

## Contact Information

Name: Austin Miller  
Email Address: mill9512@umn.edu  
Phone Number: 2188500361  
Address: 30215 Tower Road  
City: Detroit Lakes  
State: MN  
ZIP Code: 56501

## Application Information

Employee/elected official name and relationship: Neil Breidenbach

Name of city/rural water system: Grand forks trail water system

Name of school you will attend: U of M Twin cities

Major or course of study: Engineering

### Career Goals:

I plan to complete my mechanical engineering degree in May 2025. During the summers of 2023 and 2024 I plan to either work construction or get an internship. After I graduate with a bachelors in mechanical engineering I might go into the industry and work at an engineering firm or get my masters in mechanical engineering. I'm not sure which option I'll choose but it will definitely be between those two options.

### Extracurricular Activities:

High School soccer captain - Led a soccer organization with a total of more than 60 high school students. Spent 6 years on the team, 5 of which on varsity and was a captain my final year.

Engineers without Borders Member- A club at the University of Minnesota that I have been a part of for two semesters. I am in the East Africa subgroup, and we are currently working on a project in Malawi Africa where we are designing a borehole and water system for a rural school that doesn't have water. The system will utilize solar energy to work because there is no electricity.

Trinity Lutheran Church - During confirmation we would occasionally volunteer doing various things like caring for peoples yards that couldn't and cleaning ditches. Hard to estimate an amount of hours

Interact Member- Highschool club I was a part of for 4 years that raised money for various local non profits. Would do this by holding events like the polar plunge and an ice fishing tourney named poles and holes.

High school Tennis - Spent 6 years on this team and was a captain my senior year.

Photo:



Transcript: combinepdf.pdf

Applicant Essay: Water\_Industry\_Importance.pdf

Financial Need:

I pay for college 100% on my own and that amounts to about 20,000 per year in tuition, books, and fees. I have a job during school and work full time during the summer and winter break. However I still fall short each year and end up taking out loans. This scholarship would lessen the financial burden of my education and allow me to focus more on school and continue to get A's as my classes get more difficult.

If employed, please explain if your No  
employer provides any  
compensation for your education:

Statement of intent: Statement of intent

## Water Industry Importance

Water is one of, if not the most, essential component on earth. It fills our oceans and lakes, aids in the growth of plants, and even fills our bodies. Without water there would be no life for the majority of organisms on earth and there would be no way around it. As human civilization advances and populations grow, water distribution needs to do the same. The water industry is what maintains and expands this water distribution and is a main reason that these advancements and growth are able to occur. The water industry is the backbone of many aspects of our society as it provides a safe water supply and supports economic growth in many areas.

The water industry is responsible for supplying communities with clean, treated drinking water. As spoken about previously, water is a basic necessity and without safe water people will have more health issues. Without the treatment, unwanted chemicals and bacteria from the ground will stay in the water and be a root cause for certain health problems. For example, in parts of Africa, there is a cholera epidemic going on because of the untreated and unsafe water the people get from rivers, streams, and sometimes even wells. This is not seen and probably never will be seen in America because of the treatment of water that is done by the water industry. Without this treatment many diseases and harmful chemicals would remain in our drinking water.

The water industry also helps our economy by providing other types of industries with the materials needed to be successful. Not only does the water industry provide jobs itself but it is crucial to many other industries' success and ability to grow and provide jobs. The water industry supplies water that is utilized in agriculture to efficiently grow crops and increase crop yield. It supplies water to manufacturing companies which use water in a lot of different ways such as cooling systems after processes, diluting substances, and many more. This list of

examples is endless but the point is that every industry and business, from a pet store to a mining company, piggybacks off the water industry in some way.

In conclusion, the water industry is crucial to our society as it provides communities with safe drinking water and supports economic growth for many industries. Without the water industry, safe drinking water would be impossible to obtain for the majority of people and advancements and growth amongst human civilization wouldn't be able to occur.



# Detroit Lakes High School

1301 Roosevelt Avenue  
Detroit Lakes, MN 56501

**Miller, Austin Jennings**

Gender: MALE

Birthdate: 11/16/2002

Par/Guar: Jesse Miller

Address: 30215 Tower Rd  
Detroit Lakes, MN 56501

Phone: (218) 850-0088

Grade: GD  
State ID: 0397000000104

Grad Year: 2021  
Graduation Date: 05/28/2021

Grade 9				Year: 2018
Subj	Course	Earned Credits	Mrk	
	Seminar 9 S1	1.000	A	
	Seminar 9 S2	1.000	A	
BUS	Personal Finance	1.000	A	
ENG	English 9 S1	1.000	A	
ENG	English 9 S2	1.000	A	
IND	Intro to Woods	1.000	A	
MAT	Adv Algebra II S2	1.000	A	
MAT	Advanced Algebra II S1	1.000	A	
PHY	Physical Education 9	1.000	A	
SCI	Physical Science 9 Chemistry	1.000	A	
SCI	Physical Science 9 Physics	1.000	A	
SOC	World Geography S1	1.000	A	
SOC	World Geography S2	1.000	A	
WOR	Spanish I S1	1.000	A	
WOR	Spanish I S2	1.000	A	
		<b>15.000</b>		

Grade 10				Year: 2019
Subj	Course	Earned Credits	Mrk	
ENG	English 10 Honors S1	1.000	A	
ENG	English 10 Honors S2	1.000	A	
MAT	Adv. Geometry S1	1.000	A	
MAT	Adv. Geometry S2	1.000	A	
PHY	Fitness Weight Training	1.000	A	
PHY	Team Sports	1.000	A	
SCI	Biology S1	1.000	A	
SCI	Biology S2	1.000	A	
SCI	Chemistry S1	1.000	A	
SCI	Chemistry S2	1.000	A	
SOC	US History S1	1.000	A	
SOC	US History S2	1.000	A	
WOR	Spanish 2 S1	1.000	A	
WOR	Spanish 2 S2	1.000	A	
		<b>14.000</b>		

Grade 11				Year: 2020
Subj	Course	Earned Credits	Mrk	
ENG	Literature and Composition S1	1.000	A	
ENG	Literature and Composition S2	1.000	A	
FAC	Foods	1.000	A	
MAT	CE Adv College Algebra	1.000	A	
MAT	CE Adv Pre-Calculus	1.000	A	
PHY	Lifetime Sports	1.000	A	
PHY	Tr-Health	1.000	A	
SCI	Inorganic Chemistry 1	1.000	A	
SCI	Inorganic Chemistry 2	1.000	A	
SOC	AP European History S1	1.000	A	
SOC	AP European History S2	1.000	A	
SOC	CE Psychology	1.000	A	
SOC	Economics	1.000	A	
SOC	Tr-Intro to Sociology	1.500	A	
		<b>14.500</b>		

Grade 12				Year: 2021
Subj	Course	Earned Credits	Mrk	
ENG	CE Academic Writing	1.000	B	
ENG	Tr-Intro to Public Speaking	1.500	A	
MAT	AP Calculus AB S1	1.000	A	
MAT	AP Calculus AB S2	1.000	A	
PHY	Lifetime Sports	1.000	A	
SCH	Intern-2 hr S1	2.000	A	
SCI	AP Biology S1	1.000	A	
SCI	AP Biology S2	1.000	A	
SCI	Physics S1	1.000	A	
SCI	Physics S2	1.000	A	
SOC	Tr-American National Gov	1.500	A	
		<b>13.000</b>		

Grades that are documented during the time period of March 16 through June 30 of 2020 reflect the distance learning period resulting from the COVID-19 pandemic. Future use of these grades for academic placement, admission, acceleration, or remediation is discouraged and should only be used with caution after balancing the information against student performance in other grading periods.

