

Strengthening Minnesota businesses by maximizing efficiency and lowering costs through energy, water and waste reduction

INTERNSHIP: Lead a project to optimize nutrient removal in wastewater treatment ponds. (Summer 2020)

COMPANY: Minnesota Technical Assistance Program

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior level college student to lead a project focused on enhancing and optimizing nutrient removal at Wastewater Treatment Ponds in Minnesota. The project will involve using wastewater modeling software to model the plant's current operations, researching strategies to improve nutrient removal, and estimating the nutrient reduction opportunity for modifying operations..

The intern will report to MnTAP project staff and collaborate with partners at Minnesota Rural Water Association (MRWA) and the Minnesota Pollution Control Agency (MPCA).

JOB DUTIES:

As part of this project, you will be asked to complete the following tasks:

1. Gather and organize pond initial condition information.
2. Research strategies to improve nutrient removal in wastewater ponds.
3. Use ASIM software to model pond operations and to identify strategies for improving nutrient removal.
4. Use pond models and equations to develop operational optimization ideas.
5. Develop reports and outreach materials to share findings and promote implementation.
6. Manage project tasks, activities, and project documentation effectively.
7. Work professionally and safely.
8. Summarize findings in a detailed final report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
9. Present project findings to wastewater pond staff, and at MnTAP hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is \$14/hour, with a lump sum stipend of \$1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$16.00/hour when averaged over the project. Candidates must have a valid driver license and pass a background check.

QUALIFICATIONS:

- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Appropriate majors: *Engineering, environmental or physical sciences and others as applicable*

TO APPLY:

Apply online at:

www.mntap.umn.edu/intern/student_apply.htm

Remember to submit your application form, cover letter, resume, and unofficial transcript.

Cover letters can be addressed to:

Nathan Landwehr, Intern Program Administrator
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Minneapolis, MN 55455 • landwehr@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY