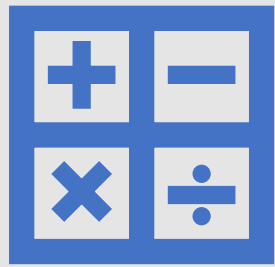
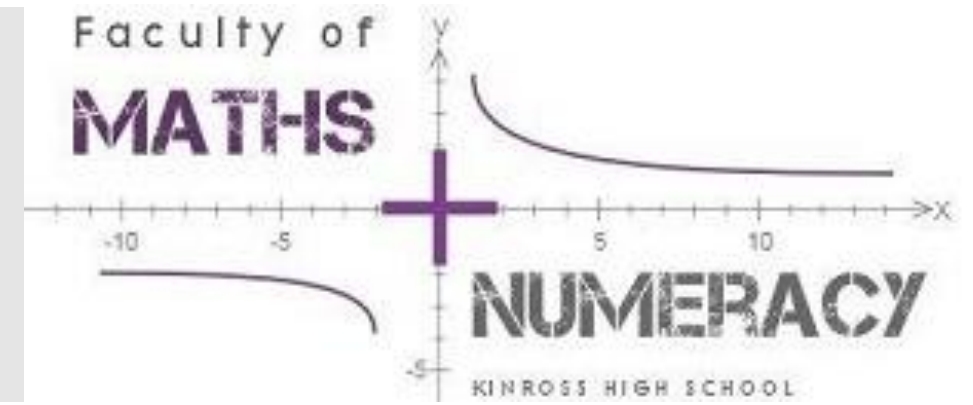


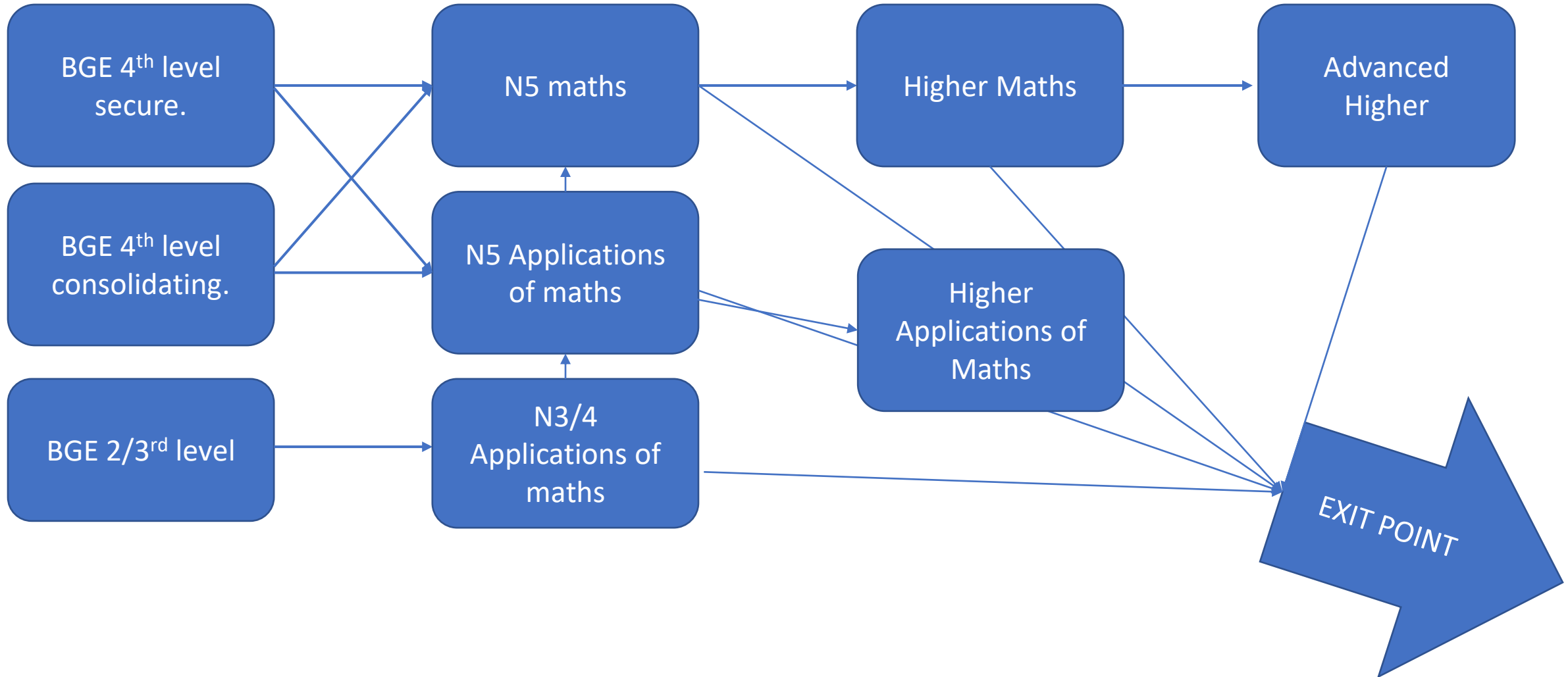
Subject choice N5 maths or N5 applications of maths?



