Center for Talent Development

Weekend Enrichment Programs
Advanced and Unique Courses for Gifted Students

Course Catalog
Age 4 through Grade 9

Saturday Enrichment Program  |  Accelerated Weekend Experience

www.northwestern.edu/wep
847/491-3782 ext. 4
sep@northwestern.edu
awe@northwestern.edu

Northwestern | CTD
Weekend opportunities for discovery that allow gifted students to focus their curiosity and passion on a specific interest area. A wide variety of advanced and unique courses range in duration from a single weekend to eight consecutive Saturdays.

Register now for the spring session of our Saturday Enrichment Program (SEP). Information on the Accelerated Weekend Experience (AWE) is on page 8.

**When:**
April 16–May 21, 2016

**Where:**
Evanston, IL (EV)
Northwestern University

Chicago, IL (CH)
The Frances Xavier Warde School, Holy Name Campus, 751 N. State St.

**NEW! Lake Bluff, IL (LB)**
(Morning classes only)
Lake Bluff Elementary School, 350 W. Washington Ave.

Palatine, IL (PA)
(Morning classes only)
Quest Academy, 500 N. Benton St.

Naperville, IL (NP)
North Central College, 31 N. Loomis St.

A.M. Classes: 9:00 a.m.–11:30 a.m.
P.M. Classes: 12:00 p.m.–2:30 p.m.
Why SEP?

Because the Saturday Enrichment Program:

- Offers a community of like-minded peers.
- Provides challenging accelerated courses with admissions score criteria.
- Presents opportunities to delve deeper into a single topic and to develop an advantage in one’s area of strength.
- Focuses on the whole family, offering parent education workshops that address the social-emotional development of gifted learners.

How can families participate in SEP?

1. Confirm that your child is eligible for the program (see chart to the left). Only choose a course in a subject area for which your child qualifies and for which your child shows interest.

2. Choose a course within a grade-level band that matches your child’s current grade level. SEP courses are designed to be 1½ to 2 years above grade level. Selecting a course within your child’s grade-level band ensures placement that is both challenging yet affords your child the opportunity to learn alongside same aged peers.

3. Identify a second course in case the first choice is not available.

4. Complete ONLINE application by visiting my.ctd.northwestern.edu (if needed, a paper application form is available for download).

5. Upload supporting materials electronically to your MyCTD Toolbox account. See web address in step 4 above.

Center for Talent Development has been accredited as a nonpublic supplementary school by the North Central Association Commission on Accreditation and School Improvement (NCA CASI) since April 1, 1994. NCA CASI is recognized by the U.S. Department of Education and has more than 100 years of experience in improving educational quality.

Who’s eligible for SEP?

Students must be able to submit ONE of the following:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Testing through CTD*</th>
<th>Above-grade-level testing through NUMATS**</th>
<th>Grade-level, standardized test at or above the 90th National Percentile Rank in math or reading</th>
<th>Portfolio Admission with ONE teacher recommendation; most recent report card; nationally normed test scores, if available””</th>
<th>Grade-level, standardized test at or above the 95th National Percentile Rank in math or reading</th>
<th>Portfolio Admission with TWO teacher recommendations; most recent report card; nationally normed test scores, if available””</th>
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</thead>
<tbody>
<tr>
<td>Age 4–Grade 3</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Grades 3–9 Enrichment</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
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<tr>
<td>Honors Level</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
<td>✓</td>
<td>or</td>
<td>✓</td>
</tr>
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</table>

NOTE: Students are only placed in classes when proof of course admission criteria is submitted and tuition is paid in full.

* To learn more about testing for your child age 4 through Grade 3, visit: www.ctd.northwestern.edu/wep. To schedule testing, call 847/491-3782, ext. 6 or e-mail ctd-testing@northwestern.edu.

** For more information on how to apply for above-grade-level testing through NUMATS, visit: www.ctd.northwestern.edu/numats/.

*** Recommendation must demonstrate student is working at least 1½ to 2 years above grade level and must be from a current teacher knowledgeable in the content area of the course for which the child is applying. Requisite teacher recommendation form is available on our website at www.ctd.northwestern.edu/wep.
6. Acceptance notifications are sent via e-mail two to three weeks following receipt of a completed application. Please pay special attention to this notification. It will include information about student course placement and a weblink for further information on

- Program orientation and ongoing parent education seminars
- Program Policies
- Late Pickup
- Behavioral Expectations

7. Students receive a narrative evaluation of their performance as well as recommendations for future study approximately four to six weeks after the conclusion of a course. Grades are only assigned for high school credit-bearing courses and official transcripts are available upon written request to sep@northwestern.edu.

What else do I need to consider?

Tuition .............................................. $330
- Some courses have additional book or lab fees as described in the course description.

- Full payment must be submitted with the completed application. If applying for both a morning and afternoon session, you will be offered a $60 discount, but you must complete two separate applications. Students staying for both morning and afternoon classes at our Chicago and Naperville sites may bring a nut-free sack lunch and will be supervised between 11:30 a.m.-12:00 p.m. Notify SEP staff of your child’s intention to stay for the lunch period by emailing sep@northwestern.edu.

- Paper applications may be paid by check or money order, made payable to Northwestern University, or by credit card (Visa, MC, Discover or Diner’s Club).

Financial Aid
- Need based financial aid is available.
- Financial Aid form is available on our website at http://www.ctd.northwestern.edu/sep.
- Completed online or paper applications (including documentation of test scores, Admission Portfolio materials, and evidence of financial need, including first two pages of latest federal income tax return and a statement of need) AND payment must be received no later than April 3, 2016.
- Applicant’s initial payment is $60. This fee will be refunded if the financial aid award is not sufficient for the family.

Refund and Withdrawal Requests
- Requests must be made in writing and must be submitted to CTD via e-mail at sep@northwestern.edu or by U.S. mail by the Tuesday prior to the start of the SEP session. A $60 non-refundable processing fee will be charged for all refund and withdrawal requests.

“It was a learning experience for both of us and my son shared what he learned with such enthusiasm … very rewarding.”

— Saturday Enrichment Program parent
# SEP Courses at a Glance

<table>
<thead>
<tr>
<th>#</th>
<th>GRADE</th>
<th>COURSE TITLE</th>
<th>CONTENT AREA</th>
<th>QUALIFYING SCORE</th>
<th>SITES</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>MORNING CLASSES: 9 A.M. – 11:30 A.M.</strong></td>
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<tr>
<td>01</td>
<td>PreK-K</td>
<td>Purposeful Probability</td>
<td>Math</td>
<td>EV, NP, PA, CH, LB</td>
<td></td>
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<tr>
<td>02</td>
<td>PreK-K</td>
<td>Ocean Adventures</td>
<td>Math</td>
<td>EV, NP, PA, CH, LB</td>
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<tr>
<td>03</td>
<td>K-1</td>
<td>Making Sets: An Introduction to Multiplication</td>
<td>Math</td>
<td>EV, NP, PA, CH, LB</td>
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<tr>
<td>04</td>
<td>K-1</td>
<td>From Pen Pals to Wifi: Crafting Words</td>
<td>English &amp; Writing</td>
<td>Reading</td>
<td>EV, CH</td>
</tr>
<tr>
<td>05</td>
<td>K-1</td>
<td>The Art &amp; Science of Color</td>
<td>Science</td>
<td>EV, NP, PA, CH, LB</td>
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<tr>
<td>06</td>
<td>1-2</td>
<td>Itty Bitty Binary</td>
<td>Math</td>
<td>EV, NP, PA, CH, LB</td>
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<tr>
<td>07</td>
<td>1-2</td>
<td>Simple Machines: An Introduction to Engineering</td>
<td>Science</td>
<td>EV, NP, PA, CH, LB</td>
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<tr>
<td>08</td>
<td>2-3</td>
<td>Spherical Journeys</td>
<td>Math</td>
<td>EV, LB</td>
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<tr>
<td>09</td>
<td>2-3</td>
<td>Lauren Ipsum: A Tale of Computer Science</td>
<td>English &amp; Writing</td>
<td>Reading</td>
<td>EV, NP, CH</td>
</tr>
<tr>
<td>10</td>
<td>2-3</td>
<td>Microscopic Biology: From Germs to Pond Scum</td>
<td>Science</td>
<td>EV, NP, PA, CH, LB</td>
<td></td>
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<tr>
<td>11</td>
<td>3-4</td>
<td>Competition Math</td>
<td>Math</td>
<td>EV, NP, PA, CH</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3-4</td>
<td>Digital Architects</td>
<td>Computer Science &amp; Technology</td>
<td>Reading or Math</td>
<td>EV, NP, PA, CH</td>
</tr>
<tr>
<td>13</td>
<td>4-5</td>
<td>Pre-Algebra: Data, Statistics &amp; Probability</td>
<td>Math</td>
<td>EV, NP, PA, CH</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>4-5</td>
<td>Secrets of the Brain</td>
<td>Science</td>
<td>EV, NP, PA, CH, LB</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>4-6</td>
<td>We The People: How Governments Work</td>
<td>Humanities &amp; Social Science</td>
<td>Reading</td>
<td>EV, NP, CH, LB</td>
</tr>
<tr>
<td>16</td>
<td>4-6</td>
<td>Python Programming</td>
<td>Computer Science &amp; Technology</td>
<td>Reading or Math</td>
<td>EV, NP, PA</td>
</tr>
<tr>
<td>17</td>
<td>5-6</td>
<td>Food for Thought</td>
<td>Science</td>
<td>EV, NP, PA</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>5-7</td>
<td>Design Studio: Math, Technology &amp; Electronic Music</td>
<td>Computer Science &amp; Technology &amp; Math</td>
<td>Reading or Math</td>
<td>EV</td>
</tr>
<tr>
<td>19</td>
<td>6-7</td>
<td>Integrated Math Honors</td>
<td>Math</td>
<td>EV</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>6-8</td>
<td>Virus Chasers</td>
<td>Science</td>
<td>EV, PA</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>6-8</td>
<td>Science, Engineering &amp; Technology Honors</td>
<td>Science</td>
<td>EV, NP</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>7-9</td>
<td>Algebra I Honors</td>
<td>Math</td>
<td>EV, NP</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>7-9</td>
<td>Persuasion &amp; Debate Honors</td>
<td>English &amp; Language Arts</td>
<td>Reading*</td>
<td>EV, NP</td>
</tr>
<tr>
<td>24</td>
<td>7-9</td>
<td>Survey of High School Lab Science Honors:</td>
<td>Science</td>
<td>EV</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Earth Science</td>
<td>Reading* AND Math*</td>
<td>EV, NP</td>
<td></td>
</tr>
</tbody>
</table>

