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 explore terabyte-sized datasets that capture mobile phone calls between millions of individuals; financial transactions between banks and companies or political party affiliations.

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

- **Political science**
  business-political networks, social movements, social influences in voter behavior
- **Economics**
  world system networks and development,
  embeddedness of multinational corporations, network effects and externalities, network effects in finance
- **Sociology**
  structure and dynamics of the social web, spreading of ideas and innovations, multiplex networks
- **Environmental science**
  resilience in energy grids, food webs and economic competition
- **Mathematics and its applications**
  graphs, graph limits and processes on graphs
“The Center for Network Science hosts world-renowned professors and postdoctoral researchers who actively engage with students through interdisciplinary classes, workshops, and general research counseling. The academic work at CNS is diverse and cutting-edge, employing the latest technologies and interdisciplinary knowledge. As a student, I benefit from great training, generous research funding, a dynamic and friendly environment, and access to an international network of researchers and practitioners. After a master’s degree at CEU, I decided to pursue a PhD in Political Science with a certificate of specialization in Network Science, since the human and material resources offered at CNS really make a difference, opening up many doors for my academic interests and providing marketable skills.”
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 work, 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.
SCHOLARSHIPS / CEU is committed to attracting talented students and scholars from around the world and provides generous merit-based scholarships available to students from any country. Doctoral scholarships include a full tuition waiver and a generous stipend for housing and living expenses. Learn more at www.ceu.edu/financialaid.

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
Central European University
student-info@ceu.edu
Nador u. 9, 1051 Budapest, Hungary
www.ceu.edu

**WHY CEU?**

52 English-language degree programs. Students and faculty from some 100 countries. Alumni on 6 continents in top positions. Accredited in the U.S. and Hungary. 8:1 student/faculty ratio.

Based in **Budapest**, the heart of Europe.

© Central European University, 2016