Which course suits you best?

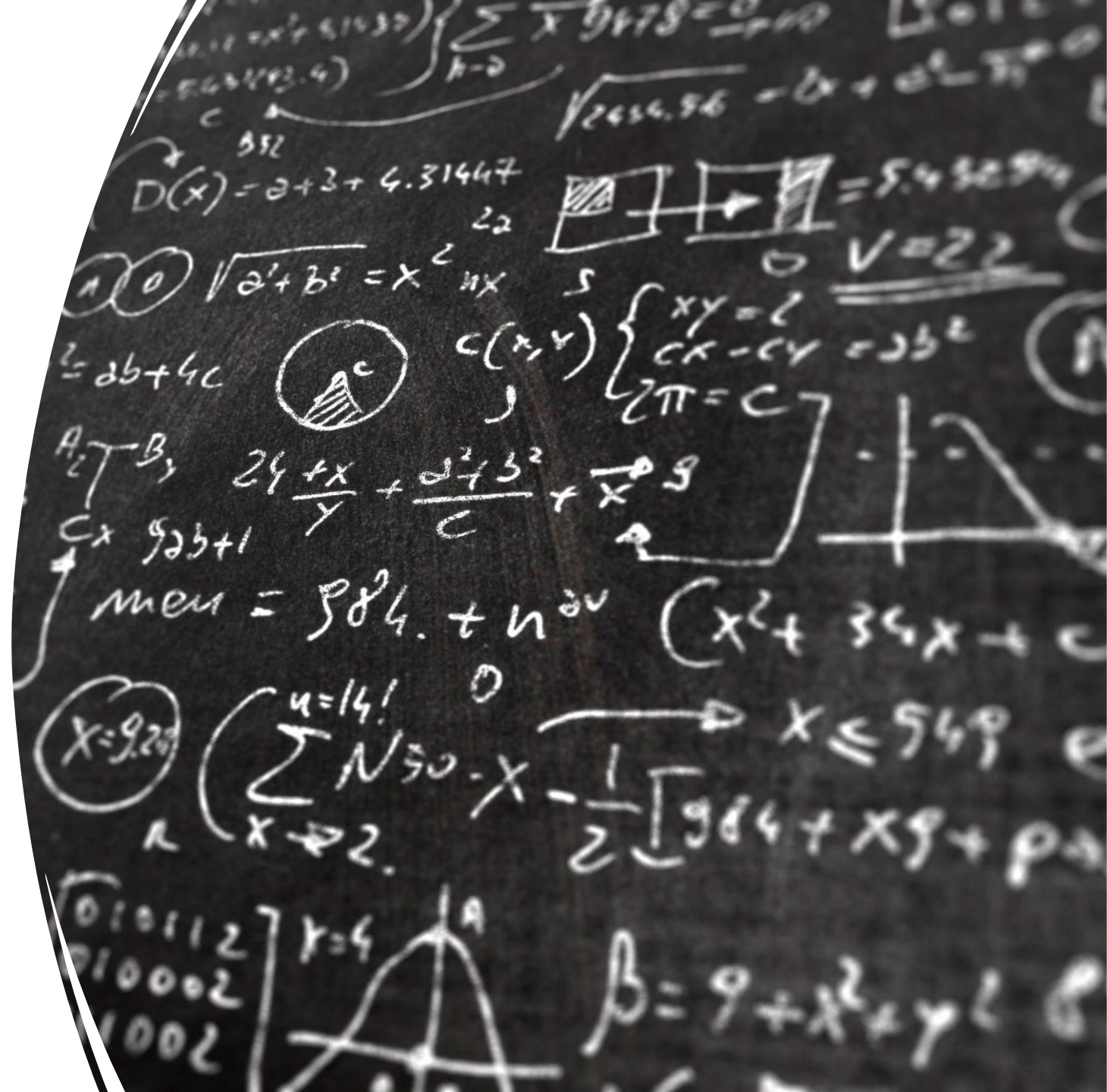


The maths journey




N5 Applications of Maths

- N5 Applications of Maths is a highly respected qualification which will open up many career opportunities for you.
- The course explores the applications of mathematical techniques and skills in everyday situations, including financial matters, statistics, and measurement.
- This course is accepted for many university courses. There are slides at the end with details of these.



N5 Applications of Maths

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- analyse real-life situations and problems involving mathematics
 - identify valid mathematical operational skills to tackle real-life situations or problems
 - select and apply numeracy skills
 - select and apply skills in finance, statistics, measurement, geometry, graphical data and probability
 - use mathematical reasoning skills to draw conclusions or justify decisions
 - communicate mathematical information in an appropriate way
- 

N5 Applications of Maths

- On successful completion of this course, you will have the skills, knowledge and understanding to support learning in other areas, such as technology, health and wellbeing, science, and social studies.
- Additionally, National 5 Applications of Maths is accepted by increasing numbers of Scottish Universities into undergraduate courses in fields such as Care and Education.

N5 and Higher Applications of Maths

Career Examples – National 5 Apps:

- Primary Teaching/Secondary Teaching
- Nursing
- Social Work
- Sports Science
- Physiotherapy
- Business Education
- Accountancy, Economics, Finance

