

# AG TECHNOLOGY

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.

## Geospatial Analytics Specialist

### JOB OVERVIEW

Assess, integrate, manipulate & extract data from GPS and other databases to improve precision agriculture

Work with IT and scientists to develop software platforms that enable cutting-edge research

Plan, prepare & maintain maps & geographic representations

Design & test algorithms and conduct prototyping to evaluate possible scenarios

### JOB OUTLOOK



### EDUCATION NEEDED

Master's in agricultural engineering, civil engineering, computer science, or GIS

### RECOMMENDED H.S. COURSES

Ag education, mathematics, computer courses, geography, biology

### TYPICAL EMPLOYERS

Government agencies and agricultural companies with precision agriculture platforms

## Information Technology Analyst

### JOB OVERVIEW

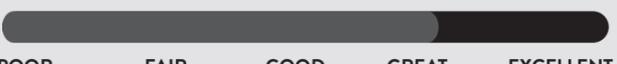
Support the analytical needs of a business through the analysis of moderately complex system data & summary reports

Derive conclusions & summarize actionable insights for specialty area

Design & prep various reports, charts & graphs to depict trends

Drive value from existing IT applications through data availability & other means

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's in an IT field

### RECOMMENDED H.S. COURSES

Ag education, advanced mathematics, computer courses

### TYPICAL EMPLOYERS

Agricultural companies with major technology systems and needs

## IT Mobile App Developer

### JOB OVERVIEW

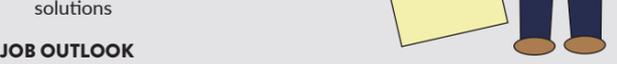
Design, build, test, produce & improve mobile apps

Create visually appealing as well as intuitive user interfaces

Analyze, review & assess user requirements, specifications & models for understanding user needs

Handle support & documentation of the mobile applications created; troubleshoot & implement testing solutions

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's degree in computer science, information systems, MIS, information technology, or software engineering

### RECOMMENDED H.S. COURSES

Ag education, computer courses, mathematics, art

### TYPICAL EMPLOYERS

Medium to large-scale agricultural companies of varying types

## IT Configurator

### JOB OVERVIEW

Serve as a consultant specializing in the configuration of large software products

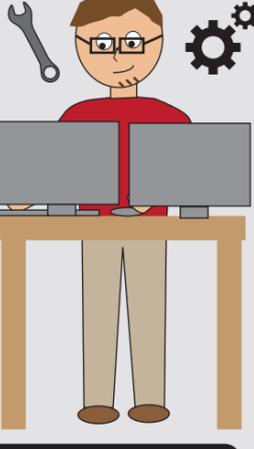
Prepare gap analysis on one program version to the highest version

Configure various modules to meet specific business requirements

Design & develop interfaces, reports & forms

Test & upgrade software

### JOB OUTLOOK



### EDUCATION NEEDED

Master's degree in computer science or computer engineering

### RECOMMENDED H.S. COURSES

Ag education, computer courses, mathematics, coding

### TYPICAL EMPLOYERS

Any one of a variety of companies require advanced IT assistance in managing their operating systems

## IT Programmer

### JOB OVERVIEW

Analyze to ensure that writing, testing & maintenance of computer programs meet user needs

Design all or part of an information system

Define & incorporate system security & control procedures to protect data

Create & maintain documentation for code and/or configuration

Ensure testing of programs meet accepted criteria

### JOB OUTLOOK



### EDUCATION NEEDED

Associate's or bachelor's in computer science or information systems

### RECOMMENDED H.S. COURSES

Ag education, computer courses, mathematics

### TYPICAL EMPLOYERS

Medium to large-scale agricultural companies with both internal & external software maintenance needs

## IT Software Developer

### JOB OVERVIEW

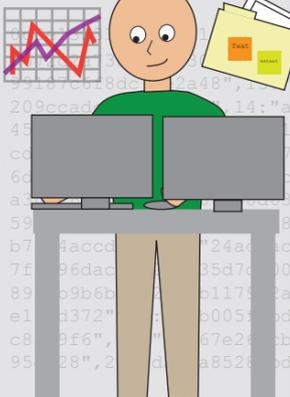
Create programs for computers or other devices that fill a specific need or niche

Provide technical & systems design expertise as well as ongoing production support

Install & test software

Promote agile practices such as continuous integration, paired programming & cross-functional development within the team

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's in computer science or computer engineering

### RECOMMENDED H.S. COURSES

Ag education, computer courses, coding, mathematics

### TYPICAL EMPLOYERS

Agricultural companies that provide software solutions to producers/end users will hire to create & maintain programs

## IT Specialist

### JOB OVERVIEW

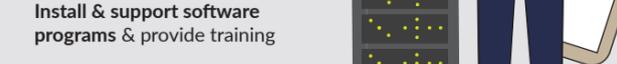
Serve as support to branch offices on all phases of technology use by employees

Assist in administering & maintaining technical infrastructure as well as security, hardware & more

Perform maintenance & troubleshooting on company computers

Install & support software programs & provide training

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's in information technology, computer science, or related field

### RECOMMENDED H.S. COURSES

Ag education, computer courses, coding, mathematics

### TYPICAL EMPLOYERS

Small to large companies with any sort of technology need or computing systems requiring assistance

## IT Web Developer

### JOB OVERVIEW

Build & maintain a website to fit the needs of the company or customer using layout & coding

Utilize XML tools & technologies

Analyze database integration from web environments

Modify & document web code to correct errors or to enhance a program's capabilities

Plan, direct & execute measurable & continuous improvements

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's degree in information technology, computer science or related field

### RECOMMENDED H.S. COURSES

Ag education, computer courses, coding, art, mathematics

### TYPICAL EMPLOYERS

Medium to large agricultural companies, PR firms, software developers, or may be self-employed

## Precision Ag Specialist

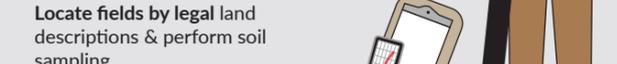
### JOB OVERVIEW

Provide support & technical assistance to growers using precision technologies on their farms

Implement actual work of grid & contour differential global positioning systems for soil sampling, information maps & more

Locate fields by legal land descriptions & perform soil sampling

### JOB OUTLOOK



### EDUCATION NEEDED

Bachelor's in ag engineering, agronomy, or agribusiness

### RECOMMENDED H.S. COURSES

Ag education, biology, chemistry, computer courses, mathematics

### TYPICAL EMPLOYERS

Precision equipment/ag retailers, cooperatives, and extension

PROFESSIONALS IN AG TECHNOLOGY CAN EXPECT TO EARN AN AVERAGE OF \$74,300 PER YEAR