



PROJACS ACADEMY
by @egis



Wastewater Treatment Plants - Planning and Design

تخطيط وتصميم محطات معالجة مياه الصرف الصحي

13 – 17 February 2023

London / United Kingdom

Introduction

Wastewater treatment plants play a crucial role in protecting public health, the environment, and water resources. Planning and designing a wastewater treatment plant requires a deep understanding of various components and systems, such as treatment processes, equipment, and infrastructure. This course is designed to provide participants with an in-depth understanding of the planning and design of wastewater treatment plants.

Objectives

Upon completion of this course, participants will be able to:

- Understand the principles and processes involved in wastewater treatment
- Identify the components and systems of a wastewater treatment plant
- Analyze the factors that affect the design of wastewater treatment plants
- Develop a wastewater treatment plant design based on site-specific conditions and regulatory requirements
- Apply best practices in wastewater treatment plant planning and design

Who Should Attend?

This course is intended for engineers, environmental professionals, and other professionals involved in the planning, design and operating of wastewater treatment plants. It is also suitable for individuals who are interested in gaining a comprehensive understanding of wastewater treatment plant planning and design.

Course Outline

Day One

Introduction to Wastewater Treatment Plants

- Overview of wastewater treatment processes and systems
- Key components of a wastewater treatment plant
- Regulations and guidelines governing wastewater treatment plants

Day Two

Site Assessment and Data Collection

- Site selection and assessment for wastewater treatment plants
- Data collection and analysis for wastewater treatment plant design
- Environmental impact assessment

Day Three

Wastewater Treatment Processes and Equipment

- Physical, chemical, and biological treatment processes
- Equipment and technologies used in wastewater treatment plants
- Design considerations for wastewater treatment processes and equipment

Day Four

Wastewater Treatment Plant Design

- Design parameters and criteria for wastewater treatment plants
- Design of treatment processes and equipment
- Design of collection and conveyance systems

Day Five

Operations and Maintenance of Wastewater Treatment Plants

- Operations and maintenance of wastewater treatment plants
- Monitoring and control systems for wastewater treatment plants
- Troubleshooting and problem-solving in wastewater treatment plants

Training Method

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a 7" Tablet containing a copy of the presentation, slides and handouts
- Post-assessment

Program Support

This program is supported by interactive discussions, role-play, case studies and highlight the techniques available to the participants.

Schedule

The course agenda will be as follows:

- | | |
|---------------------|------------------|
| • Technical Session | 08.30-10.00 am |
| • Coffee Break | 10.00-10.15 am |
| • Technical Session | 10.15-12.15 noon |
| • Coffee Break | 12.15-12.45 pm |
| • Technical Session | 12.45-02.30 pm |
| • Course Ends | 02.30 pm |

Course Fees*

- **5,200 USD**
**VAT is Excluded If Applicable*

المقدمة

تلعب محطات معالجة مياه الصرف الصحي دورًا مهمًا في حماية الصحة العامة والبيئة وموارد المياه. يتطلب تخطيط وتصميم محطة معالجة مياه الصرف الصحي فهماً عميقاً للمكونات والأنظمة المختلفة، مثل عمليات المعالجة والمعدات والبنية التحتية. تم تصميم هذه الدورة لتزويد المشاركين بفهم متعمق لتخطيط وتصميم محطات معالجة مياه الصرف الصحي.

الأهداف

عند الانتهاء من هذه الدورة، سيتمكن المشاركون من:

- فهم المبادئ والعمليات التي تدخل في معالجة مياه الصرف الصحي
- التعرف على مكونات وأنظمة محطة معالجة مياه الصرف الصحي
- تحليل العوامل التي تؤثر على تصميم محطات معالجة مياه الصرف الصحي
- تطوير تصميم محطة معالجة مياه الصرف الصحي بناءً على الظروف الخاصة بالموقع والمتطلبات التنظيمية
- تطبيق أفضل الممارسات في تخطيط وتصميم محطات معالجة مياه الصرف الصحي

الحضور

هذه الدورة مخصصة للمهندسين والمهنيين البيئيين وغيرهم من المهنيين المشاركين في تخطيط وتصميم وتشغيل محطات معالجة مياه الصرف الصحي. كما أنها مناسبة للأفراد المهتمين باكتساب فهم شامل لتخطيط وتصميم محطة معالجة مياه الصرف الصحي.