

# कम्प्यूटर विज्ञान एवं अनुप्रयोग

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

डॉक्टर हरीसिंह गौर विश्वविद्यालय, सागर (म.प्र.)

DOCTOR HARISINGH GOUR VISHWAVIDYALAYA, SAGAR (M.P.)

( केन्द्रीय विश्वविद्यालय / A CENTRAL UNIVERSITY )

प्रो. आशीष वर्मा  
Prof. Ashish Verma  
विभागाध्यक्ष / Head



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दूरभाष क्र. : (07582) 265399, 265572

RefNo.: DCSA/2022/3630

Dated: June, 09, 2022

To,  
Head  
Department of .....  
Dr. Harisingh Gour University,  
Sagar (MP)

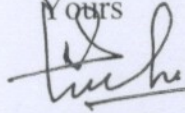
**Sub.: Open Elective (OE) course for 2<sup>nd</sup> Semester Students of PG Programs (2021-22)**

Sir/Madam,

The following Open Elective (OE) course for 2nd Semester students of PG students (2021-22) by our department.

Paper offered for other Department		
Course Code	Course Title	Credit
CSA-OE-2201	Computer Education – I	02

You are requested to inform the PG program's students of your department about the same.

Yours  
  
(Prof. Ashish Verma) 9/6/2022  
Head

Computer Science & Applications

अध्यक्ष / HEAD

कम्प्यूटर विज्ञान एवं अनुप्रयोग विभाग

Department of Computer Science & Application

डॉक्टर हरीसिंह गौर विश्वविद्यालय, सागर (म.प्र.)

Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.)

Copy to :

- (1) All Head of Departments – through e-mail
- (2) Controller of Examination
- (3) Office of Academic Affairs (DoAA)
- (4) Incharge, IUMS Portal
- (5) J.T. Cell.



**Department of Computer Science and Applications**  
**Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.)**

Annexure-1

**OPEN ELECTIVE COURSES FOR PG STUDENT IN II<sup>nd</sup> SEMESTER SESSION 2021-22**

1. Name of the student : .....
2. Department : .....
3. Class : .....
4. Registration No. : .....(copy enclosed)
5. Preferences : .....
6. Mobile No. : .....
7. e-mail ID : .....

Course Details

Course Code	Course Title	Credit
CSA-OE-2201	Computer Education – I	02

Signature of the Student

Forwarded by HoD  
(Sign & Seal)

**Note :** (1) The Open Elective Course will be taught from 09.00 am to 10.00 am on all week days (i.e. from Monday to Friday).

- (2) A Course will be offered only when at least ten (10) students opt for it.
- (3) The maximum number of students in a course shall not ordinarily exceed 50.
- (4) Please fill the Google form compulsory (link given below).

Google Form Link : <https://forms.gle/6n5b7whaaWHSzfao7>



Course Code	Course Title	L	T	P	C	Sessional		ESE	Total
						ME	IA		
CSA-OE-2201	Computer Education-I	02	-	-	02	20	20	60	100

- Objectives :** (1) To learn the basics of computer systems.  
(2) To understand the basics of computer structure and organization.

**Course Contents:**

Unit	Topic	Proposed Lectures
I	Generations of Computer, Block Diagram of a Computer, Applications of Computers, Advantages and Disadvantage of Computer, CPU, Keyboard, mouse, joystick, trackball, light pen, Data Scanning devices image scanner, OCR, OMR, MICR, Bar code reader, card reader, Voice Recognition Device.	6
II	Monitor, Printer laser pointer, dot matrix printer, inkjet printer, Memory hierarchy, Cache Memory, Primary Memory RAM, DRAM and SRAM, ROM, Secondary Memories.	6
III	Application Software, System Software, Communication Software, Application Software, Programming Language Translators, Assembler, Compiler, Interpreter, Utility Programs, Computer Languages, Machine language, Assembly language, High-level language.	6
IV	Number System: Decimal Number System, Binary Number System, Octal Number System, and Hexadecimal Number System and their conversions.	6
V	First compliment & Second Compliment Logic Gates- AND, OR, NOT, Universal Logic Gates- NOR, NAND.	6

**Learning Outcomes:** After completing this course, students will be aware of the structure, functioning, and working procedure of a computer system.

**Essential Reading:**

1. Computer Fundamentals, Fourth Edition by P.K. Sinha and Priti Sinha.
2. Computer Fundamentals Architecture and Organization, Third Edition by B. Ram.

**Suggested Reading and links :**

1. Digital Principle and Applications, Six Edition by Donald P Leach, Albert Paul Malvino & GoutamSaha.
2. Fundamentals of Computers, Fourth Edition by V. Raja Raman

Chairman, BOS  
Computer Science & Applications