

University Capacity

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Hydrology

Fluvial Geomorphology

Plant Ecology

What can Universities deliver?

TRAINING

APPLICABLE RESEARCH

RESEARCH COLLABORATION

but

UNIVERSITIES ARE
AUTONOMOUS ORGANISATIONS
(BUSINESS MODELS
INCREASINGLY DIRECT
TRAINING AND RESEARCH)

TRAINING - Undergraduate Programmes

single honours programmes

e.g. Biology, Environmental Engineering, Geography

combined honours / multidisciplinary programmes

e.g. Environmental Science(s)

Provide

(i) basic biological, chemical, physical process, and social science understanding

(ii) understanding of how to conduct and interpret research

(iii) transferable skills such as data handling, analysis, simple modelling; critical thinking and problem solving; report writing

TRAINING - Masters Programmes

Provide specialist training in specific areas of freshwater science and management

- (i) 45 Universities offer MSc programmes that entirely or mainly focus on freshwater environments
- (ii) Heavy emphasis on the physical/chemical/engineering aspects (39 programmes)
- (iii) A significant number of broadly based courses embracing biological, chemical and physical sciences, with some extending to social science aspects (14 programmes)
- (iv) Few programmes place their main emphasis on biological / ecological aspects (3 programmes)
- (v) An increasing number of programmes offer part time study and organise placement experience

TRAINING – Other

Provide specialist training in specific areas of freshwater science and management

- (i) PhD – full or part time, often explicitly linked with industry or management agencies
- (ii) Short courses – many are available, particularly where MSc modules are made available in this form.
- (iii) Multidisciplinary / interdisciplinary / transdisciplinary

UNIVERSITY RESEARCH

University research can contribute new ideas / directions, can add value to existing methods / data sets, and can offer truly collaborative opportunities:

- (i) 'Blue skies' research - can yield results that feed into future environmental management
- (ii) Research collaboration with consultants and environmental management agencies can operate in many ways:
 1. collaborative identification and prioritisation of important research opportunities
 2. development of research opportunities arising from management operations
 3. pooling data to add value
 4. working together to provide a better framework for decision making