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General Admissions Requirements

- Complete online application: www.ceu.edu/apply
- Proof of English proficiency
- Letters of recommendation
- Curriculum vitae

Program Entry Requirements

FOR THE DOCTORAL PROGRAM

- General CEU admissions requirements
- Master's degree in one of a broad range of related disciplines, including physics, mathematics,

- computer science, sociology, political science and economics
- Strong interest in interdisciplinary research and willingness to do quantitative studies
- Detailed account of earlier studies
- Motivation letter

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NETWORK SCIENCE



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Find out how recent changes to Hungary's higher education legislation may affect future CEU students at www.ceu.edu/future-students.

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CENTER FOR NETWORK SCIENCE

CEU's Center for Network Science (CNS) offers one of the world's first PhD programs in the up-and-coming field of network science that provides tools to understand how complex social, political, economic and environmental networks are structured and how they function. Working together with leading network scientists, students learn efficient ways of network modeling and collaboration in creative teams as well as explore terabyte-sized datasets that capture information flow between millions of individuals or economic networks.

QUICK FACT / Professors of the Center for Network Science at CEU have published in some of the world's leading scientific journals, including the American Journal of Sociology, Nature and Proceedings of the National Academy of Sciences (PNAS).

Select Areas of Research

- Pursue science with big data: effective methods of collecting, analyzing, modeling, and visualizing networks with millions of people
- Understand social processes:

friendships and phone calls, spread of ideas, the emergence of order from chaos

- Discover secrets of success: how teams innovate, scientist make breakthroughs, entrepreneurs make the first million

- Uncover hidden webs: political corruption, terrorist networks, global finance, wirings of the brain
- Master the mathematical foundations: graph theory, dynamic processes and graph limits



MILAN JANOSOV / HUNGARY

"The Center for Network Science uniquely bridges natural, computational and social sciences. Its research covers a diverse spectrum of network science concepts to find answers to complex questions about human behavior, such as the success of scientists and the detectability of corruption. As a physicist and biophysicist with a keen interest in interdisciplinary research and big data analytics, I think CEU's Center for Network Science is a perfect place to pursue a PhD."

Doctor of Philosophy in Network Science

The PhD program in Network Science is a pioneering, research-oriented program. It includes training in theoretical and computational methods and coursework on the basic notions and theories of complex networks, including hands-on experience with large datasets. Students have the opportunity to focus on specific related fields, such as mathematics, economics, sociology, political science or environmental science. During their research period, they participate in international research projects. By the end of their PhD studies, they develop into independent researchers, able to analyze and model empirical data in academia or in various industries.

CAREER PATH / Network scientists are employed in academia, government and business. Applied network scientists work at Internet and social media companies, where they improve users' online experience by incorporating results of network science to the service. They also serve as consultants developing business infrastructure and specialize in risk mitigation for major financial institutions.