Summer Opportunities

The campus is in full operation during the summer, populated by students and faculty from a variety of programs. The university continues to have outstanding, innovative educational programs extending beyond regular involvement with its degree candidates. Six such programs are offered during the summer for high school students: the Pre-College Programs in the Fine Arts (Architecture, Art & Design, Drama and Music), the Advanced Placement Early Action Program and the Summer Academy for Mathematics and Science. Three sessions of summer school are held for college students who wish to make up or advance their degree program studies. Every service and support organization is available to summer students: the Computer Center, the Health Center, the Counseling Center, the libraries, the Office of Admission, the Career Center, Student Activities, etc.

Summer Pre-College Programs for High School Students

Office of Admission, Warner Hall 2nd Floor

The Pre-College Programs are designed to preview an actual college experience. Our programs afford high school students many opportunities for personal growth and development within a university setting. A wide range of social, cultural, and recreational activities are planned by a staff of resident counselors to fully integrate the students' lives on campus and in Pittsburgh. Movies, dances, museum and gallery visits, field excursions or attendance at professional theater productions, concerts, and Pittsburgh Pirates games are just a few of the sponsored activities.

Summer Academy for Mathematics and Science

Students with diverse backgrounds who are entering their junior or senior year and considering careers in engineering, science and other math-based disciplines are eligible to participate in this rigorous program. Traditional classroom instruction, along with creative "hands-on" projects will allow students to apply concepts and principles.

Advanced Placement Early Admission Program

Overview

The main purpose of the Advanced Placement Early Admission (APEA) Program is to provide the opportunity to take university courses at Carnegie Mellon for talented, motivated high school students. Students earn college credit while working in an academic environment mirroring that which the student would encounter during the first year of college.

Students who complete two courses in the APEA Program and who can graduate early from high school have the unique opportunity to apply Early Admission. By attending the APEA program during the summer of 2013, students who will be high school juniors in the fall of 2013 will have a strong understanding of college life and academics. These rising juniors are eligible to apply Early Admission by January 1, 2014, and if accepted can start as full-time degree students here in the fall of 2014. Students admitted under Early Admission are not obligated to accept the offer of admission until May 1.

All APEA students may also apply to Carnegie Mellon during their senior year, through Early Decision (various deadlines in November and December depending on the college) or Regular Decision (January 1 deadline, or December 1 for the College of Fine Arts).

Regardless of whether students choose to apply to Carnegie Mellon, successful APEA students can leverage their experiences here as demonstration of their ability to succeed in college. APEA courses are college courses, not AP Classes, and as such they count toward graduation requirements here and are widely accepted elsewhere. Students applying to another college or university can request an official Carnegie Mellon transcript be sent to that institution. Any use of AP/AEA courses to satisfy high school requirements should be approved ahead of time by an appropriate high school official.

While most of the participants in the program will have just completed their junior or senior year of high school, suitably qualified students at early grade levels can participate. However, in order to stay in university housing, students must be at least 16 years old. This does not apply to commuters.

AP/AEA Coursework

Our APEA courses are regular Carnegie Mellon classes, so you should anticipate intense, college-level work. Many of the APEA faculty members are the same faculty who teach during the regular school year. Upon admission to the program, students will select their courses from the Schedule of Classes. View the 2015 APEA Course List (http://goo.gl/IYcePS) for more information.

As an APEA student, you’ll be required to take two courses during the summer. This two-course schedule completed in six weeks is comparable in demand to the typical five-course schedule completed in a semester.

The flexible APEA program allows you to take:

- Two math/science/engineering courses
- One math/science/engineering course and one humanities/social sciences course
- Two humanities/social sciences courses

Some features of the APEA classes include:

- Meet daily
- Small class size
- Personal learning environment
- Supplemental tutoring
- Taught by faculty selected for their enthusiasm and experience teaching college-level material to younger students

Pre-requisites

High school preparation is necessary for some AP/AEA classes. For more details, consult the course descriptions or contact the program director.

Calculus requires:

Algebra, trigonometry and geometry. Pre-calculus or an equivalent course is recommended.

Computer science requires:

Knowledge of computers or some computer experience in high school is helpful but not required. PSAT Math of 65 or higher, or SAT Math of 650.

