

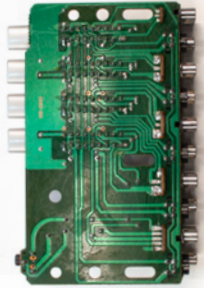


GATE

Gifted and Talented Education
MICHIGAN STATE UNIVERSITY

2021-2022
PROGRAM GUIDE

MSU



GATE



Apply online at

gifted.msu.edu



Dear Parents and Students,

The year of 2020 has been a very difficult year for all of us and we in GATE would like to thank all our faculty, parents, and students who attended our virtual programs this past summer. Although it has not been an ideal year for any of us, we are continuously working to be able to provide programming and resources to our communities.

As another uncertain year approaches, we are forging ahead in our planning process and keeping a positive outlook for the future in hopes we can all be together on the MSU campus soon. In the event that this is not possible, GATE is prepared to transition to a LIVE synchronous format once again for the summer and fall programs. For continuous updates on all GATE programming, view gifted.msu.edu.

Coming in fall of 2021, GATE will launch M.A.N.G.A. (Japanese), Michigan's Accelerated NihonGo for Americans (postponed due to the COVID-19 pandemic). The ALL (Latin) and LEAF (French) programs are on hiatus for Fall 2021.

The GATE academic year programs will be offered in the following locations, serving students in grades 7-10.

- CHAMP (Math) and ISHALL (English) offered on the MSU campus (pending COVID-19 restrictions).
- CHAMP (Math) and ISHALL (English) offered online.
- CHAMP (Math), ISHALL (English), and M.A.N.G.A. (Japanese) will be available in various locations in Southeast Michigan.

The advanced curriculum of all programs is developed with gifted students in mind. GATE students will engage with topics and concepts that are several years advanced for their current grade level while building on skills and concepts they may have learned in previous GATE programs.

See individual program pages for application deadlines or refer to the GATE website for the most up to date information. We encourage you to apply early to ensure you have all materials submitted by the deadline. Summer programs have rolling admissions, so complete your application early!

Please reference the Application Guideline charts (page 9 for Academic Year Programs and page 25 for Summer Programs) based on your student's current grade level to see where your student fits.

Academic Year Information Meeting

Sunday, February 21, 2021 | Online – 12-2 pm

R.S.V.P. at gifted.msu.edu/gateAYinfo2021

Summer Information Meeting

Sunday, March 21, 2021 | Online – 12-2 pm

R.S.V.P. at gifted.msu.edu/GATEsummerinfo2021



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Dora

IN MEMORIAM

Dorothy Lawshe

Dorothy passed away in May of 2019 and was the posthumous recipient of the Michigan Association for Gifted Children's inaugural Lifetime Achievement Award in October 2019. Former GATE director Jenny McCampbell accepted the award on behalf of Dorothy's family.

Dorothy won MSU's Crystal Apple Education award and also established the Cooperative Highly Accelerated Mathematics Program (CHAMP) and Math, Science, and Technology (MST@MSU) Program, both of which are still in existence today.

Dorothy will be greatly missed, and it is our hope that past and future GATE participants and families know of her impact within the gifted community and the selflessness with which she served gifted children.

Dorothy's family has asked that donations in her memory be made to the Dorothy Lawshe Endowment in recognition of the impact Dorothy has had on the lives of Michigan children over the past several decades.

The Dorothy Lawshe Endowment for Gifted and Talented Education

The generosity of contributions to the Dorothy Lawshe Endowment fund ensures that gifted and talented students continue to enjoy excellent, enhanced, educational opportunities for years to come by funding GATE's need-based scholarships, which are granted to high-ability students who would otherwise not have access to programming.

Please donate to help support GATE and gifted students in Michigan.

Online donations can be made by visiting: givingto.msu.edu/gift/?sid=1320

GIFTED



AND



TALENTED



EDUCATION



About Gifted and Talented Education

At Michigan State University

Gifted and Talented Education (GATE) is a division of University Outreach and Engagement at Michigan State University. The GATE office is dedicated to promoting differentiated educational programs for students in middle school and high school. The mission of the Gifted and Talented Education office is to provide educational experiences that allow gifted students to develop intellectually, to cultivate social relationships, and to expand their understanding of the world.



About Academic Year Programs

Space is limited in academic year programs and the application process is competitive. Programs may fill before the application deadline.

Our academic year programs challenge gifted middle and high school students in math, literature, and language. These programs are designed to replace high school curricula, allowing students to complete four years of Michigan High School Content Expectations (HSCE) and Common Core National Standards in just two years of study. (Exception: M.A.N.G.A. is a three-year course.) Courses are taught by MSU instructors. Students are expected to stay with the program for the full program cycle.

After completion, most students (excluding CHAMP) are prepared to take advanced placement (AP) courses at their high school or take dual enrollment through MSU or another institution.

Students should receive high school credit for their GATE academic year program. Please contact your student's school to confirm how they grant credit for GATE academic year programs.

Academic year programs include:

Cooperative Highly Accelerated Mathematics Program (CHAMP – Mathematics)

Current application grades for CHAMP are students in grades 6-9. CHAMP is offered in East Lansing, Southeast Michigan, and online. The CHAMP program begins with Algebra 1.

Intensive Studies in Humanities, Arts, Language, and Literature (ISHALL – English)

Current application grades for ISHALL are students in grades 6-10. ISHALL is offered in East Lansing, Southeast Michigan, and online. The ISHALL program begins with grade 9 English curriculum.

Michigan's Accelerated NihonGo for Americans (M.A.N.G.A. – Japanese)

Current application grades for M.A.N.G.A. are students in grades 6-9. M.A.N.G.A. is offered in Southeast Michigan. M.A.N.G.A. is a hybrid class with mostly in person curriculum, as well as online meetings. M.A.N.G.A. begins with year 1 Japanese curriculum. PLEASE NOTE: This is a 3-year program.

About Summer Programs

Summer programs have rolling admissions and fill up quickly! Programs may fill before the application deadline. Apply early!

GATE summer programs offer students the chance to experience advanced coursework and the college campus alongside their high achieving peers. Programs include a residential option for grades 7 and above (age 12 and above), as well as a commuter option for all programs.

Summer programs include:

Gifted University for Parents and Precocious Youth (GUPPY)

GUPPY offers a variety of exploratory educational presentations and hands-on experiences in Michigan State University's laboratories and classrooms. There are several advanced topic "tracks" for students to choose from, each with their own combination of STEAM-based classes.

Intensive Studies for Gifted and Talented (IS4GT)

IS4GT is a one-week advanced residential or commuter program in a specific concentrated curriculum for students in grades 6-11.

Math, Science, and Technology (MST@MSU)

MST@MSU is a one-week residential or commuter program for students in grades 7-8. There are several advanced topic "tracks" for students to choose from, each with their own combination of math, science, and technology classes. MST classes and workshops are offered in a wide range of subjects, such as computer science, chemistry, engineering, and more. Each track offers two classes and one workshop.

Math, Science, Technology, and Leadership (MSTL)

MSTL is a two-week residential or commuter program for students in grades 9-10. This program offers advanced topics such as molecular biology and pathfinding. Students will choose two courses in either math, science, or technology and all participants will attend a Leadership Workshop, *College Prep: Navigating the Road to College Through Persistence and Fit*. The Leadership workshop is designed to introduce students to concepts and skills required to be a good leader and to help navigate their transition into college.

Summer Mathematics Online (SuMO)

SuMO provides classroom instruction for qualified gifted students looking to complete accelerated math instruction in less time in the summer 2021 for grades 6-10. Students will work to complete Algebra 1 or Algebra 2 with LIVE online classes conducted by MSU GATE mathematics instructor(s).

How do I Apply?

All programs require these four things:

- Above grade level testing
- A teacher recommendation
- Your most recent report card
- **\$50 non-refundable application fee**

Students who are not accepted into a program must reapply and pay an additional application fee the next time they apply to a GATE program. Students may not defer their acceptance.

Getting Started

Visit gateway.gifted.msu.edu. There you will complete (or update, if you're a returning applicant) a student profile. Once that's done, you can apply!

1. Complete your testing early! Testing information can be found at gifted.msu.edu. Each program page has an "Eligibility" page with minimum accepted tests and scores for applying. If you have an above-level test that is not listed, please e-mail gifted@msu.edu to see if we will consider it.
2. Upload your testing and a recent report card to your application. Clear photographs or scanned images of official test scores and report cards are accepted.
3. You will be asked for your teacher's e-mail address within your application. Once submitted, your teacher will receive a link to complete the recommendation form. External letters or recommendations are not accepted.
4. **Pay your \$50 non-refundable application fee at gifted.msu.edu/payment**

If you're requesting financial aid, you can do so within the application. Students are limited to receiving one award per lifetime.

Complete summer applications are reviewed on a rolling basis until programs are filled. Complete academic year applications are reviewed, and decisions are made in the summer. Once your application has been completed and reviewed, you will receive a decision letter and any other materials via e-mail.

Testing Requirements

All programs require above grade-level testing such as SAT, ACT, CogAT, or NNAT. For more information, visit gifted.msu.edu.

The following charts show minimum test scores required to apply for GATE programs for grades 3 and up.

Only 1 qualifying score per test is required to meet minimum application requirements. For example, a CHAMP applicant needs an ACT score of at least 20 in Math or a 21 Composite to apply.

- Testing alone does not guarantee your student’s acceptance.
- A diagnostic test is required for CHAMP and ISHALL applications.
- A full IQ score report is acceptable for all programs, in place of the tests listed above. For IQ testing information visit gifted.msu.edu.
- Score requirements are a minimum benchmark to apply.

Test Scores Accepted for the GUPPY Program (Grades 3-6)

Program	PSAT 8/9 Math	PSAT 8/9 Reading	NNAT	IOWA	NWEA	MSTEP	CogAT
GUPPY 3-4	410	410	90th percentile	90th percentile	95th percentile	Level 4	90th percentile
GUPPY 5-6	410	410	90th percentile	90th percentile	95th percentile	Level 4	90th percentile

Note: A full IQ score report is acceptable for all programs, in place of the tests listed above. For IQ testing information visit gifted.msu.edu.

If your scores come close to meeting the stated minimums, we encourage you to apply. The application review process is holistic and will take into consideration all aspects of your application.

Minimum Test Scores Required for GATE Academic Year Programs (Grades 6 and Up)

Program	ACT Math	ACT English	ACT Reading	ACT Composite	SAT Math	SAT Evidence-Based Reading and Writing	SAT Total	CogAT**
CHAMP	20	++	++	21	530	++	1000	90th percentile (Quantitative)
ISHALL	X	20	20	X	X	500	X	90th percentile (Verbal or Non-Verbal)
M.A.N.G.A.	X	20	20	X	X	500	1020	90th percentile (Composite)

** CogAT scores must be in the 90th percentile in the indicated subtest. Retesting required after 3 years.

++No minimum score required, but student must exhibit a proficiency for reading and writing comprehension.

*** GATE will accept ACT and SAT subject test scores.

Minimum Test Scores Required for GATE Summer Programs (Grades 6 and Up)

Program	Grades	ACT Math	ACT English	ACT Reading	ACT Composite	SAT Math	SAT Evidence-Based Reading and Writing	SAT Total	CogAT**
MST@MSU	7-8	18	18	18	19	500	500	980	90th percentile
MSTL	9-10	19	19	20	20	510	510	1000	90th percentile
Intensive Study in Aqueous and Environmental Geochemistry	9-11	19	19	19	20	510	510	1000	90th percentile
Intensive Study in Computer Art: Merging Programming and Creativity	7-10	18	18	18	19	500	500	980	90th percentile
Intensive Study in Non-Fiction v. Fiction Writing: Focus on Space and Place	6-9	18	18	18	19	500	500	980	90th percentile
Intensive Study in Pre-Law: LitiGATE	8-11	19	19	19	20	510	510	1000	90th percentile
Intensive Study in PRE-MED ED	7-9	19	19	19	20	510	510	1000	90th percentile
Intensive Study in Sustainable Agriculture and Remote Sensing	9-11	19	19	19	20	510	510	1020	90th percentile
Intensive Study in The World of Computer Science: The Underlying Language	7-10	19	19	19	20	510	510	1020	90th percentile
SuMO Algebra 1	6-10	17	X	X	18	500	X	980	90th percentile
SuMO Algebra 2	6-10	18	X	X	19	520	X	980	90th percentile

** Retesting required after 3 years.

CogAT Cognitive Abilities Test

(Administered by MSU GATE)

To REGISTER and for DATES go to gifted.msu.edu/testing/cogat-testing**

Cost: \$49.50 per person

**More dates will be added as needed.

IQ TESTING

For application to GATE Programs, an IQ test is acceptable in place of an ACT or SAT test. The psychologists listed below provide IQ assessment, such as the WISC V test.

Pat LaPat

Clinical Psychologist

36516 Green Spring
Farmington Hills, MI 48311
Call 248-661-0195 for details

or

2190 N. Woodward
Bloomfield Hills, MI 48301
Call 248-661-0195 for details

Bright Pine

Dr. Katherine Lewitzke, PsyD, LP

Licensed Psychologist and Clinic Director
Call 248-383-8728 for details

MSU Psychological Clinic

316 Physics Rd., Rm 262
East Lansing, MI 48824
Call 517-355-9564 for details

University of Michigan

The University Center for the Child and Family

Call 734-764-9466 for details

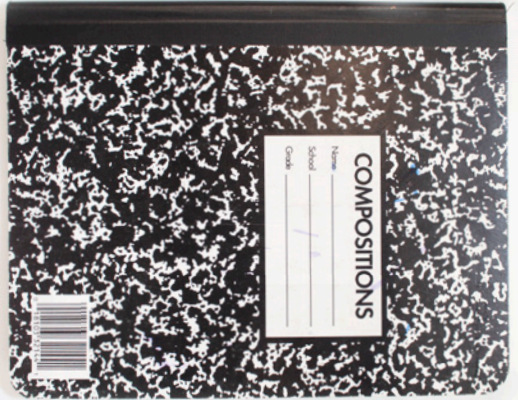
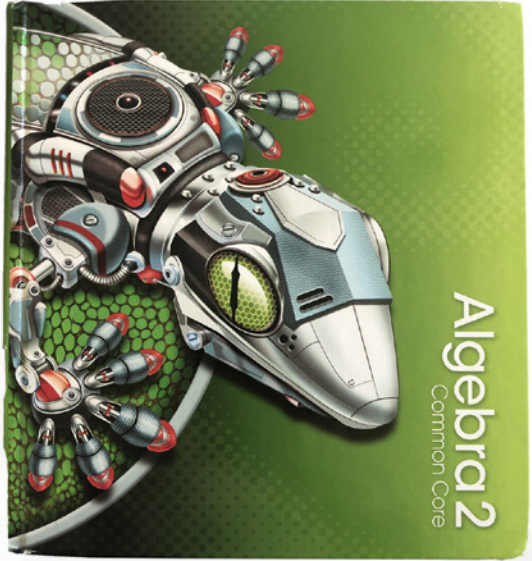
Wayne State University

Psychology Clinic

60 Farnsworth St.
Detroit, MI 48202
Call 313-577-2840 for details

The cost varies based on the services requested and rendered. Please call provider to inquire about cost.

GATE does not recommend, guarantee, or take any responsibility or liability for the list of organizations above.





Academic Year Programs

Our academic year programs challenge gifted middle and high school students in math, literature, and language. Space is limited in academic year programs and the application process is competitive. Programs may fill before the application deadline. **Apply early!**

Academic Year Application Guideline

If you are currently in the following grades during application time...	You can apply for the following Academic Year Programs:
Grades 6-9	CHAMP or M.A.N.G.A.
Grades 6-10	ISHALL

Note: students begin these programs in the Fall of their 7th, 8th, 9th, or 10th grade year. For example, to begin the program in the Fall of 7th grade, students must apply in the spring of their 6th grade year. Although students may be younger than the grades stated, the nature of the acceleration and the high school level content, no exceptions to younger students will be granted.



Academic Year Program Details

Responsibilities of Participants

Students

- Attend classes regularly
- Complete assigned homework regularly
- Keep parent(s)/guardian(s) informed of weekly graded homework and quizzes
- Attend labs as desired or assigned
- Exhibit appropriate classroom behavior
- Maintain satisfactory level of performance in regular school course work
- Log in daily to online class website

Parents/guardians

- Transport student to and from class
- Attend an orientation session and mid-semester conferences
- Support and encourage the student
- Review weekly graded homework and quizzes with the student
- Communicate any problems to the instructor
- Provide student with access to a computer, a printer, and internet access
- Contact and work with school officials to facilitate credit transfer and individual learning plans

Local school district

- Release students to attend class at designated location during their school day where applicable
- Agree that these classes will be accepted in lieu of in-school required subject classes
- Recognize this course of study and record credits and grades on high school transcripts
- Grant high school credit for demonstrated mastery of content (up to four years of the subject)
- Identify a local district contact person for the program

What to Expect From Your GATE Program

GATE programs are designed to provide educational experiences that allow gifted students to develop intellectually, to cultivate social relationships, and to expand their understanding of the world.

Academic integrity

GATE programs adhere to Michigan State University expectations about academic integrity.

Academic integrity is honest and responsible scholarship. Students are expected to submit original work and give credit to other people's ideas. Maintaining academic integrity involves:

- Creating and expressing your own ideas in course work
- Acknowledging all sources of information
- Completing assignments independently or acknowledging collaboration
- Accurately reporting results when conducting your own research or with respect to labs
- Honesty during examinations

Academic integrity is the foundation of university success. Learning how to express original ideas, cite sources, work independently, and report results accurately and honestly are skills that carry students beyond their academic career. Academic dishonesty not only cheats the student of valuable learning experiences, but can result in a failing grade on assignments, a failing grade in a course, or even expulsion from the university for the student.

Lessons and class structure

The instructor prepares lessons that provide students with a conceptual-theoretical framework for the content of the course. Practical examples are discussed to assist student understanding and work toward developing mastery of a particular skill or concept. New material is introduced at a pace much faster than occurs in the usual classroom. Gifted students typically require this pace to remain challenged.

An example of class structure may include the instructor reviewing unresolved homework assignments, introducing new material, giving spot quizzes and longer tests, and assigning homework that considers both previously studied material and concepts just introduced. Homework assignments, taking the average student six to eight hours to complete, are collected at the beginning of each class. This homework is graded, commented on by the instructor or an assistant, and returned to student.

Experience suggests that some students begin a program expecting to be able to work through homework quickly, and they can become frustrated when they are unsure of what to do immediately. Through the process of adjusting to the program students will learn perseverance with mental tasks.

Other students tend to view any effort that is less than 100% correct as a failure. As the course proceeds, these students develop a more mature perspective on learning. Homework helps to solidify concepts presented in class and to provide a realistic challenge, requiring students to develop problem-solving skills and to persevere in the face of less-than-instant success. Students may feel overwhelmed at first by the volume of the homework assigned, but most adjust to what is required.

Because of the accelerated and demanding nature of the Academic Year programs, students will only be allowed to begin one Academic Year program per year. Students are welcome to apply to more than one Academic Year program—if accepted to multiple programs, they can choose which one they would like to enroll in for the upcoming year, and then reapply for another program the following year. However, please note that each application requires a non-refundable \$50 application fee.

Attendance and participation

Course attendance is mandatory.

Students are allowed **2 absences per semester** (2 for Fall, 2 for Spring) and must make up any missed classwork by the next class session. Students who miss more than 2 class sessions will not receive a passing grade for the course and will be removed upon the third absence.

In the event of a second absence, parents will be notified that another absence will result in their student being immediately removed from the course.

In the event of a third absence, your student will receive a No Grade (NG) and families must contact their school to determine placement into an appropriate class. No refunds will be issued for students who are removed from the class.

**For the most up to date policy details, please refer to the program handbook.

Instructional plan

Students attend one to two classes per week for a total of 2.5 hours. The schedule depends on the delivery and location of each course section.

Traditional high school curriculum is taught at an accelerated pace, requiring the student to learn to be motivated and self-guided outside of the classroom to complete substantial homework and be a mature, independent learner.

There are regularly scheduled academic year program labs outside of school hours intended to strengthen a student's understanding of program materials and concepts and to seek additional help as needed from program tutors. Study labs are optional

unless the instructor has required them for your student. This requirement will be communicated to families in advance.

Students will be given an MSU account for the online course website to access academic year program coursework/homework which should be checked daily. Parents must allow students to communicate directly with the academic year program instructor.

Student evaluations

Progress in mastering subject matter is monitored regularly through graded weekly homework assignments, quizzes, and tests.

Parent-teacher conferences are scheduled mid-semester to give parents an opportunity to communicate in person with the instructor about their student's progress.

Progress reports are made available to each student's family after fall and spring conferences.

Grade reports are distributed to families and the student's school at the end of each semester.

Upon receipt of the grade report, your student's school should record the credit and grades on the student's high school transcript.

Students and parents are welcome to contact the instructor at any time with questions or concerns.

Costs and payment

These fees apply to:

CHAMP (all locations), **ISHALL** (all locations), and **M.A.N.G.A.**

Application fees

A non-refundable \$50 application fee is required for each program.

Tuition

Tuition is \$1,500 per year

- \$750 is due within 7 days of program billing to confirm attendance.
- \$750 is due within 14 days of program billing. Please refer to acceptance letter for due dates. Failure to pay tuition by the due dates will result in immediate withdrawal from the program. No refunds will be given.

Please note that tuition payments are non-refundable.

Students accepted within 14 days of the program start will be subject to an abbreviated payment deadline.

Financial aid

Tuition assistance from the GATE office may be available to those with financial need. Fill out the Financial Aid page of the application when you apply. Parents should also contact their student's school to learn if any financial support is provided by the school. Financial aid recipients qualify to have any textbooks and field trips covered by the GATE office. Because financial aid funding is limited, families are granted one award per lifetime. Families may apply more than once, but priority is given to students who have not received an award previously. This Financial Aid policy is subject to change.

School tuition process

Many school districts in and around GATE program areas contribute all or part of a student's tuition. Upon acceptance, you will receive a form for your student's school to complete which includes billing information. This form must be completed and returned to the GATE office within 14 days of receipt. Families are responsible for all tuition and fees by the due dates listed in their acceptance materials. Tuition due dates are indicated in the student's decision letter. If payment is not received by posted due dates then the student will be withdrawn from the program. All paid tuition or fees are non-refundable.

Schools are invoiced ONCE a year beginning in October. If a student's school contributes tuition costs or fees, parents will be refunded that amount AFTER the school payment is received.

NOTE: If your student leaves the program for any reason, the student is responsible for reimbursing the school for the cost of the tuition that they paid on the student's behalf.

How to pay

Payments can be made online at gifted.msu.edu/payment.

Other costs

Parents are responsible for providing transportation, as well as textbooks, classroom supplies and a TI-83+ calculator for CHAMP students. Some programs may organize optional field trips with attendance costs to be paid by the family. For any online programs, students need a computer or laptop that is less than five years old and access to the internet with a recommended bandwidth of 300 kbps. If you have financial issues, see our policies at <https://gifted.msu.edu/paying/financial-aid>.

Cancellation policy

All classes are subject to a minimum enrollment and may be canceled at the discretion of the GATE office. Your application fee and any paid tuition will be refunded.


Refunds

No fees or tuition will be refunded unless the GATE office cancels the program.

Withdrawals

All requests for withdrawals must be submitted in writing to the Gifted and Talented Education office via e-mail at gifted@msu.edu.

No fees or tuition will be refunded.



GATE Academic Year Information Meeting

Sunday, February 21, 2021
Online – 12-2 pm

R.S.V.P. at
gifted.msu.edu/gateAYinfo2021



Cooperative Highly Accelerated Mathematics Program (CHAMP – Mathematics)

FALL 2021 – SPRING 2023

CHAMP, in partnership with the Department of Mathematics and University Outreach and Engagement at Michigan State University, provides classroom instruction for qualified mathematically gifted students applying in grades 6-9.

Important Dates for CHAMP Program

.....
**CHAMP
MSU**

**Application deadline:
May 24, 2021**

.....
**CHAMP
Southeast Michigan**

**Application deadline:
August 13, 2021**

.....
**CHAMP
LIVE Online Synchronous**

**Application deadline:
August 13, 2021**

Information meeting: February 21, 2021 | 12-2 pm

For more information, visit:
gifted.msu.edu/champ

**Class days and times are available on the GATE website gifted.msu.edu.
Please refer to the GATE website for the most up to date class information.**

Students attend one to two classes per week for a total of 2.5 hours.

The schedule depends on the delivery and location of each course section.

Students are expected to attend regularly scheduled academic year program labs outside of class.

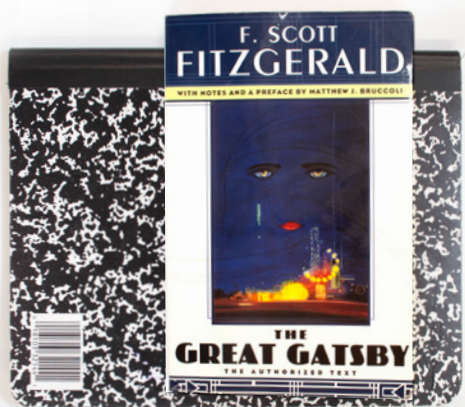
CHAMP is designed so that participating students will complete in two years the math content assigned in Michigan High School Content Expectations (HSCE) for all four years of high school and meet the Common Core National Standards. In their first year of CHAMP, students study Algebra 1 and Algebra 2. In the second year, CHAMP students study geometry and a standard pre-calculus course (trigonometry, analytic geometry, college algebra, and a brief introduction to calculus concepts).

Students must begin CHAMP with the study of Algebra 1. Bypassing one or more CHAMP courses is not allowed. Most students completing CHAMP will be prepared to enroll in an honors high school calculus course, an advanced placement (AP) high school calculus course, or a college calculus course.

CHAMP Schedule

Schedule:	Course:
Semester 1 (Fall, Year 1)	Algebra 1
Semester 2 (Spring, Year 1)	Algebra 2
Semester 3 (Fall, Year 2)	Geometry
Semester 4 (Spring, Year 2)	Pre-Calculus

**See the Academic Year Program details including instructional plans, responsibilities, expectations, and structure at the beginning of this section (pp. 10-15).



Intensive Studies in Humanities, Arts, Language, and Literature

(ISHALL – English)

FALL 2021 – SPRING 2023

ISHALL, in partnership with the Department of English, the Department of Writing, Rhetoric, and American Cultures, and University Outreach and Engagement at Michigan State University, provides classroom instruction for qualified gifted language art students applying in grades 6-10.

Important Dates for ISHALL Program

**ISHALL
MSU**

**Application deadline:
May 24, 2021**

**ISHALL
Southeast Michigan**

**Application deadline:
August 13, 2021**

**ISHALL
LIVE Online Synchronous**

**Application deadline:
August 13, 2021**

Information meeting: February 21, 2021 | 12-2 pm

For more information, visit:

gifted.msu.edu/ishall

Class days and times are available on the GATE website, gifted.msu.edu. Please refer to the GATE website for the most up to date class information.

Students attend one to two classes per week for a total of 2.5 hours.

The schedule depends on the delivery and location of each course section.

Students are expected to attend regularly scheduled academic year program labs outside of class.

Because students are studying typical high school literature content, ISHALL curriculum may contain mature content that is not appropriate for all students. Parents need to review the sample curriculum available in the online ISHALL Program Handbook and determine if their student is ready for the ISHALL curriculum.

ISHALL is designed so that participating students will complete in two years the English content assigned in Michigan High School Content Expectations (HSCE) for all four years of high school as well as meet the Common Core National Standards.

Students must begin ISHALL with the Grade 9 English curriculum. Bypassing one or more courses is not allowed. Most students completing ISHALL will be prepared to enroll in an honors high school English course, an advanced placement (AP) high school English course, or a college English or writing course.

ISHALL Schedule

Schedule:	Course:
Semester 1 (Fall, Year 1)	Grade 9 English curriculum
Semester 2 (Spring, Year 1)	Grade 10 English curriculum
Semester 3 (Fall, Year 2)	Grade 11 English curriculum
Semester 4 (Spring, Year 2)	Grade 12 English curriculum

**See the Academic Year Program details including instructional plans, responsibilities, expectations, and structure at the beginning of this section (pp. 10-15).



NEW!

Michigan's Accelerated NihonGo for Americans

(M.A.N.G.A. – Japanese)

FALL 2021 – SPRING 2024 (3-year program)

M.A.N.G.A., in partnership with the Office of University Outreach and Engagement at Michigan State University, provides classroom instruction for qualified gifted students applying in grades 6-9.

Important Dates for M.A.N.G.A. Program

M.A.N.G.A. – Southeast Michigan

Application deadline: August 13, 2021

Information meeting: February 21, 2021 | 12-2 pm

For more information, visit:

gifted.msu.edu/manga

**Class days and times are available on the GATE website, gifted.msu.edu.
Please refer to the GATE website for the most up to date class information.**

Students attend one to two classes per week for a total of 2.5 hours.

The schedule depends on the delivery and location of each course section.

Students are expected to attend regularly scheduled academic year program labs outside of class.

M.A.N.G.A. is designed so that participating students can complete in three years the Japanese language content assigned in the Michigan High School Content Expectations (HSCE) for all four years of high school as well as meet the Common Core National Standards. Semesters 5-6 correspond to a high school AP Japanese course.

Students must begin M.A.N.G.A. with the Japanese 1 curriculum. Bypassing one or more courses is not allowed. Most students completing M.A.N.G.A. will be prepared to take the Japanese Language and Culture advanced placement (AP) exam, or a college Japanese course.

M.A.N.G.A. Schedule

Schedule:	Course:
Semester 1 (Fall, Year 1)	Japanese 1
Semester 2 (Spring, Year 1)	Japanese 2
Semester 3 (Fall, Year 2)	Japanese 3
Semester 4 (Spring, Year 2)	Japanese 4
Semester 5 (Fall, Year 3)	AP Japanese Prep
Semester 6 (Spring, Year 3)	AP Japanese Prep

**See the Academic Year Program details including instructional plans, responsibilities, expectations, and structure at the beginning of this section (pp. 10-15).



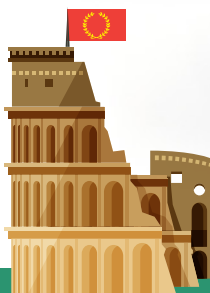
Langue pour Étudiants Avancés de Français (LEAF – French)

LEAF, in partnership with the Department of Romance and Classical Languages and University Outreach and Engagement at Michigan State University, provides classroom instruction for students applying in grades 6-10 who have advanced skills in language arts/French.

LEAF is on hiatus for Fall 2021. Please check back in January 2022 for the LEAF program starting Fall 2022-Spring 2024.

For more information, visit:

gifted.msu.edu/leaf



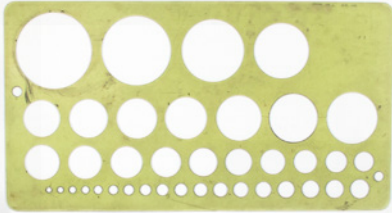
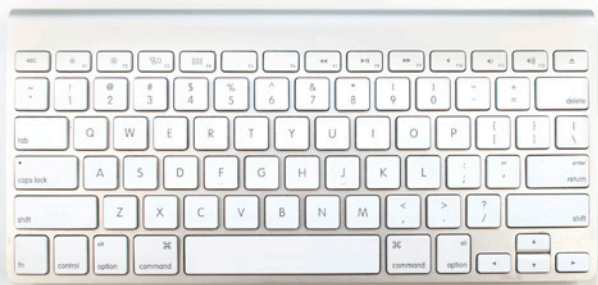
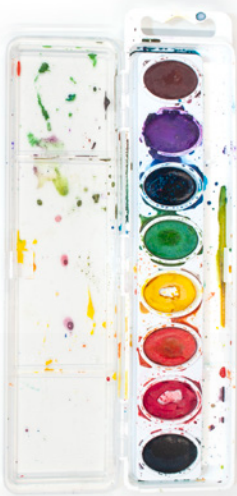
Amo Linguam Latinam (ALL – Latin)

ALL, in partnership with the Department of Writing, Rhetoric, and American Cultures, and University Outreach and Engagement at Michigan State University, provides classroom instruction for qualified gifted world language students applying in grades 6-10.

ALL is on hiatus for Fall 2021. Please check back in January 2022 for the ALL program starting Fall 2022-Spring 2024

For more information, visit:

gifted.msu.edu/all



Summer Programs

GATE summer programs offer students the chance to experience advanced non-credit coursework and the college campus alongside their high achieving peers. Summer program applications are reviewed on a rolling basis and classes fill up quickly.

Apply early!

Summer Programs Application Guideline

If you are currently in...	...you can apply for the following Summer Programs:
Grades 3 or 4	GUPPY 3-4
Grade 5	GUPPY 5-6
Grade 6	GUPPY 5-6, SuMO IS4GT: Intensive Studies: Non-Fiction v. Fiction Writing: Focus on Space and Place
Grade 7	MST@MSU, SuMO IS4GT: Intensive Studies: Non-Fiction v. Fiction Writing: Focus on Space and Place Pre-Med Ed Computer Art: Merging Programming and Creativity The World of Computer Science: The Underlying Language
Grade 8	MST@MSU, SuMO IS4GT: Intensive Studies: PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case Non-Fiction v. Fiction Writing: Focus on Space and Place Pre-Med Ed Computer Art: Merging Programming and Creativity The World of Computer Science: The Underlying Language
Grade 9	MSTL, SuMO IS4GT: Intensive Studies: PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case Non-Fiction v. Fiction Writing: Focus on Space and Place Pre-Med Ed Computer Art: Merging Programming and Creativity The World of Computer Science: The Underlying Language Aqueous and Environmental Geochemistry Sustainable Agriculture and Remote Sensing
Grade 10	MSTL, SuMO IS4GT: Intensive Studies: PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case Aqueous and Environmental Geochemistry Sustainable Agriculture and Remote Sensing Computer Art: Merging Programming and Creativity The World of Computer Science: The Underlying Language
Grade 11	IS4GT: Intensive Studies: Aqueous and Environmental Geochemistry Sustainable Agriculture and Remote Sensing PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case

Summer Program Details

Costs and Payment

These fees apply to:

GUPPY, IS4GT, MST, MSTL, and SuMO

Application fee

All programs require a \$50 non-refundable application fee.

Please note that this fee must be paid **BEFORE** any information is shared or reviewed on your application.

Tuition

Please refer to acceptance letter for due date(s). Extended day is available for commuter students for an additional cost. Tuition cost breakdown is as follows.

.....

GUPPY

\$350 - includes lunch except June 28-July 2 program
(\$175 due within 7 days of billing; additional \$175 due with 14 days of billing)

.....

IS4GT and MST@MSU

Commuter: **\$750** - includes lunches
(\$375 due within 7 days of billing;
additional \$375 due with 14 days of billing)

Residential: **\$1,500**
(\$750 due within 7 days of billing;
additional \$750 due within 14 days of billing)

.....

MSTL

Commuter: **\$995** - includes lunches
(\$497 due within 7 days of billing;
additional \$498 due with 14 days of billing)

Residential: **\$1,950**
(\$975 due within 7 days of billing;
additional \$975 due within 14 days of billing)

.....

SuMO

\$450
(Full tuition payments are required within 14 days of acceptance into the program.)

Students accepted within 14 days of the program start will be subject to an abbreviated payment deadline.

Financial aid

Tuition assistance from the GATE office may be available to those with financial need. Fill out the Financial Aid page of the application when you apply. **Because financial aid funding is limited, families are granted one award per lifetime.** Families may apply more than once, but priority is given to students who have not received an award previously. This Financial Aid policy is subject to change.

How to pay

Payments can be made online at gifted.msu.edu/payment.

Other costs

Extended day is available to commuter students for an additional cost (excluding GUPPY).

For out of town families for GUPPY, GATE will provide a list of local hotels for GUPPY families and will be distributed after the student is accepted into the program. This cost is not covered by tuition and is the responsibility of families.

Cancellation policy

All programs, or classes within a program, may be subject to a minimum enrollment of students and may be canceled at the discretion of the GATE office. Additionally, the residential portion of the programs may be canceled if there are not enough residential students enrolled. Any applicable fees and/or tuition will be refunded.

Refunds and drops

The application fee of \$50 is non-refundable.

All requests for withdrawals for summer programs must be submitted in writing to the Gifted and Talented Education office via e-mail at gifted@msu.edu. No fees or tuition will be refunded.

A student may only leave the program in case of emergency. In such a case, the student should take all personal belongings with them as they will be considered withdrawn from the program. No refunds will be given.

Commuter vs. Residential

Residential and Commuter students are required to attend all classes. Students are not allowed to leave during any program unless there is an emergency. Students who are absent at any point during a program (including early departure for emergencies) will be considered withdrawn from the program from that point forward and no refunds will be issued.

Comparison of Commuter and Residential Participation in GATE Summer Programs

	Residential (R)	Commuter (C)
Academic classes	Both R and C students participate in the day's academic classes.	
Lunch	Both R and C students are provided with lunch.	
Social activities	Because residential students pay to stay overnight in the residence halls, there are additional social activities planned for them in the evenings and on the weekend.	Commuter students do not participate in evening or weekend social activities.
Program attendance	<p>R students are not allowed to leave for the duration of the program (unless an emergency arises).</p> <p>Students can communicate with their families via phone and e-mail in the evenings.</p>	C students must be dropped off and picked up during designated times. Arriving late, leaving early, or missing days of class is not allowed.

Availability of Commuter and Residential Options for GATE Summer Programs

	Residential (R) ¹	Commuter (C)
GUPPY	No ²	Yes
IS4GT	Yes	Yes
MST@MSU	Yes	Yes
MSTL	Yes	Yes
SuMO	SuMO is only available online and will not offer residential options.	

1. Students must be at least 12 years old by the start of the program to stay in the dorms.

2. For GUPPY, families who live out of the area may stay at a local hotel. A parent must accompany their student.

Summer Program FAQs

When and where do I drop off and pick up my child?

Times, locations, and detailed information about drop-off and pick-up policies will be provided to parents and guardians well in advance of the beginning of the program via e-mail. Alternate drop-off or pick-up times are not allowed. It is important that we make sure that every student is accounted for and safe at all times.

Can my child miss a day of class?

NO. It is against university policy for an enrolled student to leave the program early or arrive late for any reason. Courses are also incredibly rigorous, and we do not want any of our students to fall behind or feel left out. Students may only miss class for an emergency that warrants the student leaving for the remainder of the program.

Can I visit my child or take my child home on the weekend?

NO. GATE programs are closed programs, meaning that for the duration of the program there are no visits from home or trips home for the weekend.

Programs are full of fun activities, even on the evenings and weekends for residential students! For liability reasons, it is mandatory that students stay on campus for the duration of the program unless an emergency arises that warrants the student leaving for the remainder of the program.

Students will be able to text, e-mail, and call their parents and guardians at designated times, usually during evening free time.

Will my child be safe on campus and staying in the dorms?

Residential staff, also called Lead Supervisors and Resident Advisors (RAs), are trained to keep each student safe. Before the opening of the program, the residential staff receive training on rules, regulations, and safety information related to the students' welfare. RAs are selected because of their commitment to education and ability to interact well with young people.

The residential staff members live in the residence hall on the same floor as students and are on duty 24 hours a day to ensure that every participant is safe. They are responsible for providing a comfortable and friendly atmosphere in the residence hall.

Male and female students will live in separate hallways in the same residence hall.



GATE Summer Information Meeting

Sunday, March 21, 2021
Online – 12-2 pm

R.S.V.P. at
gifted.msu.edu/GATEsummerinfo2021



MSU Non-Discrimination Statement

MSU's Anti-Discrimination Policy prohibits acts of discrimination and harassment against any university community member(s) by inappropriately limiting employment opportunities, access to university residential facilities, or participating in educational, athletic, social, cultural, or other university activities on the basis of age, color, gender, gender identify, disability, height, marital status, national origin, political persuasion, race, religion, sexual orientation, veteran status or weight. Complaints under this policy may be submitted to the Office of Institutional Equity for investigation.

MICHIGAN STATE
UNIVERSITY





Gifted University for Parents and Precocious Youth (GUPPY)

GUPPY is a weekend program offering students in grades 3-6 a variety of accelerated exploratory educational presentations and hands-on experiences in Michigan State University's laboratories and classrooms.

Important Dates for GUPPY Program

GUPPY 3-4

- June 25-27, 2021
- June 28 - July 2, 2021
(Half day, week long)
- July 8-10, 2021
(NEW! Thurs-Sat)
- July 16-18, 2021

GUPPY 5-6

- June 25-27, 2021
- June 28 - July 2, 2021
(Half day, week long)
- July 8-10, 2021
(NEW! Thurs-Sat)
- July 16-18, 2021

Parent University

July 10, 2021
12:30pm – 3:30 pm

Application deadline: May 24, 2021

For more information, visit:

gifted.msu.edu/guppy

GUPPY is designed for young gifted and talented students to attend classes taught by MSU faculty and subject experts at Michigan State University for the weekend or a half day week. This GATE program will offer young gifted students a variety of accelerated exploratory educational presentations and hands-on experiences in MSU's laboratories and classrooms.

Commuting

Local families commute daily by dropping off and picking up their student each day from campus.

Lodging options

For out of town families for GUPPY, GATE will provide a list of local hotels for GUPPY families and will be distributed after the student is accepted into the program. Families are responsible for the cost of their hotel stay.

GUPPY's Parent University

Parents, save the date! You are invited to attend GUPPY's Parent University, which provides presentations about gifted children by experts.

