University of Minnesota



Minnesota Technical Assistance Program

200 Oak Street, Suite 350-1 · Minneapolis, MN 55455-2008 612/624-1300 · www.mntap.umn.edu · mntap@umn.edu

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

Internship: Lead a project focused on energy and water conservation at an RO membrane manufacturing facility.

Company: DuPont – Edina, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water reduction and energy efficiency with DuPont. The intern will work with MnTAP and DuPont staff to reduce energy use associated with membrane production lines. The intern will also explore improvements to a water recycling system. The intern will quantify these opportunities and develop suggestions to reduce water and conserve energy as well as outline plans for implementation.

JOB DUTIES:

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

- 1. Assess the energy use of the membrane manufacturing line driers.
- 2. Explore energy efficiency opportunities for the driers (i.e. fan optimization and heat recovery)
- 3. Explore strategies to improve the wastewater recycle system including testing ultrafiltration.
- Evaluate energy efficiency of HVAC units with site HVAC technician and Xcel Energy staff and prioritize for replacement.
- 5. Estimate energy and water reduction potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
- As appropriate, support implementation of approved process changes or outline plans for future implementation.
- Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
- 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 \$19/hour, with a lump sum stipend of \$1,500 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$22.00/hour when averaged over the project. Candidates must pass a background check and company required drug screening.

QUALIFICATIONS:

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

TO APPLY:

Apply online at:

www.mntap.umn.edu/interns/student/apply/

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

Applications can be addressed to:

Matt Domski, Intern Program Manager

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MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY