# CHEMISTRY SOFTWARE (2024)

**120 credits**

## Professional training

**Mandatory courses**

- Introduction to Chemistry Software
- Research Methods
- Operating Systems and Basics of Cybersecurity
- Artificial Intelligence and Machine Learning in Chemistry

1, 2 semesters | 18 credits

**Elective specializations/modules/courses**

- DFT Method and Big Data Analysis
- Robot Sensing Systems
- 3D Modeling
- Introduction in Python
- Algorithms and Data Structures
- Modeling of Chemical and Biological Systems
- Programming in C#
- Programming in Java
- Programming of Robotic Systems
- Development of Virtual and Augmented Reality
- Modern Aspects of Electrochemistry
- Chemoinformatics

1, 2, 3 semesters | 36 credits

**54 credits**

## Fundamental training

- Creative Technologies
- Thinking
- Foreign Language
- Applied Artificial Intelligence
- Soft Skills

1, 2, 3, 4 semesters

**18 credits**

## Practical training

- Research Internship
- Pre-Graduation Internship
- Preparation for Thesis Defense and Thesis Defense

1, 2, 3, 4 semesters

**48 credits**