

Emma N. Bennett

Email: enbennett9@outlook.com • Phone: (573) 777-0837 • Address: 15905 Palis Nichols Road Hartsburg, Missouri 65039

Education

Bachelor of Chemical Engineering, Minor in Math
GPA: 3.83

University of Missouri, Columbia, Missouri
Graduation Date: May 2019

Job Experience

Staff Chemical Engineer, Burns & McDonnell, Kansas City, Missouri December 2022 – Present

- Bid and purchase of mechanical equipment packages for drinking water and sewer costing upwards of \$1M
- Development of potable drinking water and sanitary sewer distribution systems across a 1,000+ acre site
- Collaboration with site civil to design gravity storm water collection system, segregating storm water based on environmental requirements for treatment, design of pellet collection system for storm water using Stokes' Law

Assistant Chemical Engineer, Burns & McDonnell, Kansas City, Missouri June 2019 – December 2022

- Utilization of Fathom hydraulic modeling software to develop system sizing for complex, interconnected systems.
- Design wastewater treatment for high strength, high oxygen demand water through use of technologies such as: primary oil/water separation, secondary oil/water separation, anaerobic, and aerobic treatment
- Use of hydraulic institute principles to design below grade lift stations and pumping structures
- Use of AutoCAD software to generate process flow diagrams and piping and instrumentation diagrams
- Mentor to summer interns: coordinating regular workload check-ins, delegating tasks, and providing support
- Involvement in internal New Professionals committee and Diversity, Equity, and Inclusion committee

Environmental Engineering Intern, Department of Natural Resources, Jefferson City, Missouri May 2017– August 2017

- Updated the Wastewater Construction Permitting Manual and CAFCom cost tracking spreadsheet
- Reviewed sewer extensions using fluid and pipe calculations gaining knowledge of the NPDES permitting
- Gained knowledge of state agency processes and CSR regulations
- Informed the public about water safety at the Missouri State Fair

Undergraduate Researcher, University of Missouri, Columbia, Missouri September 2015— May 2017

- Conducted research in the field of biomedical optics use
- Analyzed laser output by applying LabVIEW programming skills
- Applied skills in 3D printing and modeling software to print pieces integral to optics projects
- Presented my research at Mizzou Life Science Research Forum and SWE iCON17 Conference

Volunteer, Boone Hospital, Columbia, Missouri June – August of 2011 – 2014

- Became familiar with medical practice and tools
- Communicated with a variety of patients and workers

Skills and Certifications

- Successful completion of FE and PE examinations, will qualify for PE licensure in June of 2023.
- In progress course - IBM Full Stack Software Developer Professional Certificate.
- Experience with Fathom, ASPEN HYSY, LabVIEW, MatLab, AutoCAD, and Sketch Up 3D printing software.

Organizations

- Water Environmental Federation
- Missouri Water Environmental Assoc.
- American Institute of Chemical Engs.
- Tau Beta Pi (Vice President)
- Mizzou Engineering Student Council
- St. Pats's Board (Committee Chair)
- Residential Hall Association Rep.

Awards

- Dean's Scholars Engineering Scholarship
- Waldemar J Klasing Annual Scholarship
- Missouri Bright Flight Award
- Mizzou's Chancellor's Award
- College of Engineering Undergraduate Research Grant recipient
- Discovery Fellows and Show Me Scholars Member