

Science and technology into the future

How science and technology are applied
to the Food and Fibre sectors



Environmental

- Effluent management
- Meteorology
- Hydrology
- Microbiology
- Soil & water sciences
- Conservation
- Waterways
- Coastal habitats
- Disease control
- Bioremediation
- Entomology
- Climate change



Engineering

- Robotics
- Geospatial
- Wind farming
- Aeronautics
- Biochemical
- Refrigeration
- Telecommunications
- Biomass energy
- Autonomous freight shuttles
- Agrophysics
- Biometrics
- Graphene filtering
- Fog catchers
- Biogas generation
- Thermal hydrolysis
- Adaptive ecological technology



Research & development

- Agronomy
- Genetics
- Carbon usage analytics
- Chemistry
- Biochemistry
- Taxonomy & systematics
- Plant pathology
- Molecular diagnostics
- Agroecology
- Nanotechnology
- Biotechnology



Innovation

- Desalination & ring gardening
- Aeroponics
- Aquaponics
- Plantscaping
- Modular farming
- Sky farming
- Genome editing
- Smart phone apps
- Pathogenesis
- Sea ranching
- Bioconversion
- Last mile delivery
- Exoskeletons
- Autonomous vehicles
- Self-sailing electric cargo ships



IT & design

- Software design
- The Internet of Things (IoT)
- Big data analysis
- Machine learning
- Bioinformatics
- Artificial intelligence
- Systems modelling
- Drones (unmanned aerial systems)
- Predictive analytics
- Social network analysis
- Remote sensing devices
- Intelligent packaging
- Algorithmic modelling



Production & manufacturing

- Hydroponics
- Urban vertical farming
- LED & refrigeration
- Recirculating aquaculture systems
- Production ecology
- Mercerisation (wool process)
- Bag tipping station design
- CO₂-based refrigerants

