

PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS043/2025

Introduction to Plant Genetic Engineering

Name of the PMRF student

Details of the content of the module

Anakha R Nair

Required background of the students taught

Undergraduate and postgraduate students interested in the course, with at least a high school level understanding of biology



- 1.Introduction to Plant Genetic Engineering
- 2.Plant Genomes & Gene Transfer Vectors
- 3. Molecular Cloning Tools
- 4.DNA Delivery Methods in Plants
- 5. Selectable Markers & Reporter Genes
- 6.Plant Regeneration & Tissue Culture
- 7. Gene Expression in Transgenic Plants
- 8. Engineering Resistance Traits
- 9. Engineering Nutritional, Industrial &

Pharmaceutical Traits

- 10.Biosafety, Regulations & Public Perception
- 11. Future Trends in Plant Genetic Engineering

Schedule of the module

Start date: 22/04/2025

End date: 1/05/2025

Schedule: Recorded video lectures will be uploaded everyday at 7 PM (Doubt clearing sessions will be

taken on Sundays 7:00 – 9:30 PM)

Number of lectures: 10

Total Hours: 24

Meeting link: Will be shared later

Link

Contact email ID: isss.forum@gmail.com

Registration link: Link