

Illinois Mathematics and Science Academy

Aurora, United States



A tuition-free state laboratory in Aurora where a fifth of the school week is reserved for original research, not lectures.

RANKING DIMENSIONS

Overall	79/100
Academic outcomes	85/100
University placement	80/100
Prestige & heritage	74/100
Alumni network	73/100
Facilities	74/100
Transparency	80/100

EDITOR'S VERDICT

Illinois Mathematics and Science Academy occupies a niche few schools can match: a **tuition-free** public academy built for mathematically and scientifically ambitious students who want more than strong classes. Its defining feature is structural, not cosmetic. A fifth of the week is set aside for original inquiry and research rather than standard classroom teaching. That changes the rhythm of school life. Students do not just move faster through content; they spend time producing work, testing ideas and learning how scholarship functions beyond the textbook. With an enrolment of about 650 and a student-teacher ratio of **1:9**, IMSA delivers scale without anonymity. The boarding element also matters. This is not a conventional suburban high school with an advanced track bolted on; it is a residential academic

community.

What puts IMSA on a shortlist is the seriousness of the model. The school serves students who want an American education with AP options, but the real draw is intellectual culture rather than branding. *Restless curiosity* is the currency here. So is *academic intensity*. Small classes of **20** support discussion and close supervision, but this is not a soft, pastoral version of selectivity. IMSA asks students to work with independence, sustain focus and tolerate challenge without constant hand-holding. Parents looking for glossy all-rounder schooling will find a narrower proposition. Parents looking for a place where high-level STEM interest is treated as normal will find a rare one.

The right student for IMSA is bright, self-directed and genuinely excited by ideas, not just grades. *Serious young researchers*, *competition mathematicians*, *committed coders* and scientifically minded students who want peers at the same level will feel the pull. The boarding environment suits children ready for early academic autonomy and a social life shaped by shared interests rather than mass-market school culture. Students who need a broad, sport-led campus identity or heavy adult prompting will find the model hard going. Students who want *a laboratory for the mind* and can handle *the pressure of a concentrated peer group* will find one of the strongest specialised options in American secondary education.

STRENGTHS

- Illinois resident students pay no tuition, room, or board; only an income-based sliding-scale student fee (reported at roughly \$1,800 to \$19,000 over three years, with waivers for qualifying families).
- Founded in 1985 by Nobel laureate physicist Leon Lederman as a state-funded laboratory school dedicated to advanced STEM instruction.
- Notable alumni include YouTube co-founder Steve Chen and SparkNotes/OkCupid co-founder Sam Yagan, illustrating strong outcomes in technology and entrepreneurship fields.
- Ranked the top STEM high school in Illinois by Niche.com, reflecting a strong reputation for mathematics and science preparation.
- Coeducational residential community of roughly 630 students across seven dormitories, offering an immersive three-year boarding experience.

TRADE-OFFS

- Enrollment begins only in grade 10 (no freshman year), so families must be ready for a mid-adolescence transition into a new residential setting.
- Seats are reserved primarily for Illinois residents; the small out-of-state and international cohort is capped at 25 percent of the student body and has been quoted fees near \$50,000-\$54,000 a year.
- Admission is highly selective and requires standardized test scores (SAT/ACT), transcripts, essays, and recommendations, making it unsuitable as a fallback option for average students.
- The curriculum is built around mathematics and science; families prioritizing a broad liberal-arts, arts-intensive, or vocational program may find offerings comparatively narrow.

ADMISSIONS

IMSA enrolls students for grades 10-12 only; there is no freshman year. Illinois residents apply via a free online application requiring transcripts, teacher recommendations, two essays, and SAT or ACT scores; completed or in-progress Algebra 1 and a high-school-level science course are prerequisites. The process is holistic and competitive, with admission rates reported differently across sources but consistently described as selective. Since 2023, IMSA has opened a limited number of paid seats for out-of-state and international students, capped at 25 percent of the student body, with fees reported near \$50,000 annually.

NOTABLE ALUMNI (2 3)

SPORT: Alex Moreno

DRAMA: Dominic Armato, Henry Milton Chu

VISUAL_ARTS: Steve Chen

LETTERS: Ramez Naam, Keith Winstein, Sabrina Pasterski, Todd Mitchell, Michael Damian Thomas

POLITICS: Arati Shroff

SCIENCE: Steve Chen, Robert McCool, Ramez Naam, Keith Winstein, Yu Pan, Sabrina Pasterski, Scott Gaudi, Steven G. Johnson

BUSINESS: Steve Chen, Q16216850, Clara Shih, Russel Simmons, Yu Pan

WTS RATING 

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