

WASTEWATER TREATMENT PLANT TECHNOLOGY (AAS)

Associate of Applied Science

Career-Technical Program

Interest Areas:

Manufacturing and Trades

The Wastewater Treatment Plant Technology Program is a multifaceted program that utilizes many areas of mechanics including electronics, automation, computers, hydraulics, programmable logic controllers, electrical systems, and mechanical systems. The program is designed to prepare students for employment as entry-level wastewater treatment plant technicians and emphasizes extensive practical experience in both theory and laboratory settings using mock-up equipment and assemblies similar to those found in the industry. Instruction advances many of the concepts learned in the Industrial Mechanics/Millwright and Mechatronics programs and includes theory, troubleshooting, and hands-on application in mechatronics, programmable logic controllers, pneumatics, AC and DC electrical systems, hydraulics, and motor control.

Successful completion of each semester and/or permission of the instructor is required for acceptance into the next semester. Placement in specific English and math courses is determined by the college assessment test.

Contact Information:

Trades & Industry Division
Parker Technical Education Center
 7064 West Lancaster Road
 Rathdrum, ID 83858
 Phone: (208) 769-3448

Program Website (<https://www.nic.edu/programs/wastewater-treatment-plant-technology/>)

Program Requirements

Course	Title	Credits
Semester 1		
MM-150	Industrial Mechanics I	8
WWTR-150L	Wastewater Treatment Lab I	2
ENGL-101	Writing and Rhetoric I	3
MATH-123	Math in Modern Society	3
Credits		16
Semester 2		
MM-152	Industrial Mechanics II	7
MM-156	Industrial Hydraulics	3
WWTR-152L	Wastewater Treatment Lab II	3
CHEM-101	Introduction to Chemistry	4
Credits		17
Semester 3		
MECH-210	Mechatronics I	5
MECH-211	Industrial Automation Control Systems	3
WWTR-210L	Wastewater Treatment Lab III	2
CAOT-164	Computer Fundamentals for Technical Programs	1
CAOT-165	Productivity Software for Technical Programs	1

ENSI-119	Introduction to Environmental Science	4
Credits		16
Semester 4		
BACT-250	General Microbiology	4
CHEM-275	Carbon Compounds	3
COMM-101	Fundamentals of Oral Communication	3
COMM-233	Interpersonal Communication	3
Credits		13
Total Credits		62

Course Key



GEM



AAS
Institutionally
Designated



Gateway



Milestone

Program Outcomes

Upon completion of the program, students will be able to:

1. Apply safety, health, and environmental rules and regulations.
2. Select and safely use hand/power tools and accurately use precision measurement tools.
3. Install, troubleshoot, and test components in a basic hydraulic circuit, test AC/DC electrical motors and electro-fluid power components/circuits.
4. Perform machine maintenance procedures, systems troubleshooting methodologies, and maintenance of seals, pumps, and bearings.
5. Perform installation, troubleshooting, and maintenance of PLC's, and advanced electrical motor control repair.
6. Perform basic welding procedures, mechanical drive systems repair procedures, and equipment installation and alignment.

In addition to the program outcomes, students will meet the following North Idaho College General Education (GEM) Requirements: Written and Oral Communication; Mathematical Ways of Knowing; Social and Behavioral Ways of Knowing; and an additional program-designated or selected course from any of the GEM requirements.