



# CALIFORNIA INSTITUTE OF TECHNOLOGY

## Graduate Admission Criteria and Application Instructions

### REQUIREMENTS AND ADMISSION CRITERIA

Applicants must have completed a bachelor's degree or the equivalent before beginning graduate study. Applicants who already possess a Ph.D. degree will generally not be considered for a second Ph.D. degree. Transcripts, GRE scores, letters of recommendation, and the applicant's statement of purpose are carefully weighed during the evaluation process. The admissions committee may also consider research papers, publications and other original work.

### COMPLETING THE APPLICATION

The application form should be submitted prior to submitting supporting documents. It is the responsibility of the applicant to ensure that all supporting materials are received prior to the application deadline. Please make sure that all application documents contain your full name. Once submitted, the application for admission and all supporting documents become the property of the California Institute of Technology. No materials will be returned to the applicant.

If you have questions about your application, please call 626-395-6346 (between 8 A.M. and 5 P.M. Pacific Standard Time, Monday through Friday), or send email to [gradofc@its.caltech.edu](mailto:gradofc@its.caltech.edu). We are unable to accept collect calls.

### APPLICATION DEADLINES

Please refer to the "Application Deadlines" information page.

### APPLICATION FEE

There is a non-refundable processing fee of USD \$80. Payments can be made online via credit card, check or money order made payable to "Caltech" and mailed to the Office of the Dean of Graduate Studies, California Institute of Technology, Mail Code 230-87, 1200 E. California Blvd., Pasadena, CA 91125. **Do not send cash through the mail.** Applicants living outside the United States can make the payment credit card, or submit an international money order or a check drawn on a United States bank.

### SELECTING AN ACADEMIC OPTION

The term "option" refers to the various academic programs that offer graduate degrees. The options offered are described in detail in the *Caltech Catalog*. The *Caltech Catalog* is available online at <http://www.caltech.edu/catalog>. The graduate options also have their own web sites, which can be accessed by going to <http://www.caltech.edu> and clicking on "Academic Divisions."

Applicants wishing to apply to more than one academic option may do so, but please note that an application processing fee will be charged for each application. In reviewing your application, the admission committee of the option to which you have applied may recommend that your application be reviewed by another option as well. If your application is referred to another option you will not be charged any additional fees or be asked to submit a duplicate application.

### DEGREES OFFERED

Most graduate options at Caltech offer the Ph.D. degree, with the exception of Aerospace Engineering, which is Master's only. Aeronautics, Aerospace Engineering, and Electrical Engineering offer terminal Master of Science degrees. Aeronautics, Civil Engineering, Electrical Engineering, and Mechanical Engineering also offer Engineer's degree programs. For details concerning these programs please consult "Section Four: Information for Graduate Students," in the *Caltech Catalog*.



# CALIFORNIA INSTITUTE OF TECHNOLOGY

## Graduate Admission Criteria and Application Instructions

### TRANSCRIPTS

Transcripts from all colleges or universities attended are required. Transcripts may be submitted online following the electronic submission process, or sent directly to the Graduate Office (see address on Page 3 of the instructions) from the Registrar of the institution you attended. If you have submitted an electronic copy of your transcripts, there is no need to submit a paper copy. Only one copy of each transcript is needed. If you attended Caltech as an undergraduate, you must request an official transcript from the Office of the Registrar. We cannot obtain one on your behalf.

In the "Additional Information" section, please provide an explanation of any nonstandard grading systems. Foreign transcripts or records of all courses, seminars, and examinations, including grades, scores, grading scales, and conferrals of degrees, must be in English. All translations must be complete versions of the original records. An official transcript documenting the award of an undergraduate degree is required prior to enrollment in the graduate program at Caltech.

### LETTERS OF RECOMMENDATION

At least three letters of recommendation from individuals familiar with your academic, research and/or work performance are required for all applicants. We prefer that you utilize the Online Recommendation functionality to register your referee. Please note that in order to register your referee you must do so in the supplemental documents section. Your referee will be sent an email providing them with a secure password to be used to access the online recommendation database. Applicants who have registered referees online can view the status of the recommendation and send system reminders to those who have not yet submitted the recommendation. Once the online recommendation has been submitted, both the referees and the applicant will receive a confirming email. If you are unable to access the online recommendation, please call or fax the Office of the Dean of Graduate Studies (see contact information below) to request a paper recommendation form. Alternatively, recommendations can be mailed or faxed directly to the Office of the Dean of Graduate Studies (see contact information on Page 3 of the Instructions).

