

ETHANOL ENGINEER

In ethanol plant, an engineer is responsible for working closely with the management team to maximize efficiencies of plant operations and implement process improvement projects. Ethanol engineers can help an ethanol plant with cost-saving projects, such as energy reclaim/reduction, yield optimization and chemical usage reduction.

WHAT RESPONSIBILITIES WILL I HAVE?

- Troubleshoots problems as they arise
- Identifies process needs to maintain production levels
- Ensures compliance of environmental and health & safety needs of team members
- Because ethanol plants typically operate 24/7, be available in case of a breakdown or emergency
- Work closely with the plant manager and general manager to maximize efficiencies of plant operations
- Look for ways to optimize plant run time but mechanically and with personnel
- Identify process needs to maintain production levels
- Analyze plant data and develop reports based on plant operations
- Network with other engineers at other sites in order to share best practices and to solve problems
- Assist in the development and execution of projects
- Develop budgets for improvements and additions to plant
- Monitor infrastructure and machinery for maintenance needs
- Research new technology to improve processes at the plant
- Look for ways to increase product quality
- Ensure plant meets environmental and safety protocol



WHAT EDUCATION & TRAINING IS REQUIRED?

A bachelor's degree in chemical or electrical engineering is required; additional microbiology knowledge a plus

THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, biology, chemistry, writing, computer courses

TYPICAL EMPLOYERS

Ethanol plants, bio-energy firms and other biorefineries

FUTURE JOB MARKET/OUTLOOK



SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- American Coalition for Ethanol
- Renewable Fuels Association
- National Biodiesel Board

AVERAGE ANNUAL FULL-TIME SALARY

\$97,000