

Critical Materials in the Age of Green-Tech Competition

Language

English

Course content and objectives

Critical raw materials are increasingly at the center stage of geopolitical and geoeconomic dynamics. Global trends such as the energy and digital transitions are expected to hugely increase the demand for minerals and metals, while decades of globalization have resulted in supply chain concentration from mining to further downstream stages.

In this scenario, US, EU are rushing for supply diversification, especially from China, reducing dependencies for technological competitiveness and economic security in sectors such as advanced batteries, semiconductors, EVs, renewable energy, robotics.

During this 2-day course, students will be encouraged to participate in the discussion to share their views on the topics analysed in each session.

At the end of this course, they will be able to:

- expand their knowledge on critical raw materials and global trends;
- develop their critical and analytical skills on the nexus between geopolitics and technology;
- share their ideas and participate in active discussions

Teaching mode

Synchronous online. Additional materials and/or activities will be made available to students.

Final test

The final test of the course will consist of a multiple-choice test that can be taken in presence only. The test will be made up of 15 questions (passed with 8 correct answers).

Faculty for the course

Alberto Prina Cerai. He is a Research Fellow at the Geoeconomics Observatory, ISPI. He obtained an Executive Course in “Strategic Affairs” at Luiss School of Government, a PhD Summer School with Politecnico di Milano-EIT Raw Materials on critical raw materials, and a Master's degree at SIOI in Rome. He collaborated with Fondazione Eni Enrico Mattei (FEEM) until May 2024 as a research assistant in the “RAw Materials for the Energy Transition (RAMET)” Program, while doing independent consulting work for an Italian major firm and lecturing at University of Trieste, Milan and LUISS. He holds an ISO/IEC Certification on Raw Materials Risk Management from IRTC. His research focuses on critical materials, supply chains in the context of green-tech transition and policy implications.