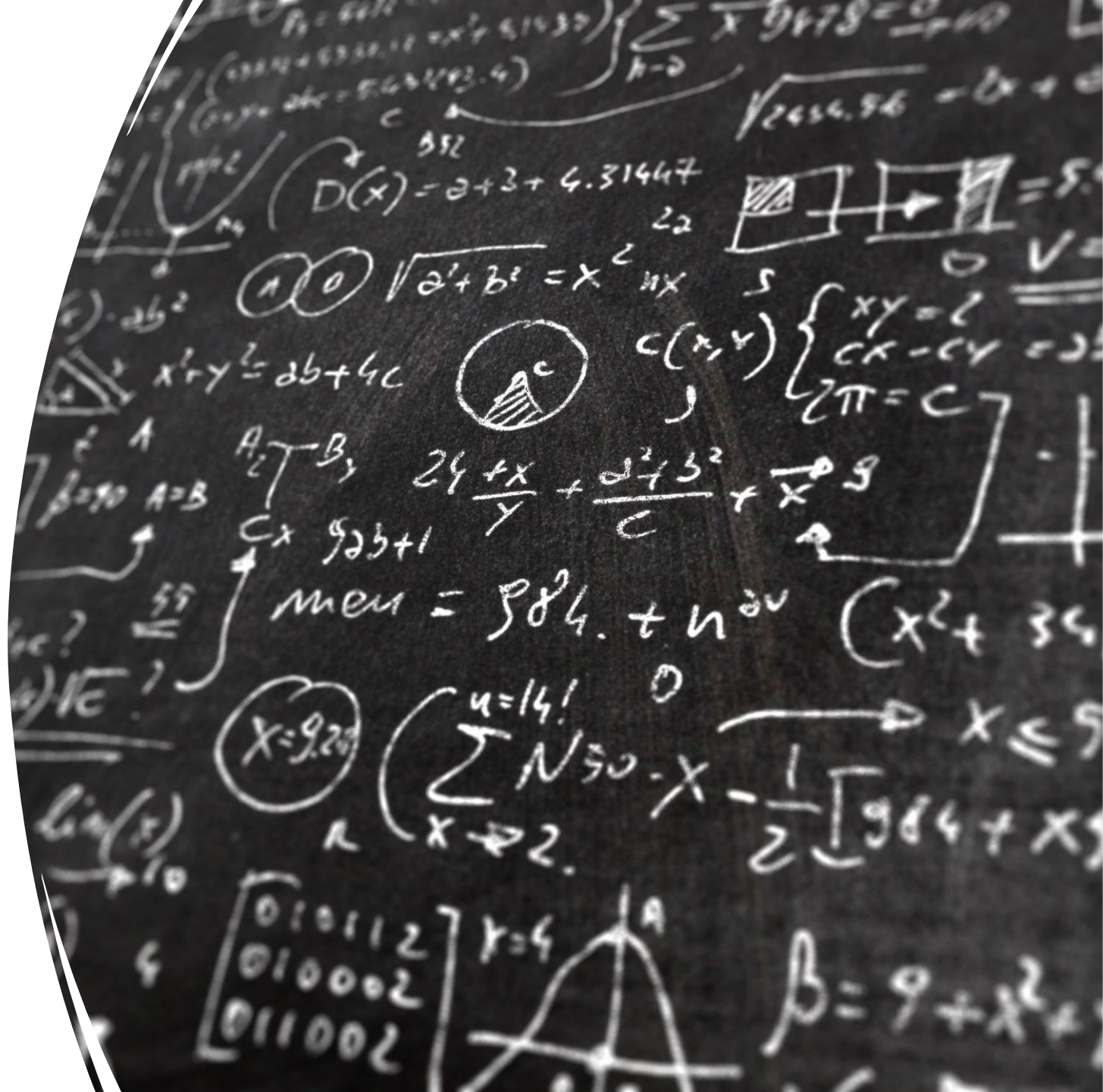
Career Examples – Higher Apps:

- Actuary (Insurance)
- Investment Banking
- Business Management
- Government Research
- Biomedical and Health Services
- R Studio Programming
- Data Analysis



N5 Maths

- N5 Maths is a highly respected qualification which will open up many career opportunities for you.
- This is your more traditional maths course where you will study abstract maths. It is designed for those who want to go on and study maths at advanced levels.
- This course is compulsory for some university courses such as medicine and STEM subjects.



N5 Maths

The course explores:

- understand and use mathematical concepts and relationships
- select and apply numerical skills
- select and apply skills in algebra, geometry, trigonometry and statistics
- use mathematical models
- use mathematical reasoning skills to interpret information, to select a strategy to solve a problem, and to communicate solutions



N5 and Higher Maths

Career Examples – National 5 Maths:

- Primary Teaching/Secondary Teaching
- Nursing
- Social Work
- Sports Science
- Physiotherapy
- Business Education
- Accountancy, Economics, Finance