|    |       | **AFTERNOON CLASSES: 12 NOON – 2:30 P.M.**     |              |                  |        |
| 25 | PreK-K| Purposeful Probability                        | Math         | EV, CH           |
| 26 | PreK-K| Ocean Adventures                              | Science      | EV, NP, PA, CH, LB |
| 27 | K-1   | Making Sets: An Introduction to Multiplication| Math         | EV, CH           |
| 28 | K-1   | From Pen Pals to Wifi: Crafting Words          | English & Writing | Reading   | EV |
| 29 | K-1   | The Art & Science of Color                    | Science      | EV, NP, PA       |
| 30 | 1-2   | Itty Bitty Binary                             | Math         | EV, CH           |
| 31 | 1-2   | Simple Machines: An Introduction to Engineering| Science      | EV, NP, CH       |
| 32 | 2-3   | Lauren Ipsum: A Tale of Computer Science      | English & Writing & Computer Science & Technology | Reading or Math | EV |
| 33 | 2-3   | Microscopic Biology: From Germs to Pond Scum | Science      | EV, NP, CH       |
| 34 | 3-4   | Competition Math                              | Math         | EV              |
| 35 | 3-4   | Digital Architects                            | Computer Science & Technology & Engineering | Reading or Math | EV, NP, CH |
| 36 | 4-5   | Pre-Algebra: Data, Statistics & Probability  | Math         | EV              |
| 37 | 4-5   | Secrets of the Brain                          | Science      | EV, NP, PA       |
| 38 | 4-6   | We The People: How Governments Work           | Humanities & Social Science | Reading   | EV |
| 39 | 4-6   | Python Programming                            | Computer Science & Technology | Reading or Math | EV, NP |
| 40 | 5-7   | Design Studio: Math, Technology & Electronic Music | Computer Science & Technology | Reading or Math | Math, EV |
| 41 | 6-8   | Virus Chasers                                 | Science      | EV, NP          |
| 42 | 7-9   | Persuasion & Debate Honors                    | English & Language Arts | Reading* | EV |
| 43 | 7-9   | Survey of High School Lab Science Honors:     | Science      | EV              |
|     |       | Earth Science                                | Reading* AND Math* | EV |

*Qualifying score must be at or above the 95th percentile*
Saturday Enrichment Program

