

# CHOOSING A CAREER IN CROP SCIENCE



**A CAREER IN SCIENCE.  
A LIFETIME OF ADVENTURE.**

**DIG IN. DO GOOD.**



## WANT TO LITERALLY FEED THE WORLD? THIS IS HOW.

Crop science is more than farming. It's the biology, chemistry, genetics, and technology behind every plant that feeds, fuels, or clothes humanity. If you love science and want your work to matter from day one, this is it.

### WHAT IS CROP SCIENCE?

Crop science is the art and skill of growing food, feed, and fiber crops using cutting-edge science and technology. You work with plants and everything affecting their development—light, water, temperature, nutrients, diseases, weeds, insects. Think plant genetics meets environmental science meets biotechnology.

You'll identify, develop, and manage crops for agriculture, urban spaces, and rangelands. Your work spans activities from breeding disease-resistant varieties to improving soil health to developing sustainable pest management. Every breakthrough helps farmers grow more food on less land with fewer resources.

**YOUR LAB WORK BECOMES FIELD SOLUTIONS. YOUR RESEARCH FEEDS MILLIONS.**

### WHAT DO CROP SCIENTISTS DO?

Design crops that withstand drought, heat, disease. Develop sustainable pest management. Research plant nutrition and soil fertility. Explore crop biodiversity. Test new seed varieties. Use molecular biology and genetics to make crops more nutritious and stress tolerant. Analyze environmental impacts. Model crop yields using AI and data science. Work internationally to solve global food security challenges.

### WHY BECOME A CROP SCIENTIST?

The work is incredibly diverse. Laboratory or fieldwork? Both. Genetics or practical agronomy? Choose your specialty. Work for seed companies, life science firms, farms, USDA, international organizations, or universities.

Specializations include: plant breeding, genetics, molecular biology, biotechnology, plant physiology, pest and weed management, turfgrass science, seed science, plant diseases, ecology.

Discovery research or real-world application?  
Private sector, academia, or government?  
Laboratory or field? **YOU DECIDE.**

## WHAT DO CROP SCIENTISTS NEED?

- 1 Passion for the plant sciences
- 2 Strong foundation in science, especially biology
- 3 Interest in genetics and biotechnology
- 4 Problem-solving mindset
- 5 Drive to improve food and nutrition security

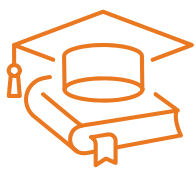
**No farm background required.**

## THE FUTURE OF CROP SCIENCE



### JOB OUTLOOK:

Growing **6 percent** from 2024 to 2034, faster than average. Climate change, population growth, and sustainable agriculture drive demand.



### EDUCATION REQUIRED:

**Bachelor's degree** minimum in Crop Science, Plant Science, Agronomy, or related field. Many research positions require Master's or PhD.

**\$83K**  
AS OF 2024

### AVERAGE SALARY:

Crop scientists will have earnings comparable to soil and plant scientists and earn a median annual wage of **\$83,040**, according to the Bureau of Labor Statistics May 2024.





## GET STARTED

### IN HIGH SCHOOL:

Excel in biology, chemistry, math. Join agriculture organizations or clubs. Seek internships at agricultural research stations or seed companies.

### IN COLLEGE:

Major in Crop Science, Plant Science, or Agronomy. Take genetics, plant pathology, soil science, plant breeding, molecular biology.

## THE BOTTOM LINE

Crop scientists help solve humanity's biggest challenge—feeding billions while protecting the planet. Your genetics research becomes drought-resistant wheat. Your pest management project reduces chemical use. Your breeding programs create nutritious crops.

**IT'S A CAREER ROOTED IN SCIENCE. BUT MORE IMPORTANT, IT IS A CAREER THAT WILL TAKE YOU ON A LIFETIME OF FULFILLING ADVENTURE—PROFESSIONALLY AND PERSONALLY**