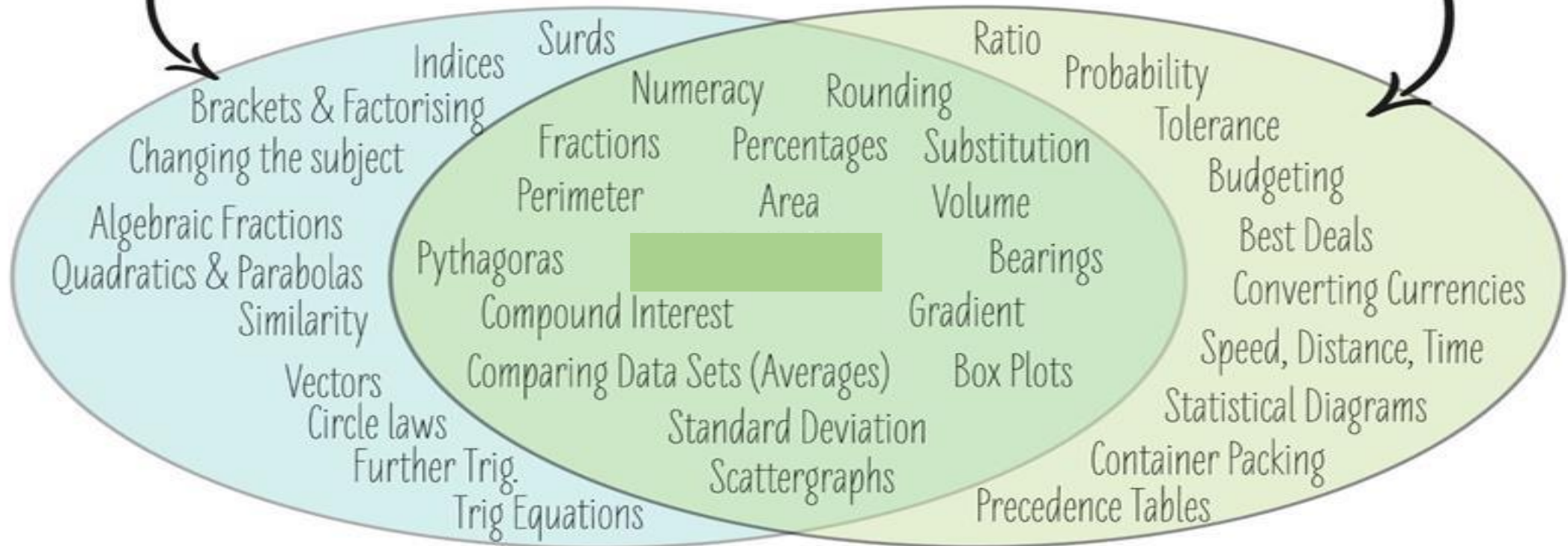
Career Examples – Higher Maths:

- Medicine
- Veterinary Medicine
- Dentistry
- RAF Aircrew
- Computer Game Design
- Architecture
- Science and Engineering




Topics in N5 maths an N5 applications

MATHS OR APPLICATIONS



WHAT'S THE DIFFERENCE?



Progression routes
into Further or
Higher education

Using Higher Maths and Higher Applications as separate Higher subjects for University entry requirements

University	Statement from Admissions
The University of Edinburgh	<p>“Where Higher Mathematics is specifically required for entry to one of our degrees, we will not accept Higher Applications of Mathematics to meet this requirement.</p> <p>If a student is taking both Higher Mathematics and Higher Applications of Mathematics, we are able to count these as two separate subjects. However, the guidance in the sentence above would still apply.</p>
Glasgow University	<p>“For Scottish Highers, Higher Mathematics and Higher Applications of Mathematics count as 2 separate subjects however should 'Higher Mathematics' be listed as an additional subject requirement only Higher Mathematics will satisfy this requirement.”</p>
Strathclyde University	<p>“The University of Strathclyde will regard Higher Applications of Mathematics as a separate higher qualification to Higher Mathematics. The Higher would not replace Higher Mathematics for any programme that requires Higher Mathematics, for example Mathematics, Physics, Accounting.”</p>
Dundee University	<p>“We would consider Higher Maths and Higher Application of Maths as two distinct Highers.</p> <p>However, where there is a Higher Maths essential subject requirement this cannot be replaced with Higher Application of Maths. The exception to this rule is whereby an applicant was unable to take Higher Maths and therefore Higher Application of Maths was the only option, we would consider here on a case-by-case basis.”</p>
