

CAREER GUIDE 2026-27

Mathematics vs Applications of Mathematics

The information is subject to change and is not a comprehensive list,
ALWAYS check specific course or career requirements

This guide explains how [Mathematics](#) and [Applications of Mathematics](#) align with different career paths. Both qualifications are numeracy centred, but have a different focus:



Mathematics focuses on algebra, trigonometry, and problem-solving



Applications of Mathematics covers numeracy, finance, and data handling for everyday use

In 2025-26, over 48,000 people studied towards National 4, National 5 and Higher Applications of Mathematics qualifications in schools, colleges and other centres.

Source: [Qualifications Scotland Attainment Statistics 2026](#)

Information marked with ** was confirmed by admissions teams in July 2026. Entry requirements and admissions processes may change, so anyone relying on this information should verify current details with the institution.



Applications of Mathematics IS likely a suitable alternative to Mathematics, when applying to:

Acting	Agriculture
Art	Childcare
Criminology	Dance
Dental Nursing/Oral Health*	English
Fire Service	Film and Media
Geography*	Graphic Design
Hair and Beauty	History
Hospitality	Journalism
Languages	Law
Midwifery*	Music
Nursing*	Paramedic Science*
Physiotherapy*	Police*
Politics	Social Work
Teaching*	Theatre
Tourism	Veterinary

*Further detail – [when it IS likely to be suitable](#)



Applications of Mathematics MAY be a suitable alternative to Mathematics

Accounting and Finance*	Architecture*
Armed Forces/Military*	Biology*
Business*	Computing*
Economics*	Electrical (Electrician)*
Joinery*	Medicine*
Plumbing*	Psychology*
Sports*	

*Further detail – [when it **MAY** be suitable](#)



Applications of Mathematics is NOT recommended as an alternative to Mathematics

Dentistry*	Engineering*
Mathematics*	Physics*

*Further detail – [when it is **NOT** recommended](#)

*Further Detail



When Applications of Mathematics IS likely to be a suitable alternative to Mathematics But still check

Dental Nurse/Oral Health

The following courses offer training in Dental Nursing/Oral Health and have no Mathematics requirements:

- [Glasgow Caledonian University BSc \(Hons\) Oral Health Science](#)
- [New College Lanarkshire HNC Dental Nursing](#)
- [University of the Highlands and Islands BSc Oral Health Sciences](#)

Geography

For example, both the [MA Geography](#) and [BSc Geography](#) at the University of Edinburgh accept Higher Mathematics or Applications of Mathematics.

Midwifery

There are three universities in Scotland that offer degrees in midwifery. They all require Mathematics or Applications of Mathematics at National 5 Grade C

- [Edinburgh Napier University](#)
- [Robert Gordon University](#)
- [University of West of Scotland](#)

Nursing

Some nursing degrees require National 5 Mathematics or Applications of Mathematics, such as [Glasgow Caledonian University](#) and [Napier University](#).

Paramedic Science

Some Paramedic Science degrees require National 5 Mathematics or Applications of Mathematics, such as [Glasgow Caledonian University](#) and [Queen Margaret University](#).

Physiotherapy

There are three universities in Scotland offering degrees in physiotherapy.

- [Glasgow Caledonian University](#) – No Mathematics requirement
- [Queen Margaret University](#) - Requires National 5 Mathematics or Applications of Mathematics. Two of Biology, Physics, Chemistry or Mathematics/Applications of Mathematics at Higher**
- [Robert Gordon University](#) - two from Biology/Human Biology, Chemistry, Mathematics/Applications of Mathematics and Physics**

Police

You **do not need** any formal qualifications to become a police officer with Police Scotland. The application process involves the [Police Scotland Entrance Test \(PSET\)](#), which includes a numeracy element. Applications of Mathematics is a suitable subject to prepare for this.

Teaching

National 5 Mathematics or Application of Mathematics at C is required. For an example, see the [University of Edinburgh](#).

Veterinary

Applications of Mathematics is a suitable alternative to Mathematics for the following courses:

- [Scotland's Rural College \(SRUC\) BVSci Veterinary Science](#)
- [University of Edinburgh BVM&S Veterinary Medicine and Surgery](#)
- [University of Glasgow Veterinary Medicine & Surgery BVMS](#) - Higher Applications of Mathematics is accepted in place of Higher Mathematics**
- [University of Glasgow Veterinary Biosciences BSc/MSci](#)



When Applications of Mathematics **MAY** be a suitable alternative to Mathematics
Double check

Accounting and Finance

Examples where Applications of Mathematics is a suitable alternative:

- [Dundee University BAcc \(Hons\) Accountancy](#)
- [Queen Margaret University BA \(Hons\) Business Management with Finance](#)
- [University of the Highlands and Islands BA \(Hons\) Accounting and Finance](#)
- [University of Strathclyde BA Hons Accounting – 'Mathematics or Applications of Mathematics is required for Accounting'](#)

Example where National 5 Applications of Mathematics is not a suitable alternative:

- [University of Edinburgh MA Accounting and Finance](#) – National 5 Mathematics is usually required **BUT** Higher Applications of Mathematics is accepted in place of National 5 Mathematics.

Architecture

Examples where Applications of Mathematics is a suitable alternative:

- [Dundee University Architecture MArch \(Hons\)](#)
- [Edinburgh Napier University BSc \(Hons\) Architectural Technology](#)
- [Glasgow School of Art BArch Architecture**](#)
- [Robert Gordon University BSc/MArch Architecture**](#)

Examples where Higher Applications of Mathematics is not a suitable alternative to Higher Mathematics:

- [University of Edinburgh BA/MA Architecture](#)
- [University of Strathclyde BSc \(Hons\) Architectural Studies – more information](#)

Armed Forces/Military

The requirements will vary by role. For example, there are no formal qualifications needed to join the [British Army as an infantry soldier](#), but for engineering roles across all branches of the Armed Forces, Applications of Mathematics is not recommended as an alternative to Mathematics.

Biology

Examples where Applications of Mathematics is a suitable alternative:

- [UWS Applied Bioscience BSc \(Hons\)](#)
- [Napier University BA \(Hons\) Biological Sciences](#)

Example where National 5 Applications of Mathematics is not a suitable alternative:

- [University of Edinburgh BSc \(Hons\) Biological Sciences](#) – National 5 Mathematics or Physics is usually required **BUT** Higher Applications of Mathematics is accepted in place of National 5 Mathematics.

Business

Examples where Applications of Mathematics is a suitable alternative:

- [Fife College HNC Business](#)
- [Queen Margaret University BA \(Hons\) Business Management](#)
- [Strathclyde University BA \(Hons\) Business](#)
- [University of the Highlands and Islands HND Business](#)

Example where National 5 Applications of Mathematics is not a suitable alternative:

- [University of Edinburgh MA \(Hons\) Business Management](#) – National 5 Mathematics is usually required **BUT** Higher Applications of Mathematics is accepted in place of National 5 Mathematics.

Computing

Examples where Applications of Mathematics is a suitable alternative:

- [Edinburgh Napier University BEng \(Hons\) Computing](#)
- [Glasgow Caledonian University BSc \(Hons\) Computing](#)

Examples where Higher Applications of Mathematics is not a suitable alternative to Higher Mathematics:

- [Edinburgh College HND Computer Games Development**](#)
- [Edinburgh University BEng \(Hons\) Computer Science](#)

Economics

Examples where Applications of Mathematics is a suitable alternative:

- [University of Dundee BSc \(Hons\) Economics](#)
- [University of Stirling BSc \(Hons\) Economics](#)

Example where Higher Applications of Mathematics is not a suitable alternative to Higher Mathematics:

- [Edinburgh University MA \(Hons\) Economics](#)

Electrical (Electrician)

Example where Applications of Mathematics is a suitable alternative:

- [Forth Valley College - Pre-Apprenticeship Electrical Installation](#)

Examples where Applications of Mathematics is not a suitable alternative to Mathematics at any level:

- [West College Scotland - Pre-Apprenticeship Electrical Installation](#)
- [Glasgow Clyde College - Pre-Apprenticeship Electrical Installation](#)
- [Perth UHI - Pre-Apprenticeship Electrical Installation](#)

Joinery

Examples where Applications of Mathematics is a suitable alternative:

- [Perth UHI – Construction \(Carpentry and Joinery\) NPA](#)
- [Forth Valley College NQ Carpentry & Joinery \(Pre-Apprenticeship\)](#) – ‘Those applying for the course with an application of maths qualification, irrespective of the level achieved, will be required to attend and pass a maths skills test at a college campus in order to progress to a group selection event’

Example where National 4 Applications of Mathematics is not a suitable alternative:

- [Fife College - National Progression Awards Carpentry & Joinery](#) - National 4 Mathematics is usually required **BUT** National 5 Applications of Mathematics is accepted in place of National 4 Mathematics**

Medicine

Entry to Medicine is extremely competitive and anyone wishing to pursue medicine should research how choosing Mathematics or Applications of Mathematics impacts their options.

