

# The Bulletin

BULLETIN OF TUFTS UNIVERSITY 2016-2017

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### **Anthony P. Monaco**

President, 2011–present

### **Lawrence S. Bacow**

President, 2001–2011

Emeritus, 2011–present

### **John DiBiaggio**

President, 1992–2001

Emeritus, 2001–present

### **Jean Mayer**

President, 1976–1992

Chancellor, 1992–1993

### **Burton Crosby Hallowell**

President, 1967–1976

### **Leonard Chapin Mead**

Acting President, 1966–1967

### **Nils Yngve Wessell**

Acting President, 1953

President, 1953–1966

### **Leonard Carmichael**

President, 1938–1952

### **George Stewart Miller**

Acting President, 1937–1938

### **John Albert Cousens**

Acting President, 1919–1920

President, 1920–1937

### **Hermon Carey Bumpus**

President, 1914–1919

### **William Leslie Hooper**

Acting President, 1912–1914

### **Reverend Frederick William Hamilton**

Acting President, 1905–1906

President, 1906–1912

### **Reverend Elmer Hewitt**

#### **Capen**

President, 1875–1905

### **Reverend Alonzo Ames**

#### **Miner**

President, 1862–1875

### **John Potter Marshall**

Acting President, 1861–1862

### **Reverend Hosea Ballou II**

President, 1853–1861

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## School of Arts and Sciences

COLLEGE OF LIBERAL ARTS

GRADUATE SCHOOL OF ARTS AND SCIENCES

## School of Engineering

## Table of Contents

Presidents of Tufts University	1
About Tufts University	3
Accreditation	3
<b>Financial Information</b>	
Expenses and Policies	6
<b>School of Arts and Sciences</b>	
Mission Statement	10
College of Liberal Arts	10
Graduate School of Arts and Sciences	22
College of Special Studies	23
<b>School of Engineering</b>	
Mission Statement	24
School of Engineering Information	24
<b>General Undergraduate Information</b>	
Pre-Matriculation Table	31
Undergraduate Policies	35
Combined-Degrees Programs	41

# About Tufts University

International, student-centered, Tufts University is dedicated to academic rigor and interdisciplinary research that addresses the most critical issues facing our world. Rooted in the best traditions of learning and scholarship, Tufts is committed to educating tomorrow's global leaders in all disciplines and fields through innovation in its teaching and research.

Since its founding in 1852 by members of the Universalist Church, Tufts has grown from a small liberal arts college into a nonsectarian university of approximately 10,800 students on four campuses. The trustees of Tufts College voted to make Tufts coeducational in 1892, and the first women were graduated in 1896. Although women applied to Tufts almost immediately after its founding in 1852, they were denied admission until the 1890s. With the founding of Jackson College for Women in 1910—named for Cornelia Maria Jackson, the benefactor who did the most to promote women's education at Tufts—women's education gained security at the institution.

At Tufts, creating excellence in education is forged through a philosophy that is forward-thinking, imaginative, and responsive to the fast-paced evolution of technology, politics, the sciences, our global society, and the arts.

## Our Schools

The largest division of the university is the Faculty of Arts, Sciences, and Engineering. This division comprises the College of Liberal Arts, the School of Engineering, the Graduate School of Arts and Sciences, the College of Special Studies, and Summer Session. The university's graduate and professional schools are the Fletcher School of Law and Diplomacy, the School of Medicine, the School of Dental Medicine, the Cummings School of Veterinary Medicine, the Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy, and the Sackler School of Graduate Biomedical Sciences.

The schools are located on Tufts' campuses in Medford/Somerville, Boston, and North Grafton, Massachusetts. Students may also study at the Tufts European Center, located in an eleventh-century monastery in Talloires, France. Tufts is also affiliated with the School of the Museum of Fine Arts and New England Conservatory of Music, providing joint graduate and undergraduate programs and flexible cross-registration.

## The Undergraduate Experience

Undergraduate study is on Tufts' Medford/Somerville campus, situated on a hill about five miles northwest of Boston. It is a tranquil New England setting within easy access by subway and bus to the cultural, social, and entertainment resources of Boston and Cambridge.

Tufts is a student-centered institution, where support for students' personal and academic development is embedded into the organization and ethos of the university. The Faculty of Arts, Sciences, and Engineering is committed to scholarship of the highest order and teaching of exacting quality, while equally dedicated to providing a friendly, open, and intellectually rich and stimulating environment. This environment is one of the reasons Tufts is one of the most highly competitive universities in the country.

Tufts has programs abroad in Britain, Chile, China, France, Germany, Ghana, Hong Kong, Japan, and Spain. More than 40 percent of undergraduates choose to spend their junior year abroad to add a strong international dimension to their education. This experience adds to the international flavor of the Tufts campus when they return for their senior year.

More than 98 percent of enrolling students expect to pursue graduate or professional studies, and annually Tufts students are the recipients of such prestigious academic awards as Fulbright, Truman, Goldwater, and Beinecke scholarships and fellowships.

## Accreditation of Tufts University

Tufts University is a privately endowed institution founded in 1852 and has been accredited by the New England Association of Schools and Colleges (NEASC) and Commission on Institutions of Higher Education (CIHE) since 1929, and its accreditation by NEASC encompasses the entire institution. Tufts underwent a comprehensive evaluation in March 2013 and was accredited by the Commission in September 2013. The University will submit a fifth year interim report in Spring 2018. NEASC establishes and maintains high standards of educational excellence through self-evaluation and peer review. Institutions demonstrating that they meet these standards are accredited and thus members of NEASC. The CIHE, recognized by the U.S. Department of Education, is one of seven accrediting commissions that provide accreditation regionally.

Some programs and degrees at Tufts have been accredited by additional specialist agencies:

- B.S. in Chemical Engineering, accredited by Accreditation Board for Engineering and Technology (ABET) since 1952, last reviewed fall 2011, next review academic year (AY) 2017–2018
- B.S. in Civil Engineering, accredited by ABET since 1936, last reviewed fall 2011, next review AY 2017–2018
- B.S. in Computer Engineering, accredited by ABET since 1982, last reviewed fall 2011, next review AY 2017–2018
- B.S. in Electrical Engineering, accredited by ABET since 1936, last reviewed fall 2011, next review AY 2017–2018
- B.S. in Environmental Engineering, accredited by ABET since 1995, last reviewed fall 2011, next review anticipated AY 2017–2018
- B.S. in Mechanical Engineering, accredited by ABET since 1936, last reviewed fall 2011, next review AY 2017–2018
- B.S. in Computer Science/Engineering, accredited by ABET’s Computing Accreditation Commission since 2004, last reviewed fall 2011, next review AY 2017–2018
- M.A. and Ed.S. in School Psychology, accredited by the National Association of School Psychologists (NASP) and the Massachusetts (MA) Department of Elementary and Secondary Education since 1992, last reviewed fall 2010, next review fall 2017
- B.S. in Early Childhood Licensure, accredited by the MA Department of Elementary and Secondary Education since 1994 (when the MA Department of Education initiated a program review process and approval for Teacher Education programs, which had previously been “registered” by the Commonwealth), last reviewed spring 2003, next review anticipated AY 2016–2017
- M.A.T. in Art Education (grades PreK–8 and 5–12), accredited by the MA Department of Elementary and Secondary Education since 1994, last reviewed spring 2003, next review anticipated AY 2016–2017
- M.A. in German with Teacher Licensure, accredited by the MA Department of Elementary and Secondary Education since 1994, last reviewed spring 2003, next review anticipated AY 2016–2017
- M.A.T. in Early Childhood Education, accredited by the MA Department of Elementary and Secondary Education since 1994, last reviewed spring 2003, next review anticipated AY 2016–2017
- M.A.T. in Elementary STEM, accredited by the MA Department of Elementary and Secondary Education since 2003, next review anticipated AY 2016–2017
- M.A.T. in Middle and High School, accredited by the MA Department of Elementary and Secondary Education since 1994, last reviewed spring 2003, next review anticipated AY 2016–2017
- BFA, MFA (offered with the School of the Museum of Fine Arts, Boston), accredited by the National Association of Schools of Art and Design’s (NASAD) Commission on Accreditation since 2004, next review anticipated AY 2014–2015
- Professional Entry Level Master’s Degree in Occupational Therapy, Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) since 1938, last re-viewed 2014, next review 2021
- M.A. in Urban and Environmental Policy and Planning, accredited by the Planning and Accreditation Board (PAB) since 2004, last reviewed 2011, next review 2018
- Dental Education, accredited by the Commission on Dental Accreditation of the American Dental Association (CODA) since 2004, last reviewed 2015, next review 2022
- Medical Education, accredited by the Liaison Committee on Medical Education (LCME) of the American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) since 1942, last reviewed 2014, next review 2022
- Master of Public Health, accredited by the Council on Education for Public Health (CEPH) since 1992, last re-viewed 2009, next review 2016
- Physician Assistant Program (Master of Medical Science), accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) since 2012, next review anticipated 2015
- Doctor of Veterinary Medicine, accredited by American Veterinary Medical Association (AVMA) since 1983, last reviewed 2012, next review AY 2018–2019

The Tufts University Police Department has been accredited by the Massachusetts Police Accreditation Commission since 2005, last reviewed in June 2014, next review anticipated in 2017.

