

# Food Scientist



ANALYZE, TRACK AND UNDERSTAND THE WAY OUR FOOD SYSTEMS WORK



Agtech Career Series in partnership with



## Food Scientists Maintain and Expand the Nation's Food Supply

*There has never been a better time to help our planet thrive. In farming, we can promote health, wellness, and food accessibility by innovating and finding new approaches to feeding a growing population. We should work toward creating safe, nutritious, delicious and sustainable food. Food science allows us to analyze, track and understand the way our food systems work. It's a field that has been around for centuries and today has helped us to reduce food waste and our environmental footprint.*



Organized



Creative



Observant

# Putting Food On the Table

## UNDERSTANDING THE BIOLOGICAL AND CHEMICAL PROCESSES THAT CROPS AND LIVESTOCK USE TO GROW

### WHAT DO WE DO?

A food scientist, or more precisely, agricultural food scientist, is a kind of scientist specializing in analyzing farm methods and food production practices that will help farms increase their yields and improve food safety and other factors.

To contribute in this manner, the scientist will conduct experiments, then analyze the data found. They often use their findings to create new and innovative ways to augment agricultural output or improve the quality of our food supply. A lot of their work involves visiting farms and other sites to get samples. Then they must communicate their findings to their clients, which includes farmers, members of the scientific community, and at times policy-makers. In a lot of cases, an agricultural food scientist can lead and coordinate important food-related research.

So, agricultural food scientists play a vital role in maintaining and expanding our nation's food supply. Whether through basic research that helps them understand essential processes by which crops and livestock grow or applied research that is more focused on discovering new ways to improve the quantity, quality, and safety of agricultural products, agricultural food scientists are very much in need.

### SOME OTHER ASPECTS OF THE ROLE INCLUDE:

- Determining food nutrient levels and analyzing their content
- Looking for new nutritional food sources
- Studying farm crops and animals
- Studying environmental factors that impact crop production, pasture growth and breeding
- Studying the effects of cultivation techniques, insects, soils, and plant diseases on crop or animal production
- Developing ways to conserve water and soil
- Advising farmers and managers on innovative strategies that can improve production
- Investigating the best and most economical ways to make food taste good, healthy and safe

*If there's one food you could improve what would it be and why?*

WE ♥  
FOOD!



# Job Description

## RESEARCHING WAYS TO IMPROVE THE EFFICIENCY AND SAFETY OF AGRICULTURAL PROCESSES AND PRODUCTS

### CORE FUNCTIONS

- **Design, execute** and **interpret** experiments to develop and optimize food
- **Understand processes** and equipment to create practical solutions
- **Identify, research** and **implement** new methods to help reduce costs, improve productivity, quality and ROI
- **Document requirements** for food processes, specification for materials and finished goods
- **Synthesize data** from a wide range of disciplines to develop innovative approaches to problems
- **Use specific equipment** and instruments to perform tasks
- **Supervise** other team members

### SKILLS & ABILITIES

- **Passionate** about science
- Good **communication** and public speaking skills
- Works well on a **team**
- Has **creative** problem-solving skills
- Excellent **interpersonal** skills
- Interested in **farming**

### Requirement

To enter this field, you require a 4-year bachelor's degree or even a master's or doctorate in a related discipline such as technology, biochemistry, chemistry or microbiology. These degrees include coursework in microbiology, chemistry and engineering as you will be analyzing the principles of food deterioration and processing, as well as its nutritional profile.

### Tip

Overall, food scientists are versatile, collaborative and interdisciplinary practitioners committed to advancing the field of food science, ensuring an abundant and safe food supply while contributing to better health for everyone on the planet. Would you consider taking on this profession? If so, know that you would be making a huge difference!

### Salary

\$92,163 or \$48.26 per hour