Example where Applications of Mathematics is a suitable alternative:

- [University of Edinburgh](#)

Examples where Higher Applications of Mathematics is not a suitable alternative to Higher Mathematics:

- [University of Aberdeen](#)**
- [University of Dundee](#)**
- [University of Glasgow](#)
- [University of St Andrews](#)

Plumbing

Examples where Applications of Mathematics is a suitable alternative:

- [Perth UHI – Pre-Apprenticeship Plumbing](#)
- [West College Scotland – Pre-Apprenticeship Plumbing with Renewable Technologies](#)
- [Forth Valley College – Pre-Apprenticeship in Plumbing](#)

Example where National 4 Applications of Mathematics is not a suitable alternative:

- [Fife College - National Progression Award: Building Services: Plumbing and Electrical](#) – National 4 Mathematics is usually required **BUT** National 5 Applications of Mathematics is accepted in place of National 4 Mathematics**

Psychology

Examples where Applications of Mathematics is a suitable alternative:

- [Abertay University BSc \(Hons\) Psychology](#)

- [Dundee University BSc \(Hons\) Psychology](#)
- [Edinburgh Napier University BA \(Hons\)/ BSc \(Hons\) Psychology](#)
- [Strathclyde University BA \(Hons\) Psychology](#)
- [St Andrews University BSc/MA \(Hons\) Psychology](#)
- [University of the Highlands and Islands BSc \(Hons\) Psychology](#)

Example where National 5 Applications of Mathematics is not a suitable alternative:

- [Edinburgh University BSc \(Hons\) Psychology](#) – National 5 Mathematics is usually required **BUT** Higher Applications of Mathematics at B is accepted in place of National 5 Mathematics.

Sports

Examples where Applications of Mathematics is a suitable alternative:

- [Abertay University BSc \(Hons\) Sports Development and Coaching](#)
- [Heriot Watt University BSc \(Hons\) Sport and Exercise Science](#)
- [Stirling University BA \(Hons\) Sport Development and Coaching](#)
- [Edinburgh Napier University BSc \(Hons\) Sports Coaching](#)

Example where Higher Applications of Mathematics is not a suitable alternative to Higher Mathematics:

- [University of Edinburgh BSc \(Hons\) Applied Sport Science](#)



When Applications of Mathematics is NOT recommended as a suitable alternative to Mathematics.
Still check with institutions.

Dentistry

At undergraduate level, dentistry is offered at two universities in Scotland. Applications of Maths is not accepted as an alternative to Mathematics at either university.

- [University of Glasgow Dentistry BDS](#) – Higher Applications of Mathematics is not accepted as an alternative to Higher Mathematics for Dentistry BDS entry requirements**
- [University of Dundee Dentistry BDS](#) – Dundee do not accept Applications of Maths in place of Mathematics for dentistry or medicine courses**

Engineering

Engineering requires algebra, trigonometry, and mathematical problem-solving skills, which are developed in-depth within SQA Mathematics. Applications of Mathematics is not considered as an alternative.

Mathematics

Mathematics requires algebra, trigonometry, and mathematical problem-solving skills, which are developed in-depth within SQA Mathematics. Applications of Mathematics is not considered as an alternative.

Physics

Physics requires algebra, trigonometry, and mathematical problem-solving skills, which are developed in-depth within SQA Mathematics. Applications of Mathematics is not considered as an alternative.

Why Check?

Entry requirements may change, so individuals are encouraged to check with the relevant colleges or universities. This guide is for general information only and should not be used as a substitute for checking official university requirements.

As part of widening access efforts, some institutions may offer greater flexibility with entry requirements, so it may be worth contacting them directly for guidance if widening access criteria apply.

**Skills
Development
Scotland**

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SOURCES: Information from reliable online sources with confirmation and/or further detail sought via college and university admissions.

****Confirmed by admissions July 2026.** Entry requirements and admissions processes may change, so anyone relying on this information should verify current details with the institution.

All information and links are correct at time of publication August 2026

To report issues or make resource suggestions,
contact SDS National CIAG Team, email: cmsresource@sds.co.uk