

# RESEARCH CAPACITY 2023

## ENVIRONMENT & SUSTAINABILITY

TRANSLATION, INTEGRATION AND INNOVATION



WESTERN SYDNEY UNIVERSITY SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS



### HAWKESBURY I CLIMATE CHANGE SCIENCE

Research capability to tackle the most pressing issues in environmental and natural sciences that has global reach.

#### KEY CAPACITIES

- Genome Sequencing
- Bushfire Science
- Plant and Animal Ecology
- Ecosystem Modelling
- Soil Health

### PENRITH PRECINCT URBAN INNOVATION

Here is our testbed for progressive research in engineering, managing, planning and greening urban landscapes of tomorrow.

#### KEY CAPACITIES

- Sustainable and Smart Construction
- Circular Economy
- Advanced Materials and Manufacturing
- Sustainable Urban Living

### HAWKESBURY II GLOBAL FOOD SECURITY

A rich history in agricultural research and practice, vast landholdings and unique field-based research facilities support research that investigates how to feed the world.

#### KEY CAPACITIES

- Protected Cropping
- Biosecurity
- Crop Pollination

### PARRAMATTA CBD GREEN ECONOMY

In the Central River City, we develop solutions to enhance and protect global biodiversity while progressing environmental responsibility.

#### KEY CAPACITIES

- Urban Transformation
- Engineering Innovation
- Carbon Accounting
- Industry Start-ups

### PARRAMATTA SOUTH AND CBD RESILIENT COMMUNITIES

Our evidence-based concepts for urban and social renewal aim at building resilient cities and communities.

#### KEY CAPACITIES

- Urban Heat
- Environmental Activism
- Zero Waste
- Planetary Health

### AEROTROPOLIS - NEW ENVIRONMENTAL FRONTIERS (FORTHCOMING)

We provide aviation and aerospace research programs as partner of the Multiversity at the Aerotropolis and actively contribute to the creation of a highly skilled local workforce and technologies necessary to explore space.

#### KEY CAPACITIES

- Defense and Space Applications
- Aerospace and Aviation Technology