Parent University occurs on July 10. Various topics related to gifted education and raising a gifted child will be discussed. Past topics include: Gifted 101, Road map to Advocacy, IQ Testing, and Spatial Learners. There will also be an Ask the Gifted Expert Q&A session where the speakers will answer parent questions. All GUPPY parents are welcome to attend the Parent U session.

GUPPY 3-4 Track Options

Students in Grades 3-4 will take the classes in one of the tracks below.

Space is limited, and each track will be filled on a first-come first-served basis.

For full descriptions, see gifted.msu.edu/guppy

GUPPY 3-4: June 25-27, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
A	How Much is a Million? Mathematics by the millions, billions and trillions	Spanish is Fun: read, write, speak, repeat	Lunch and Coordinated Activity Time	Shapes, Forms, Colors, and Textures OH MY!	Persuasive Writing: Learn processes and strategies for writing strong and convincing persuasive arguments
B	Experience Chinese Culture Through Language	Color Theory: All the colors of art		Mythology Writing: Watch out Percy Jackson!	SPEEEEEED MATH: Learn how to beat the calculator-whew

GUPPY 3-4: June 28-July 2, 2021

Track	Class 1 8:30 – 9:30 am	Class 2 9:45 – 10:45 am	Class 3 11:00 am – 12:00 pm
C	The Science of Measurement: Learn how ancient and modern tools were used for measurement	Creating Art in a Box: Design comics and superheroes	Train Your Math Brain: Improve your mathematical abilities

GUPPY 3-4: July 8-10, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
D	Modular Origami: Create amazing geometric shapes with paper	Scratch: Learn how to code and share interactive media	Lunch and Coordinated Activity Time	Theatre Arts: dancing, singing, and acting!	Slam Dunk Poetry: Push the boundaries of poetry
E	Survivor! Survivor! Basic skills for wilderness survival	Understanding Pi: A perennial puzzle		POP Art: Create bright and bold art using various media and methods	Candy, Chemistry and Careers

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GUPPY 3-4: July 16-18, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
F	Biology of Animal Response: Students will conduct experiments on behavioral responses to an environmental variable	Animal Behavior: Learn more about animal behavior and environmental interactions	Lunch and Coordinated Activity Time	Geogebra: A fun math program that combines geometry, algebra, graphing, statistics, and calculus	Veterinary Science: Learn about the health and well-being of animals

GUPPY 5-6 Track Options

Students in Grades 5-6 will take the classes in one of the tracks below.

Space is limited, and each track will be filled on a first-come first-served basis.

For full descriptions, see gifted.msu.edu/guppy

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GUPPY 5-6: June 25-27, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
G	Figure Study in Art: Learn about gestural drawings and how to draw proportion	Wilderness Survival: Survival skills in the great outdoors	Lunch and Coordinated Activity Time	Geocaching: The high-tech treasure hunt	Nuclear Astrophysics: Fusion, fragmentation, and radioactive decay
H	Science Olympiad Exploration: Prepare to compete in one of the premier science competitions	Non-fiction Connecting with Earth and Nature: Amazing facts built into narrative nonfiction text	Lunch and Coordinated Activity Time	Becoming Bilingual: Building your Spanish language skills	Sneaker Art: Customize your own kicks <small>*additional material costs are required for this class</small>

Class choices are tentative.

Check gifted.msu.edu for the most up to date information

GUPPY 5-6: June 28-July 2, 2021

Track	Class 1 8:30 – 9:30 am	Class 2 9:45 – 10:45 am	Class 3 11:00 am – 12:00 pm
I	Art Around the World: Capturing the spirit of art around the world	Learning Math Zero to Infinity: Exploring the concept of infinity	Entomology: Understanding the importance of insects

GUPPY 5-6: July 8-10, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
J	Greek Mythos: Exploring art through Homer's tale, The Odyssey	Narrative Non-fiction: Connecting to the past by reading historical stories of memorable people from Mahatma Gandhi to Abe Lincoln	Lunch and Coordinated Activity Time	Euclid's Elements: Creating geometric construction using a compass and a straight edge	Java: Learn fundamentals of developing applications in Java
K	Chemistry: Exploring our atomic world	Fine Art and YOU: Learn and create famous style art pieces		Lego of your poetry fears: Writing poetry is as easy as building LEGOs!	MOEMS: Mathematical concepts

GUPPY 5-6: July 16-18, 2021

Track	Class 1 8:30 – 9:45 am	Class 2 10:05 – 11:20 am		Class 3 12:45 – 2:00 pm	Class 4 2:20 – 3:35 pm
L	Pre-Med Jr.	Pre-Med Jr.	Lunch and Coordinated Activity Time	Pre-Med Jr.	Pre-Med Jr.



Pioneer



Innovate

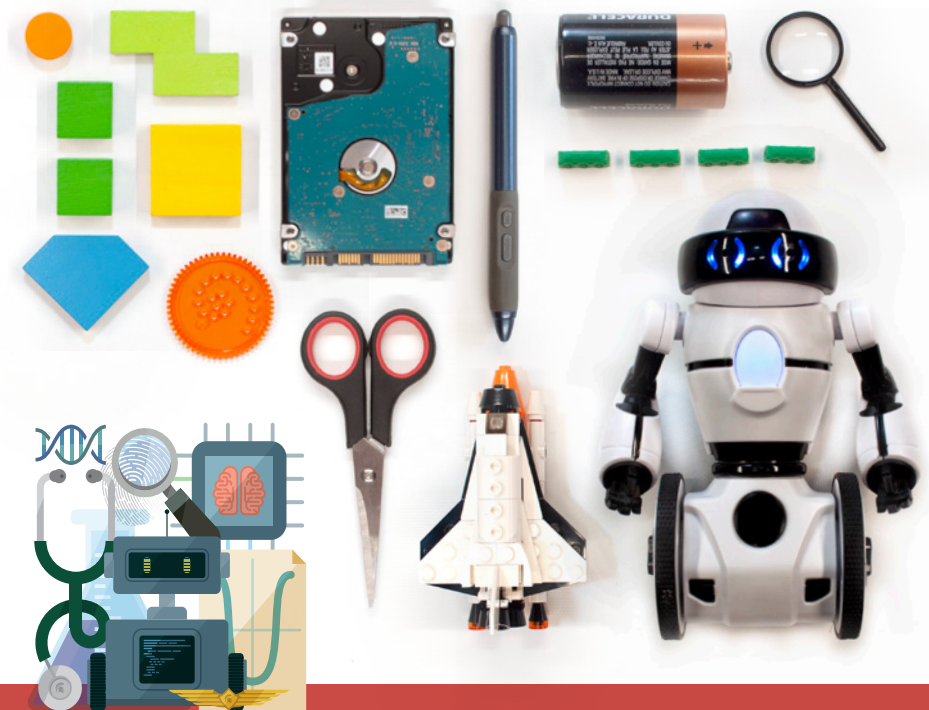


Engage

MICHIGAN STATE
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Honors College

honorscollege.msu.edu



Intensive Studies for Gifted and Talented (IS4GT)

A one-week advanced program in a specific concentrated curriculum, IS4GT is an option for gifted 6th-11th grade students. Classes focus on one main topic for the week.

Important Dates for IS4GT Program

IS4GT Program Dates

June 21-25, 2021

- PRE-MED ED
- Aqueous and Environmental Geochemistry

June 28-July 2, 2021

- PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case

July 12-16, 2021

- Computer Art: Merging Programming and Creativity
- Non-Fiction v. Fiction Writing: Focus on Space and Place
- Sustainable Agriculture and Remote Sensing

July 19-23, 2021

- The World of Computer Science: The Underlying Language

Application deadline: May 24, 2021

For more information, including course descriptions, visit:

gifted.msu.edu/is4gt

For information including extended course descriptions, payment options, and testing information, please visit gifted.msu.edu. Phone: 517.432.2129 / Fax: 517.884.5927 / Email: gifted@msu.edu

IS4GT Course Offerings for
June 21-25, 2021

Please note: Listed grades are the grades that students are in when they are applying.

For more comprehensive class details, see gifted.msu.edu/is4gt

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PRE-MED ED

Grades 7-9

Program intended for students interested in the health care field

- Discover medical specialties through hands-on demonstrations and activities, such as a medical escape room, phlebotomy, and intubation
- Experience the healthcare field through virtual reality simulations
- Explore the life of CPR and emergency medical response

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Aqueous and Environmental Geochemistry

Grades 9-11

- Use a variety of state-of-the-art equipment for collecting in situ river and groundwater data
- Collect water samples for hands on wet chemistry analysis in MSU's geochemistry laboratory
- Create computer models of these complex environmental systems using the data we collected in the field and laboratory

IS4GT Course Offerings for
June 28-July 2, 2021

Please note: Listed grades are the grades that students are in when they are applying.

