



Chiara Barbara Aresi

PhD Candidate in Chemical Engineering
(Politecnico di Milano)

PROFILE

I am a newly graduated chemical engineer from Politecnico di Milano. In my academic career, I acquired competence in process simulation, design and control, with a strong interest in the optimization of existing processes to achieve higher sustainability.

For my Master Thesis, I analyzed the thermochemical conversion of plastics through pyrolysis and gasification, investigating these processes as they are valuable alternatives to the mechanical recycle of plastic waste.

I am eager to learn and make a positive impact through my work.

CONTACTS

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📍 Bergamo (BG), Lombardia, IT

COMPETENCES AND SKILLS

- Familiar with MATLAB, Python and common process simulators (Aspen HYSYS, Unisim)
- English language proficiency (C1 level, certified by Cambridge English "FCE")
- Positive attitude and strong commitment
- Team-working experience

WORKING EXPERIENCE

Summer Internship - Tecnimont S.p.A.

2025

I worked as intern in the Process Engineering department of Tecnimont S.p.A., in Milan, from June to Oct 2025. I was assigned to a task force for the Front End Engineering Design of a petrochemical plant. I supported the engineering team with the development of the required documentation (P&IDs, H&M balances, equipment datasheets, etc.) and during technical meetings, such as HAZOP or P&ID reviews.

Private Tutor

2021-2024

I worked as a tutor during my university years by giving private lessons to high school students, supporting them with Maths, Physics and Chemistry.

ACADEMIC BACKGROUND

Master's Degree - Chemical Engineering (Process Design track)

2023-2025

Politecnico di Milano - Votation: 110/110 cum laude

During my Master's Degree I deepened my knowledge on advanced transport phenomena, chemical and catalytic reaction engineering and discontinuous/batch processes.

I specialized in Process Design, thanks to which I acquired expertise with process simulation and I became more familiar with the concept of feasibility study and the related economic indicators.

Bachelor's Degree - Chemical Engineering

2020-2023

Politecnico di Milano - Votation: 107/110

During my Bachelor's Degree at Politecnico, I studied fundamental engineering subjects such as Thermodynamics, Fluid Mechanics, Chemical Plants' Unit Operations and Process Control. My final project focused on the design of the reaction section of a dehydrogenation plant, to convert ethylbenzene into styrene, followed by a cost estimation.

LANGUAGES

Italian - Native speaker

English - C1 level (Advanced)