WATER WASTEWATER PRE-APPRENTICESHIP PROGRAM

This is a 16-week course. Classes are Monday – Friday from 9 am – 2 pm, unless otherwise stated by the instructor.

BASIC WATER		
Week 1		
AM Session	9 am – 11 am	**Chapter 1:** Microbiology
PM Session	12 pm – 2 pm	**Chapter 4:** Water Sources and Treatment Options
Week 2		
AM Session	9 am – 11 am	**Chapter 5:** Ground Water, Wells
PM Session	12 pm – 2 pm	**Chapter 7:** Pretreatment
Week 3		
AM Session	9 am – 11 am	**Chapter 8:** Conventional Treatment: Coagulation, Flocculation
PM Session	12 pm – 2 pm	**Chapter 9:** Sedimentation, Clarifiers & **Chapter 10:** Filtration Fundamentals
Week 4		
AM Session	9 am – 11 am	**Chapter 12:** Iron and Manganese Removal
PM Session	12 pm – 2 pm	**Review:** Chapters 1-12
Week 5		
AM Session	9 am – 11 am	**Chapter 11:** Disinfection Methods
PM Session	12 pm – 2 pm	**Chapter 17:** Specialized Treatment Processes, Membrane Treatment Process, Ion Exchange Softening
Week 6		
AM Session	9 am – 11 am	**Chapter 14:** Water Quality Testing
PM Session	12 pm – 2 pm	**Chapter 3:** USEPA Water Regulations
Week 7		
AM Session	9 am – 11 am	**Chapter 18:** Electric Systems, Motors & **Chapter 19:** Pumps Operation and Pump Parts
PM Session	12 pm – 2 pm	**Chapter 20:** Operator Safety, SOP's & **Chapter 21:** Administration
Week 8		
AM Session	9 am – 11 am	**Basic Water Final Exam**
PM Session	12 pm – 2 pm	**Review Materials and Schedule Operators Exam**

WASTEWATER		
Week 9		
AM Session	9 am – 11 am	**What is Wastewater and How is it Collected?**
PM Session	12 pm – 2 pm	**Lab**
Week 10		
AM Session	9 am – 11 am	**How is Wastewater Treated and Where Does it Go?**
PM Session	12 pm – 2 pm	**Lab**
Week 11		
AM Session	9 am – 11 am	**How is Water Quality Monitored? Compliance & Process Control**
PM Session	12 pm – 2 pm	**Lab**
Week 12		
AM Session	9 am – 11 am	**Wastewater Final Exam**
PM Session	12 pm – 2 pm	**Review Materials and Schedule Operators Exam**
ON THE JOB TRAINING & INTRO TO BACKFLOW		
Week 13		
Monday – Thursday	TBD	**On the job with selected employer.**
Friday	9 am – 1pm	**Intro to Backflow:** History, hydraulics, regulations, and degrees of hazard
Week 14		
Monday – Thursday	TBD	**On the job with selected employer.**
Friday	9 am – 1pm	**Intro to Backflow:** Mechanical assembly functionality and standardized test step breakdowns, Gauge Intro
Week 15		
Monday – Thursday	TBD	**On the job with selected employer.**
Friday	9 am – 1pm	**Intro to Backflow:** Guided assembly diagnostics and troubleshooting simulated component failures. Wet Lab (Hands-on)
Week 16		
Monday – Thursday	TBD	**On the job with selected employer.**
Friday	9 am – 1pm	**Intro to Backflow:** Practical timed practice runs and review of written exam sample questions. Written examination and a proctored, hands-on performance test.

Textbooks/Manuals:

Water Treatment Plant Operation, Volume 1, 7th Edition

Sacramento State Training Manual: Operation of Wastewater Treatment Plants, Vol 1, 8th Edition

Manual of Backflow Prevention and Cross-Connection Control, 2015 Edition