Age 4–Grade 9

Grades PreK–K*

Purposeful Probability
*How do we use probability to make decisions in real life?*
Through fun, hands-on games and experiments, students make magical connections between math and real life that sustain a lifelong interest in the workings of the universe. Together, students collect, organize and analyze data, building crucial skills in systematic thinking and logic and exploring the idea that certain results are mathematically more likely to occur,

SUBJECT AREA: Math
QUALIFYING SCORE: Math

Ocean Adventures
*How is the ocean essential for survival on Earth?*
The oceans make up a large part of our planet and are an essential element of life on Earth. They are so large and so complex that scientists continue to discover new things about them. Through engaging activities, young oceanographers discover the science of the oceans: what we know about plate tectonics, hydrothermal vents, and the land forms we live on today, as well as the behavior of currents, winds, and waves and the organisms that live in, on, and at the edge of the ocean.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

Grades K–1*

Making Sets: An Introduction to Multiplication
*How are mathematical operations, like multiplication and addition, related?*
Boots, mittens, twins, eyebrows, chopsticks—in math, a set is a collection of things that share a common element. By brainstorming items that come in groups, young mathematicians start their venture into multiplication while building upon their knowledge of addition. Using hundreds charts, arrays, and skip counting, learn to identify patterns and create simple equations. Discover how to visualize the connection between addition and multiplication using math stories.

SUBJECT AREA: Math
QUALIFYING SCORE: Math

From Pen Pals to Wifi: Crafting Words
*How are messages transmitted and understood?*
You probably don’t talk to your pet the same way you talk to your grandma. It’s the same with writing. Focusing on familiar stories and fictional characters, young writers explore communicating in different voices, formats, and forums, laying the foundation for traditional and digital storytelling.

NOTE: Students do NOT need to be able to write independently to be in this course.

SUBJECT AREA: English & Writing
QUALIFYING SCORE: Reading

The Art & Science of Color
*What are the scientific uses of color and perception?*
What is color and how do we see it? Through hands-on experiments with the electromagnetic spectrum and art-making with natural and man-made pigments, young artists and scientists investigate how we experience color.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

*NOTE: SEP does not recommend that children grade 1 and under take both morning and afternoon sessions.*

Creative Studies Course — Rigorous arts-integrated courses that extend learning in math, science and language arts.
Grades 1–2*

Itty Bitty Binary
How is math used to design and describe patterns?
How do computers work? Budding computer programmers solve puzzles, play games, and experiment with gadgets like Bee Bots and Robot Turtles that reveal how computers function to encode and sort information, display images and encrypt data.

SUBJECT AREA: Math
QUALIFYING SCORE: Math

Simple Machines: An Introduction to Engineering
How are machines organized to help us do work?
Young engineers develop an understanding of simple machines, exploring terms like work, energy, force, and effort through hands-on experiments with wheels and axles, wedges, pulleys, screws, inclined planes and levers.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

Grades 2–3

Spherical Journeys
How do we use geometry to make sense of the real world?
World travelers-in-the-making use geometry to navigate the globe. Students examine how light, shape, and space influence mapmaking and experiment with compasses and scales to create their own maps. While fine tuning their spatial thinking skills, students develop an understanding of the technology that makes GPS possible.

SUBJECT AREA: Math
QUALIFYING SCORE: Math

Grades 3–4

Competition Math
How many ways can you solve the same problem?
Mathletes in training can increase the speed of their mental computing and practice their skills during friendly team competitions. Students practice explaining the processes and strategies associated with various math problem-solving concepts, focusing on algebra, geometry, number theory, counting and probability.

SUBJECT AREA: Math
QUALIFYING SCORE: Math

Grades 4–5

NEWLY UPDATED!
Pre-Algebra: Data, Statistics & Probability
What skills or tools are needed to effectively compute with numbers?
Through exploration, practice and application, students deepen their understanding of mathematical ideas by applying them in real world settings. Linked to the Common Core State Standards, this pre-algebra series incorporates three courses offered sequentially in the fall, winter, and spring. Students may participate in any or all of these courses beginning in any session. Completion of the entire series prepares students for Algebra I.

FALL: Numbers & Algebraic Thinking
WINTER: Geometry & Measurement
SPRING: Data, Statistics & Probability

NOTE: Due to the advanced nature of this course, students must score at or above the 95th percentile on a grade-level, standardized test OR EXPLORE Math > 15.