Heriot Watt University	<p>“Some of our programmes have subject specific requirements i.e. Higher Maths for engineering and some will require a portfolio or interview. We do like to see a breadth of knowledge therefore may select a student with a variety of subjects over a student with 2 maths qualifications if there is a demand for places. However in some cases i.e. for an applicant who meets one of our criteria for contextual admissions we would count the two qualifications. We will consider both qualifications when making offers.”</p>
Stirling University	<p>“We will accept Higher Applications of Mathematics as a subject in its own right and if a student is taking this as well as Higher Mathematics then they will be treated a two Highers.</p> <p>We would not consider it as an alternative to Higher Mathematics where Higher Mathematics is a pre requisite for entry for a specific UG degree eg; Mathematics and Professional Education.</p>
Napier University	<p>“I can confirm we count Higher Maths and Higher Applications of Maths as two separate subjects as part of the applicant’s overall profile. However, for courses where Higher Maths is a required subject e.g., Mechanical Engineering, we would not accept Higher Applications of Maths as the required subject, they would need to also have Higher Maths.”</p>
University of West of Scotland	<p>“I can now confirm that UWS will count the two Highers as completely independent.</p> <p>We can say that, since the two courses are independent and share no common features, we would consider the programmes as separate entities with the concomitant separate allocation of UCAS points.”</p>

Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

Always check their requirements carefully!

Essential = you must have this qualification as minimum.

Desirable = you may be able to get in without this qualification, but it will help you to have it.

Can join without a specific Maths qualification	<p><u>Army</u> (as a soldier)</p> <p><u>Navy</u> (<i>except for joining as Officer</i>)</p> <p><u>Nursery Nurse</u></p>
No specific maths qualification required	<p><u>Napier University</u>: where a degree does not explicitly state a maths entry requirement, then there is no minimum maths requirement and applicants will be considered even if they do not have a N5 qualification. Specific in this category include (this list is not exhaustive):</p> <ul style="list-style-type: none"> • BA Criminology <p><u>Glasgow College of Art</u>: except for the Bachelors in Architecture (see below), there is no minimum maths requirement.</p>
No specific maths qualification required, but applicants must sit a numeracy test	<p><u>Police Scotland</u> (<i>the style of their Numeracy test is broadly equivalent to National 4 Applications of Mathematics</i>)</p>
SCQF3	<p>tbc: not yet found anything specifically requiring this</p>
SCQF4: either N4 Maths or N4 Applications of Maths (see next section for those that accept maths only and <u>not</u> applications of maths)	<p>Desirable for most <u>Modern Apprenticeships</u> (<i>exact requirements vary</i>) (individual employers set the criteria)</p> <ul style="list-style-type: none"> • East Lothian Council confirm that Applications is definitely accepted in place of Maths for apprenticeships. <p>Desirable for <u>pre-apprenticeship</u> courses at Edinburgh College e.g. trowel trades, brickwork, plasterwork, roofing</p> <p>Desirable as a minimum qualification to become a <u>Plumber, Joiner, Electrician</u></p> <p>Desirable for careers in <u>retail</u></p>
SCQF4: National 4 Mathematics only (<u>not</u> National 4 Applications of Mathematics)	<p>The content of National 4 Maths would normally be seen as a prerequisite for attempting study of National 5 Maths in any context.</p> <ul style="list-style-type: none"> • Essential for entry to National 5 Maths at Edinburgh College <p>Recommended for entry to SCQF4 Light Vehicle Maintenance level 1 at Edinburgh College.</p>

Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

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Desirable = you may be able to get in without this qualification, but it will help you to have it.

SCQF5: either National 5 Maths or National 5 Applications of Maths

(see next sections for those that accept N5 maths only and not N5 applications of maths. Some courses accept Higher Applications in lieu of N5 maths)

For some courses, a different minimum grade may be required. This is noted in the text where relevant.

Essential as minimum entry for any course in the following faculties. Specific courses may have further additional requirements.

- St Andrews University Arts/Divinity Faculties (*for Maths must be at grade B or above; for Applications of Maths must be grade A). A few specific subjects with more specific requirements noted below.*
- any course in University of Strathclyde Faculty of Humanities and Social Sciences
- all courses at Heriot-Watt university except those which explicitly specify Higher Mathematics, for which Higher Applications of Mathematics would not be accepted
- Glasgow University will accept Applications of Maths in lieu of Maths for any non-science/engineering degrees.

