🎓 Start at School | Years 9 - 12:

Agriculture / Primary Industries | STEM subjects (Maths, Science, Digital Technology) | Work experience on farms or with agricultural businesses.

AgTech Specialist

Pathway: From School to Smart Agriculture Careers

AgTech Specialists combine technology, data, and farming expertise to help farmers produce more with fewer resources. Using GPS, drones, sensors, automation, and data analytics, they turn technology into practical solutions that increase efficiency, sustainability, and profitability.

Work locations include paddocks, workshops, offices, and digital environments, making the role ideal for people who enjoy both outdoor work and technology.

💼 What You'll Do

- Set up and maintain precision agriculture systems (GPS, autosteer, variable-rate technology)
- Fly drones and analyse satellite imagery for crop health, soil and water monitoring
- Install and maintain sensors, telemetry, and IoT systems
- Support automated and robotic machinery
- Analyse farm data and provide practical recommendations
- Train farmers and staff to use technology effectively
- Troubleshoot technical issues in the field or remotely

💼 Job Titles You Might See

- AgTech Specialist
- Precision Agriculture Technician
- Agriculture Technology Advisor
- Ag Technology Integration Specialist
- Machinery Systems Support Specialist
- Precision Ag Data Technician

🧠 Skills You'll Use

Technical Skills:

- GPS/GNSS and RTK systems
- Precision agriculture and farm management software
- Drones, remote sensing, and photogrammetry
- GIS mapping and data visualisation tools
- Sensors, telemetry, and IoT fundamentals
- Machinery, electronics, and automation knowledge

Employability Skills:

- Problem-solving and critical thinking
- Communication and training skills
- Adaptability and learning new technologies
- Safety awareness and teamwork

🎓 VET Pathways (Job-Ready Skills)

Entry Level: Certificate II/III in Agriculture or Rural Operations with technology focus.
Leads to: Agriculture Technology Assistant, Junior AgTech support roles

Technician Level: Certificate III in Agricultural Mechanical Technology | Certificate IV in Agriculture | Certificate IV in Engineering Technologies | Certificate IV in Information Technology (Applied) | Diploma of Agriculture / Agribusiness / Engineering Technologies
Leads to: Agricultural Mechanic, AgTech Specialist, Precision Agriculture Technician, Agricultural Systems Technician

🎓 University Pathways

Bachelor of Agricultural Science - Major in Agricultural Technology
Combined degree in Bachelor of Engineering and Bachelor of Agriculture
Microcredentials and Graduate Certificates in AgTech
Leads to: Precision Ag Specialist, AgTech Consultant, Agricultural / Automation Engineer, Data Analyst (Agriculture)

🚀 Typical Career Pathway

School / VET → **Entry-Level AgTech Assistant** → **AgTech Specialist** → **Senior Consultant / Precision Ag Lead**

Start with Certificate II, III, IV in Agriculture, Agribusiness, or Engineering Technologies, plus on-farm experience → Progress to Diploma or University degrees (Agriculture, AgTech, Data Science, Engineering) → Specialise in data analytics, precision machinery, IoT, and farm systems integration → Work on farms, advisory services, research trials, or precision agriculture service teams

📈 Career Outlook

- Strong demand in regional WA (Great Southern & Wheatbelt)
- High adoption of precision agriculture on large-scale farms
- Mix of outdoor work, technology, and problem-solving
- Local jobs with global relevance
- Key role in sustainable food production

🏢 Typical Employers

- **Farms & Agribusinesses:** Family-owned and corporate grain farms | Mixed-enterprise farms (crops + livestock) | Large pastoral enterprises | Farm retail sales
- **Agronomy & Advisory Services:** Independent agronomy consultancies | Crop and farm management advisory firms | Grower groups and systems groups
- **Machinery & Technology Service Providers:** Agricultural machinery dealerships with GPS/autosteer support | Precision agriculture technology providers | Telemetry, sensors, and automation service companies
- **Government, Research & Training Organisations:** AgTech Start-ups | DPIRD research farms | Muresk Institute | University research labs | Research groups and agricultural extension services