

## **Audiologist**

# Careers in **STEM**

Audiologists are healthcare professionals who are specialists in human hearing. They work with patients from newborn babies to the elderly, who have hearing, balance or other earrelated problems. They will typically work in health care venues like hospitals or referral units. Audiologists are **observant**, **communicative** and **patient**.

#### Science to know

Wave Properties | Sound | Pressure

#### Employer

Freeman Hospital www.newcastle-hospitals.org.uk Level Undergraduate degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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### Animator

# Careers in **STEM**

Animators bring drawings and computer generated characters to life on screen. They can specialise in areas such as games design and visual effects. They often work as part of a team and may use both software and hand drawn techniques to create characters and scenes. Animators are **creative**, **imaginative** and **collaborative**.

#### Science to know

Light | Wave Properties | Gravity

#### Employer

Oak Moon Games oakmoongames.com Level Undergraduate degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## **Biophysicist**

# Careers in **STEM**

Biophysicists use physics and biology to study living organisms. They collect, analyse and interpret data about cells and organisms, trying to understand how they move and signal each other. Some biophysicists work with mathematical models, others develop imaging equipment or biomaterials. Biophysicists are logical, imaginative and curious.

#### Science to know

Cells | Elements | Movement

#### Employer

GlaxoSmithKlein uk.gsk.com Level

Undergraduate or Masters degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## **Civil Engineer**

# Careers in **STEM**

Civil Engineers are involved in the design, development and construction of projects in the built and natural environment: from concert halls to motorways. They are responsible for ensuring projects are completed safely and on time. Civil Engineers are **open-minded**, **resilient** and **collaborative**.

#### Science to know

Gravity | Contact Forces | Elements

#### Employer

Arup arup.com

#### Level

Undergraduate or Masters degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## Electrician

# Careers in **STEM**

Electricians are responsible for fitting, servicing and repairing equipment in our homes and other venues. They will also install communications, lighting and control systems. Electricians can be self-employed or work for companies contracted to take on larger projects. They are **observant**, **self-motivated** and **hardworking**.

#### Science to know

Voltage and Resistance | Current | Energy Transfers

#### Employer

AIO Electrical aioelectrical.co.uk Level

A-Levels or BTECs

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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# **Lighting Technician**

Careers in STEM

Lighting Technicians set up and operate the lighting equipment used in television, film, concerts and events. They will work at indoors and outdoors venues. Some will specialise in areas such as pyrotechnics. Lighting Technicians are patient, tenacious and collaborative.

#### Science to know

Light | Energy Transfers | Energy Costs

#### Employer

Newcastle Theatre Royal theatreroyal.co.uk

Level Apprenticeship

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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# Architectural Technologist Careers in STEM

Architectural Technologists work closely with architects, designing blueprints and overseeing projects from start to finish. They will often liaise with clients and the construction team to ensure projects get finished on time and within budget. Architectural Technologists are **organised**, **creative** and **logical**.

#### Science to know

Gravity | Energy Transfers | Light

#### Employer

GT3 Architects gt3architects.com Level Undergraduate degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## **Pilot**

# Careers in **STEM**

Pilots are responsible for flying passengers and cargo safely. Their job comes with a large number of responsibilities including pre-flight checks, interpreting the onboard instruments and calculating the amount of fuel for the aircraft. Pilots are **communicative**, **resilient** and **logical**.

#### Science to know

Gravity | Speed | Pressure

#### Employer

Jet2 jet2.com Level A-Levels or BTECs

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## Radiographer

# Careers in **STEM**

Radiographers use equipment to diagnose or treat patients who are ill or injured. Diagnostic radiographers will produce and interpret high quality images of the body. Therapeutic radiographers plan and give treatment to patients using radioactive sources. Radiographers are **observant**, **communicative** and **organised**.

#### Science to know

Magnetism| Wave Properties | Elements

#### **Employer**

Freeman Hospital www.newcastle-hospitals.org.uk Level Undergraduate degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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# Telecommunications Engineer in STEM

Telecommunications Engineers work on satellite, digital TV and fibre optics systems and install broadband, mobile and landline phone networks. They also test underground and underfloor cabling, finding and fixing faults. Telecommunications Engineers are **open-minded**, **self-motivated** and **observant**.

#### Science to know

Light | Wave Properties | Energy Transfers

#### Employer

BT btplc.com Level Apprenticeship

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## **Offshore Engineer**



Offshore Engineers design, construct, operate and maintain offshore wind turbines and rigs. They are very safety-conscious because of the hazardous conditions of some of the projects and needs to remain calm under stressful situations. Offshore Engineers are **patient**, **resilient** and **tenacious**.

#### Science to know

Earth Structure | Gravity | Contact Forces

#### Employer

Ore Catapult ore.catapult.org.uk

#### Level

Undergraduate or Masters degree

#### Importance of Physics

Needs Physics | Physics is useful | Transferable skills from Physics



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# **Nuclear Engineer**



Nuclear Engineers design and build nuclear plants and the equipment used in them. They carry out maintenance work and monitor radiation levels from power plants and their surroundings. Nuclear Engineers are also responsible for the safe disposal of nuclear waste. They are **collaborative**, **organised** and **communicative**.

#### Science to know

Particle Model | Periodic Table | Wave Properties

#### Employer

EDF - Hartlepool power station edfenergy.com/energy/power-stations/hartlepool

#### Importance of Physics

Needs Physics | Physics is useful | Transferable skills from Physics

Level Masters degree or PhD



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# **Food Technologist**



Food Technologists ensure that the food and drinks we consume are of consistent quality and safely produced. Food technologists are often involved in developing recipes, testing sample products and producing nutritional labels for food and drink products. They are communicative, observant and curious.

#### Science to know

Wave Properties | Type of Reactions | Digestion

#### **Employer**

2 Sisters Food Group www.2sfg.com

Level Undergraduate degree

#### Importance of Physics

Needs Physics | Physics is useful | Transferable skills from Physics



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# Water Testing Analyst

Careers in **STEM** 

Water Testing Analysts are responsible for safeguarding water quality. They take water samples, carry out laboratory analysis of the samples, and analyse the data. In addition they will visit sites of concern and share their findings with businesses and the public. Water Testing Analysts are **hard-working**, **observant** and **organised**.

#### Science to know

Elements | Pressure | Type of Reactions

#### Employer

Northumbrian Water nwl.co.uk Level Undergraduate degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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## Geophysicist



Geophysicists study the physical structure and movement of land. They often create very precise maps of areas, which can be used to extract mineral resources or to preserve local ecosystems. Geophysicists are **communicative**, **observant** and **passionate**.

#### Science to know

Earth Structure | Earth Resources | Gravity

#### Employer

DownUnder GeoSolutions dug.com Level

Undergraduate or Masters degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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# **Environmental Planner**

Careers in **STEM** 

Environmental Planners advise on, and develop, plans for land use in urban and rural areas. They often design maps using computer programs for different projects in industrial development, heritage and tourism. Environmental Planners are **passionate**, **open-minded** and **communicative**.

#### Science to know

Earth Structure | Earth Resources | Gravity

#### Employer

Environment Agency environment-agency.gov.uk

#### Level

Undergraduate or Masters degree

#### **Importance of Physics**

Needs Physics | Physics is useful | Transferable skills from Physics



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