Twelve Reasons You Should Study an M.Sc.

1) Access to more professional tools and resources
2) Admission to better job openings
3) Greater recognition in the academic and professional environment
4) Better ability to apply research and work techniques and technologies
5) More skills to work as a team
6) Further development of critical reasoning
7) Possibility to teach and enter the 3rd cycle of studies
8) More professional contacts
9) Greater specialization in a given area
10) Greater acceptance to study or work abroad
11) Improvement of remuneration
12) New vision of science, the academic and business world
The "University of Lisbon" (ULisboa) is the largest and most prestigious Portuguese University, and a major European University.

"ULisboa has 18 schools and over 100 research units, around 50,000 students, 4,000 lecturers, 2,500 non-academic staff and 400 degree courses. It is a major centre for teaching, research, innovation, sports, culture and art."

<table>
<thead>
<tr>
<th>Top Ranked Universities in the World (2020)</th>
<th>Rank # (1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Lisbon</td>
<td>338</td>
</tr>
<tr>
<td>University of Porto</td>
<td>353</td>
</tr>
<tr>
<td>University of Coimbra</td>
<td>406</td>
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<tr>
<td>New University of Lisbon</td>
<td>421</td>
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<tr>
<td>University of Aveiro</td>
<td>551-560</td>
</tr>
<tr>
<td>University of Minho</td>
<td>651-700</td>
</tr>
</tbody>
</table>

Coordinator: J.M.F. Nogueira (nogueira@fc.ul.pt)

Co-coordinator: Susana Santos (smsantos@ciências.ulisboa.pt)
Pedagogical Commission

- J.M.F. Nogueira
- Susana Santos
- Student representative - 1st year
- Student representative - 2nd year

Branches Available (2021-22)

- MSc Degree in Chemistry
  - Chemistry
  - Analytical Chemistry

30 (+5) Vagas
2nd Cycle in Chemistry
120 ECTS

1st Year
60 ECTS

1st Semester
30 ECTS

2nd Semester
30 ECTS

2nd Year
60 ECTS

Mandatory Assignments (1st Year)

1st Semester
(30 ECTS)

Advanced Methods of Analysis
(6 ECTS)

Synthesis in Organic Chemistry
(6 ECTS)

2 Mandatory UCs
(12 ECTS)

2nd Semester
(30 ECTS)

Chemical Systems and Reactivity
(9 ECTS)

Management and Planning
(3 ECTS)

2 Mandatory UCs
(12 ECTS)
Computational Chemistry  
Analytical Chemistry  
Electrochemistry  
Synthetic Chemistry  
Physical-Chemistry  
Solid State Chemistry  
Food  
Environment  
Energy  
Pharmaceutical  
Phytochemistry  
Forensic  
Biochemistry
Chemical and petrochemical industry | Phytochemical industry | Pharmaceutical and cosmetics industry | Food industry | Analytical and quality control laboratories | Forensic toxicology and criminal investigation laboratories | Environmental control laboratories | Food security and defense laboratories | Service, auditing and consulting companies | Scientific instrumentation trading companies | Higher education and research institutions | Scientific investigation
According to reputable experts in Chemistry, researchers should pay attention to these topics for 2019-20:

1. Machine Learning
   - Computational Chemistry
2. Battery Technology
   - Electrochemistry
3. Microplastic Pollution
   - Analytical Chemistry
4. Green Chemistry
   - Synthesis
5. Gut Bacteria
   - Biochemistry
6. Artificial Intelligence