### **Changes to Academic Program in Coming Years**

In July 2016, the School of the Museum of Fine Arts officially became part of Tufts University's School of Arts and Sciences. Now named the School of the Museum of Fine Arts at Tufts University, or SMFA at Tufts, the school is extraordinary in being part of a major research university and affiliated with a world class museum.

The acquisition reflects the university's long-standing commitment to the arts and a relationship between the two institutions that goes back more than 70 years. Tufts University has provided liberal arts courses, as well as accredited bachelor and master of fine arts degrees, to SMFA students, while the SMFA has offered courses in studio arts to Tufts students. The two institutions have also offered a joint, five-year combined-degree program by which undergraduates earn both a B.A. and B.F.A. These degree programs will continue to be offered to SMFA at Tufts undergraduate and graduate students during this academic year.

For the academic year 2016-2017, all SMFA students, whether new or returning, are Tufts University students, able to fully engage in all aspects of Tufts' campus life, including student activities, academic and co-curricular resources and study abroad. Details regarding academic policies and procedures for SMFA at Tufts programs can be reviewed in the SMFA Handbook.

In April 2015, the faculty of the Schools of Arts & Sciences and Engineering voted to change the system of credit granted per course and the total number of credits required for graduation. By Fall 2018, the Schools of Arts & Sciences and Engineering will adopt the credit-hour system—used by most universities in the United States. When the new credit system is in place, most courses will be worth 3 credits, many will be worth 4 credits, and a few may be worth 5 or more credits. Current “partial credit” courses will be worth 1 or 2 credits in the new system. Students will be required to earn a minimum of 120 credits for the baccalaureate degree (though some degree programs may require more credits) and a minimum of 30 credits for the master's degree (though some degree programs may require more credits). Students who matriculate prior to the implementation of the new credit system will see a change in the way in which course credits appear, but Tufts will make every effort to keep degree requirements consistent with information provided in the Bulletin of the student's year of matriculation. The University is actively developing a petition process for students who, upon reaching their scheduled graduation dates, believe that this change may have prevented them from meeting their degree requirements in a timely manner. Information regarding the petition process will be made available through the Registrar's Office.

The new credit-hour system will make transfer of credit easier for students and will make the Tufts transcript more self-explanatory to most graduate and professional schools. Because the credit hour generally reflects the amount of time required for the course, students may find it easier to create a balanced course-load each semester. For example, a 3 credit course generally requires 3 hours of class or instructional contact per week.

In 2011, the United States Department of Education instructed all accreditation agencies to review university credit policies and ensure that universities use a common standard for awarding credit hours. This has resulted in the need for Tufts to move to a system where credit hours and instructional contact hours are linked. The Department of Education clarified that the federal definition of the credit hour is the standard for higher education in the United States, with institutionally-determined flexibility to account for unique courses and novel instructional methods (such as online courses or “flipped” classrooms). The new credit system adopted by Schools of Arts & Sciences and Engineering adheres to the federal definition of the credit hour.

# Financial Information

## Expenses and Policies

All undergraduate students (with the exception of those in the R.E.A.L. program) are expected to carry a full course load (four to five courses) except in cases of serious, documented medical problems. A typical first-year student in residence at Tufts during the 2016–2017 academic year may expect the following expenses:

<b>Tuition</b>	<b>\$51,304</b>
<b>Residence hall</b>	<b>\$7,392</b>
<b>Meal plan</b>	<b>\$6,174</b>
<b>Health service and student activity fees</b>	<b>\$1,126</b>
<b>Books, supplies, and miscellaneous expenses (estimated)</b>	<b>\$2,204</b>
<b>Total for year (estimated)</b>	<b>\$68,200*</b>

Medical Insurance costs \$2,522\* for the year if the student is not covered by a comparable plan of their own. International students are required to be covered by the insurance plan through Tufts.

\*The charges listed above are subject to change.

## Tuition

Tufts undergraduate tuition is a comprehensive fee that covers basic charges for instruction, costs of registration, most laboratory supplies, and other incidental items or services.

