

Education

2021 - 2025	BTech Chemical engineering at NIT SURAT	(CGPA: 8.61)
2021	Class 12 Board of Secondary Education Andhra Pradesh	(percentage:94.7)
2019	Class 10 CBSE	(percentage:89.6)

Work Experience

GET 2024 SUMMER INTERN RELIANCE INDUSTRIES LTD | NAVI MUMBAI

May 2024 - July 2024

During my internship at the Petchem Business Unit of Reliance Industries Limited (RIL), I undertook the following Responsibilities:

- Gained extensive practical experience in the entire PET production process, including both continuous and solid-state polymerization.
- I worked in petchem business unit where i involved in designing a comprehensive PET recycling process, which converted plastic waste into food-grade PET resins ensuring strict adherence to safety and quality standards throughout the process.
- Gained hands on experience on various industrial Operations and cooperate functions.

Projects

PRODUCTION OF BENZENE FROM TOLUENE USING HDA PROCESS

Designed and optimized the benzene production process using the HDA method. Performed material and energy balance calculations across reactors, separators, and distillation columns to enhance efficiency. Designed critical equipment, including a distillation column, ensuring optimal performance and verifying against flooding and weeping conditions. Conducted thermodynamic and kinetic analyses to maximize benzene yield and reduce by-products. Estimated capital and operating costs, ensuring economic viability. This project developed skills in process optimization, equipment design, and cost analysis.

Key skills used: Material balance, Energy balance, Process design, Process Equipment design, Cost estimation.

RADFRAC DISTILLATION COLOUMN DESIGN USING ASPEN HYSIS

In this project, I took initial estimates using shortcut distillation design and then used these estimates to design a RadFrac distillation column. I performed a performance analysis for the RadFrac distillation column, considering tray efficiency, and also designed the distillation column internals to avoid flooding and weeping in the column.

Skills

TECHNICAL SKILLS : Fluid flow operations, Heat exchanger design and integration, Rigorous Distillation column design, Scheduling of batch reactors, Process design, Process equipment design

INTERPERSONAL SKILLS : Communication, Problem solving, Multi-Tasking, Adaptability, Self-Motivated, Time management, Teamwork, Active Listening, Decision-Making.

ANALYTICAL SKILLS : MS Excel, SQL, Python, Tableau.

Academic Achievements and Extra circular activities

- Achieved the remarkable feat of ranking in the 95.38th percentile among one million peers in the JEE Mains and 18k rank in the JEE Advanced.
- Participated and won many Techno- Managerial events in our college