Essential for entry to Initial Teacher Education. Most universities will accept Applications of maths. The following definitely do:

- Edinburgh (grade B or above, grade C for MA PE or PGDE Primary)
- Aberdeen
- Stirling (grade B for Applications)
- Dundee
- Strathclyde
- Queen Margaret
- UWS PGDE and BA Education (grade B)

Essential for entry to Accountancy, Economics, Finance, Education at Aberdeen University.

- Other MA degrees at Aberdeen have no minimum maths entry requirement at all (including Business Management)

Essential for entry to Nursing at some institutions (but not all – some require maths): (Nursing and Midwifery Council do not set any specific requirements, they allow Universities to determine their own policy)

- Robert Gordon grade C
- Stirling grade C
- Dundee grade C
- UWS (both adult and mental health) grade C
- Napier grade C
- Queen Margaret University (grade B required)
- University of Edinburgh at grade C

Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

Always check their requirements carefully!

Essential = you must have this qualification as minimum.

Desirable = you may be able to get in without this qualification, but it will help you to have it.

SCQF5: either National 5 Maths or National 5 Applications of Maths
(see next sections for those that accept N5 maths only and not N5 applications of maths. Some courses accept Higher Applications in lieu of N5 maths)

For some courses, a different minimum grade may be required. This is noted in the text where relevant.

Essential for BSc Midwifery at UWS.

Essential for BSc Occupational Health, Public Health, Paramedic Science and Dietetics at Queen Margaret University.

Essential for entry to Sport Science or Sport Studies at Stirling University (grade B), or Education (grade B) at Stirling, or Nursing at Stirling (grade C) [Stirling University will accept Applications of Maths in place of Maths for any courses with a maths requirement]

Essential for entry to Heriot Watt University for subjects "outwith sciences and engineering"

Essential for entry to film, theatre, drama, PR at Queen Margaret University – with Applications and Maths being viewed equally.

Essential (grade C) for entry to BA Social Sciences at Napier University

Essential for entry to Social Work at:

- Dundee
- UWS
- Edinburgh University . Website confirms Maths or Applications are both accepted.
- Robert Gordon

Essential for entry to BSc Economics at St Andrews University. *This course appears to be an exception to other economics courses at other institutions where maths generally seems to be requested – see below.* Also Geography, International Relations, Psychology, Philosophy and Management at St Andrews. *For all these courses: N5 maths, minimum grade is B, for Applications of Maths, minimum grade is A.*

Essential for Business Management at:

- Abertay University at grade C.
- Queen Margaret

Some other business management courses at other institutions accept maths only – see below. Aberdeen have no minimum maths requirement – see above.

Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

Always check their requirements carefully!

Essential = you must have this qualification as minimum.

Desirable = you may be able to get in without this qualification, but it will help you to have it.

<p>SCQF5: <u>either</u> National 5 Maths <u>or</u> National 5 Applications of Maths <i>(see next sections for those that accept N5 maths only and <u>not</u> N5 applications of maths. Some courses accept Higher Applications in lieu of N5 maths)</i></p>	<p>Essential (grade C) for entry to BSc/BA <u>Psychology</u> at Napier University</p> <p>Essential for non-mathematical <u>business</u> courses at Heriot-Watt University including (see below for mathematical business courses):</p> <ul style="list-style-type: none"> • MA Accounting and Accounting and Finance • BBA Business Administration • MA Business and Finance • MA Finance • MA International Business Management
<p><i>For some courses, a different minimum grade may be required. This is noted in the text where relevant.</i></p>	

<p>SCQF5: National 5 Mathematics only (<u>not</u> National 5 Applications of Mathematics but <u>Higher Applications of Maths</u> is accepted in lieu) <i>(see next section for those that accept maths only and <u>not</u> applications of maths)</i></p>	<p>Essential (grade B for N5, C for Higher) for entry to <u>Medicine</u> at Edinburgh University. <i>Note: Applicants must also have a Higher in Chemistry and 2 Highers out of Biology, Physics and Maths/Applications of Maths; so the N5 maths minimum will only apply to the few candidates who are applying based on Highers in Chemistry/Biology/Physics only.</i></p> <p>Essential (grade B for N5, C for Higher) for entry to BSc <u>Sport and Exercise Science</u> at Napier University .</p> <p>Essential (grade C) for entry to BSc <u>Physical Activity and Health</u> at Napier University</p>
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Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

Always check their requirements carefully!