## Campus Housing

All first-year and sophomore students are required to live in university housing or recognized fraternities or sororities, and to purchase a meal plan. Commuting students pay no residence hall fee and are not required to purchase a meal plan.

## Meal Plans

Students select a meal plan or JumboCash in accordance with university requirements. JumboCash allows students to make purchases at all on-campus dining locations (Carmichael and Dewick-MacPhie Dining Centers, Hodgdon Food-on-the-Run, Hotung Café, Commons Marketplace, Brown and Brew Coffee House, Tower Café at Tisch Library, Pax et Lox Glatt Kosher Deli, Mugar Café and The Rez), as well as the bookstore, Campus Center Info Booth, vending machines, and on-campus washers and dryers; to pay fines at the Tisch and Ginn Libraries; and to purchase parking permits or lost IDs at Public Safety Administrative Services. JumboCash can also be used to pay for printing and copying in campus libraries and computer centers. JumboCash may be used at 15 off-campus restaurants for dining in, take-out or delivery (where available), as well as at a drug store and two convenience stores (alcohol, tobacco products, lottery tickets and gift cards excluded). Dining Services is located at 89 Curtis Street, Somerville. For more information, contact 617-627-3566, e-mail: [tuftsdining@tufts.edu](mailto:tuftsdining@tufts.edu), website: <http://dining.tufts.edu>.

## Health Service

The Health Service fee is mandatory and non-waivable and covers the cost of running a comprehensive outpatient health service and counseling center. The fee covers unlimited primary care and walk-in visits to the Health Service, access to the Counseling and Mental Health Service, and an annual flu shot if available for those who desire inoculation. Laboratory tests, prescribed medications, and consultation with on-campus medical specialty consultants are not covered by the health service fee. Students who do not purchase the optional medical insurance are required to demonstrate that they have other medical insurance. Details regarding the fee and deadlines for waiving the insurance are available at <https://students.tufts.edu/health-and-wellness/health-insurance>.

## **Fees**

All students are required to pay the student activity fee, which is proposed by the student government. Accepted students must pay an enrollment deposit, which is applied to tuition for the first year.

## **Housing Charges**

Room assignments are made for the full academic year. The campus housing room rates set by the Board of Trustees will appear on the resident student's bill in two parts, identified as the housing commitment fee and the room charge.

The housing commitment fee is nonrefundable at the time a student selects a room, has a proxy select a campus room on his or her behalf, or otherwise accepts a room assignment from the Residential Life Office. The housing commitment fee is only refundable when:

- a) the student is placed on required leave or withdrawal by the university, or
- b) the student, subsequent to selecting a room, is admitted to a study abroad program. In such cases the student must file an electronic study abroad leave of absence form online via SIS. Students in both Tufts and non-Tufts study abroad programs must file an update form, available at the Residential Life Office in South Hall, within ten (10) days of acceptance—no later than April 27 for fall semester housing cancellation and November 13 for spring semester housing cancellation. The room charge portion of a student's bill will be equal to the room rate for the student's assignment, less the \$750 housing commitment fee.

Room selection for spring-only applicants is held during the first week of December. Once a spring-only room assignment has been selected by the student (or his or her proxy), or an assignment is offered and accepted, the student is subject to the housing commitment fee.

Questions may be directed to the Residential Life Office, Tufts University, Medford, Massachusetts 02155, 617-627-3248, fax 617-627-3929, e-mail: [reslife@tufts.edu](mailto:reslife@tufts.edu), website: <http://ase.tufts.edu/reslife>.

## **Payment of Bills**

All currently enrolled students are billed electronically through the Tufts eBill system. Information on Tufts eBill can be found at <http://go.tufts.edu/mybill>. Students are required to pay tuition, fees, room, and board prior to the start of each semester. Bills for the fall semester must be paid by the first week in August; spring semester bills are due and payable in early December. The amount billed is reduced by any financial aid awarded by or sent to the university on behalf of the student for the semester. Payment in full (after deduction for financial aid) must be made before each term either by check, e-payment, wire transfer or enrolling in the monthly payment plan. Detailed information about the payment plan is sent to returning students in April and incoming students in May/June.

Fall semester charges do not include those incurred for courses an applicant must take to become fully qualified for admission. Charges will not be reduced when courses are accepted for transfer credit.

All university charges are collected by Student Financial Services. Without waiting for receipt of a formal bill, payments for tuition, fees, room and board are to be made to Tufts on or before the due date for the semester. Checks should be made payable to the Trustees of Tufts College.