For more comprehensive class details, see gifted.msu.edu/is4gt

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PRE-LAW: LitiGATE, An Intensive Study in Prosecuting and Defending A Criminal Case

Grades 8-11

- Partnership with Western Michigan's Cooley Law School.
- Students will learn to read a case file, a criminal statute, and a criminal complaint.
- Students will create a case theme, observe skills necessary for opening statements and closing arguments, effective techniques for direct and cross-examination, and proper methods for introducing items into evidence.
- After observing the tutorials, students will practice what they have learned by performing collaborative and interactive exercises designed to prepare for participating in a mock trial. Instructors will provide feedback and constructive critiques to help prepare the students for their final mock trial.

IS4GT Course Offerings for **July 12-16, 2021**

Please Note: Listed grades are the grades that students are in when they are applying.
For more comprehensive class details, see gifted.msu.edu/is4gt

Computer Art: Merging Programming and Creativity

Grades 7-10

- Create fractal art with basic programming languages
- Use sine waves and other equations to generate animation
- Create effects with 3D particle systems, fluids and other simulations
- Create abstract art with motion graphics tools
- Use motion capture for animation

Non-Fiction v. Fiction Writing: Focus on Space and Place

Grades 6-9

Students will examine setting as the character, working with describing places as they are, places imagined realistically, and places imagined without these realistic boundaries. As a product of these examinations, they will write their own works, and they will expand one of the three sub-genres into a more extensive writing sample. Instructional foci include:

- Realist journalism, realistic fiction, and surrealistic fiction with a focus on space and place
- The physical descriptions of places — real and fictional—via (de)familiarization
- Written important considerations of insiders/outsideers
- Characteristics of invitational writing
- Reading and writing experiences of rich descriptions
- Peer review/editing/publishing

Sustainable Agriculture and Remote Sensing

Grades 9-11

- Learn about the fast moving and high-tech field of modern agriculture directly from industry leaders and contemporary research experts.
- Participate in the analysis of high-resolution satellite images and explore the advances in air and space-borne platforms in obtaining crop and soil data.
- Tour the MSU research farms and launch a state-of-the-art research drone to collect our own data for analysis.
- Learn about the future of farming, including topics such as sustainable agriculture, food security, crop yield forecasting, and precision farming.
- Assess the impact of climate variability and change on agricultural production systems.

IS4GT Course Offerings for
July 19-23, 2021

Please Note: Listed grades are the grades that students are in when they are applying.

For more comprehensive class details, see gifted.msu.edu/is4gt

**The World of Computer Science:
The Underlying Language**

Grades 7-10

This course will cover the basic material that you'll need to understand computer science and to build a foundation in coding. It will hit all the major topics of computer science and will walk you through the basics of Scratch, Python, and web development. Whether you want to refresh your memory, reinforce class instruction, or learn the basics, this course is the way to go!

Topics will include: Computer systems, Binary code, Algorithms, Loops, events, procedures, Programming in SCRATCH and Python, Boolean Expressions, Web development, Cybersecurity, HTML, CSS and more!

Class outcomes include:

- Modeling individual decisions; defining decision; deciding what to decide
- Analyzing a single option: identifying factors; identifying relationships; building connections; and scoring the option
- Comparing options; selecting an option; testing the algorithm; summarizing the decision process
- Changing a decision; monitoring a decision: time frames and the hybrid approach



Math, Science, and Technology (MST@MSU)

MST@MSU is a one-week summer commuter or residential program for students who are currently in grade 7 or 8 during the 2020-2021 school year. To sign up for the residential option, students must be a minimum age of 12 years old.

NOTE: MST/MSTL class and workshop choices are subject to change or cancellation at the discretion of the GATE office. Such changes **DO NOT** warrant refunds or withdraws.

Important Dates for MST Program

MST Program Dates June 21-25, 2021 and July 12-16, 2021

June 20, 2021 or July 11, 2021

Check-in at residential hall
(times and availability to be determined)

Orientation for parents
and students (including commuter)

June 21-25, 2021 or July 12-16, 2021

Classes held Monday – Friday
9:00 am – 5:00 pm

Lunch included for all students
(including commuter)

Extended day is available for commuter
students at an additional cost.

June 25, 2021 or July 16, 2021 (Friday)

Check-out and
Closing Ceremony
(all students and parents)

Application deadline: May 24, 2021

For more information, including course descriptions, visit:

gifted.msu.edu/mst

For information including extended course descriptions, payment options, and testing information, please visit gifted.msu.edu. Phone: 517.432.2129 / Fax: 517.884.5927 / Email: gifted@msu.edu

The program is held at the MSU campus and offers a variety of topics within mathematics, science, and technology, focusing on real-world applications in these areas. The goal is to match the intellectual abilities of talented students with rigorous and challenging course work, which provides enrichment but does not duplicate or accelerate course work that is part of the regular middle school curriculum.

Updated structure: Students will now select one course track for the week, consisting of two academic classes, and will rank their choice of enrichment workshop. Students may choose to attend both weeks of MST.

See individual class descriptions on gifted.msu.edu.

MST Track Options

June 21-25, 2021

Track	Class 1 9:00 – 11:00 am	Class 2 12:30 – 2:30 pm
1	Nuclear Astrophysics: Learn about the wonders of nuclei in deep space	Optics and Photonics: Applying technology to solve real-world problems
2	Statistics in Real Life: How we process, interpret, and analyze data	Java Development: Creating in a Windows environment

Workshop Options - 3:00 – 5:00 pm (Rank your workshop choices)		
Workshop A	Workshop B	Workshop C
Studio Art: From watercolors to mixed media to sculpting clay	Hatch Your Hustle: Developing the skills to be an entrepreneur and innovator	Media Creation in a Digital World: From content consumption to creation

July 12-16, 2021

Track	Class 1 9:00 – 11:00 am	Class 2 12:30 – 2:30 pm
3	Mechatronics: A blend of mechanical and electrical engineering, computer control, and information technology	3D Animation: Digitalized art and storytelling
4	Chemistry: Exploring our atomic world	Cybersecurity: Exploring ways systems can be protected against malicious attacks
5	Pathfinding 101: Creating algorithms to alter common game behavior	Engineering 101: Learn about the design process, CAD, 3D printing, lathes, drills, and mills

Workshop Options - 3:00 – 5:00 pm (Rank your workshop choices)		
Workshop A	Workshop B	Workshop C
Composing Electronic Music: Recording, editing, and sound creation using technology	College Prep: Navigating the road to college through persistence and fit	The Chemistry of Cooking: Exploring the reactions between food and science



Math, Science, Technology, and Leadership (MSTL)

The Mathematics, Science, Technology, and Leadership (MSTL) program at Michigan State University is a two-week summer commuter or residential program for academically talented students who are currently in grades 9 or 10 during the 2020-2021 school year.

NOTE: MST/MSTL class and workshop choices are subject to change or cancellation at the discretion of the GATE office. Such changes **DO NOT** warrant refunds or withdraws.

We cannot guarantee placement in any of the classes or workshops offered.

Important Dates for MSTL Program

MSTL Program Dates July 12-23, 2021

July 11, 2021

Check-in at residential hall
(times and availability to be determined)

Orientation for parents
and students (including commuter)

July 12-16, 2021 and July 19-23, 2021

Classes held Monday – Friday
9:00 am – 5:00 pm

Lunch included for all students
(including commuter)

Extended day is available for commuter
students at an additional cost.

July 23, 2021 (Friday)

Check-out and
Closing Ceremony
(all students and parents)

Application deadline: May 24, 2021

For more information, including course descriptions, visit:

gifted.msu.edu/mstl

The MSTL program offers advanced curriculum, as well as a leadership workshop. Students will take two classes that have been designed to stimulate students to learn about new developments in mathematics, science, and technology, and to explore related career fields. Students will also take the leadership workshop titled *College Prep: Navigating the Road to College Through Persistence and Fit*, which will introduce them to concepts and skills required to transition from high school to college. See class and workshop descriptions below. **For more comprehensive class details, go to gifted.msu.edu/programs/summer-programs/mstl/class-options.** Students will be asked to rank their preference of topics.

