

**Sheela Vemu, Ph.D.**

Associate Professor of Biology

Principal Investigator (PI)

---

**Nancy Christensen, Ph.D.**

Associate Professor of Chemistry

Co-PI

Advanced Technological  
Education Grant



U.S. National  
Science  
Foundation



WAUBONSEE  
COMMUNITY COLLEGE



SCIENCE BUILDING

Waubonsee Community College is preparing learners for success in the 21st century by raising student achievement through academic quality and technological innovation. We focus on personal, experiential learning to help students adapt to the changing needs of business, industry and society.



# Identifying the Need

- A significant wave of retirements in the water sector is creating an urgent need to recruit and train skilled professionals
- \$288 million in funding to Illinois from the EPA in 2022 for water projects will create additional jobs
- Shifts in technology require new skill sets for water technicians
- Our program allows students to earn credits for educational and work experiences, which can be stacked toward associate degrees and other credentials
- It is the first certificate of this type offered in Northern Illinois
- The Illinois Blue Economy employed nearly 1.8 million people—approximately 30 percent of all employment in the state (2020).





# About the Certificate

- Waubonsee's introductory water technician certificate seeks to prepare students for careers as water and wastewater technicians
- Water careers will be positioned/marketed as high-skilled, professional roles
  - Water jobs pay more, on average, when compared to all occupations in the U.S., and they pay up to 50 percent more to workers at the low end of the income scale.
- Waubonsee will become a training hub: one central place where needed coursework can be obtained
- Those completing the certificate will be qualified/eligible to take the EPA credentialing exams.



# About the Certificate/Coursework

1

## Semester 1

Water Operations I	3 credits
Wastewater Operations I	3 credits
Math for Water/Wastewater I	3 credits
Workplace Navigation	3 credits
Internship	1 credit

- Course content is industry relevant
- 27-credit curriculum for a stackable certificate

2

## Semester 2

Water Operations II*	3 credits
Wastewater Operations II*	3 credits
Math for Water/Wastewater II*	3 credits
Science for Water Technology (WTE296)	3 credits
Special Topic: Water and Wastewater	1 credit
Internship	1 credit





# Moving Forward

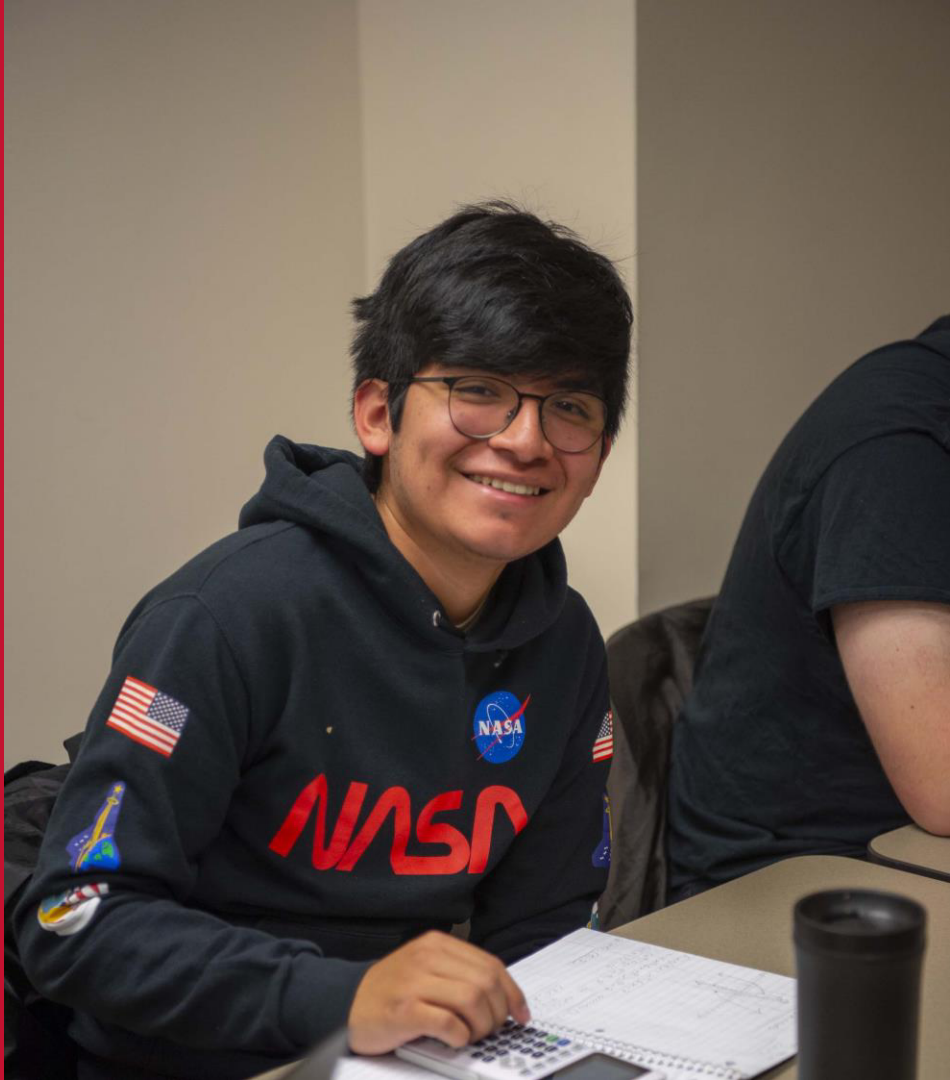


- Marketing
- Internships
- Enrollments



WAUBONSEE  
COMMUNITY COLLEGE

Here is a QR code; please select the ways to further our partnership.



WAUBONSEE  
COMMUNITY COLLEGE

Thank you



WAUBONSEE  
COMMUNITY COLLEGE

*This work is supported by the NSF Award # 2400347. Any opinions, findings, conclusions, or recommendations expressed in this presentation are based on the work conducted and do not necessarily reflect the views of the NSF. Award Abstract # 2400347 Waubonsee Water Ways: Building Pathways to Careers in the Water Sector*