

BSc Sustainability: Environmental Science and Engineering

CAO Code: DN240

Sample pathway for a degree in Sustainability *



YEAR
1

ENGAGE WITH THE PRINCIPLES

FIRST YEAR - COMMON TO BOTH PATHWAYS.

SUSTAINABILITY

Topics include:

- ▶ Concepts and research tools in sustainability
- ▶ Policy, law and Economics of Sustainability

ENVIRONMENTAL SCIENCE & ENGINEERING

Topics include:

- ▶ Principles of Scientific Enquiry
- ▶ Basis of Organic and Biological Chemistry
- ▶ Calculus

- ▶ Climate Change, Causes and Consequences

SOCIAL SCIENCES

Topics include:

- ▶ Mapping a Sustainable World
- ▶ Global Development
- ▶ Environmental Change and Policy

YEAR
2

CHOOSE YOUR SUBJECTS

ENVIRONMENTAL SCIENCE AND ENGINEERING PATHWAY

Topics include:

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Statistical Modelling
- ▶ Chemistry for Biology
- ▶ Land Use and the Environment
- ▶ Energy Climate Change and Policy
- ▶ Principles of Environmental Biology and Ecology

- ▶ Global Environmental Change
- ▶ Weather, Climate and Climate Change
- ▶ Research tools for sustainability
- ▶ Innovation, Communication and Careers in Sustainability

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ Achieving the Sustainable Development Goals
- ▶ Introduction to GIS for Sustainability

YEAR
3

REFINE YOUR KNOWLEDGE

ENVIRONMENTAL SCIENCE AND ENGINEERING PATHWAY

Topics include:

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Working with Biological Data
- ▶ Waste Management
- ▶ Environmental & Sustainable Chemistry
- ▶ Energy Climate Change and Policy
- ▶ Principles of Environmental Biology and Ecology
- ▶ Wildlife Conservation and Fisheries Management

- ▶ Forest Climate and Carbon
- ▶ Geoscience for Sustainability
- ▶ Professional Work placement
- ▶ Field trip

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ Environmental Law and Policy

YEAR
4

FOCUS ON YOUR CHOSEN SUBJECT

ENVIRONMENTAL SCIENCE AND ENGINEERING PATHWAY

Topics include:

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Research Project
- ▶ Agri-Environmental Issues and Policy
- ▶ Transport operations and planning
- ▶ Environmental Impact Assessment

- ▶ Marine Community Ecology
- ▶ Environmental Assessment
- ▶ Environmental Geology
- ▶ Energy Systems and Climate Change
- ▶ Climate Model and Scenario Applications
- ▶ Interdisciplinary project on Sustainability

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ The Urban Environment
- ▶ Climate Politics and Policy
- ▶ Behavioural Economics for Environmental Policy

BSc (Honours) Sustainability: Environmental Science and Engineering

MSc (Taught)

- ▶ MSc Applied Environmental Science
- ▶ MSc World Heritage Management
- ▶ MSc Plant Biology
- ▶ MSc Climate Change: Science and Impacts
- ▶ MSc Environmental Sustainability
- ▶ MSc Environmental Technology
- ▶ MSc(Agr) Rural Environmental Conservation and Management
- ▶ MSc (Agr) Sustainable Agriculture and Rural Development
- ▶ MSc Sustainable Energy and Green Technology
- ▶ MSc Wildlife Conservation and Management
- ▶ MEngSc Water, Waste and Environmental Engineering

PhD

- ▶ Students can pursue a PhD in universities in Ireland or abroad in areas such as ecology, microbiology, fisheries, conservation biology, environmental management and global change

Industry

- ▶ Careers as consultants, managers and advisers in large organisations and private businesses.
- ▶ International organisations such as the UN, the European Environment Agency and the European Commission, government departments and state agencies Conservation Organisations.
- ▶ Diverse areas such as renewables, clean technology management and energy efficiency
- ▶ Advise industries on social and environmental strategies.

*See pages 4 and 5 for information on the terminology used above. Potential combinations shown here are examples only and are not guaranteed by UCD. Topics are subject to change each year.