SUBJECT AREA: Math
QUALIFYING SCORE: Math

Lauren Ipsum: A Tale of Computer Science
How can you learn computer science without computers?
Students solve a madcap mystery through a series of logic puzzles, using the novel Lauren Ipsum—then write their own next chapter to this computer-science take on Alice in Wonderland. Through this engaging story and hands-on activities, students are introduced to computer programming without the computer, learning the language of math concepts like algorithms, conditionals, probability, and symbols.

SUBJECT AREA: English & Writing and Computer Science & Technology
QUALIFYING SCORE: Reading or Math

Microscopic Biology: From Germs to Pond Scum
What patterns of change can be seen among organisms?
Young microbiologists explore the vast world of microorganisms, strengthening their skills of observation and analysis by investigating the busy world of life in a drop of pond water. Students use microscopes to reveal the “invisible” microorganisms that impact their everyday life, classify their findings, and build and test their own water purifier.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

Digital Architects
How do architects use math, physics, and art to design buildings?
Explore the architectural design process using math, physics, storytelling, and visual-spatial reasoning skills. Through hands-on building projects, blueprint sketching, storytelling, and SketchUp-Make® 3D modeling software, novice architects investigate how buildings come to be and how people interact with the built environment. Using literature as the inspiration, students experience how math and art come together as they design and create their own model buildings.

SUBJECT AREA: Computer Science & Technology & Engineering
QUALIFYING SCORE: Reading or Math
Secrets of the Brain
How does the brain govern our behaviors and judgments?
Do brains perceive things as they really are? Are memories truly accurate? Students intrigued by the workings of the mind learn about perception and memory, exploring the neurological mechanisms of the brain and the fascinating consequences of damage to specific areas. Students explore case studies, examine visual illusions, and practice strategies for improving memory.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

Grades 4–6
We the People: How Governments Work
What impact can citizens have on their government?
How do huge groups of people work together in a system? When should a law be amended? Why can’t a 4th grader vote? Young politicians and activists answer these and other questions through role playing and writing, case study, and introductory policy writing. Looking at global systems of government, students identify the critical issues of their time and strategize solutions.

SUBJECT AREA: Humanities & Social Science
QUALIFYING SCORE: Reading

Grades 5–6
Food for Thought
How has science influenced our modern food supply?
In this introductory agricultural science course, students take on issues affecting the world’s food supply. By debating topics like food waste, use of pesticides, organic farming, and genetic modification, as well as issues that hit close to home like pollinator loss, students are fortified with the knowledge and ethics necessary to solve current and future problems facing our growing society.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math

Grades 5–7
Design Studio: Math, Technology & Electronic Music
How can elements of music be created and controlled by computers?
Using digital tools and unconventional instruments, gain exposure to the fundamental building blocks of music and investigate the possibilities of combining electronics, programming, and digital tools. Produce music, explore the electronic music canon, and discover more about the connections between mathematics and contemporary sound.

SUBJECT AREAS: Math & Technology
QUALIFYING SCORE: Math

HIGH SCHOOL CREDIT COURSES
Within the last year, 95th percentile scores on a nationally normed, grade-level, standardized test required for all SEP honors courses OR the following above-grade-level scores in the appropriate subject area:
ACT-R 19 SAT-CR 440
ACT-M 18 EXP-R 14
ACT-Sc 18 EXP-M 15
SAT-M 460 EXP-Sc 16

• Complete all 3 sessions to receive 2 semesters of high school credit.
• May be taken over a two-year time span provided student is still within grade level band.
• Consistent class attendance and 4–5 hours of homework per week is expected.
• Acceptance of credits by student’s school depends on that school’s institutional policy. Discuss credit acceptance with appropriate school counselor before applying.
• Student may take any or all courses for enrichment only.

Python Programming
Do you want to build your own complex games using simple code?
Python is a powerful, flexible yet simple object-oriented programming language used for different purposes in a variety of fields from gaming to animation. Experiment with Python scripts using lists, functions, modules, loops, for example. Design your own drawings and patterns using Turtle Graphics. Create original fully functional games, animations, and more!

SUBJECT AREA: Computer Science & Technology
QUALIFYING SCORE: Reading or Math

Grades 6–8
Virus Chasers
Can we eradicate viruses permanently?
Students step into the shoes of an epidemiologist and race against time to stop a virus from spreading in their community. Using recent viral outbreaks of measles and Ebola as case studies to learn about the components and functions of viruses, students recommend steps for containment and prevention and engage in debate about the use of vaccines, all while gaining an appreciation for modern medicine.

