ANNAMACHARYA UNIVERSITY

(ESTD UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

(UNIVERSITY LISTED IN UGC AS PER THE SECTION 2(f) OF THE UGC ACT, 1956)

RAJAMPET, Annamayya District, AP – 516126, INDIA

Title of the Course	**:**	Research and Publication Ethics for Engineers
Course Code	**:**	26CEEE0NT
Course offered to	**:**	CE, EEE, ME, ECE and CSE
Credits	**:**	2

COURSE OBJECTIVES:

1.To understand the importance of ethics in research and publication.
2.To identify research misconduct such as plagiarism and fabrication.
3.To familiarize with ethical guidelines in academic writing and publishing.
4.To learn tools and techniques for maintaining research integrity.
5.To understand the role of indexing, citation, and research metrics.

COURSE OUTCOMES:

After completion of the course, the scholar will be able to

1. Understand research ethics and academic integrity.
2. Identify and avoid plagiarism and unethical practices.
3. Apply proper citation and referencing techniques.
4. Evaluate journals and publications critically.
5. Use research tools and metrics effectively

Unit 1 Introduction to Research and Ethics 10

Research: Meaning, Objectives, Types of Research, Research Process Ethics: Meaning, Moral Philosophy, Ethical Principles Research Ethics: Importance, Need for Ethical Practices Ethical Issues in Research: Bias, Conflict of Interest, Accountability

Unit 2 Research and Publication Misconduct 09

Definition and Types: Fabrication, Falsification, Misrepresentation, Academic Integrity and Honesty Authorship Ethics and Responsibilities Case Studies on Research Misconduct.

Unit 3 Publication Ethics 10

Publication Ethics: Concepts and Importance Duplicate and Redundant Publications, Predatory Journals and Conferences Peer Review Process and Responsibilities Copyright and Open Access Publishing.

Unit 4 Plagiarism and Academic Writing 09

Definition and Types of Plagiarism, UGC Regulations on Plagiarism, Levels of Plagiarism and Penalties, Citation and Referencing Styles, Use of Plagiarism Detection Tools (Turnitin, etc.)

Unit 5 Research Tools and Metrics 10

Reference Management Tools: Mendeley, Zotero, EndNote, Indexing Databases: Scopus, Web of Science, Google Scholar, Research Metrics: h-index, Impact Factor, Citation Analysis, Introduction to AI in Research and Ethical Concerns.

Prescribed Textbook:

1. V.K. Ahuja and Kankana Baishya, Research and Publication Ethics, National Law University and Judicial Academy, Assam, 2024.

Reference Books:

1. Resnik, D. B., *The Ethics of Science*, Routledge, New York,1998.
2. Shamoo, A.E. and Resnik, D.B., *Responsible Conduct of Research*, 4th Edition, Oxford University Press, New York,2022.