

## What does Education for Sustainability have to do with Audiology, Acoustics and Acoustical Engineering?

"We provide industry with innovative solutions to their problems, train the engineers, audiologists and environmental scientists of the future, and impact on society through our world-leading research." (<http://www.southampton.ac.uk/engineering/about/index.page?>)

In the 21<sup>st</sup> century, we are surrounded by sound and vibration. Studying them enables us to better understand our world, and how to change it for the better - through medical care, transport, research. Topic areas of relevance to sustainability already in the Audiology, Acoustics and Acoustical Engineering curriculum include:

- **Human Wellbeing:** diagnosis and treatment of health in medicine; rehabilitation and disability; impact of living with neurosensory loss; the wider impact on family and friends; how to classify the impact of a health condition using international definitions; wellbeing and joy through music individually and in community; design consideration of physical, environmental, physiological and psychological factors on humans.
- **Design and innovation:** advocating the use of sustainable energy, materials and sources, from production, construction, development, design and through to trade; advances in healthcare e.g. cochlea implant; sustainable transport options e.g. electric cars; increasing efficiencies to minimise resource use; underwater
- **Environment:** noise pollution; the role of acoustics systems in underwater research and species conservation; the impact of vibrations on underwater species.
- **Law and Management:** ethical and environmental concerns to ensure sustainable business success; social entrepreneurship; legal and social requirements in healthcare.
- **Healthcare System:** systems of care and bed-side manner; equality of access.
- **Ethics:** in healthcare; in industry

**Key skills for audiologists and acoustical engineers which sustainability teaching cultivates:** interdisciplinarity; informed decision-making; synthesis of different opinions, theory and data; debate and reasoning; teamwork; leadership; problem-solving; oral and written communication; self-management; time-management; critical thinking; future thinking; project management; risk management; entrepreneurship.

**Find out more:** Contact Julia Kendal ([j.kendal@soton.ac.uk](mailto:j.kendal@soton.ac.uk)) for more information including case studies on teaching sustainability in this area.