SUBJECT AREA: Science
QUALIFYING SCORE: Reading or Math
Grades 6–7
Students who began the Integrated Math Honors sequence in the 2014-2015 school year and are now in 8th grade may still complete the sequence during the 2015-2016 school year)

Integrated Math Honors
*How do we analyze and understand patterns, relations and functions?*
In this accelerated experience, students gain a solid foundation for future mathematics studies. All strands of mathematics are covered during the year: numbers, properties and operations, geometry and spatial sense, measurement, data analysis, probability and statistics, and algebra and functions.

**FALL:** Quantities, Equations & Inequalities, Functions
**WINTER:** Sequences, Functions, Data Analysis, Correlations, Modeling
**SPRING:** Geometry & Logic

**NOTES:**
- Recommended that Integrated Math Honors be taken in sequence, beginning with the fall.
- A scientific calculator is required.
- Additional cost for required textbook. See online description for cost.

**SUBJECT AREA:** Math
**QUALIFYING SCORE:** Math

Grades 6–8
Science, Engineering & Technology Honors
*How can science and engineering be used to solve society’s challenges?*
Based on the Next Generation Science Standards, this course engages students in engineering practices across the various disciplines. Plan and carry out investigations, analyze and interpret data, construct explanations and design solutions for society’s challenges. Develop and use models, support explanations through evidence, and practice communicating scientific information. Apply real-world research and scientific inquiry to gain the skills necessary to be successful in advanced high school science courses. Example projects may include cleaning up an oil spill, testing landfill designs, and constructing bridges.

**FALL:** Life Science & Medicine
**WINTER:** Physical Science & Civil Engineering
**SPRING:** Earth & Environmental Science

**NOTE:** Additional $25 materials fee required. **SUBJECT AREA:** Science
**QUALIFYING SCORE:** Reading or Math

Persuasion & Debate Honors
*What makes some arguments more effective than others?*
Learn principles and practices of communication. Preparation and presentation, body language, the vocal mechanism and the debate process are covered, along with active listening skills. Debate techniques grounded in rhetorical tradition and in currently accepted principles and findings related to behavioral sciences are explored. Topics are student-generated and provide opportunities for participants to practice and improve their persuasive communication skills.

**NOTE:** Recommended that the Persuasion & Debate Honors sessions be taken in sequence, beginning with the fall.

**SUBJECT AREA:** English & Writing
**QUALIFYING SCORE:** Reading

Survey of High School Lab Science Honors: Earth Science
*How and why is the earth changing? What is the importance of the earth’s resources?*
Studying concepts in geology, geophysics, oceanography, and soil science, students relate their academic lab work to pressing global and local issues.

**FALL:** Biology
**WINTER:** Chemistry
**SPRING:** Earth Science

**NOTES:**
- This course may be counted as a lab science for applications to IMSA.
- Completion of this 3-course series meets the CTD Summer Program prerequisite of a laboratory science course required for future Honors level science courses in Spectrum and Equinox.
- Additional $95 lab fee required.

**SUBJECT AREA:** Science
**QUALIFYING SCORES:** Reading Math

Algebra I Honors
*How can algebraic tools and skills be used to express mathematical ideas, concepts and relationships?*
This course is intended for students who have completed Pre-Algebra and are ready for an intensive, full-year course. Algebra I Honors covers equations and functions, properties of real numbers, solving and graphing linear equations and functions, solving and graphing linear inequalities, exponents and exponential functions, polynomials and factoring, quadratic equations and functions, radicals and geometry connections, and rational equations and functions.

**NOTES:**
- Algebra I Honors must be taken in sequence, beginning with the fall.
- A scientific calculator is required.
- Additional cost for required textbook. See online description for cost.

**SUBJECT AREA:** Math
**QUALIFYING SCORE:** Math
Accelerated Weekend Experience (AWE)

Grades 5–8

Why participate in the Accelerated Weekend Experience (AWE)?

AWE offers weekend-long experiences, hosted at community sites across the country. Unique courses connect students with practicing professionals. Join experts in the field for a real-life perspective on topics, such as Alice 3D Programming, Cognitive Neuroscience, Aviation, Cryptography, Digital Imaging, Forensic Science, MIT App Inventor, Veterinary Science and more. Programs run Saturdays and Sundays, 9:00 a.m.–2:30 p.m.