Physics, chemistry and biology require:

Students enrolled in physics, chemistry, biology or engineering must have completed a physics, chemistry or biology high school course.

Students with special qualifications may apply for permission to enroll in a third course with an additional non-refundable charge. Carrying three courses in the AP/AEA program is not generally recommended.

Pre-College Architecture Program

Overview

The study of architecture is an exciting multidisciplinary activity that combines design creativity, historical perspective, technical excellence, social responsibility, and global and environmental leadership. The Pre-College Architecture Program is structured to introduce you to each of these areas and for you to experience studying architecture in a university setting.

Primary Goals of Pre-College Architecture

Pre-College will provide you with a strong foundation and give you a clear idea of what to expect at a college level architectural program. The mix of seminars, workshops, drawing and digital media classes will introduce you to some of the theory, process and methodology of current design practice. The experience of working in the studio environment is quite different from the traditional classroom that you may be used to, giving you the opportunity to begin to develop your own design sensibility as you work iteratively through the creative process.

The Value of Attending Pre-College

Pre-college is a good opportunity to test the fit of architecture with your career goals and expand upon your creative and technical skills, providing a solid head start if you decide to enter this field of study. Project work is partnered with a focus on documentation and techniques to communicate your design visually. We run workshops to assist you in photographing your work and creating a strong portfolio, which is an essential part of a student's presentation package.
Coursework
The studio curriculum is designed to allow you to move freely between physical and virtual spatial investigations. Work alternates between theoretical projects represented through image and model, and installation projects created at full-scale. Installations are produced collaboratively and will immerse you in hands-on making, approaching the work in terms of material behavior, tectonic systems, and perceptual experience. These full-scale projects allow you to learn from physical engagement with the spaces you have designed; this experience and spirit of experimentation will inform and strengthen your individually created theoretical work.
No prior design, drawing or computer experience is necessary; if your skills in these areas are more advanced, our faculty and program will challenge you to develop them further. The ratio in the design studio is 1:12. At the conclusion of the summer program, you will have a private consultation with your design professor and receive a written letter of evaluation regarding your progress and aptitude in all courses. You will also receive 9 units of elective credit at Carnegie Mellon should you later enroll in the School of Architecture as an undergraduate student.

Pre-College Art and Design Program

Overview
The Pre-College Art and Design program motivates, stimulates and prepares you as emerging artists and designers. Exploring traditional tools and new technologies in a variety of media leads you to develop conceptual and technical skills as well as your portfolio – all excellent preparation for applying to and succeeding in college-level art and design programs. Challenging courses, stimulating workshops, museum and gallery field trips, and energetic interaction with dedicated faculty and talented peers introduce you to the spirit and substance of an art and design school culture and environment.

Coursework
During the Pre-College Program, you will attend morning and afternoon classes, Monday through Friday. You’ll work in our beautiful, spacious studios in the historic College of Fine Arts building and Margaret Morrison Carnegie Hall.

The Pre-College faculty at Carnegie Mellon are accomplished artists, designers and educators who share their expertise inside and outside the classroom. With small class sizes, you’ll benefit from their individual attention, intense instruction and substantial constructive feedback. Instructors provide written evaluations of your work upon completion of the program.

Your instructor to student ratio will be about 1:13, promoting opportunities for questions and discussion. Although the pre-college program has its own particular aspects, the underlying philosophy is similar to the first year of our regular undergraduate art and design curricula. At the end of the program, each student meets with a faculty member to discuss his/her performance in the program, and to address questions regarding documentation and presentation of work and portfolio preparation. The program concludes on a celebratory note, inviting parents and friends to see the unique work produced over the course of the three-week or six-week session.

Studio Environment
Students work together in a large studio with individual workspaces. Sessions include individual instruction, in-class work sessions, critiques, lectures and field trips.

There is an array of events and opportunities to enhance and supplement studio work, including:
- Weekly figure drawing
- Visits to local galleries such as the Carnegie Museum of Art
- Visits to Pittsburgh based design firms
- Evening presentations by faculty on their own art and design work
- Exhibitions of Carnegie Mellon student work
- Portfolio preparation and critique sessions

Pre-College Drama Program

Overview
The Pre-College Drama Program gives students the chance to participate in a professional training program with three options: acting, music theatre and design/technical production. The program focuses on the exploration of a conservatory training program with emphasis on creativity, craft and discipline.

