## Training for the Mathematical Olympiad in Maynooth University October 2024 – January 2025

The following is the programme for Olympiad training in Maynooth University. The classes will be held from 10 a.m. to 1 p.m. on the listed Saturdays, in person. No individual first- or second-timer should feel bound to attend every single class. In particular you may participate in the local training contest and the Irish Mathematical Olympiad (IrMO), regardless of how many classes you attend.

The trainers involved in 2024-25 include: D. Adriano (DA); Prof S. Buckley (SB); Dr G. Cleanthous (GC); P. Clifford (PC); O. Davey (OD); L. Devenney (LD); Dr C. Ketterer (CK); Prof D. Malone (DM); Dr O. Mason (OM); Dr R. Moral (RAM); Dr J. Murray (JM); Prof A. O'Farrell (AOF); G. Palma (GP); Dr L. Pforte (LP); R. Sparkes (RS); Dr N. Tran (NT); Dr S. Urbas (SU); Dr M. Walsh (MW) and, hopefully, some other volunteers (X) from time to time.

Date	Venue	10:00-10:50	10:50-11:40	12:10-1:00
5/10/24	Physics Hall	Introduction (SB)	Induction (SB)	Induction (SB)
	MS2	Advanced class (DM)	Advanced class (DM)	Advanced class (DM)
12/10/24	Physics Hall	Geometry (MW)	Geometry (MW)	Geometry (MW)
	MS2	Advanced class (OD)	Advanced class (OD)	Advanced class (OD)
19/10/24	Physics Hall	Number Theory (DA)	Number Theory (DA)	Number Theory (DA)
	MS2	Advanced class (OM)	Advanced class (OM)	Advanced class (OM)
26/10/24	Physics Hall	Number Theory (LP)	Number Theory (LP)	Number Theory (LP)
	MS2	Advanced class (SU)	Advanced class (SU)	Advanced class (SU)
9/11/24	Physics Hall	Combinatorics (PC)	Combinatorics (PC)	Combinatorics (PC)
	MS2	Advanced class (AOF)	Advanced class (AOF)	Advanced class (AOF)
16/11/24	Physics Hall	Trigonometry (LD)	Trigonometry (LD)	Trigonometry (LD)
	MS2	Advanced class (X)	Advanced class (X)	Advanced class (X)
23/11/24	Physics Hall	Functional Eqns (OM)	Functional Eqns (OM)	Functional Eqns (OM)
	MS2	Advanced class (CK)	Advanced class (CK)	Advanced class (CK)
30/11/24	Physics Hall	Inequalities (SB)	Inequalities (SB)	Inequalities (SB)
	MS2	Advanced class (NT)	Advanced class (NT)	Advanced class (NT)
7/12/24	Physics Hall	Complex Numbers (AOF)	Geometry $2$ (AOF)	Geometry 2 (AOF)
	MS2	Advanced class (GP)	Advanced class (GP)	Advanced class (GP)
14/12/24	Physics Hall	Algebra (GC)	Algebra (GC)	Algebra (GC)
	MS2	Advanced class (RS)	Advanced class (RS)	Advanced class (RS)
11/01/25	MS2	Local contest	Local contest	Local contest
18/01/25	MS2	Common class (SB)	Common class (SB)	Common class (SB)
25/01/25	MS2	IrMO	IrMO	IrMO

The 38<sup>th</sup> Irish Mathematical Olympiad (IrMO) will take place on Saturday 25<sup>th</sup> January 2025, from 10.00 to 13.00 and from 14.00 to 17.00 in Logic House, Maynooth University, and in other venues in Cork, Dublin, Galway and Limerick. The 66<sup>th</sup> International Mathematical Olympiad (IMO) will take place in Australia, from 10–20 July 2025. See https://imo2025.au/ for details.

The IrMO will be used to select students to participate in advanced training camps during Spring 2025. The Irish team for the 66th IMO will be selected from the participants of these camps following contests in April and May 2025.