#### Twin Cities Campus

## Science, Technology, and Environmental Policy M.S.

HHH Administration

## **Hubert H. Humphrey School of Public Affairs**

Link to a list of faculty for this program.

#### **Contact Information:**

Hubert H. Humphrey School of Public Affairs, University of Minnesota, 301 19th Avenue South, Minneapolis, MN 55455 (612-624-3800;

fax: 612-626-0002)
Email: hhhadmit@umn.edu
Website: http://www.hhh.umn.edu

• Program Type: Master's

- Requirements for this program are current for Spring 2017
- Length of program in credits: 36
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

The MS in science, technology, and environmental policy (STEP) provides students with an understanding of the role of science and technology in society, including food and agriculture, the economy, energy and the environment, security, health, and education; the impact of science and technology on the political and economic relationships within and among nations; and the analysis and design of policies for appropriate promotion and regulation of science and technology regionally, nationally, and internationally. The program educates students with natural and social science backgrounds to assume roles in public policy development.

## **Program Delivery**

This program is available:

• via classroom (the majority of instruction is face-to-face)

## Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A four-year bachelor's degree from an accredited US university or foreign equivalent at time of enrollment.

#### Other requirements to be completed before admission:

While no specific experience or academic pathway is required, students with a strong liberal education background and sound quantitative and analytical skills will be best prepared for academic success at the Humphrey School of Public Affairs.

Previous coursework in mathematics, statistics, and economics is recommended. Past applicants needing to strengthen this part of their skill set have found courses in introductory microeconomics, college algebra, and introductory statistics to be helpful preparation.

Applicants applying to the MS-STEP program should have completed a degree or taken advanced level coursework in the natural or engineering sciences prior to the date of their planned enrollment.

#### **Special Application Requirements:**

A complete application will include a University of Minnesota application, personal statement, resume or C.V., transcripts, GRE scores, TOEFL scores (if applicable), at least three letters of recommendation, and an optional diversity statement.

Applicants must submit their test score(s) from the following:

GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
- Internet Based Total Score: 100Paper Based Total Score: 600
- IELTS
- Total Score: 7

Key to test abbreviations (GRE, TOEFL, IELTS).

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

## **Program Requirements**

Plan A: Plan A requires 26 major credits, 0 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan C: Plan C requires 36 major credits and up to null credits outside the major. The is no final exam.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

Elective credits are chosen in consultation with the student's advisor.

Students who have not taken prior coursework in statistics must demonstrate to their advisors that they have adequate preparation in statistics or must take Empirical Analysis I (PA 5031). PA 5031 does not count toward fulfilling the 36-credit minimum requirement.

#### Science, Technology, and Environmental Policy Overview

PA 5711 - Science, Technology & Environmental Policy (3.0 cr)

PA 5715 - Deliberating Science, Technology, and Environmental Policy (1.5 cr)

# Take one of the following:

PA 5712 {Inactive}(1.5 cr) or PA 5742 {Inactive}(1.5 cr)

## **Sustainability Systems Science**

PA 5741 - Risk, Resilience and Decision Making (1.5 cr)

#### Take one of the following:

PA 5722 - Economics of Environmental Policy (3.0 cr)

or PA 5752 {Inactive}(3.0 cr)

or APEC 5721 - Economics of Science and Technology Policy (3.0 cr)

or APEC 5651 {Inactive}(3.0 cr)

## **Social and Policy Processes**

PA 5002 - Introduction to Policy Analysis (1.5 cr)

PA 5012 - The Politics of Public Affairs (3.0 cr)

PA 5021 - Microeconomics for Policy Analysis (3.0 cr)

#### **Foundational Methods**

#### Take one of the following:

PA 5032 - Applied Regression (2.0 cr)

or PA 5044 - Applied Regression, Accelerated (2.0 cr)

## Take one of the following:

PA 5033 - Multivariate Techniques (2.0 cr)

or PA 5041 - Qualitative Methods for Policy Analysts (4.0 cr)

## Focus Area - Take one of the following:

PA 5721 - Energy Systems and Policy (3.0 cr)

or PA 5723 - Water Policy (3.0 cr)

or PA 5724 - Climate Change Policy (3.0 cr)

or PA 5731 - Emerging Sciences and Technologies: Policy, Ethics and Law (3.0 cr)

or PA 5751 - Addressing Climate and Energy Challenges at the Local Scale (3.0 cr)

#### **Electives**

Electives to bring total credits to at least 36, in consultation with the advisor.

## **Plan Options**

## Plan A Requirements

Take 10 master's thesis credits.

PA 8777 - Thesis Credits: Master's (1.0 - 18.0 cr)

## Plan C Requirements - Take one of the following:

PA 8081 - Capstone Workshop (3.0 cr)

or PA 8082 - Professional Paper-Writing Seminar (3.0 cr)

or PA 8921 - Master's: Professional Paper (Individual Option) (1.0 - 3.0 cr)

Joint- or Dual-degree Coursework: MS-STEP/JD (Joint Degree Program in Law, Health, and the Life Sciences) Student may take a total of 24 credits in common among the academic programs.