

# Yucai Academic Excellence 2020-21 Course Catalog

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# 1. MathAscent UMTYMP Admission Prep - Live Virtual Year-Long Program

Month	Dates (Saturdays)
September	19, 26
October	3, 10, 17, 24, 31
November	7, 14, 21
December	5, 12, 19
January	9, 16, 23, 30
February	6, 13, 20, 27
March	6, 13, 20, 27
April	10, 17, 24
May	1, 8, 15, 22

Day/Time: Saturdays / 3:00 PM - 3:50 PM

Grades: 5 to 7

Pricing: \$500 (Full)

## Course Description

MathAscent is a year-long program at Yucai Chinese School that focuses on fortifying the main topics in middle school mathematics. Students will master these topics while solving challenging problems at the level of (or above) University entrance examinations such as those at UMTYMP, John Hopkins, MIT, and Stanford. Students will also learn to solve mathematical puzzles and learn tricks and shortcuts for solving them. Students go above and beyond the school curriculum in this brain-stimulating course.

The MathAscent course will familiarize students with the essential concepts and techniques of Pre-Algebra, Introductory Algebra and Geometry, Number Theory, and Combinatorics. We will specifically emphasize problem-solving, where students will constantly be challenged to think creatively.

**Early University Admissions:**

UMTYMP, MIT, Stanford online, Northwestern CTD, John Hopkins CTY

### Course Objectives:

Upon the completion of the MathAscent program students will:

- Have a mastery of concepts covered in standard Pre-Algebra, the beginnings of Algebra and Geometry courses, as well as topics not covered in the traditional school curriculum.
- Be able to explain and employ important theorems and techniques used in mathematics to crack entrance examinations.
- Be able to map unfamiliar problems to basic principles and intelligently employ techniques they have learned to find the solution.

### Teaching Philosophy:

We believe that building good problem-solving skills is vital for mathematical growth. As such, the main focus of the course will be on building up intuition and creative thinking skills for moments when students are faced with classes of problems they've never seen before.

### Curriculum:

The course curriculum is owned and developed by CAE. The class material is composed of a unique blend of problems based on previous exams/contests from around the globe, traditional/historical problems, and fascinating puzzles. The classes in the month of May will focus on Competitive Math / Problem Solving.

## 2. IvyACT - Live Virtual Year-Long Program

Month	Dates (Saturdays)
September	19, 26
October	3, 10, 17, 24, 31
November	7, 14, 21
December	5, 12, 19
January	9, 16, 23, 30
February	6, 13, 20, 27
March	6, 13, 20, 27
April	10, 17, 24
May	1, 8, 15, 22

Day/Time: Saturdays / 2:00 PM - 2:50 PM

Grades: 7 to 11

Pricing: \$500 (Full)

The IvyACT program provides students with the skills and guidance necessary for achieving a perfect score on the ACT. Although a perfect score is not attainable for every student, our goal is to help students improve their performance, so they can end with a score that reflects their highest potential. Through this program, high ability middle-schoolers can train for the PreACT and ACT.

All relevant subject areas and topics necessary for the PreACT/ACT will be covered in-depth.

In particular, guidance is provided for the following difficult portions of the test:

- Sentence improvement questions and avoiding getting lost in the grammar rules
- Vocabulary questions and utilizing context clues
- Difficult mathematical questions and utilizing reasoning
- Data interpretation questions and learning the techniques

In addition to content, test-taking strategies will be covered in-depth. Understanding the structure of the test alone can significantly improve scores.

PreACT/ACT is taught by instructors with perfect scores, who have extensive classroom and tutoring experience. These instructors have aided over 170 students to obtain perfect scores, and have mentored over 56 Ivy Leaguers through the college admissions process.

The classes are designed from a student perspective and include powerful strategies and problem-solving techniques that you will not want to miss.

Highlights of the PreACT/ACT Course:

1. You'll be made aware of the winning approach to take on the ACT, which is adaptable to every type of question.
2. You'll be equipped with the skills to solve any sentence improvement question without getting lost in the grammar rules.
3. You'll be taught to think analytically and apply the necessary techniques to unfamiliar vocabulary questions.
4. The strategies you learn in the camp will help you to solve mathematical questions to reasoning, even in areas where you do not have extensive knowledge.

### 3. Mathlvy K to 6 - Live Virtual Year-Long Program

Grades: K / 1st / 2nd / 3rd / 4th / 5th / 6th

Month	Dates (Tuesdays)
September	15, 22, 29
October	6, 20, 27
November	3, 10, 17
December	1, 8, 15
January	5, 12, 19, 26
February	2, 9, 16, 23
March	2, 9, 16, 23
April	13, 20, 27
May	4, 11, 18, 25

#### A. Mathlvy Grades K - 2 Live Virtual Course

Suggested Grades: K - 2  
Time: 5:00 PM - 5:50 PM  
Pricing: \$625 (Full)      \$325 (Per Semester)

#### B. Mathlvy Grades 3 - 4 Live Virtual Course

Suggested Grades: 3 - 4  
Time: 6:00 PM - 7:00 PM  
Pricing: \$625 (Full)      \$325 (Per Semester)

#### C. Mathlvy Grades 5 - 6 Live Virtual Course

Suggested Grades: 5 - 6  
Time: 7:00 PM - 8:00 PM  
Pricing: \$625 (Full)      \$325 (Per Semester)

### Course Descriptions

Our Math courses broaden students' understanding of challenging concepts in a manner that enriches their investigative and reasoning skills. In this course, the study of numbers and their operations will be explored through interesting word problems and unique real-world

applications. Student progress is strengthened through homework, quizzes, tests, and a cumulative final exam to reinforce their knowledge.

Our Math courses adhere to the Common Core and Singapore Math Curriculums. Students will sharpen their math skills to have a fundamental knowledge of Pre-Algebra concepts. As a result, they will be highly prepared for middle and high school math courses and national standardized tests, including MCA, MAP, Aspire ACT, and Pre PSAT Examinations.

CAE's online courses provide live instruction and use materials including videos, notes, and practice problems. Our programs will also make use of breakout sessions to facilitate student learning and engagement. During the optional review sessions, students will get the opportunity to work closely with instructors to prepare for chapter exams and cumulative finals.

*Please note: The dates/times are characteristic and may change to accommodate for any technology or other related issues. Students will be grouped together to enable the right challenge.*

## 4. MathIvy Algebra I / Algebra II / Geometry - Live Virtual Year-Long Program

Algebra I	Month	Dates (Tuesdays)
	September	15, 22, 29
	October	6, 20, 27
	November	3, 10, 17
	December	1, 8, 15
	January	5, 12, 19, 26
	February	2, 9, 16, 23
	March	2, 9, 16, 23
	April	13, 20, 27
	May	4, 11, 18, 25

Algebra II/ Geometry	Month	Dates (Thursdays)
	September	17, 24
	October	1, 8, 22, 29
	November	5, 12, 19
	December	3, 10, 17
	January	7, 14, 21, 28
	February	4, 11, 18, 25
	March	4, 11, 18, 25
	April	15, 22, 29
	May	6, 13, 20, 27

### 1. MathIvy Algebra I Live Virtual Course

Suggested Grades: 5 - 8  
Day/Time: Tuesdays / 7:30 PM - 8:30 PM  
Pricing: \$625 (Full)      \$325 (Per Semester)

### 2. MathIvy Algebra II Live Virtual Course

Suggested Grades: 6 - 10



Day/Time: Thursdays / 8:00 PM - 9:00 PM  
Pricing: \$625 (Full) \$325 (Per Semester)

### 3. Mathlvy Geometry Live Virtual Course

Suggested Grades: 7 - 11  
Day/Time: Thursdays / 8:00 PM - 9:00 PM  
Pricing: \$625 (Full) \$325 (Per Semester)

## Course Descriptions

### Long Description:

Accelerated students are encouraged to join our Middle School courses: Introduction to Algebra, Algebra I, Algebra II, and Geometry. These curated online courses extend Pre-Algebra topics into a broader application of algebraic and geometric theory. Students will have the opportunity to explore challenging concepts through modeling and exploring real-world applications. These courses prepare students to excel in Middle and High School courses like Algebra 1, Geometry, and Algebra 2 courses. In addition, our training will prepare students for state and national standardized tests including the MCA, MAP, CLEP (College Level Examination Program), Aspire (ACT), ACT, Pre SAT Examinations, SAT, and SAT Mathematics Subject Tests.

CAE's online courses provide materials including videos, notes, and practice problems. Each student progresses through the course at their own pace, while retaining the opportunity to ask instructors questions during breakout sessions and scheduled office hours. During the scheduled online review sessions, students work closely with instructors to prepare for graded assignments, chapter exams, and cumulative finals.

Our online classroom allows for video, voice, and text interaction with instructors, as well as screen-sharing and whiteboard technology to make the experience engaging and personal to each student. As this is an accelerated course, students are encouraged to work for an hour a day, five days a week.

