WARWICK
THE UNIVERSITY OF WARWICK

Warwick Agri-Tech

Innovation for a Sustainable Future

Combining advanced engineering with plant science, delivering solutions to shape the next generation of agriculture.

Warwick Agri-Tech is:

A fusion of sector specialists.

Engineering (WMG):
Warwick Manufacturing Group (WMG), as part of the University of Warwick, and a High Value Manufacturing Catapult, brings world leading research on automation, AI and robotics to agriculture.

Crop Sciences:
Warwick Crop Centre (WCC) and the School of Life Sciences (SLS) are internationally recognised for translational research in sustainable agriculture and bring unique skills and specialist facilities for crop science research, especially for fresh produce.

Warwick Agri-Tech will

- Bring a unique mix of advanced capabilities in engineering, technology and crop science.
- De-risk innovation for industry.
- Support project development from Technical Readiness Levels 3-7.
- Provide access to world-class facilities, expertise and networks.
- Offer technology leadership for effective engagement with industry across sectors.
- Bring expertise in engineering biology alongside a large portfolio of strategic partnerships to form collaborative initiatives.
- Accelerate commercial adoption of Agri-Tech.

Our capabilities

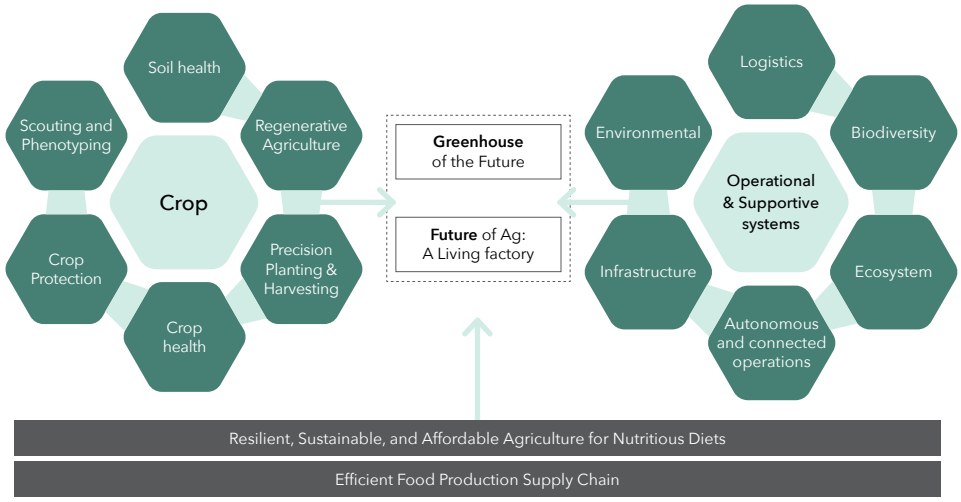
Engineering

- Robotics and manipulation
- Perception & sensing
- Artificial intelligence
- Smart automated farming
- Digital twin
- Augmented reality

Biology

- Crop improvement and precision breeding
- Smart crop protection, IPM, biopesticides
- Epidemiology of crop pests & diseases
- Soils and soil microbiology
- Bioinformatics
- Policy and knowledge exchange

Action plan **to help drive and shape the future of agriculture**



Vision
Warwick Agri-Tech

"To secure the global food system and reduce human impact under all nine planetary boundaries by advancing research in automation, robotics, AI and plant science (Engineering Biology)"

Principles

Build capabilities in advance engineering biology

Planet first and sustainable food system

100% Alignment with industry

Cost-effective deployment

Sustainable approach

Innovative solutions

Target sectors

Field Agriculture | Protected Horticulture | Outdoor Horticulture | Forestry

Our Projects

Examples of our recent publicly funded projects

- **CropMap**
  Scouting Robot for lettuce - Crop Health
- **ASPA**
  Autonomous Spot Application Robot for weed elimination – Soil Health
- **STPS**
  Smart Tree Production System for precision grading of trees – Autonomous and Connected Operations
- **ICROSS**
  Integrated Crop Scouting System for Pest/disease - Crop Protection

Find out more Contact us at wmgbusiness@warwick.ac.uk