

# Plumbing

## Degree Type

Certificate

## Contact Information

Tanner Oliphant, instructor  
Tanner.Oliphant@ndscs.edu  
701-671-2585  
Mechanical Systems 111

## Delivery Methods

Face-to-Face: Wahpeton

The Plumbing program at NDSCS provides both lecture and lab opportunities for the student. While approximately 55% of the semester time is in lab, it is felt the remainder of the time (when they are immersed in theory, plumbing code and drafting/design classes) will benefit them in career advancement as well as increase their success on the Journeyman's exam which they will eventually take. The hands-on training in labs helps to prepare students for work in both the residential and commercial plumbing fields. The lab classes require students to learn to work with copper, plastic and PEX piping methods and also learn the proper procedures for installing fixtures. Along with good, safe plumbing practices, the lab courses also help to create good work habits and to further develop students' interpersonal skills.

The theory and design classes arm students with the knowledge of pipe sizing and proper placement of piping and fixtures within the structure. All aspects of installation and design are performed with the Uniform Plumbing Code as a reference. Code-specific classes each semester raise awareness and preparation for state licensure in the future. Upon successful completion of the NDSCS Plumbing program, up to 2,040 schooling hours may be credited by the ND State Plumbing Board, 1,750 hours by the Minnesota Plumbing Board and 1,900 by the South Dakota Plumbing Board toward their plumbing apprenticeship.

The program's transition to more commercial plumbing materials and practices will offer employers a more well-rounded employee in the future. During the print reading class, students will gain valuable experience in construction/project management utilizing Procore software and will receive a certification for their knowledge of that program. To enhance students' residential experience, the plumbing students will provide the plumbing services (piping and fixture installation) for the house which the Building Construction Technology students build on campus each year. For the more competitive students NDSCS offers the opportunity to compete at the college level in the ND Skills USA competition in the spring. Students also will write an industry competency exam at the end of the year to measure their learning against other students nation-wide. Lastly, all aspects of the plumbing instruction provide students with the knowledge of and exposure to up-to-date materials and practices which lead to more efficient uses of our natural "greener" resources within the plumbing industry.

## Admission Requirements\*

The applicants must be high school graduates or equivalent. Students considered for acceptance must complete all admission requirements.

**Please Note:** Students are placed into English, math and reading courses based on ACT, ACCUPLACER or other nationally recognized tests. Please see [www.ndscs.edu/current-students/student-success/test-center](http://www.ndscs.edu/current-students/student-success/test-center) for the NDSCS Course Placement Policy and testing information. Students may be on an extended plan of study pending their course placement.

\*Program Admission Requirements are subject to revision. Please check the department or program website under Program Admission Requirements for current information.

## Award

Upon successful completion of the required courses, students will be awarded a certificate in Plumbing.

## Required Courses

Course Code	Title	Credits
MSYS 103	Math for Mechanical Systems Technicians	3
MSYS 151	Drafting and Sketching	2
PLMB 101	Plumbing Theory And Code I	3
PLMB 102	Plumbing Theory And Code II	5
PLMB 105	Core Curriculum for Plumbers	2
PLMB 111	Plumbing Lab I	6
PLMB 112	Plumbing Lab II	6
PLMB 114	Residential Plumbing Application	1
PLMB 132	Plumbing Drawing, Sketching and Design	3

A student will earn a certificate in Plumbing after completing the above courses and the appropriate credits of general education courses as listed below. An Associate in Applied Science degree in Mechanical Systems may be earned by taking the additional classes listed from the HVAC/R Technology curriculum.

## Related/General Education Courses

Course Code	Title	Credits
ENGL 105	Technical Communications	3
	Social and Behavioral Sciences, Humanities, History and/or Computer Electives (2 credits)	2
FYE 101	Science of Success	1

A student will earn a certificate in Plumbing after completing all the above courses. An Associate in Applied Science degree in Mechanical Systems may be earned by taking the additional REFG (HVAC/R) courses listed under the Mechanical Systems AAS Degree.

<b>Total Required Credits</b>		<b>37</b>
-------------------------------	--	-----------