IMSA Ranks as #1 Best High Schools for STEM in Illinois, Offers Unmatched Learning Experiences

Ranked the #1 College Prep Public High School in Illinois, the Illinois Mathematics and Science Academy® (IMSA) develops creative, ethical leaders in science, technology, engineering and mathematics. As a teaching and learning laboratory created by the State of Illinois, IMSA enrolls academically talented Illinois students in its tuition-free residential Academy for grades 10-12. Students are challenged with a rigorous curriculum designed to develop them into problem solvers and critical thinkers.

Notable IMSA alumni include YouTube Co-Founder Steve Chen, PayPal Co-Creator Yu Pan, Yelp Co-Founder Russell Simmons, SparkNotes and OkCupid Co-Founder Sam Yagan, and Hearsay Social Founder, Clara Shih.

Research and Innovation
20% of students’ time is spent outside the classroom exploring independent study, research, innovation or entrepreneurship. Student Inquiry and Research (SIR) exposes students to authentic research experiences in a breadth of fields through on- and off-campus collaborations with IMSA faculty, university faculty and over 70 world-class institutions. IMSA’s Center of Innovation and Inquiry stimulates entrepreneurship including prototyping, makerspace activity and the launching of new tech start-ups and business ventures.

Leadership and Service Learning
Through IMSA’s service learning program, students are required to complete 200 hours of service during their three year tenure. In addition, the Leadership Education and Development (LEAD) program fosters social awareness and civic engagement among youth in their communities.

Grading
In order to promote collaborative exploration and discovery, the Academy does not provide grade point averages or class averages.

57% of IMSA Faculty have doctoral degrees. 100% have master’s degrees.

651 residential academy students come from 54 Illinois counties.

#1 Ranked #1 Best High School for STEM in Illinois by Niche.com

*Due to the COVID-19 pandemic, IMSA students participated in remote learning for the entire 2020-2021 academic year.
# Mathematics and Computer Science

**Core Courses (Sophomore)**
- AB Calculus I
- AB Calculus II
- BC Calculus I
- BC Calculus II
- BC Calculus III
- BC Calculus I/II
- BC Calculus II/III

**Pre-Calculus Core Courses**
- Geometry
- Mathematical Investigations I/II
- Mathematical Investigations II
- Mathematical Investigations III
- Mathematical Investigations IV

**Pre-Calculus Electives**
- Discrete Mathematics
- Modern Geometries
- Problem Solving
- Statistical Experimentation and Inference
- Statistical Exploration and Description

**Post-Calculus Electives**
- Advanced Topics in Mathematics
- Differential Equations
- Linear Algebra
- Abstract Algebra
- Multi-Variable Calculus
- Number Theory
- Theory of Analysis

**Computer Science Core Course (Sophomore)**
- Computer Science Inquiry

**Computer Science Electives**
- Advanced Programming
- Micro-controller Applications
- Object Oriented Programming
- Web Technologies
- Advanced Web Technologies
- CS Seminar: Android Apps Development
- CS Seminar: UNIX/Linux and Cybersecurity
- CS Seminar: Machine Learning

**Calculus Core Courses**
- AB Calculus I
- AB Calculus II
- BC Calculus I
- BC Calculus II
- BC Calculus III
- BC Calculus I/II
- BC Calculus II/III

**Pre-Calculus Electives**
- Discrete Mathematics
- Modern Geometries
- Problem Solving
- Statistical Experimentation and Inference
- Statistical Exploration and Description

**Chemistry Electives**
- Advanced Chemistry—Structure and Properties
- Advanced Chemistry—Chemical Reactions
- Biochemistry
- Environmental Chemistry
- Organic Chemistry I
- Organic Chemistry II
- Survey of Organic Chemistry
- Medicinal Chemistry

**Physics Electives**
- Computational Science
- Engineering
- Micro-controller Applications
- Modern Physics
- Physics—Sound and Light
- Physics—Calculus-based Mechanics
- Physics—Calculus-based Electricity and Magnetism
- Planetary Science
- Geology

**Biology Electives**
- Advanced Biological Systems
- Evolution, Biodiversity and Ecology
- Microbes and Disease
- Cancer Biology
- Pathophysiology
- Biology of Behavior

**World Languages**
- French I, II, III, IV, V
- German I, II, III
- Mandarin Chinese I, II, III
- Russian I, II, III
- Spanish II, III, IV, V

**English**

**3.0 credit minimum**

**Core Courses (Sophomore)**
- Literary Explorations I
- Literary Explorations II

**Core Courses (Junior)**
- Literary Explorations III: American
- Literary Explorations III: British
- Literary Explorations III: World

**Junior/Senior Electives**
- Creative Writing Workshop
- Graphic Novels—Image and Text
- Modern Theater
- Speculative Fiction Studies
- Modern World Fiction
- Victorian Fiction
- Rhetoric and Communication: Science

**Social Science**

**2.5 credit minimum**

**Core Courses (Sophomore)**
- American Studies

**Core Courses (Junior)**
- The World in the Twentieth Century

**Junior Electives**
- Ancient World Religion and Philosophy
- Conflict in World History
- Historic Global Commodities and Culture
- Ancient Epics
- Revolutions

**Senior Electives**
- Digital Literary Studies
- Gender Studies
- The Idea of the Individual
- Shakespeare
- Tolkien—Language and Literature
- Authors & Topics: Satire

**Wellness Education**

**1.0 credit minimum**

**Core Course (Sophomore)**
- Moving and Learning

**Wellness Electives**
- Dance
- Movement and Relaxation
- Net and Wall Games
- Outdoor and Indoor Games
- Wellness in the Water
- Stress Management for Life

**Mathematics and Computer Science**

**3.0 credit min.**

**Core Courses (Sophomore)**
- Methods in Scientific Inquiry
- Scientific Inquiries—Chemistry
- Scientific Inquiries—Physics

**Physics Electives**
- Computational Science
- Engineering
- Micro-controller Applications
- Modern Physics
- Physics—Sound and Light
- Physics—Calculus-based Mechanics
- Physics—Calculus-based Electricity and Magnetism
- Planetary Science
- Geology

**Chemistry Electives**
- Advanced Chemistry—Structure and Properties
- Advanced Chemistry—Chemical Reactions
- Biochemistry
- Environmental Chemistry
- Organic Chemistry I
- Organic Chemistry II
- Survey of Organic Chemistry
- Medicinal Chemistry

**Biology Electives**
- Advanced Biological Systems
- Evolution, Biodiversity and Ecology
- Microbes and Disease
- Cancer Biology
- Pathophysiology
- Biology of Behavior

**World Languages**
- French I, II, III, IV, V
- German I, II, III
- Mandarin Chinese I, II, III
- Russian I, II, III
- Spanish II, III, IV, V

**World Languages**

**2.0 credit minimum**, A student must complete two years of world language study, with one year at level II or higher
- French I, II, III, IV, V
- German I, II, III
- Mandarin Chinese I, II, III
- Russian I, II, III
- Spanish II, III, IV, V

**Fine Arts**

**0.5 credit minimum**

**Music**
- Chamber Choir
- Chamber Strings
- Concert Band
- Concert Choir
- Music Appreciation
- Music Theory
- String Orchestra
- Wind Ensemble

**Visual Arts**
- 3D Design Foundations
- Art and Design
- Digital Photography
- Observational Drawing
- Printmaking
- Scientific Illustration

**Science**

**All science courses have a lab component.**

**Core Courses (Sophomore)**
- Methods in Scientific Inquiry
- Scientific Inquiries—Chemistry
- Scientific Inquiries—Physics

**Physics Electives**
- Computational Science
- Engineering
- Micro-controller Applications
- Modern Physics
- Physics—Sound and Light
- Physics—Calculus-based Mechanics
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- Geology

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**Wellness Education**

**1.0 credit minimum**

**Core Course (Sophomore)**
- Moving and Learning

**Wellness Electives**
- Dance
- Movement and Relaxation
- Net and Wall Games
- Outdoor and Indoor Games
- Wellness in the Water
- Stress Management for Life
Recognition of Scholarships, Class of 2022

199 Seniors
29 National Merit Semifinalists
55 Commended Students

ACT Scores - Class of 2019*
Middle 50% Ranges and Means

<table>
<thead>
<tr>
<th>IMSA Mean (n=155)</th>
<th>IMSA Middle 50% Range</th>
<th>IL College-Bound Senior Mean</th>
<th>All College-Bound Senior Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>31.9</td>
<td>30.0 - 35.0</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20.7</td>
</tr>
</tbody>
</table>

SAT Reasoning Test - Class of 2021
Middle 50% Ranges and Means

<table>
<thead>
<tr>
<th>IMSA Mean (n=190)</th>
<th>IL College-Bound Senior Mean</th>
<th>All College-Bound Senior Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERW</td>
<td>685</td>
<td>508</td>
</tr>
<tr>
<td>Math</td>
<td>718</td>
<td>498</td>
</tr>
</tbody>
</table>

Sample of Advanced Placement (AP) Examinations for 2020-2021 School Year
Although IMSA does not offer AP courses, 592 AP examinations were administered to 271 students.

<table>
<thead>
<tr>
<th>Biology</th>
<th>Calculus BC</th>
<th>Chemistry</th>
<th>Computer Science A</th>
<th>Physics C: E&amp;M</th>
<th>Physics C: Mech</th>
<th>English Language</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Students Tested</td>
<td>47</td>
<td>105</td>
<td>70</td>
<td>64</td>
<td>30</td>
<td>43</td>
<td>24</td>
</tr>
<tr>
<td>Average Scores</td>
<td>3.6</td>
<td>4</td>
<td>2.6</td>
<td>3.8</td>
<td>3.4</td>
<td>3.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>

A Sample Grade Distribution Report for Junior Course Enrollment (2020 - 2021)
A = Exceeds course requirements  B = Meets course requirements  C = Needs improvement  D = Does not meet course requirements, no credit awarded

**SEMESTER 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Biological Systems</td>
<td>65</td>
<td>23</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>107</td>
</tr>
<tr>
<td>Mathematical Investigations IV</td>
<td>42</td>
<td>22</td>
<td>17</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>127</td>
</tr>
<tr>
<td>Adv. Chemistry: Structure and Properties</td>
<td>70</td>
<td>15</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>97</td>
</tr>
<tr>
<td>Literary Explorations III: America, British, World</td>
<td>123</td>
<td>49</td>
<td>12</td>
<td>19</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>211</td>
</tr>
<tr>
<td>Modern Physics</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>39</td>
</tr>
</tbody>
</table>

**SEMESTER 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Biological Systems</td>
<td>73</td>
<td>19</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
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<td>3</td>
<td>104</td>
</tr>
<tr>
<td>Advanced Chemistry: Chemical Reactions</td>
<td>50</td>
<td>20</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>The World in the Twentieth Century</td>
<td>132</td>
<td>38</td>
<td>13</td>
<td>8</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>206</td>
</tr>
<tr>
<td>BC Calculus I</td>
<td>19</td>
<td>20</td>
<td>18</td>
<td>11</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>88</td>
</tr>
<tr>
<td>Engineering</td>
<td>40</td>
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<td>1</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>58</td>
</tr>
</tbody>
</table>

* Due to Covid-19, new test data is not available for the Class of 2021.
### IMSA Matriculations - Class of 2021 (199 Graduates)

<table>
<thead>
<tr>
<th>Out-of-State Schools</th>
<th>In-State Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attending</td>
</tr>
<tr>
<td>Out-of-State Schools</td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Non-US Colleges</td>
<td></td>
</tr>
</tbody>
</table>

Total percentage of public and private college matriculation: 
- 41.2% Private
- 57.3% Public
- 5.5% Non-US Colleges

* Includes four two-year colleges.  
+ Includes one student with unknown plan upon graduation.

### Student Population of Academy, 2020-2021

- Percentage of students identifying as:  
  - 0.2% American Indian or Alaskan Native  
  - 35.5% Asian  
  - 10.1% Black or African American  
  - 17.1% Hispanic or Latino  
  - 5.7% Two or More Races, Non-Hispanic or -Latino  
  - 29.0% White  
  - 2.3% Not Reported

- Percentage of economically disadvantaged students: 16.6%

**2021 College Placement Profile (199 Graduates)**

<table>
<thead>
<tr>
<th>Attending</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona State University</td>
<td>1</td>
</tr>
<tr>
<td>Augustana College</td>
<td>1</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
<td>4</td>
</tr>
<tr>
<td>Case Western Reserve University</td>
<td>3</td>
</tr>
<tr>
<td>College of DuPage</td>
<td>1</td>
</tr>
<tr>
<td>College of the Holy Cross</td>
<td>1</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>1</td>
</tr>
<tr>
<td>Columbia University</td>
<td>1</td>
</tr>
<tr>
<td>Cornell University</td>
<td>3</td>
</tr>
<tr>
<td>Creighton University</td>
<td>1</td>
</tr>
<tr>
<td>DePaul University</td>
<td>1</td>
</tr>
<tr>
<td>Drake University</td>
<td>1</td>
</tr>
<tr>
<td>Duke University</td>
<td>3</td>
</tr>
<tr>
<td>Eckerd College</td>
<td>1</td>
</tr>
<tr>
<td>Embry-Riddle Aeronautical University</td>
<td>2</td>
</tr>
<tr>
<td>Emory University</td>
<td>1</td>
</tr>
<tr>
<td>Florida Gulf Coast University</td>
<td>1</td>
</tr>
<tr>
<td>Florida Institute of Technology</td>
<td>1</td>
</tr>
<tr>
<td>Furman University</td>
<td>1</td>
</tr>
<tr>
<td>Georgia Institute of Technology</td>
<td>1</td>
</tr>
<tr>
<td>Gettysburg College</td>
<td>1</td>
</tr>
<tr>
<td>Grinnell College</td>
<td>1</td>
</tr>
<tr>
<td>Harvard University</td>
<td>3</td>
</tr>
<tr>
<td>Harvey Mudd College</td>
<td>1</td>
</tr>
<tr>
<td>Hofstra University</td>
<td>1</td>
</tr>
<tr>
<td>Hope College</td>
<td>2</td>
</tr>
<tr>
<td>Illinois Institute of Technology</td>
<td>7</td>
</tr>
<tr>
<td>Illinois Wesleyan University</td>
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</tr>
<tr>
<td>Iowa State University</td>
<td>1</td>
</tr>
<tr>
<td>Kettering University</td>
<td>1</td>
</tr>
<tr>
<td>Lehigh University</td>
<td>1</td>
</tr>
<tr>
<td>Lewis University</td>
<td>1</td>
</tr>
<tr>
<td>Loyola University Chicago</td>
<td>3</td>
</tr>
<tr>
<td>Macalester College</td>
<td>1</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>1</td>
</tr>
<tr>
<td>Michigan Technological University</td>
<td>1</td>
</tr>
<tr>
<td>Minerva University</td>
<td>1</td>
</tr>
<tr>
<td>Monmouth College</td>
<td>1</td>
</tr>
<tr>
<td>Murray State University</td>
<td>1</td>
</tr>
<tr>
<td>New York University</td>
<td>2</td>
</tr>
<tr>
<td>North Carolina State University</td>
<td>1</td>
</tr>
<tr>
<td>Northern Illinois University</td>
<td>2</td>
</tr>
<tr>
<td>Northwestern University</td>
<td>4</td>
</tr>
<tr>
<td>Olivet Nazarene University</td>
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</tr>
<tr>
<td>Pennsylvania State University</td>
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<td>Princeton University</td>