### GRADUATE RECORD EXAM (GRE)

The Verbal, Quantitative, and Analytical components of the Graduate Record Examination are required by all graduate options, and advanced GRE Subject scores are required or strongly recommended by several options as part of the application for graduate admission. These tests are given at centers throughout the world on dates throughout the year. Testing schedules and information on the GRE may be obtained at <http://www.gre.org>. Caltech's institution code is 4034. **A subject code is not required.**

The following options also require (R) or strongly recommend (SR) applicants to take GRE Subject tests as specified below:

<u>Option</u>	<u>GRE Subject Test</u>	<u>R or SR</u>
Applied and Computational Mathematics	Mathematics	SR
Applied Physics	Physics	SR
Astronomy	Physics	R
Biology	*	SR
Biochemistry and Molecular Biology	*	SR
Bioengineering	*	SR
Chemistry	Chemistry / Biochemistry / Physics	R
Computational and Neural Systems	*	SR
Computer Science	Computer Science**	SR
Geological and Planetary Sciences - Geochemistry	Chemistry	SR
Geological and Planetary Sciences - Planetary Science	Physics	SR
Physics	Physics	R
Mathematics	Mathematics	R

\* Applicants are strongly recommended to take the subject test that is most relevant to their intended course of study.

\*\* Applicants may choose to take an advanced test in another scientific field of study instead of the computer science test.



# CALIFORNIA INSTITUTE OF TECHNOLOGY

## Graduate Admission Criteria and Application Instructions

### MINORITY APPLICANTS

The California Institute of Technology actively encourages applications from qualified students from ethnic groups historically underrepresented in graduate education. Caltech is a member of the [National Physical Science Consortium \(NPSC\)](#), the [Alfred P. Sloan Minority Ph.D. Program](#) and the [National Consortium for Graduate Degrees for Minorities in Engineering and Science \(GEM\)](#). If you would like more information regarding our diversity efforts, please feel free to contact the Office of the Dean of Graduate Studies at [gradofc@its.caltech.edu](mailto:gradofc@its.caltech.edu) or 626-395-6346 or Caltech Center for Diversity at <http://www.mse.caltech.edu/>.

### INTERNATIONAL APPLICANTS

Students from non-English-speaking countries are expected to read, write, comprehend, and speak English in order to be admitted for graduate study.

**TOEFL/TSE/TWE/IELTS** Applicants whose first or native language is not English are required to take a test of English proficiency as part of the application procedure. Caltech recognizes scores from the Educational Testing Service (ETS) and from the Cambridge Examinations and International English Language Testing System (IELTS). Applicants who take the TOEFL exam are also strongly encouraged to take the Test of Written English (TWE) and the Test of Spoken English (TSE) and to submit these scores as part of their application. Testing schedules and information can be found at <http://www.toefl.org>. Testing schedules and information on the IELTS exam may be obtained at <http://www.ielts.org>. Applicants should arrange for the results of these tests to be sent to the Office of the Dean of Graduate Studies prior to the application deadline. Caltech's institution code is 4034. **A subject code is not required.**

It is strongly recommended that students who do not achieve a high score on these tests or who have had little opportunity to communicate in English make arrangements for intensive work during the summer preceding their registration. All international students are tested for English proficiency upon arrival at Caltech. Students will be required to take non-credit ESL courses if found to be deficient in their ability to communicate in English. A student may not serve as a graduate teaching assistant with responsibility for a recitation section until this requirement has been satisfied.

### FINANCIAL AID

A separate application for requesting financial aid is not required. Financial aid is awarded to most graduate students on the basis of merit. Several multi-year fellowships are awarded each year, as well as graduate assistantships, tuition scholarships, and other Institute scholarships. In addition to the merit-based financial aid, Caltech administers and coordinates federal, state, private, and institutional loans. Loans are not used as part of a financial aid package for entering graduate students. Applicants requesting additional information on financial assistance may contact the Office of the Dean of Graduate Studies.

### APPLICATION SUBMISSION

All materials related to your application (application form, application fee, transcript(s), letters of recommendation, GRE and TOEFL scores, statement of purpose, miscellaneous documents) should be submitted electronically through Embark. Applicants unable to submit materials electronically may fax or mail materials to:

Office of the Dean of Graduate Studies  
Mail Code 230-87  
California Institute of Technology  
1200 E. California Boulevard  
Pasadena, CA 91125

Phone 626-395-6346      FAX 626-577-9246  
Email [gradofc@caltech.edu](mailto:gradofc@caltech.edu)