

Internship: Lead a project focused on water and wastewater reduction at a craft brewery

Company: Fulton Brewing Company, Minneapolis, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation and wastewater reduction at Fulton Brewing Company in Minneapolis. The intern will research and quantify in-coming water use, and identify and justify opportunities for water recycling or reuse. The intern will map water use throughout the process to determine how wastewater is created and treated, then research opportunities to optimize water usage and decrease load in wastewater effluent. The intern will consult with production, and facilities staff to audit, assess, recommend, and implement approved water and wastewater recycling or reuse opportunities.

JOB DUTIES:

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

1. Identify and quantify water uses throughout the facility, including brew house, packaging, process cleaning, and use in boilers, chillers and water treatment systems.
2. Make recommendations for specific improvements based on research and testing that will result in water use reduction, reuse, treatment, or recycling opportunities.
3. Determine best practices for removing organic material upstream of waste water treatment.
4. Research and make specific recommendations for reducing TSS and COD load in wastewater, including optimizing current waste water treatment protocol.
5. As time allows, make recommendations to implement CO₂ capture and reuse, or identify and research other opportunities to reduce energy use and solid waste.
6. Estimate reduction or diversion potential and costs associated with implementation of a recommended reduction opportunity, then prioritize suggested changes using simple payback methods to financially justify the alternative processes or equipment.
7. As appropriate, initiate approved changes and system upgrades and estimate the performance of upgraded systems.
8. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
9. Present findings to the company 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 \$13/hour, with a lump sum stipend of \$1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$15.00/hour when averaged over the project. Candidates must 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
200 Oak Street SE, Suite 350-1
Minneapolis, MN 55455 • landwehr@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY.