

AG RESEARCH

AgCareers.com developed career profiles for high demand jobs in the agricultural industry. These career profiles are a helpful resource for students and job seekers to explore new roles in the industry, as well as for career educators.

Laboratory Technician

JOB OVERVIEW

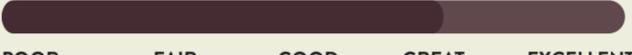
Prepare samples, carry out experiments, make measurements, record results & present for critical analysis

Collect, classify & preserve specimens & samples

Perform routine mathematical calculations & prepare graphs; assist in the writing of lab reports

Clean, maintain & set up experimental equipment; perform quality assurance checks

JOB OUTLOOK



EDUCATION NEEDED

Bachelor's degree in laboratory science, biology, chemistry, or other relevant field

RECOMMENDED H.S. COURSES

Ag education, anatomy, biology, mathematics, English, chemistry, physics

TYPICAL EMPLOYERS

Variety of labs - seed, chemical, animal health, biotech - in academic, government, or company settings

Research & Development Manager

JOB OVERVIEW

Oversee research activities & develop knowledge-based products for a company

Develop research programs incorporating current developments to improve existing products & study potential of new products

Manager trial & testing programs for products/services through management of staff

Present at industry conferences on research topics of interest

JOB OUTLOOK



EDUCATION NEEDED

Master's degree in field you will be applying knowledge

RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, business & computer courses, mathematics

TYPICAL EMPLOYERS

Any company developing & testing new products to sell (plant, biotech, alternative energy, food, animal health)

Research Station Manager

JOB OVERVIEW

Manage research station operations for a university or organization with offsite research

Provide procedures for the collection, classification & preservation of specimens & samples

Supervise research trials & projects in an effort to achieve validated research data

Ensure compliance to safety & environmental regulations

JOB OUTLOOK



EDUCATION NEEDED

Bachelor's degree in desired work area (i.e. agriculture, crop science, soil science, animal science)

RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, horticulture, Spanish, physics, business and computer courses, mathematics

TYPICAL EMPLOYERS

Land Grant universities, companies with research farms &

Research Technician

JOB OVERVIEW

Assist scientists conducting research in lab or outdoor setting

Operate & maintain lab equipment, ensure lab is properly stocked, and clean and sanitize lab or research area

Record data from experiments & input data into software programs & draft progress reports

Assist in research activity & participate in research planning sessions

JOB OUTLOOK



EDUCATION NEEDED

Bachelor's degree in focus area of research (i.e. agronomy, horticulture, animal science)

RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, physics, mathematics

TYPICAL EMPLOYERS

Universities; general research facilities; seed, animal health, or pharmaceutical companies

Product Development Manager / Demand Planner

JOB OVERVIEW

Oversee product control, strategy & distribution throughout sales networks

Develop new products & technology that will potentially add value to the company

Assess the product's profitability through market research & competitive analysis

Assist in positioning product performance & manage global development programs

JOB OUTLOOK



EDUCATION NEEDED

Master's or Doctorate in desired field of work (i.e. plant pathology, ruminant nutrition)

RECOMMENDED H.S. COURSES

Ag education, a focus on the sciences, business & computer courses, mathematics

TYPICAL EMPLOYERS

Medium to large-scale agricultural organizations & companies, some government agencies

Analytical Chemist

JOB OVERVIEW

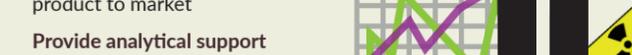
Study chemical compounds to determine what they are composed of & how they interact with other substances

Provide solutions to support formulation, active ingredient & packaging development

Conduct product chemistry studies that meet worldwide regulatory requirements which help bring new product to market

Provide analytical support

JOB OUTLOOK



EDUCATION NEEDED

Bachelor's or Master's in chemistry or laboratory science

RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, anatomy, physics, writing, computer science, advanced mathematics

TYPICAL EMPLOYERS

Agriculture companies that develop chemical & pharmaceutical solutions for farmers

Formulation Chemist

JOB OVERVIEW

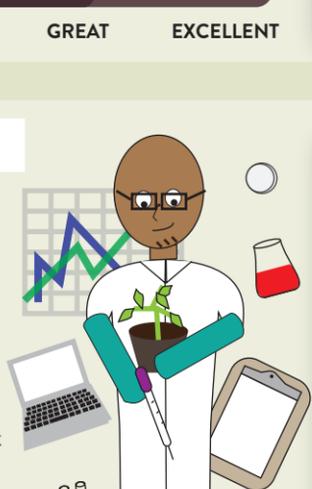
Design & develop new crop protection products

Plan, organize & conduct experiments to optimize the biological, marketing, regulatory & production performance of products

Plan and control/carry out lab work to develop, understand & test new & improved manufacturing processes

Record & deliver critical data

JOB OUTLOOK



EDUCATION NEEDED

Master's or PhD in chemistry

RECOMMENDED H.S. COURSES

Ag education, statistics, algebra, genetics, physics, chemistry, physics

TYPICAL EMPLOYERS

Academia; animal pharmaceutical, crop protection & alternative energy companies; biotechnology firms

Biostatistician

JOB OVERVIEW

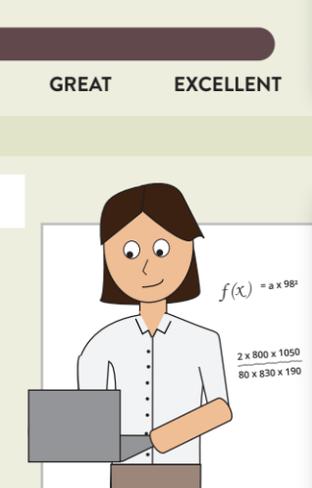
Use math & statistics to find ways to solve scientific problems

Assist in developing statistical techniques, design studies & analyze data

Review case reports & forms to ensure protocol objectives are met & that project standards are maintained

Conduct retrospective database analysis in order to determine effectiveness of past treatments

JOB OUTLOOK



EDUCATION NEEDED

Master's or PhD in statistics, biostatistics, mathematics, or statistical genetics

RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, statistics, anatomy, advanced mathematics

TYPICAL EMPLOYERS

Animal pharmaceutical & biotechnology companies, academia, research groups & companies

PROFESSIONALS IN AG RESEARCH CAN EXPECT TO EARN AN AVERAGE OF \$80,500 PER YEAR