Essential = you must have this qualification as minimum.

Desirable = you may be able to get in without this qualification, but it will help you to have it.

<p>SCQF5: National 5 Mathematics only (<u>not</u> National 5 Applications of Mathematics)</p>	<p>The content of National 5 Mathematics would normally be seen as a prerequisite for attempting study of Higher Mathematics in any context.</p> <ul style="list-style-type: none">• At Edinburgh College a grade A or B is stipulated <p>Essential as minimum entry for any course in the following faculties. Specific courses may have further additional requirements.</p> <ul style="list-style-type: none">• Heriot Watt University for science and engineering subjects• St Andrews University Science Faculty• any Science or Medicine degrees at Aberdeen University.• (grade C or above) any course in the University of Strathclyde Faculty of Engineering, Faculty of Science and Strathclyde Business School . <p>Essential for <u>Medicine</u> at St Andrews University. (<i>must also have one Higher from biology, maths and chemistry; but N5 maths is the minimum</i>)</p> <p>Essential for <u>Medicine</u> at Aberdeen University (<i>must also have two out of three Highers from biology, maths (not Applications) and physics; but N5 maths is the minimum</i>)</p> <p>Essential (grade B) for Dentistry at Dundee University</p> <p>Essential for RAF Aircrew (who also require a science/technology-based subject)</p> <p>Essential for entry to <u>Computer Games</u> HNC at Edinburgh College</p> <p>Essential (grade B) for entry to <u>Business Management</u> and <u>International Business</u> Degrees at Edinburgh University</p>
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Sometimes these are minimum entry requirements and the particular employer, college or University you are applying to may ask for more.

Always check their requirements carefully!

Essential = you must have this qualification as minimum.

Desirable = you may be able to get in without this qualification, but it will help you to have it.

SCQF6: <u>either</u> Higher Maths <u>or</u> Higher Applications of Maths	<p>Essential (grade B) for <u>Veterinary Medicine</u> at the University of Edinburgh.</p> <p>Recommended for MA <u>Business and Management</u> at the University of Glasgow (Glasgow will accept Applications in lieu of maths for all non-STEM courses)</p>
SCQF6: Higher Mathematics but <u>not</u> Higher Applications of Mathematics	<p>Likely to be Essential for most or all University degrees in STEM subjects e.g. Maths, Chemistry, Physics, Biology, Engineering, Medicine, Veterinary Medicine, Architecture. See some exceptions in the previous sections.</p> <p>Essential (grade A) for <u>Medicine</u> at University of Glasgow, <i>but Higher Physics at grade A would be accepted for someone who had not done Higher maths.</i></p> <p>Essential for '<u>mathematically oriented</u>' (my wording) <u>business courses</u> at Heriot-Watt University, specifically:</p> <ul style="list-style-type: none"> • BSc Actuarial Science • BSc Financial Mathematics • BSc Statistical Data Science <p>Essential (grade B) for Bachelors in <u>Architecture</u> at Glasgow College of Art</p> <p>Essential for MA <u>Economics</u> at the University of Edinburgh.</p> <p>At Napier University, if Higher Maths is stated in an entry requirement, Higher Applications of Maths will not be accepted.</p>
SCQF7: Advanced Higher Mathematics	Desirable for degrees in Maths, Chemistry, Physics, Engineering
SCQF8+: University degree in Mathematics	<p>Essential for Maths Teaching</p> <p>Other possible career routes include Actuary, Chartered Accountant, Banking/Finance, Engineering, Research/Statistics</p>