THE CHALLENGE
Society’s grand challenges—infrastructure for future cities, climate change, sustainable energy transitions, governance of emerging and/or disruptive technologies, water and food security—require innovative leadership and collaboration among academia, communities, government, businesses, and nonprofit organizations, anchored upon interdisciplinary and systems thinking rooted in real-world projects.

MISSION
The Science, Technology, and Environmental Policy (STEP) area at the Humphrey School of Public Affairs focuses on public issues arising at the intersection of science, technology, environment, and society that shape economic development, environmental sustainability, human health, and well-being.

The mission of the STEP area is to integrate science with public policy, community action, and multi-sector governance to advance the common good in a complex and diverse world.

PROGRAM
The Master of Science in Science, Technology, and Environmental Policy (MS–STEP) at the Humphrey School is one of a few in the nation that prepares individuals with backgrounds in natural sciences, physical sciences, or engineering to become leaders and innovators who integrate science with policy and action to solve grand challenges.

WHAT STUDENTS VALUE IN THE STEP PROGRAM
Harnessing your engineering, physical, or natural science background to shape the policies that will change and define your field of expertise
Accessing the many international, national, and Twin Cities leaders in industry, nonprofits, government, and community organizations that are shaping the world
Working as a research assistant in hands-on sponsored research projects with local and global partners

SKILLS DEVELOPED IN THE STEP PROGRAM
Interdisciplinary systems thinking
Science and technology domain expertise
Understanding of public policy and governance
Systems analytics
Public communication
Entrepreneurship and engaged leadership
Action-oriented public service

MAKE A CHANGE
The Humphrey School has given me many opportunities to explore interesting STEP issues and to challenge both myself and my assumptions about how we shape policy.

Angela Laird
EXAMPLES OF POSITIONS HELD BY MS–STEP GRADUATES

A science or engineering background coupled with a policy-focused graduate degree affords many career opportunities. 100% of 2013 MS–STEP graduates were employed within one year of graduation.

GLOBAL TECHNICAL SERVICE ENGINEER
3M

SENIOR SCIENCE POLICY OFFICER
U.S. Department of State

ENVIRONMENTAL IMPACT MANAGER
U.S. Department of Energy

FISCAL AND POLICY ANALYST
State of California

WATER POLICY PLANNER
Minnesota Environmental Quality Board

PROGRAM AND POLICY MANAGER
Center for Energy and the Environment, Minneapolis

PROJECT LEADER
LK Domain Registry, University of Moratuwa, Sri Lanka

INTERGOVERNMENTAL AFFAIRS LIAISON
U.S. Fish and Wildlife Service

CONSERVATOR OF FORESTS
Government of West Bengal

DIRECTOR OF RESEARCH AND EDUCATION
Solar Electric Power Association

CURRICULUM + OPPORTUNITIES

The MS–STEP program combines a rigorous curriculum with opportunities available in many departments, centers, and schools at the University of Minnesota. MS–STEP students can take advantage of advanced research conducted by Humphrey School faculty members, workshops and symposia, and coursework noted for its breadth and depth of focus.

Students also have access to the Center for Science, Technology, and Environmental Policy where scholarship, teaching, and public engagement come together in hands-on projects. These projects, conducted in partnership with communities, nonprofit and private sector organizations, local-state-national governments, and international advisory bodies, maximize our impact on the real world.

RESEARCH FOCUS AREAS

Sustainable Infrastructure and Cities
Renewable Energy Transitions
The Water Energy Food Nexus
Natural Resource Conservation
Governance of New and Emerging Technologies

REQUIRED COURSES

Science, Technology, and Environmental Policy
Interdisciplinary Environmental Study or Science in Action: All Paths
Environmental and Resource Economic Policy or Economics of Science and Technology Policy or Material-Energy Flows for Sustainable Society
Risk, Resilience, and Decision-making
Survey of Current Issues in Science, Technology, and Environmental Policy
The Politics of Public Affairs
Policy Analysis
Economics of Policy Analysis and Planning
Empirical Analysis

PREREQUISITES

Applicants to the MS–STEP program should have completed a degree or taken advanced level coursework in natural or physical sciences, engineering, or environmental studies prior to the date of their planned enrollment.

EARLY ADMISSION FOR UNIVERSITY OF MINNESOTA UNDERGRADUATES

For students currently pursuing their undergraduate degree in any STEM discipline, we offer a combined undergraduate/master’s degree program. The program can be completed in five years (BS & MS) by enabling matriculation into a graduate program during the senior year.

DUAL DEGREE: MS–STEP/JD

MS–STEP students can pursue a unique dual degree with the University of Minnesota Law School. Typically, a dual degree can be completed in less time than it would take to complete the two degrees independently.

The University of Minnesota is an equal opportunity educator and employer.

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