# **Environmental Engineering**

#### Department Information

 Interim Department Chair: Xuefeng (Michael) Chu, Ph.D.

Graduate Program Coordinator.

Kalpana Katti, Ph.D.

· Department Location:

201 Civil and Industrial Engineering Bldg.

· Department Phone:

(701) 231-7244

· Application Deadline:

International applications are due May 1 for fall semester and August 1 for spring and summer semesters. Domestic applicants should apply at least one month prior to the start of classes.

· Credential Offered:

M.S

· English Proficiency Requirements:

TOEFL iBT 71, IELTS 6

# **Program Description**

The Department of Civil and Environmental Engineering offers the M.S. degree in environmental engineering and M.S. and Ph.D. degrees in civil engineering. Also, the College of Engineering offers a program leading to a Ph.D. degree in engineering in which civil engineering is a possible area of specialization. The department also participates in several interdisciplinary programs such as Environmental and Conservation Sciences, Materials & Nanotechnology and Transportation and Logistics.

The graduate curriculum in environmental engineering offers courses designed to prepare the student with engineering fundamentals as applied to the environment. To complement the major area of study, additional courses are often selected from other disciplines. Students without a B.S. degree in civil engineering will take remedial undergraduate courses to gain an appropriate background in civil engineering.

# **Admissions Requirements**

To be admitted to the graduate Master of Science program in environmental engineering, the applicant must meet the Graduate School requirements (http://catalog.ndsu.edu/past-bulletin-archive/2023-24/graduate/admission-information/).

# **Financial Assistance**

Research and/or teaching assistantships may be available. Applicants are considered on the basis of scholarship, potential to undertake advanced study and research, and financial need. To be considered for an assistantship, a completed Graduate School application, official transcripts, and three letters of reference (and TOEFL results for international applicants) must be submitted to The Graduate School. Additional eligibility requirements for teaching assistantships can be found on the Graduate School website.

The Master of Science degree thesis is a scholarly document prepared by the student which is based on research performed. The research topic is chosen by the student in consultation with his or her adviser. The student and adviser together prepare a plan of study to meet the needs of the individual student. The program contains a minimum of 30 credits of graduate-level material, of which the thesis can count 6 to 10 credits. An overall GPA of 3.0 or better must be maintained. An oral defense of the research-based thesis and comprehensive academic subject matter is required.

A student entering the environmental engineering Master of Science degree program without an undergraduate engineering degree will be required to satisfy the undergraduate requirements for mathematics, basic science, and engineering sciences in addition to the Master of Science requirements.

#### Achintya N. Bezbaruah, Ph.D.

University of Nebraska-Lincoln, 2002

Research Interests: Environmental sensors, Recalcitrant and micro pollutants, Contaminant fate and transport, Small community water and wastewater treatment, Environmental management

#### Xuefeng (Michael) Chu, Ph.D.

University of California, Davis, 2002

Research Interests: Watershed Hydrologic and Environmental Modeling, Overland Flow and Infiltration, Integrated Modeling of Flow and Contaminant Transport

#### 2 Environmental Engineering

#### Wei Lin, Ph.D.

State University of New York at Buffalo, 1992

Research Interests: Water and Wastewater Treatment, Hazardous Waste Management

## G. Padmanabhan, Ph.D. (Emeritus)

Purdue University, 1980

Research Interests: Stochastic Hydrology, Water Resource Systems, and Hydrologic Modeling

## Eakalak Khan, Ph.D. (adjunct)

University of California, Los Angeles, 1997

Research Interests: Water and Wastewater Quality, Water and Wastewater Treatment, and Storm Water and Non-point Source Pollution

#### Robert Zimmerman, Ph.D. (adjunct)

North Dakota State University, 1991

Research Interests: Water and Wastewater Treatment, Solid Waste