

## Welcome to the World of High Tech Ag Careers

Globally, agriculture employs people having a wide variety of educational backgrounds and skill sets. These talented people face a daunting challenge - feeding, housing and clothing the 7.3 billion people currently living on the planet (*9.7 billion* by 2050). Now more than ever, it is important that today's youth pursue agriculture-related careers!

There is an incredible scope of agricultural career opportunities out there. Tim Hammerich wrote a great e-book, **300+ Careers in Agriculture**, available at [Tim@AgGrad.com](mailto:Tim@AgGrad.com). The book organizes Agricultural professions into seven career categories: "Production Agriculture", "Processing and Distribution", "Agribusiness", "Science and Research", "Education and Communication", "Resource Management", and "Engineering". In this newsletter issue, we will focus on careers in **Ag Engineering**.

The American Society of Agricultural Engineers (ASAE) defines Agricultural and Biological Engineering as the discipline of engineering that applies engineering principles and the fundamental concepts of biology to agricultural and biological systems ranging in scale from molecular to ecosystem levels. "Ag engineering provides safe, efficient and environmentally sensitive production, processing, and management of agricultural, biological, food, and natural resources systems" (ASAE). If you are a person who likes science and math, loves to problem-solve, and is interested in improving the way people use the earth's natural resources, you should consider a career in Ag Engineering!

Ag engineering has been instrumental in developing drone technology and robotics that vastly improve the efficiency of agricultural production. Take a look at these you tube links to get an idea of what's out there in the high-tech world of agriculture (and prepared to be amazed).

### Farm Drones

<https://www.youtube.com/watch?v=v3YcZtIVrls>



### Farm Robots

<https://www.youtube.com/watch?v=RI77FVobxVI>



Here are some examples of ag-related engineering careers. For profiles about these and other Ag Engineering careers, check out <http://www.AgGrad.com/podcast> .

Ag Construction Engineer

Ag Equipment Engineer

Safety Engineer

Agricultural Engineer

Food Engineer

Hydraulic Engineer

Irrigation Engineer

Research Engineer

Computer Software Design

Computer System Analyst

For more information about *educational preparation* for a career in Ag Engineering, please see the material on the ASAE link: <https://www.asabe.org/news-public-affairs/about-this-profession.aspx> . It is never too early for students to start thinking about future career opportunities!

Submitted by Maureen Russell