



D **CONTEST**

DECARBONIZATION



2023 SUMMER INTERNS PORTFOLIO

*EMPOWERING OUR FUTURE WORKFORCE -
SHOWCASING THE JOURNEY OF OUR
2023 SUMMER INTERNS*



310i Internship 2023

Theme: Decarbonization

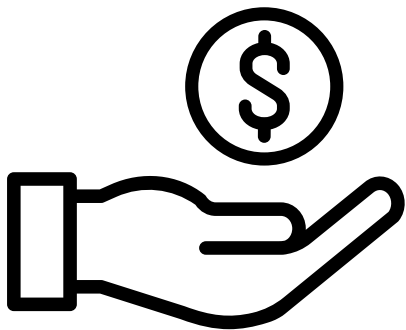
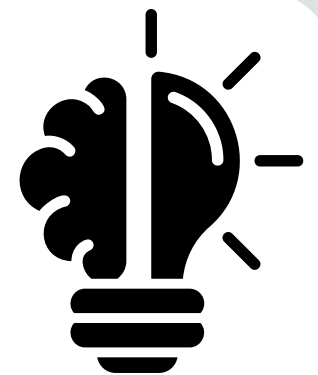


Why Provide Stipended Internship?



- At 310i, we believe in enhancing engineering education in India through hands-on experience.
- Our aim is for our interns to gain practical skills and work on real-world projects as pioneers in the program

- We created this stipended internship program for chemical engineering students and allied areas to bridge the gap between academia and industry



- Our position is to prevent the internship process from becoming commercialized

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Phased process for selection



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01

Phase-1 - Screening

- Learning material was provided to the applicants that included:
 - 17 Sustainable development goals
 - CCUS Report-NITI Aayog
 - EIA energy outlook
- Based on the given material, an MCQ test was conducted and qualified candidates were shortlisted to phase-2

02

Phase-2 - Screening

- In this phase the shortlisted candidates were tested in the aspects below
 - Problem solving
 - Written abilities
 - Justification abilities
 - Data explanation
 - Summarizing technical articles
 - Logical questioning
 - Chemical engineering aptitude

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03

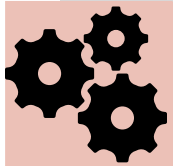
Internship

- Selected interns were assigned both individual and group tasks and a final CAPSTONE project to design a CO₂ capture plant following certain guidelines related to process and environmental aspects
- Individual tasks included:
 - Technical reading
 - Market analysis
 - Engineering economics and cash flow analysis
- Group tasks included:
 - Robust chemical engineering problem formulation in excel
- CAPSTONE project
 - Planning and scheduling work
 - Designing a CO₂ Capture plant using ProTreat
 - Screening of solvents & column internals
 - Adhering to inherently safe design
 - Preparing technical report
- In addition to the tasks, the cohort of interns had the chance to interact with the academicians and practitioners, who served as guest speakers, from several organizations across the globe.

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SKILLS OUR INTERNS GAINED FROM INTERNSHIP



Engineering Practices



Design Methods



Process Simulation



Basic Engineering Economics



**Business Awareness in Chemical
Industries**



Interpersonal and Soft Skills

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GRANULAR DETAILS OF SKILLS

- Excel built-in functions
- Excel visualisation
- Excel-solver and optimization
- Excel automation
- Solving complex calculations
- Process simulation
- Validation of simulation results
- Market research/Analysis
- Laws and regulations (chemical Industry)
- Do's and don'ts of technical writing
- Process plant engineering economics
- CO₂ capture technologies awareness
- CO₂ capture using chemical solvents
- Oral communication
- Comprehension of technical documents
- Written communication
- People skills
- Collaboration skills

