML5, 10<sup>th</sup> Edition, Pearson.

## Reference Books:

- Leon A. & Leon M., Introductions to Computers, Vikas Publication.
- Tannenbaum, "Operating System Concept", Addition Weseley
- Robert. W. Sebesta, "Programming the World Wide Web", Fourth Edition, Pearson Education.

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**HEAD**

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**Copy forwarded to the following for information and necessary action.**

1. Principal, St Xavier's College, Jaipur
2. Vice-Principal Office, St Xavier's College, Jaipur
3. Department Staff, St Xavier's College, Jaipur
4. Website Coordinator, St Xavier's College, Jaipur