

COURSE TITLE

Water Industry Mathematics Applied (3006)

COURSE DURATION

1 hour

OVERVIEW

For almost every job within any technical area of public service or public works, there is a requirement for an understanding of basic mathematics and how to apply such concepts. Within the water industry there are necessary mathematics calculations that must be successfully mastered for the safety and health of the public who utilize domestic and industrial water systems. This course covers beginning applied mathematics as used in the water supply industry. It is structured for beginning-level operators or those who have not had recent experience with mathematics in their jobs. Subjects covered in this course are: average daily flow, overflow rate, filter loading rate, detention time, and well operation calculations.

This training course has 9 learning modules with a 10-question exam.

PREREQUISITES

No prior knowledge is required.

BEHAVIORAL OBJECTIVES

After successfully completing this course, you will be able to:

- define key mathematical terms such as average daily flow, overflow rate and detention time.
- apply with accuracy basic mathematical concepts in both domestic and industrial water problem settings
- perform diurnal calculations based on diurnal graphs
- demonstrate proper filter operation calculations
- execute proper well operation calculations

COURSE OUTLINE

- Introduction - 2 minutes
- Order of Operations - 5 minutes
- Average Daily Flow - 5 minutes
- Overflow Rate - 10 minutes
- Diurnal Flow - 10 minutes
- Sand Filter Calculations - 5 minutes
- Detention Time - 5 minutes
- Well Operation Calculations - 5 minutes
- Design Flow Rates - 10 minutes
- Summary - 3 minutes

AVAILABILITY

This course is offered online and is available 24 hours a day, 7 days a week, 365 days a year.

TRAINING METHODOLOGY & EVALUATION

This course is self-paced online training. Review exercises and case studies reinforce the content, and students are evaluated with a multiple-choice exam. Upon completion, students are prompted to submit a course evaluation.