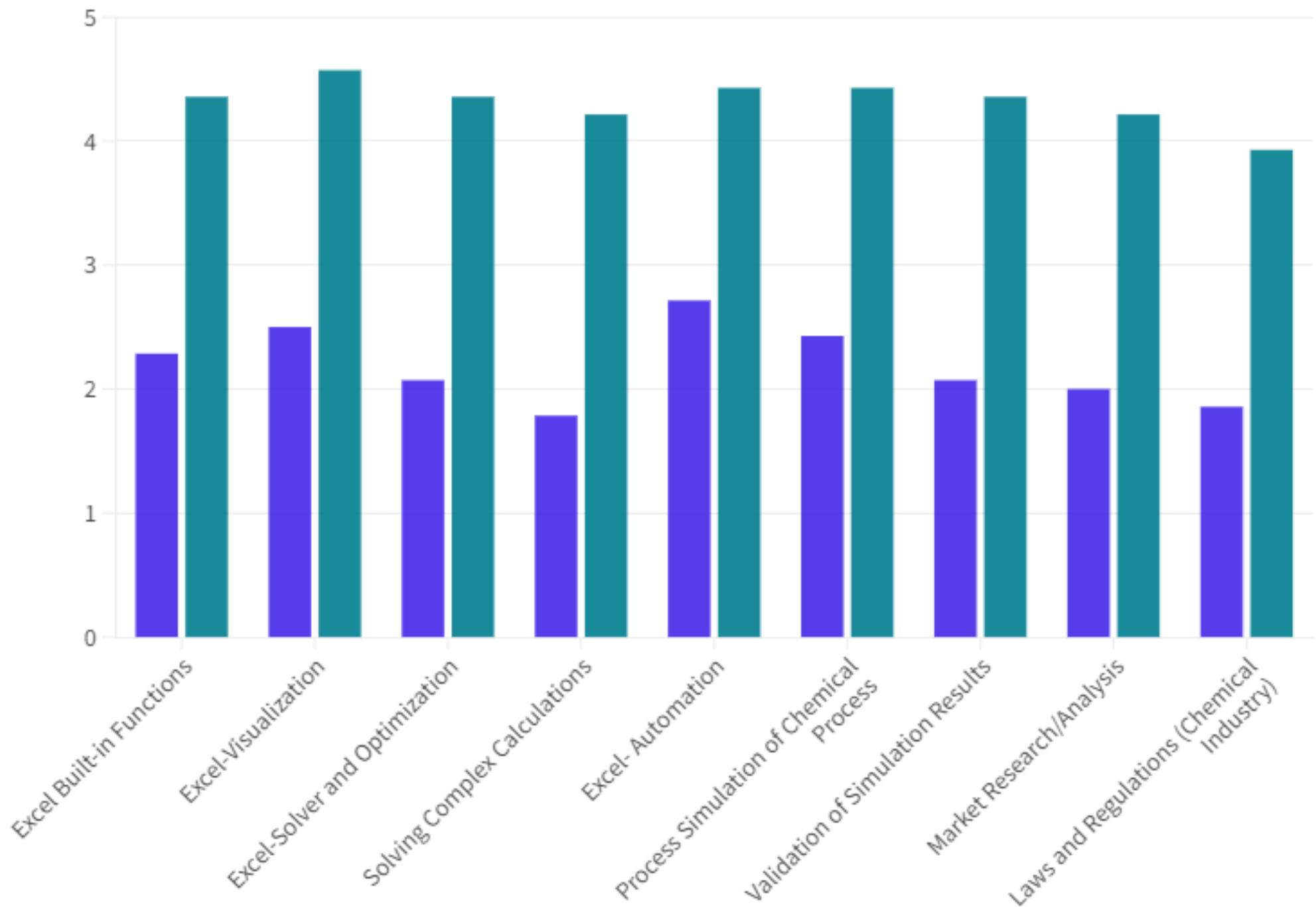
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Pre and Post Internship Skill Confidence Survey

