Employability and careers

- Analysis laboratories in public or private health structures
- Research & Development and/or Production & Control of new materials in chemistry-specific sectors such as pharmaceutics, cosmetics, construction, textile laboratories, etc.
- Research & Development in other enterprises/corporations;
- Education.

Graduates from the Master in Chemistry LM-54 are expected to use Italian, plus at least one additional EU language such as English fluently, to communicate disciplinary knowledge. For foreign students, the University provides free Italian courses which also qualify as elective coursework.
**Brief presentation**

The MSc Degree in Chemistry aims to develop chemists who can use chemistry to ingeniously optimize, conserve and render sustainable, the wealth of resources at the heart of the Mediterranean.

The MSc Degree course offers two curricula:

- **Chemistry of Environment, Health and Local Resources**: theoretical and practical applications of advanced methods of chemical analysis; processes of transport and diffusion of substances; modern methodologies and techniques in applied analytical chemistry (e.g. for quality control of foods, soils, industrial waste, etc.).

- **Chemistry of Sustainable Materials**: environmentally friendly organic synthesis methods; metal catalysis; smart materials; spectroscopic and diffractometric analysis of materials; synthesis of functional materials.

**Learning objectives and outcomes**

- Mastery of advanced-level knowledge and laboratory skills in chemistry;
- Creatively apply advanced knowledge and skills to solve problems in environmental chemistry, chemistry of materials and chemical issues in the life sciences;
- Design and safely operate environmentally sustainable processes;
- Apply understandings of molecular structures and interactions to monitor and shape macroscopic properties;
- Communicate effectively about chemistry knowledge and processes, both orally and in writing.
- Delineate chemical solutions to local issues such as the optimization of local agro-food resources and reuse of waste materials of local industries.

**Main Topics**

- Analytical Methods for Environment, Health and Agro-food Products;
- Environmental Physical Chemistry;
- Molecular and Nanostructured Materials;
- Chemistry of Organic Materials;
- Analytical Chemistry for Materials;
- Materials and Devices for Renewable Energy;
- Structure and Intermolecular Interactions;
- Catalysis and Sustainable Chemistry.