

CAREER CENTER TELEGRAFENBERG

The World Economic Forum identified critical and creative thinking as the top skills in demand now and for the future. In this second edition of our Skills Newsletter series, we explore why these skills are crucial and how you can leverage them for career success.

What is the definition

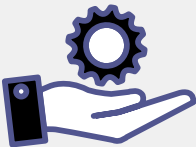


Critical thinking involves convergent thinking and organizes information logically, often through questioning, to explore different perspectives to evaluate their validity and relevance.

Creative thinking, on the other hand, involves divergent thinking, and out-of-the-box ideas to generate something new, whether it's a product, an argument, or understanding.

*Various self-assessment tools can help evaluate these skills. Make an appointment with the Career Center to better understand your top skills and leverage them effectively.

How to develop



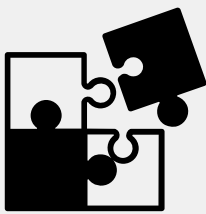
Critical thinking

- Ask lots of open-ended questions.
- Explore viewpoints and challenge biases.
- Stay informed & evaluate evidence.
- Practice active listening.

Creative thinking

- Regularly ask "why".
- Explore "what if" scenarios.
- Read & dream to fuel imagination.
- Brainstorm alone & in groups.

Problem-Solving Framework



Critical and creative thinking go hand in hand. Innovators use both to generate impactful ideas and solve problems. Here are the steps to apply these skills effectively:

1 Problem Identification:

Define the issue by questioning who, when, where, and what.

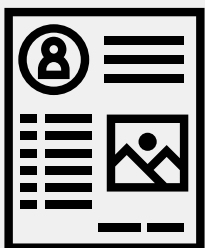
2 Root Cause Analysis:

Identify underlying causes through critical analysis and evaluation and using the "5 Whys" technique to uncover the fundamental issue.

3 Solution Generation:

- Brainstorm diverse solutions.
- Collaborate for varied perspectives.
- Cluster ideas into groups.
- Set criteria to evaluate and rank ideas.

How to include it on your CV



Critical thinking examples:

- Enhanced climate change models by 20% through detailed analysis of emission impacts.
- Analyzed multi-element geochemical data to accurately determine the source of groundwater contamination.
- Evaluated and improved analytical methods for remote sensing data, resulting in a 25% increase in the precision of geological feature identification.

Creative thinking examples:

- Pioneered a new method combining geochemical analysis with machine learning to identify potential mineral deposits more efficiently.
- Applied creative storytelling techniques and clear visuals to present complex scientific concepts in an accessible and engaging manner in conferences.
- Unified field and remote sensing data for novel environmental insights.

*Contact us to tailor your CV for academic or non-academic applications.

Upcoming events



Do not miss our upcoming activities:

- Career Coffee Chat (CCC), on Zoom September 10th.
- Postdoc Appreciation Week, in-person September 17th.
- 2nd Supervision Day, on-site September 26th at GFZ.