about Course

Genetic Engineering Techniques is a comprehensive course designed to introduce students to the fundamental principles and advanced methodologies used in the manipulation of genetic material. This course covers a broad range of topics from the basics of molecular biology to the latest advancements in genetic engineering technologies.

Genetic Engineering Techniques

Contact us

0816-2278569
Near TownHall ,BH Road Tumkur
https://www.sscasc.in/

Siddaganga College of ARTS,Science and Commerce For Women

https://www.sscasc.in/

COURSE OBJECTIVES

- Understand Basic Concepts: Gain a solid foundation in molecular biology, including DNA, RNA, and protein synthesis.
- Learn Key Techniques: Master essential genetic engineering techniques such as PCR, CRISPR-Cas9, cloning, and gene editing.
- Practical Application: Apply theoretical knowledge in hands-on laboratory sessions, learning to design and conduct experiments.
- Ethical Considerations: Discuss the ethical implications and regulatory aspects of genetic engineering.

COURSE MODULES

- Introduction to Molecular Biology
- Tools and Techniques in Genetic Engineering
- Advanced Genetic Engineering Applications
- Laboratory Practices
- Ethical, Legal, and Social Issues

LEARNING OUTCOMES

- Demonstrate a deep understanding of molecular biology and genetic engineering concepts.
- Perform key genetic engineering techniques with proficiency.
- Analyze and interpret experimental data accurately.
- Evaluate the ethical, legal, and social implications of genetic engineering technologies.

WHO SHOULD ENROLL

- Undergraduate and graduate students in biology, biotechnology, and related fields.
- Researchers and professionals seeking to update their knowledge in genetic engineering.
- Individuals interested in the scientific and ethical aspects of genetic manipulation.

COURSE DURATION

- Duration: 12 weeks
- Format: Combination of lectures, laboratory sessions, and project work