## GPA and Class Ranking

Normal GPA: 3.981

Weighted GPA: 4.214

Weighted Class Rank: 9 of 212

Total Earned Credits: 56.500

*Kristin Johnson*  
School Official Signature

Date: 3 / 17 / 2023

Note: Official Transcript Requires School Seal Stamp

University of Minnesota Unofficial Transcript

Name : Miller,Austin Jennings  
 Student ID : 5702529  
 Birthdate : 11 - 16

Print Date: 02/04/2023

MOST RECENT PROGRAMS

Campus : University of Minnesota, Twin Cities  
 Program : College of Sci and Engineering  
 Plan : Mechanical Engineering B M E  
 Degree Sought : Bachelor of Mechanical Engineering

Course	Description	Attempted	Earned	Grade	Points
MATS 2002	Mech. Prop. Lab	1.00	1.00	A	4.000
ME 2011	Intro to Engineering	4.00	4.00	B+	13.332
TERM GPA :	3.750	TERM TOTALS :	16.00	16.00	16.00
			60.000		

Term Honor: Dean's List

Transfer Credits  
 Transfer Credit from Minnesota State Community & Technical College  
 Semester Transfer Totals: 34.000

**Spring Semester 2023**  
 University of Minnesota, Twin Cities  
 College of Sci and Engineering  
 Mechanical Engineering B M E

Test Credits

Test Credits Applied	Attempted	Earned	Points
Test Trans GPA: 0.000	Test Totals: 4.000	4.000	0.000

Course	Description	Attempted	Earned	Grade	Points
AEM 3031	Deform. Body Mech.	3.00	0.00		0.000
ENT 1005	Insect Biology	4.00	0.00		0.000
IE 3521	Stats, Quality, & Reliability	4.00	0.00		0.000
ME 3331	Thermodynamics	3.00	0.00		0.000
TERM GPA :	0.000	TERM TOTALS :	14.00	0.00	0.00
			0.000		

\* \* \* \* \* Beginning of Undergraduate Record \* \* \* \* \*

**Fall Semester 2021**  
 University of Minnesota, Twin Cities  
 College of Biological Sciences  
 Biochemistry B S

**Undergraduate Career Totals**  
 CUM GPA: 3.884 UM TOTALS: 60.00 46.00 46.00 178.668  
 UM + TRANSFER TOTALS: 84.00

Course	Description	Attempted	Earned	Grade	Points
AST 1001	Explore Universe	4.00	4.00	A	16.000
CHEM 2301	Organic Chemistry I	3.00	3.00	A	12.000
MATH 1272	Calculus II	4.00	4.00	A	16.000
PHYS 1301	Phys for Sci and Engr I	4.00	4.00	A	16.000
TERM GPA :	4.000	TERM TOTALS :	15.00	15.00	15.00
			60.000		

Term Honor: Dean's List

**Spring Semester 2022**  
 University of Minnesota, Twin Cities  
 College of Biological Sciences  
 Biochemistry B S

Course	Description	Attempted	Earned	Grade	Points
CSCI 1113	Intro to C/C++	4.00	4.00	A	16.000
JOUR 1501	Digital Games and Society	3.00	3.00	A	12.000
MATH 2243	Lin Alg & Diff Eqs	4.00	4.00	A	16.000
PHYS 1302W	Physics for Sci and Engr II	4.00	4.00	A-	14.668
TERM GPA :	3.911	TERM TOTALS :	15.00	15.00	15.00
			58.668		

Term Honor: Dean's List

**Fall Semester 2022**  
 University of Minnesota, Twin Cities  
 College of Sci and Engineering  
 Lower Division Major  
 Mechanical Engineering Emphasis

Course	Description	Attempted	Earned	Grade	Points
AEM 2021	Statics & Dynamics	4.00	4.00	A	16.000
MATH 2263	Multivariable Calc	4.00	4.00	A-	14.668
MATS 2001	Mech. Prop.	3.00	3.00	A	12.000

\*\*\*\*\* End of Transcript \*\*\*\*\*