Coursework
The Pre-College Drama curriculum focuses on process rather than results. Nevertheless, the culmination of the program is an audition or portfolio review. These events are mandatory for all students whether or not they plan to apply to Carnegie Mellon for admission.

The audition/portfolio reviews take place during the last two days of the program. Acting and music theatre students will perform two contrasting, two-minute monologues. In addition, music theatre students will participate in dance and vocal auditions. Design/Production students will experience portfolio reviews and interviews with faculty.

Every student will receive an evaluation of his or her coursework along with advice for future development in the profession.

Pre-College Music Program

Overview
Instruction is challenging, creativity is expected and the responsibility of making music and training musicians is taken very seriously. At Carnegie Mellon, we are proud of our history in which tradition and technology co-exist. The School of Music has graduated superb musicians who are known worldwide as performers, composers, conductors and educators.

The Program
The Pre-College Music Program offers a unique view of the life of a music student at Carnegie Mellon in a supportive environment of study and performance. It is an ideal opportunity to experience a world-class conservatory program and discover your potential for a career in music. Coupled with the rich cultural life of the city of Pittsburgh and varied campus activities, the Pre-College Music Program is an extraordinary way for young musicians to spend their summer.

The Pre-College Music Program will give you the opportunity to see what college is like. This is not high school and it is not camp. You get to live on campus, take classes with conservatory professors, play, rehearse, perform and enjoy the freedom of college life in a safe environment.

National High School Game Academy

Overview
The National High School Game Academy (NHSGA) explores the video game industry and the skills needed to be successful in it. The program includes an exciting blend of hands-on exercises combined with traditional lecture and discussion. Students are encouraged to expand their own creative possibilities in a unique blend of left- and right-brain college-level work.

Inspired by the Carnegie Mellon graduate program, Entertainment Technology, the NHSGA is structured to give students a taste of the current state of video game development and provide guidance toward embarking on their own career in the video game industry.

Video games are now a major force in the world of popular entertainment. Video game sales, in the U.S., have outgrown the film industries annual box office sales. Plus, this industry is still growing with the emergence of casual gaming, online gaming and serious gaming, so companies are continually looking for passionate, creative and talented individuals.

The program encourages all students to apply. No particular technical or artistic skills are needed. Regardless of your background, if you are interested in exploring the world of video game development, the National High School Game Academy is the program for you.

While creating a real college-level environment, students are encouraged to explore their interests, expand their technical knowledge and develop their interpersonal skills. They will learn about job opportunities in the industry and what is needed to be competitive in this job market. There is a misconception that if one is good at playing video games then they will be good at creating video games. Students in this program will discover just how much hard work and talent is needed to be successful.
**Coursework**

The six-week program consists of daily lectures on various topics concerning video game development and the industry itself, followed by four-hour studio sessions in the afternoon where various specific skills classes and workshops are held. All of these courses will be hosted at the Entertainment Technology Center which is located just off main campus. Students will be bussed the short distance to and from the main campus every day.

Upon applying for the National High School Game Academy, students will need to declare an Art Focus or a Programming Focus. While all students will take classes in all three areas of art, programming and game design, their declared focus will dictate the length of time they spend in each area. On the first day of class, each of these two focus areas will then be split into three additional groups (Beginner, Intermediate and Advanced) in order to aid us in providing a challenging level of study for all students. If a student is a beginner, or unsure of which focus to take, or is an accomplished programmer already then it is suggested that they choose the Art Focus so that they can explore a new area of study at the NHSGA.

While the emphasis of the National High School Game Academy is to acquaint the student with the process of video game development, that effort is focused through the building of playable game demos and game assets. Students will develop a portfolio of their completed work and will present them for play testing and critique. Parents are again encouraged to attend this final afternoon session and see firsthand what has been accomplished.

At the end of the program, every student will receive an evaluation of his or her coursework along with advice for future development in college studies that would help him or her best prepare for this profession.

**Further Information**

Requests for applications and further information should be addressed to:

Pre-College Programs  
Office of Admission  
Carnegie Mellon University  
5000 Forbes Avenue  
Pittsburgh, PA 15213-3890  
(412) 268-2082  
FAX: (412) 268-7838