

# MANAGEMENT OF INNOVATION, SUSTAINABILITY, AND TECHNOLOGY (MIST)

**GRADUATE PROGRAM IN MANAGEMENT OF COMPLEX SYSTEMS (MCS)** 

Degrees Offered: Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) University of California, Merced

The graduate program in **Management of Complex Systems** addresses cross-disciplinary challenges of understanding, modeling, designing, and managing complex systems, focusing on adaptive management of complex coupled human and natural systems and complex coupled human and technology systems, including for-profit and not-for-profit organizations and public and private enterprises.

**ADMISSION INFORMATION** 

Applications open: Nov 2019 - Feb 2020

Financial aid and fellowships available Requirements: Bachelors degree, GMAT or GRE

More information: mist.ucmerced.edu/phd-program-info

mist@ucmerced.edu

# Multidisciplinary doctoral training at the nexus of complex systems and management science

# **FOUNDATIONS OF MANAGEMENT**

Apply disciplinary concepts and theories for framing and defining research questions and plans from business, management, economics, sociology, psychology, cognitive science, environmental science and engineering

# RESEARCH METHODS FOR MANAGEMENT

Apply contemporary data analytics, complex systems, management and organizational science methods needed to conduct rigorous research in your area of specialization.

## COMMUNICATION FOR MANAGERS

Communicate effectively to experts and non-experts, in professional (scientific and management) and community settings, preparing and delivering oral and written presentations using appropriate technologies.

### RESEARCH INDEPENDENCE

Initiate and conduct independent research that makes an original contribution to knowledge, and which may be published in a peer-reviewed outlet.

# RESEARCH ETHICS AND SOCIETAL CONTEXT

Demonstrate familiarity with all aspects of research ethics and their societal context.





# MANAGEMENT OF INNOVATION, SUSTAINABILITY, AND TECHNOLOGY

Multidisciplinary faculty aligned around a common interest in better understanding how arrangements of people, organizations, information, technology and the natural world give rise to complex adaptive phenomena that pose grand decision-making challenges to society

#### John Abatzoglou PhD, Earth Systems Science, University of California, Irvine

climatology, meteorology, rain, fire, snow, variability, natural resources, food security, megadrought

#### Roger Bales PhD, Environmental Engineering Science, California Institute of Technology

hydrology, glaciology, paleoclimate, atmospheric chemistry, environmental engineering

#### Anita Bhappu PhD, Management, University of Arizona

organizational behavior, diversity, teams, conflict and negotiation, service delivery, digital retailing and the sharing economy

#### Spencer Castro PhD, Psychology, Cognition and Neural Science, University of Utah

human attention capacity, cognitive workload, neuro-technology, multitasking, cognitive engineering

#### Jeffrey Jenkins PhD, Environmental Studies, University of California, Santa Cruz

political ecology, public lands and protected areas, community planning and adaptive management

#### Catherine Keske PhD, Agriculture and Resource Economics, Colorado State University

environmental studies, applied economics at food-water-energy nexus, land and resource management in fragile ecosystems

#### Crystal Kolden PhD, Geography, Clark University

pyrogeography, wildfire, terrestrial and ecosystem management, socioecological systems, ecology, remote sensing

#### Sarah Kurtz PhD, Chemical Physics, Harvard University

renewable energy, multijunction GaInP/GaAs photovoltaic devices and materials, sustainable energy transition

# Tea Lempiälä PhD, Organizations and Management, Aalto University

innovation studies, organization theory, technological innovation processes and collaboration

#### Paul Maglio PhD, Cognitive Science, University of California, San Diego

service science, human-computer interaction, distributed cognition

#### Russell McBride PhD, Philosophy and Cognitive Science, University of California, Berkeley

entrepreneurship, strategy, cognitive science, and the structure of social reality

#### Tracey Osborne PhD, Energy and Resources, University of California, Berkeley

climate and social justice, political ecology, climate change mitigation in forests, commodification of nature

#### **Alexander Petersen PhD, Physics, Boston University**

socio-economic systems modeling, science communication, innovation, team, complexity, network science

### Fanis Tsouhoulas PhD, Economics, University of Illinois Urbana-Champaign

corporate finance, governance and entrepreneurship, applied tournament theory, contract theory and economics of information

## Josh Viers PhD, Environmental Sciences, University of California, Davis

watershed management, environmental decision making, environmental and hydro informatics, geospatial analysis

#### Leroy Westerling PhD, Economics and International Affairs, University of California, San Diego

applied climatology, wildfire, simulation and scenario analysis, climate change impact assessment, resource management policy

#### Lisa Yeo PhD, Operations and Information Systems, University of Alberta

economics of information systems, security and privacy, organizational behavior

**CONTACT** mist@ucmerced.edu