*Please note: The dates/times are characteristic and may change to accommodate for any technology or other related issues. A diagnostic test will be administered at the beginning to determine whether or not the student will be able to properly benefit from the course.*

## 5. MathIvy High School (Precalculus / Calculus I) - Live Virtual Year-Long Program

Month	Dates (Tuesdays)
September	15, 22, 29
October	6, 20, 27
November	3, 10, 17
December	1, 8, 15
January	5, 12, 19, 26
February	2, 9, 16, 23
March	2, 9, 16, 23
April	13, 20, 27
May	4, 11, 18, 25

### 1. MathIvy PreCalculus Live Virtual Course

Suggested Grades: 8 - 11  
Day/Time: Tuesdays / 8:00 PM - 9:00 PM  
Pricing: \$685 (Full)                      \$350 (Per Semester)

### 2. MathIvy Calculus I Live Virtual Course

Suggested Grades: 8 - 11  
Day/Time: Tuesdays / 8:00 PM - 9:00 PM  
Pricing: \$685 (Full)                      \$350 (Per Semester)

## Course Descriptions

Students are able to learn and excel in Precalculus and Calculus I through our carefully curated online courses. Our Precalculus course expands on topics taught in Algebra I / II and helps students master advanced trigonometry concepts. It will solidly prepare students for college admission tests, such as the ACT, SAT, and SAT Mathematics Subject Tests. Our Calculus I/II courses will adequately prepare students for high school calculus courses including Calculus Concepts, AP Calculus AB/BC, and their respective AP examinations.

CAE's online courses provide materials including videos, notes, and practice problems. Each student will have the opportunity to ask instructors questions during breakout sessions and scheduled office hours. During the scheduled online review sessions, students will work closely with instructors to prepare for graded assignments, chapter exams, and cumulative finals.

Our online classroom allows for video, voice, and text interaction with instructors, as well as screen-sharing and whiteboard technology to make the experience engaging and personal to each student. Students are encouraged to work for an hour a day, five days a week.

*Please note: The dates/times are characteristic and may change to accommodate for any technology or other related issues. A diagnostic test will be administered at the beginning to determine whether or not the student will be able to properly benefit from the course.*

## 6. Readinglvy K to 8 - Live Virtual Year-Long Program

Month	Dates (Thursdays)
September	17, 24
October	1, 8, 22, 29
November	5, 12, 19
December	3, 10, 17
January	7, 14, 21, 28
February	4, 11, 18, 25
March	4, 11, 18, 25
April	15, 22, 29
May	6, 13, 20, 27

### 1. Readinglvy Online Course - (Grade K - 2)

Suggested Grades:	K - 2	
Day/Time:	Thursdays / 5:00 PM - 5:50 PM	
Pricing:	\$625 (Full)	\$325 (Per Semester)

### 2. Readinglvy Online Course - (Grade 3 - 4)

Suggested Grades:	3 - 4	
Day/Time:	Thursdays / 6:00 PM - 7:00 PM	
Pricing:	\$625 (Full)	\$325 (Per Semester)

### 3. Readinglvy Online Course - (Grade 5 - 8)

Suggested Grades:	5 - 8	
Day/Time:	Thursdays / 7:00 PM - 8:00 PM	
Pricing:	\$625 (Full)	\$325 (Per Semester)

#### Course Descriptions

The online reading program allows students of all levels to expand on their critical reading, writing, and thinking skills. Students grades K-8 are encouraged to join and begin their mastery

of the English language at an individualized pace. Through this course, students will learn and practice challenging grammar, advanced vocabulary, reading comprehension, and critical writing skills at an accelerated pace.

Highlights of the Program:

- Online Live Lectures / Daily assignments to enhance learning
- Develops and naturalizes deeper textual understanding (Critical Reading Skills)
- Classwork in phonics, grammar, vocabulary, and spelling
- Assessments to identify gaps and measure growth
- Progression based on proficiency

This program allows for students of all learning styles to thrive. Whether your child learns best through engaging live lectures, daily individualized work, or group activities, the CAE Reading course provides the resources and instruction needed for success.

The classes are live-taught and students are given daily and weekly assignments. Our virtual classroom allows for video, voice, text, screen sharing, and whiteboard interaction, which provides a personal and engaging learning environment.

*Please note: The dates/times are characteristic and may change to accommodate for any technology or other related issues. Students will be grouped together to enable the right challenge.*

# Virtual Class Requirements

To use Zoom, you will need access to a computer (preferred) or mobile device with internet access. This is a list of basic system requirements:

## Screen Size

Canvas and Zoom are best viewed at a minimum screen size of 11+ inches. If you want to use a device with a smaller screen, we recommend using the mobile apps for Canvas and Zoom.

## Operating Systems

- macOS 10.13 or newer (Interlochen recommends Apple products)
- Windows 10
- Chrome OS
- Apple iOS and Android

## Computer Speed and Processor

- 4 GB of RAM
- 2 GHz processor

## Internet Speed

Minimum of 1.5 Mbps download and 800 Kbps upload