<td>3</td>
</tr>
<tr>
<td>Purdue University</td>
<td>10</td>
</tr>
<tr>
<td>Rice University</td>
<td>1</td>
</tr>
<tr>
<td>Rose-Hulman Institute of Technology</td>
<td>1</td>
</tr>
<tr>
<td>Saint Louis University</td>
<td>4</td>
</tr>
<tr>
<td>Southern Illinois University</td>
<td>2</td>
</tr>
<tr>
<td>Tufts University</td>
<td>1</td>
</tr>
<tr>
<td>Tuskegee University</td>
<td>1</td>
</tr>
<tr>
<td>University of Alabama</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attending</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Alabama - Huntsville</td>
<td>1</td>
</tr>
<tr>
<td>University of California - Davis</td>
<td>1</td>
</tr>
<tr>
<td>University of California - Los Angeles</td>
<td>2</td>
</tr>
<tr>
<td>University of Central Florida</td>
<td>1</td>
</tr>
<tr>
<td>University of Chicago</td>
<td>6</td>
</tr>
<tr>
<td>University of Illinois - Chicago</td>
<td>13</td>
</tr>
<tr>
<td>University of Illinois - Urbana-Champaign</td>
<td>53</td>
</tr>
<tr>
<td>University of Iowa</td>
<td>2</td>
</tr>
<tr>
<td>University of Louisville</td>
<td>1</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>2</td>
</tr>
<tr>
<td>University of Missouri</td>
<td>2</td>
</tr>
<tr>
<td>University of New Mexico</td>
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</tr>
<tr>
<td>University of Oregon</td>
<td>1</td>
</tr>
<tr>
<td>University of Pittsburgh</td>
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</tr>
<tr>
<td>University of Rochester</td>
<td>1</td>
</tr>
<tr>
<td>University of South Florida</td>
<td>1</td>
</tr>
<tr>
<td>University of Toledo</td>
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</tr>
<tr>
<td>University of Waterloo (Canada)</td>
<td>1</td>
</tr>
<tr>
<td>University of Wisconsin - Madison</td>
<td>2</td>
</tr>
<tr>
<td>Vanderbilt University</td>
<td>2</td>
</tr>
<tr>
<td>Washington University in St. Louis</td>
<td>3</td>
</tr>
<tr>
<td>Waubonsee Community College</td>
<td>2</td>
</tr>
<tr>
<td>William Rainey Harper College</td>
<td>1</td>
</tr>
<tr>
<td>Worcester Polytechnic Institute</td>
<td>1</td>
</tr>
<tr>
<td>Yale University</td>
<td>1</td>
</tr>
</tbody>
</table>

**2021 College Placement Profile (199 Graduates)**

<table>
<thead>
<tr>
<th>Percentage of students identifying as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2% American Indian or Alaskan Native</td>
</tr>
<tr>
<td>35.5% Asian</td>
</tr>
<tr>
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</tr>
<tr>
<td>29.0% White</td>
</tr>
<tr>
<td>2.3% Not Reported</td>
</tr>
</tbody>
</table>

**Percentage of economically disadvantaged students:** 16.6%

---

**IMSA Matriculations - Class of 2021 (199 Graduates)**

**Out-of-State Schools**
- Private
- Public
- Other
- Non-US Colleges

**In-State Schools**
- Private
- Public
- Other
- Non-US Colleges

Total percentage of public and private college matriculation:
- 41.2% Private
- 57.3% Public
- 5.5% Non-US Colleges

* Includes four two-year colleges.
+ Includes one student with unknown plan upon graduation.