MSTL Class Options (Students will receive 2 classes from their rankings)

Molecular Biology: Bacterial Behavior and Communication

- By studying how chemotaxis works, students will discover the simple molecular mechanisms that form the building blocks of sophisticated signaling networks.
- Using computer simulations, students will explore how signaling networks control bacterial behaviors in complex environments

Fascinating Physics

- Learn how to apply mathematics and use computers to measure Earth's gravitational acceleration, to explore circuits with LEDs, and to investigate resonant frequencies of a vibrating string.
- Learn how to apply algebra, trigonometry, and physics to gain a better understanding of rotational motion and interference patterns produced by laser light.
- Design and conduct physics experiments, and present the results of those experiments.
- Learn how to effectively communicate physics concepts to others.

Virtual Rhetoric

- Students will examine rhetorical frameworks to learn fundamentals of how rhetoric functions in the real world. We will consequently investigate the "screens" with which we interact with a two-fold shared purpose: to learn how to analyze the world around us rhetorically and to create digital compositions of our own on a selected topic or theme.
- In this journey, students will engage in activities to examine and to discuss the digitized world through various rhetorical lenses.
- Resulting projects will include websites and videos to practice (a)synchronous digital artifacts for select audience and purposes, examine the differences in which these two mediums engage audiences, and share information to achieve a designed purpose.

Pathfinding and Video Game Artificial Intelligence

Software developers use many tricks to give their game characters decision-making abilities. This class is for anyone wishing to know more about the algorithms behind common game behavior. The class will also go into the theoretical background behind these techniques. Students will have the opportunity to create an AI controlled game in the lab. Topics will include:

- The concept of utility
- Player node, NPC node, and Enemy AI style node Pathfinding
- A* Algorithm and basic graph theory

MSTL Workshop (All participants will attend)

College Prep: Navigating the Road to College Through Persistence and Fit

As a high school student the road to navigating the way from high school to college is difficult. This path is filled with uncertainties, questions and many unknowns. This class will provide students access to experts in admissions, high school advising, and various areas of higher education and will work with students to:

- Learn how to develop a strong resume
- Learn how to ask for a letter of recommendation
- Learn from college and university admissions experts in a panel format
- Learn what your interests are and how this translates into college applications
- Learn about college applications from university experts
- Learn about IB/AP/Honors courses and dual enrollment options



Summer Mathematics Online (SuMO)

SuMO provides classroom instruction for qualified gifted students looking to complete accelerated math instruction in less time in the summer 2021 for grades 6-10.

Students will work to complete Algebra 1 or Algebra 2 with LIVE online classes conducted by MSU GATE mathematics instructor(s).

Important Dates for SuMO Program

Orientation

June 20, 2021
Online - Time TBD

Algebra 1

June 21-August 29, 2021
• Mondays and Wednesdays
5:30 - 7:30pm
• Tutoring dates and times TBD

Algebra 2

June 21-August 29, 2021
• Tuesdays and Thursdays
5:30 - 7:30pm
• Tutoring dates and times TBD

Application deadline: May 24, 2021

For more information, including course descriptions, visit:

gifted.msu.edu/sumo

Students are required to attend two 2-hour math classes each week with additional tutoring labs available. **Students who do not attend the class regularly and do not meet the attendance requirements will be dismissed from the program.** Students will receive LIVE online instruction during the week with additional time for tutoring during the labs to work through their questions and concepts.

Students may not complete Algebra 1 and Algebra 2 in SuMO at the same time.

Midterm progress reports and final grade report with letter grades will be issued in accordance with the MSU GATE grading scale. Grade reports will be sent directly to parents. Parents may request an official transcript from MSU GATE to be sent directly to their child's home school.

GATE MSU Academic Programs are conducted as an opportunity for students to gain high school level credit. GATE mathematics classes are designed to align with Michigan HSCE requirements as well as Common Core. Parents are responsible to communicate with their child's school before applying to any academic program to address the question of issuing credit and placement of their student in their class curriculum and/or schedule. GATE does not guarantee any credit acceptance with any school or district.

The GATE Summer Mathematics students are not able to opt into a MSU CHAMP program using any credit obtained from any GATE Summer Mathematics class. GATE Summer Mathematics class cannot be used as a substitute for any class in the MSU CHAMP program.

Participation in SuMo does not guarantee acceptance into CHAMP. SuMO courses are not interchangeable with CHAMP curriculum. Students who wish to apply to CHAMP must complete a new application for CHAMP and complete and meet all of the requirements for the CHAMP application process.

SuMO acceptances are based on rolling admissions and are completed on a first come, first served basis. When a section is full the program will close and no more applications will be reviewed. Note: A SuMO section may fill prior to the application deadline date.

All sections must meet a minimum number of registered students or the class will be canceled and all fees and payments will be refunded.

Cost

Tuition cost: **\$450** (no discounts may be applied) (not including a \$50 application fee)

Due to the reduced cost of this program, we will not be honoring any prior discounts.

Refund and payments: Full tuition payments are required within 14 days of acceptance into the GATE Summer Mathematics ONLINE program. Students may withdraw from the program up until June 1st for a full refund. After May 24th class decisions will be made and no refunds will be available after June 1st. All tuition payments must be paid before first class session (week of June 20).



Ingham Intermediate School District

Ingham Intermediate School District is a regional educational service agency that offers programs and services to 12 public school districts, 9 public school academies, over 44,000 students, and reaches into seven counties. Our continuum of programs and services includes summer camps to challenge young minds.

Gifted and Talented programs are available through Ingham ISD and through partnerships with Michigan State University and Lansing Community College. These programs provide challenging educational enrichment opportunities for K-12 students.

For more information, visit:

inghamisd.org/thelatest/events/giftedandtalentedprograms

Ingham ISD Summer 2021 Programs

Wilson Talent Center Summer Camps

The Wilson Talent Center will be hosting several summer camps in areas such as Engineering, Culinary Arts, New Media and more.

Kids' College

July 12 – 23, 2021

For students who have completed grades 4 or 5.

The Gifted and Talented Office of Ingham Intermediate School District and Michigan State University are pleased to announce the 35th year of Kids' College for talented students. This collaborative venture improves and expands educational offerings for students who have outstanding abilities and/or potential talent in the content areas of science, technology, engineering and math. The content focus for 2021 is "Forces." Kids' College is for students currently in grades four and five. This program is sponsored by Ingham Intermediate School District and partially funded by grants from The W.B. and Candace Thoman Foundation.

Register beginning April 2021

(partial/full scholarships may be available based on need)

Math Scholars' University

July 12 – 23, 2021

For students who have completed grades 6 or 7.

Math Scholars' University is a two-week program designed to serve students who are identified as having high abilities or interest in mathematics. This program challenges students to develop a better understanding of mathematics through the use of problem solving applications, mathematical reasoning and collaboration. Math Scholars' University is for students currently in grade six and seven. This program is sponsored by Ingham Intermediate School District and partially funded by grants from The W.B. and Candace Thoman Foundation.

The topics of Math Scholars' University are intended to supplement, complement and extend mathematics taught in the classroom during the school year. The choice of topics is based on current research in mathematics and knowledge about how children learn. The instruction focuses on cooperative learning and builds on children's prior mathematical knowledge.

Register beginning April 2021

(partial/full scholarships may be available based on need)

The mission of the MSU Science Festival is to celebrate the many ways science, technology, engineering, art, and mathematics (the STEAM disciplines) touch our everyday lives and shape our future, broaden public access to informal learning environments, create meaningful direct interactions with scientists, and inspire the workforce of the future.

SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATHEMATICS

MICHIGAN STATE UNIVERSITY
**SCIENCE
FESTIVAL**

APRIL 1-30, 2021

**The 2021 festival
will be online**



sciencefestival.msu.edu



MICHIGAN STATE UNIVERSITY

spartan youth programs

**Camps, Courses, Places to Visit,
Programs, and Other Activities
for Kids of All Ages**

(Pre-K through 12th Graders)

What is SYP?

An online catalog of **exciting opportunities for pre-K through 12th graders** to improve their knowledge and skills in specific subject areas. Pre-college programs are an excellent way for students to explore majors or careers while being introduced to the college environment.

With **over 200 listings** covering topics in agriculture, art, business, computers, engineering, math, music, science, sports, and writing, MSU is sure to have a **program for every student!**

You can search the SYP website for:

- summer and school year programs
- opportunities to earn college credit
- residential experiences on the MSU campus
- financial assistance
- study abroad possibilities

For more information visit

spartanyouth.msu.edu

MICHIGAN STATE
U N I V E R S I T Y

Gifted and Talented Education
University Outreach and Engagement

Kellogg Center
219 S. Harrison Rd., Rm 8
East Lansing, MI 48824

For more information on any of our programs, please visit
[GIFTED.MSU.EDU](https://www.gifted.msu.edu)