Academically talented middle school students want and need:

• Career exploration with a professional practicing in the field.
• Exposure to career paths in their area of interest.
• A community of like-minded peers.
• Opportunities to delve deeper into a single topic and to develop an advantage in their area of strength.
• Short, intensive, one-weekend-long, supplemental, academic experiences that fit in with their busy schedules.

Who’s eligible for AWE?

• Students who score at the 90th percentile or above on a grade-level, standardized test OR
• Students with above-grade-level test scores through NUMATS OR
• Students who submit a portfolio with ONE teacher recommendation, most recent report card, and nationally normed test scores, if available. Download requisite form on our website.

How do I participate in AWE?

For a current listing of AWE offerings and to register for AWE, visit www.ctd.northwestern.edu/wep and visit the AWE page. Remember to check frequently for updates.

What else do I need to consider?

Tuition ......................................... $255

1. Apply by 5 p.m. Central Time on the Monday before session starts.

2. If you apply for both SEP and AWE, you will be offered a $60 discount.

Limited financial aid is available on a first-come, first-served basis.
Center for Talent Development, Northwestern University

Dynamic Pathways for Gifted Learners

The Center for Talent Development at Northwestern University is dedicated to helping gifted students, age 4 through grade 12, reach full potential. We provide research-based assessment, advanced programs and resources to enhance a child’s schooling. Our signature approach to talent development delivers personalized options and guidance for young people with high ability. Program pathways lead students on a journey of intellectual, emotional and social growth. By extending support to families and educators, we help exceptional students discover their unique voice, explore opportunities, cultivate a love of learning and become bold, creative achievers and contributors.

Northwestern University’s Midwest Academic Talent Search (NUMATS)

The foundation for a lifelong journey of achievement and fulfillment. Research-based assessments identify exceptional academic ability and connect students to tailored programs and opportunities. Parents and educators gain invaluable information to create challenging, dynamic pathways that nurture individual potential.

Gifted LearningLinks

Individualized pathways through online learning that expand access to advanced subject matter and foster personal interests. Motivated students progress at the time, place and pace right for them and enjoy one-on-one engagement with instructors.

Weekend Enrichment Programs

Weekend opportunities for discovery that allow gifted students to focus their curiosity and passion on a specific interest area. A wide variety of advanced and unique courses range in duration from a single weekend to eight consecutive Saturdays.

Summer Program

Rigorous, academic adventures with life-changing impact that allow gifted students to delve deep into a subject of intrigue, build upon their strengths and connect with a community of peers.

Civic Education Project

Pathway to leadership and civic engagement that combines service learning with academic study and reflection. Bright, impassioned students engage in social issues first-hand and develop skills to change the world.

National Association for Gifted Children

The National Association for Gifted Children (NAGC) is an organization of parents, teachers, educators, other professionals and community leaders who unite to address the unique needs of children and youth with demonstrated gifts and talents as well as those children who may be able to develop their talent potential with appropriate educational experiences. Visit www.nagc.org to join this organization and add your name to the ranks of supporters working to raise awareness of the needs of gifted learners nationwide.

Students associated with Center for Talent Development are afforded all privileges and held to all responsibilities of members of the Northwestern University community. Northwestern University and Center for Talent Development reserve the right to change without notice any statement in this brochure concerning, but not limited to, rules, policies, tuition, fees, courses, and faculty.

CTD students are expected to act with honesty and personal integrity in all their academic work. Using the words and ideas of someone else without proper attribution, thus implying that they are the student’s own, is intellectual theft that robs the student of an important opportunity to learn. Consequences for academic dishonesty or improper “netiquette” may include grade reduction and failure (for credit-bearing courses) or program dismissal.

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Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship, or veteran status in matters of admissions, employment, housing, or services or in the educational programs or activities it operates.
Weekend Enrichment Programs
Advanced and Unique Courses for Gifted Students

Spring 2016 Dates
April 16–May 21, 2016

APPLICATION NOW OPEN!

Mark Your Calendar for 2016-2017 SEP Dates

Fall Dates
October 1–November 14, 2016
(scheduled snow day December 3)

Winter Dates
January 14–March 4, 2017
(scheduled snow day March 11)

Spring Dates
April 8–May 13, 2017

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Be sure to check out the courses for our new site in Lake Bluff!