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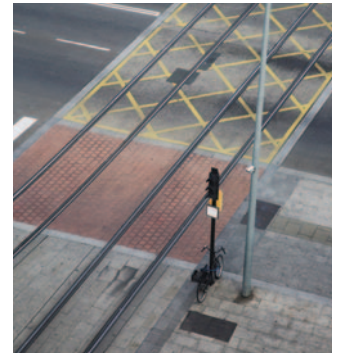


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sustainability

BSc Sustainability: Social Sciences, Policy and Law

CAO Code: DN240

Sample pathway for a degree in Sustainability *



YEAR
1

ENGAGE WITH THE PRINCIPLES

FIRST YEAR - COMMON TO BOTH PATHWAYS.

Topics include:

SUSTAINABILITY

Topics include:

- ▶ Concepts and research tools in sustainability
- ▶ Policy, law and Economics of Sustainability

SOCIAL SCIENCES

Topics include:

- ▶ Mapping a Sustainable World
- ▶ Global Development

ENVIRONMENTAL SCIENCE & ENGINEERING

Topics include:

- ▶ Principles of Scientific Enquiry
- ▶ Basis of Organic and Biological Chemistry
- ▶ Calculus
- ▶ Global Environmental Change

YEAR
2

CHOOSE YOUR SUBJECTS

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ Achieving the Sustainable Development Goals
- ▶ Introduction to GIS for Sustainability
- ▶ Weather, Climate and Climate Change Environmental Management
- ▶ Sociology of Peace & Conflict

SOCIAL SCIENCES, POLICY AND LAW PATHWAY

Topics include:

- ▶ Cities in a Global World
- ▶ Sociology of Health and Inequality
- ▶ Law and Policy
- ▶ Research tools for sustainability
- ▶ Innovation, Communication and Careers in Sustainability

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Land Use and the Environment
- ▶ Earth, Environment and Society

YEAR
3

REFINE YOUR KNOWLEDGE

SOCIAL SCIENCES, POLICY AND LAW PATHWAY

Topics include:

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ Environment and Sustainability
- ▶ World Heritage and Sustainable Development

- ▶ Democracy and Civil Society
- ▶ Climate Politics and Policy
- ▶ Environmental Assessment
- ▶ Rivers, Estuaries and Coasts
- ▶ Global Inequalities
- ▶ Professional Work placement
- ▶ Field trip

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Principles of Environmental Biology and Ecology

YEAR
4

FOCUS ON YOUR CHOSEN SUBJECT

SOCIAL SCIENCES, POLICY AND LAW PATHWAY

Topics include:

SOCIAL SCIENCES, POLICY AND LAW

Topics include:

- ▶ Research Project
- ▶ Urban Environments
- ▶ Climate Politics and Policy
- ▶ Planning Law

- ▶ Development Geographies
- ▶ Climate Model and Scenario Applications
- ▶ Overseas Field Trip

- ▶ Interdisciplinary project on Sustainability
- ▶ Environmental Economics
- ▶ Social Policy, Social Justice and the Environment

ENVIRONMENTAL SCIENCE AND ENGINEERING

Topics include:

- ▶ Advanced Air Pollution
- ▶ Global Change Ecology
- ▶ Environmental Geoscience

BSc (Honours) Sustainability: Social Sciences and Law

MSc (Taught)

- ▶ MSc Applied Environmental Science
- ▶ MSc World Heritage Management
- ▶ MSc Plant Biology
- ▶ MSc Environmental Policy
- ▶ MSc Global Change: Ecosystem Science and Policy
- ▶ MSc Planning, Development and Urban Design
- ▶ MA Politics and International Relations

PhD

- ▶ Students can pursue a PhD in universities in Ireland or abroad in areas such as geography, social policy, international development, planning and environmental policy, environmental law

Industry

- ▶ Careers as consultants, managers and advisers in large organisations and private businesses.
- ▶ International organisations such as the UN, the European Environment Agency and the European Commission, government departments and state agencies Conservation Organisations.
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