



















**Course Objectives:**

To provide students with a comprehensive understanding of ethical principles and practices of computer science research and academic publishing and explore ethical considerations specific to computer applications, including issues related to data privacy, cybersecurity, intellectual property rights, and responsible conduct of research in computational settings. The students will learn about the importance of transparency, integrity, and reproducibility in research, as well as best practices for authorship, peer review, and publication ethics and aims to foster a culture of ethical awareness and responsibility among future computer science professionals and researchers.

**Course Outcomes:**

On successful completion of the course the scholars will be able to:

SI No	Course Outcome	Blooms Taxonomy Level
co1	Define the basic terminologies of Computer Applications Research & Publication Ethics	BT1
co2	Interpret the basic concepts of computer applications in research	BT2
co3	Apply the concept of computer algorithms in defining research problem and design	BT3
co4	Examine and apply the knowledge of philosophy & Ethics in research	BT4
co5	Appraise on the different process of Research Publication, calculation and presentation tools	BT5
co6	Adapt suitable techniques to write a good research report	BT6

**Detailed Syllabus:**

Module	Course Contents	Periods
I	Computer basics : O Algorithm, characteristics and generation of computers components, data representation, input output units O Computer memory and its organization O UGC INFONET, INFLIBNET and ERNET, role of computer in research	15
II	Introduction to Programming languages: . Compiler, interpreter, high, low and assembly language O Basics of Operating Systems & Databases O Introduction to Programming in Python	L2
III	Introduction to Philosophy & Ethics: O Definition, nature and scope, concept, branches O Ethics: Definition, moral philosophy, nature of moral judgements and reactions	1B











