

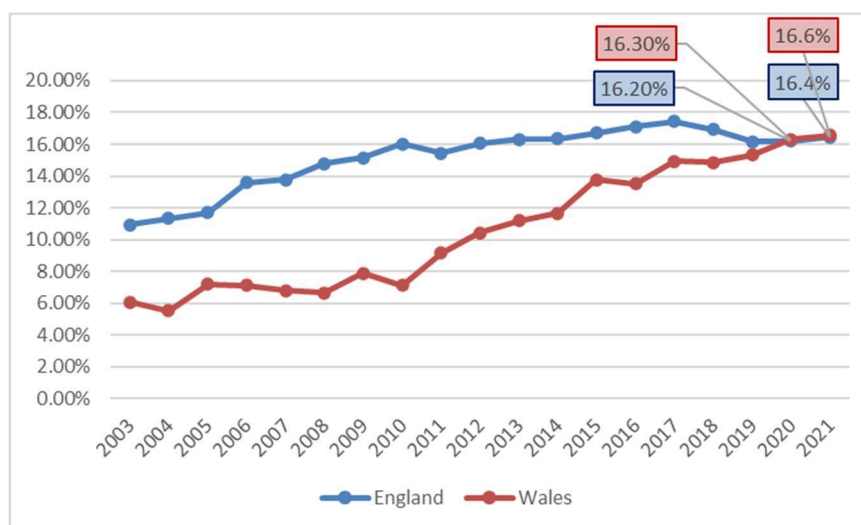
NEWS RELEASE TO SCHOOLS AND COLLEGES, August 2021

A record high number of students awarded an A-level Mathematics and Further Mathematics in Wales

This year Wales has achieved the highest ever number of A-level students awarded Further Mathematics A-level qualifications, which is a 12.4% increase from last year. The proportion of A-level Mathematics students awarded an A-level Further Mathematics has also reached the highest level, at 16.6%. This is a further increase from 16.3% achieved last year. According to the Joint Council for Qualifications (2021) the following changes took place in the number of Mathematics and Further Mathematics qualifications awarded in Wales since 2020:

- A-level Mathematics numbers have increased from 3711 to 4106, a 10.6% increase;
- A-level Further Mathematics numbers have increased from 605 to 680, a 12.4% increase;
- The number of girls awarded an A-level Further Mathematics have increased by 18%;
- The number of girls awarded an A-level Mathematics have increased by 9%.

Graph 1. Percentages of A-level Mathematics students taking A-level Further Mathematics in England and Wales since 2010 (<https://www.jcq.org.uk/wp-content/uploads/2021/08/A-Level-and-AS-Results-Summer-2021.pdf>)



A-level outcomes remain strong with girls outperforming boys in both A-level Mathematics and Further Mathematics:

- 46% of boys and 59.8% of girls achieved an A in AS Mathematics;
- 69% of boys and 82% of girls achieved an A in AS Further Mathematics;
- 41% of boys and 44% of girls achieved an A* in A-level Mathematics;
- 62.4% of boys and 62.1% of girls achieved A* in A-level Further Mathematics;

The FMSPW is pleased that the outcomes remain strong with many more young people being able to access Further Mathematics qualifications and progress into higher education. Further Mathematics qualifications remain required or preferred for entering some degree programmes in the UK and a few universities require students to take additional and more advanced examinations in mathematics.

Joseph Bailey-Wood who attended Welsh medium school Ysgol Gyfun Gymraeg Llangynwyd, achieved four grades A* and will start a Chemical Engineering degree in Bath University. He said: *"Were it not for the Further Maths Support Programme, I would never have had the same opportunities and bilingual resources that helped improve my mathematical reasoning. FMSPW laid the foundation for me to study engineering at university, and encouraged an inquisitive approach to mathematics."*

Daniel Narain, a student from Penglais Comprehensive School studying with the FMSPW, said: *"Since too few people in my school chose to do further maths, I was set up with FMSPW to enable me to do this A level. Studying Further Mathematics led to an improvement in my maths skills as well as helped developing analytical and problem-solving skills. I would encourage others to study Further Maths especially if they're considering studying science or maths to a higher level. As well as having important content, it teaches you valuable problem-solving skills, vital for the sciences and in general."*

Lili Mair Humphrey who attended Ysgol Gyfun Gymraeg Llangynwyd and will start a Physics with Astrophysics degree at Leicester University, said: *"I have really enjoyed studying A Level Further Maths through the FMSPW. It has really helped me with my A Level Maths, it has definitely helped give me a better understanding of the Maths that I will use at University in my Physics with Astrophysics degree"*.

The Further Mathematics Support Programme (FMSPW) funded by the Welsh Government was launched in Wales in 2010 and offers teacher professional development courses, online bilingual learning resources, enrichment programmes for KS4 and A-level students as well as live online tuition. Dr Sofya Lyakhova, FMSPW programme leader, said: *"The mathematics department in Swansea University is proud to continue working with the Welsh Government on widening access to Further Mathematics in Wales. Further Mathematics is known to boost students' confidence in entering competitive degree programmes with this year's students entering Oxford, Bath, Bristol, and other universities with degree courses ranging from mathematics to physics and engineering to computer science."*

The Minister for Education and Welsh Language, Jeremy Miles, said: *"There are a wide range of exciting careers where STEM subjects are essential, so it's really important we increase the number of learners studying subjects such as Maths and Further Maths. I'm pleased to see an increase in the number studying Maths and Further Maths this year and well done to everyone who's been successful in their A-levels!"*

Notes for Editors

1. The FMSPW is funded by the Welsh Government and is managed by Swansea University, Wales Institute of Mathematical and Computational Sciences (WIMCS).
2. More information regarding the Further Maths Support Programme Wales can be found at: <http://furthermaths.wales/>. For case studies from students, parents and schools please visit <http://furthermaths.wales/students/studentcs/>
3. The Wales Institute of Mathematical and Computational Sciences (WIMCS) is a collaborative partnership between the universities of Aberystwyth, Bangor, Cardiff, South Wales and Swansea. It has been set up by the Welsh Government through the Higher Education Funding Council for Wales. WIMCS aims to enhance the standing of Mathematics and Computation in Wales, to foster links with industry, commerce and business, to generate substantial research funding and to provide a forum for education and public awareness of the Mathematical Sciences (www.wimcs.ac.uk).
4. All the figures in the report are taken from www.jcq.org.uk
5. For more information please contact the FMSPW Wales Administrator by email fmprswales@swansea.ac.uk