

Mikołaj Cudny

Peterhouse College

mc2452@cam.ac.uk

+44 7789 926347

CURRICULUM VITAE**PERSONAL PROFILE**

Master's student in Mathematics at Peterhouse, Cambridge, specialising in Analytic and Algebraic Number Theory. Building on a background in elite competitive mathematics - including a Gold Medal at the 2022 Baltic Way competition - I have developed advanced analytical skills and fast-paced learning capacity required for rigorous research. My long-term goal is to pursue a PhD in Analytic Number Theory or Arithmetic Geometry. Alongside my academic focus, my unique experience as the President of the Cambridge Polish Society and a trainer for the National Polish Team for the 2026 EGMO has cultivated the communication and collaborative teamwork abilities essential for successful research environments.

EDUCATION & QUALIFICATION**UNIVERSITY OF CAMBRIDGE****2026 – Current Master of Mathematics**

Courses Taken: , Additive Combinatorics, Algebraic Geometry , Algebraic Topology, Analytic Number Theory, Commutative Algebra, Functional Analysis, Local Fields

2023 – 2026 Bachelor of Arts (Honours) in Mathematics

Courses Taken: Numbers & Sets, Groups, Vectors & Matrices, Differential Equations, Probability, Vector Calculus, Dynamics & Relativity, Analysis, Linear Algebra, Analysis & Topology, Markov Chains, Methods, Complex Analysis, Complex Methods, Geometry, Groups, Rings and Modules, Linear Analysis, Probability & Measure, Algebraic Topology, Galois Theory, Number Theory, Number Fields, Analysis of Functions, Algebraic Geometry, Riemann Surfaces, Elliptic Curves.

Programming Skills: C++, MATLAB, LaTeX

2019 – 2023**STASZIC XIV HIGH SCHOOL IN WARSAW (No. 1 in Poland)**

Specialized Maths & Physics program called Experimental Mathematics led by professors from academia: University of Warsaw (MIM Faculty) and Warsaw University of Technology.

2014 – 2018_2018 – 2023**1ST AND 2ND DEGREE MUSIC SCHOOL
(Piano Instrument Class)**

Completed both degrees in an accelerated manner (9 years out of 12). Finished the 2nd degree music school with the highest marks in all courses and an excellent overall score on the Diploma Concerto - a 45-minute performance of four memorised pieces by Chopin, Bach, Beethoven, and Szymanowski, performed before an audience and jury. Full option to join the Music Academy was available at that time.

LANGUAGES (3 foreign)

English – IELTS Language Certificate with overall score 8.5/9.0

German: B1/B2

Spanish: A1

OTHER

Driver's License B, Open water sailing and motorboat License

ACHIEVEMENTS

Summer Research in Mathematics (SRIM)

- I participated in the Summer Research in Mathematics Programme at the University of Cambridge in the summer of 2026. As one of three students studying Analytic Number Theory, under the supervision of Dr Lasse Grimmelt and Dr Joni Teräväinen I wrote a research paper called „An improvement in the restricted ternary Goldbach problem”.

Mathematical Olympiads

- Participated for three consecutive years in the Junior Mathematical Olympiad, earning a triple laureate status with distinction.
- Awarded the laureate title twice in the Polish Mathematical Olympiad and recognised as one of the top 20 young mathematicians in Poland.

International Competitions

- Represented Poland as one of 5 selected nationwide candidates for the 2022 Baltic Way International Mathematics Competition in Tromsø, Norway. Contributed to our team's gold medal victory by solving 4 geometry problems and 1 algebra problem out of 20 challenging problems in Geometry, Algebra, Number Theory and Combinatorics within the pressure of a 5-hour contest.

Olympic Training Camp

- Selected among the 19 top laureates of the Polish Mathematical Olympiad for an exclusive two-week Olympic camp focused on international competition preparation. Ranked in the top 10 on the camp leaderboard, excelling in Number Theory and Geometry.

Rafał Brzoska Foundation Scholarship (2025/2026 & 2026/27)

- Awarded a Rafał Brzoska Foundation Scholarship for elite academic and social achievements. The Scholarship was offered to 28 Polish students out of over 1.000 talented applicants (best 2,8%).

Leadership & Professional Experience

- **Selected a trainer of the Polish Mathematical National Team** of young women for the European Girls' Mathematical Olympiad in Bordeaux, France, in April 2026. Additionally, co-leading the 5-day preparation camp in December 2025 for teams from Poland, Czechia, Lithuania and Hungary.
- **President & Committee Member, Cambridge University Polish Society:** Elected President in second year after joining the committee as a freshman; organised the LOC (LSI, Oxford, Cambridge) Christmas Dinner 2024, a 400-guest full international Gala in Warsaw for students and alumni from Oxbridge and Ivy League Universities.
- **Secretary, November 11th Society:** Coordinated an academic formal dinner for 45 Cambridge selected mathematics students, fellows, and professors hosted with Dr András Zsák.
- **Consultant, Ivy Consultants:** Prepared talented international students for university interviews and the British, Polish, and Swiss Mathematical Olympiads.

INTERESTS AND HOBBYS

- **Triathlon & Fitness;** Actively training for triathlons and gym exercising. Successfully competed in two Sprint Triathlons, an Olympic distance triathlon and in relays for ¼ and ½ Ironman events.
- **Team Sports;** Cambridge Representative Player - playing in the 2nd Men's volleyball team and a member of Cambridge University Volleyball Club (in 2024/25). Played in the college team for Tennis and Pool.