Pre-Internship Post Internship



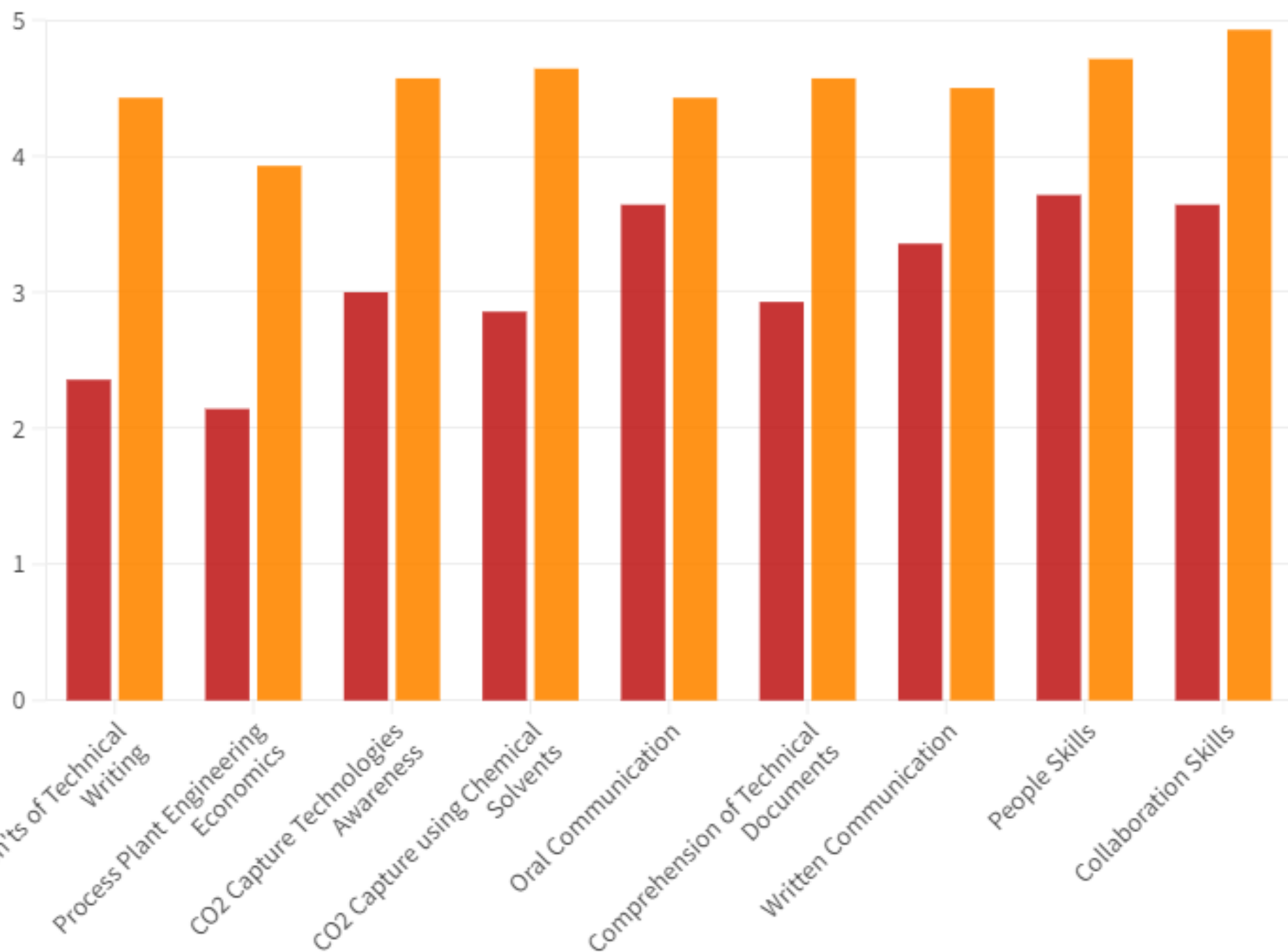
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Pre and Post Internship Skill Confidence Survey

■ Pre-Internship ■ Post Internship



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2023 SUMMER INTERNS PORTFOLIO



ABIJA SHAJAN P

Sree Chitra Thirunal College
of Engineering, Kerala

Biotechnology and Biochemical
Engineering

Batch of 2025

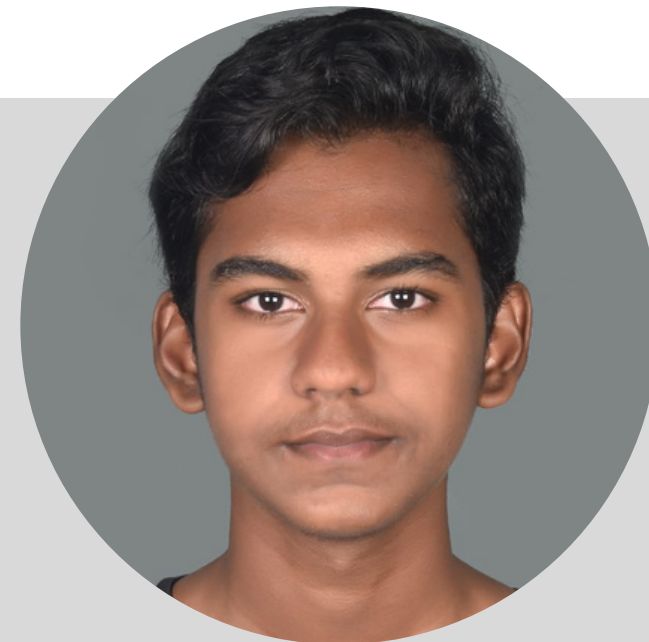


ANKIT MYLARAPU

Sathyabama Institute of
Science and Technology,
Tamil Nadu

Chemical Engineering

Batch of 2024



BATHRASRI KANNAN KT

SSN College of Engineering,
Tamil Nadu

Chemical Engineering

Batch of 2025

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SREE KRISHNAN

Alagappa College of
Technology, Anna University,
Tamil Nadu

Petroleum Engineering and
Technology

Batch of 2024



MAHESHWARI M

Gayatri Vidya Parishad
College of Engineering,
Andhra Pradesh

Chemical Engineering

Batch of 2024



KUNAL SHIRKE

Sinhgad College of
Engineering, Maharashtra

Chemical Engineering

Batch of 2024

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KRISHNA G R C

Alagappa College of
Technology, Anna University,
Tamil Nadu

Petroleum Engineering and
Technology

Batch of 2024



VIJAY S

Dayananda Sagar College of
Engineering, Karnataka

Chemical Engineering

Batch of 2024



NANDINI GARG

Dayananda Sagar College of
Engineering, Karnataka

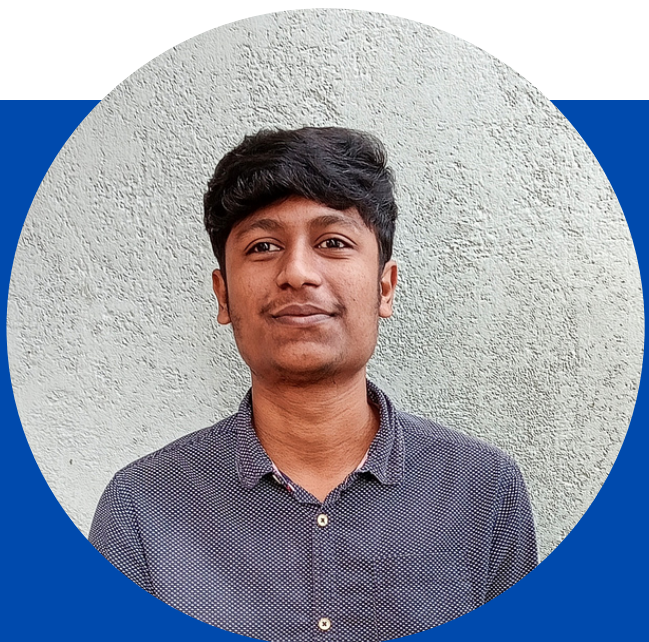
Chemical Engineering

Batch of 2024

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RAGULASANGEERTHIAN

Hindusthan College of
Engineering and Technology,
Tamil Nadu

Chemical Engineering

Batch of 2025



YANAPU SHARMILA

Gayatri Vidya Parishad
College of Engineering,
Andhra Pradesh

Chemical Engineering

Batch of 2024



SATHI SAI AKSHATHA

SSN College of Engineering,
Tamil Nadu

Chemical Engineering

Batch of 2024

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YOGESHWARAN R S

ST Peters College of
Engineering and Technology,
Tamil Nadu

Chemical Engineering

Batch of 2024



THARUN KUMAR R

SSN College of Engineering,
Tamil Nadu

Chemical Engineering

Batch of 2024



WORK SAMPLES ARE AVAILABLE @
<https://the310i.com/intern2023>

For more information, please
write to info@the310i.com