If full payment has not been received, or financial arrangements have not been agreed upon by the specified due date, a late payment fee will be assessed monthly.

The following actions will take place should a student fail to meet his or her financial obligations to the university for outstanding student loans or balances on his or her student account: the student may be denied access to university dining services; will not be allowed to access library resources; will be denied registration privileges; will not be issued an official transcript; and will be denied an on-campus room selection for an upcoming semester.

Any unpaid student account balance may be referred to our collection agency. The student will be responsible for all costs associated with collection, including collection agency fees, attorneys' fees, and court costs. The account will be reported to credit bureaus if assigned to a collection agency. Diplomas and official transcripts of records for those in arrears are regularly withheld until all payments have been made.

## **Administrative/Financial Withdrawal**

If a student's account remains unsettled beyond the billing due date, subsequent bills will be issued reflecting monthly late payment charges. If the student's account remains unsettled after the first day of classes, the student may be subject to withdrawal from the university.

Students are strongly encouraged to communicate with Student Financial Services as soon as they encounter personal or financial difficulties so that the university may help identify possible solutions and alternatives for meeting individual needs.

### **Withdrawal/Leave Tuition Refund Policy**

Students who elect to take a leave of absence or withdraw or who are required to withdraw will receive a tuition refund in accordance with the following schedule, based on the effective date of the leave.

#### **Fall 2016 Semester**

<b>Date of Withdrawal</b>	<b>% Tuition Charge Cancelled</b>
September 5, 2016	100%
September 6 to 19, 2016	90%
September 20 to 26, 2016	80%
September 27 to October 3, 2016	60%
October 4 to 10, 2016	40%
October 11 to 17, 2016	20%

#### **Spring 2017 Semester**

<b>Date of Withdrawal</b>	<b>% Tuition Charge Cancelled</b>
January 18, 2017	100%
January 19 to February 1, 2017	90%
February 2 to 8, 2017	80%
February 9 to 15, 2017	60%
February 16 to 22, 2017	40%
February 23 to March 1, 2017	20%

The student is responsible for any unpaid charges and must make arrangements to pay this balance prior to leaving Tufts. Any outstanding balance will result in a hold on the release of any transcripts until paid in full. If the student's account is referred to a collection agency, the student will be responsible for all collection and litigation costs associated with this debt.

### **Campus Housing Charges**

Campus housing charges will be refunded based on the above prorated tuition schedule for the semester. The date of withdrawal from housing will be based on the date that the room has been vacated and the room key returned to residential facilities. The housing commitment fee is non-refundable.

### **Meal Plan Charge**

Students wishing to cancel their meal plan after the cutoff date, the third Friday after classes begin, will be assessed 50 percent of the prorated refund amount.

**Other Charges**

Other fees and charges such as the health service fee, the student activity fee, library or traffic fines, and traffic or parking citations are not refunded or prorated after the beginning of the academic year. If a student is enrolled in the optional medical insurance plan, both the charge and the plan benefits remain in place through the end of the contract period. A student enrolled for only one semester will be charged the full student activity fee and health service fee.

**Financial Aid**

Details regarding the financial aid application process, types of aid, and scholarships can be viewed on the financial aid website: [go.tufts.edu/finaid](http://go.tufts.edu/finaid).

# School of Arts and Sciences

## Mission Statement

Broadly recognized as one of the premier liberal arts colleges within a research university, the School of Arts and Sciences at Tufts University educates students for transformational leadership in communities around the world. Tufts's tradition of innovation dates to the school's founding in 1852. Today, a multidisciplinary and experiential approach defines scholarship and teaching. Faculty and students use the curricular framework of the arts and sciences to address the great intellectual and social challenges of the twenty-first century.

The school has a distinctive style. Excellence in scholarship and teaching are the school's highest priorities; translating inquiry and research into action is a defining theme. The Faculty of Arts and Sciences, the largest of Tufts's seven schools, explores collaborative research opportunities across the university's professional schools and around the world. More than 5,000 students at the undergraduate and graduate levels represent the broad range of intellectual, creative, and personal attributes. The creation of new knowledge in traditional and emerging disciplines, a dedication to globalism and active citizenship, a commitment to humanitarianism and diversity in its many forms, and a belief that intellectual discourse and discovery serve the common good are deeply held ideals.

## College of Liberal Arts

### Requirements for Degrees

For students entering the College of Liberal Arts, the degree of Bachelor of Arts or Bachelor of Science is awarded after four years (eight semesters) of full-time study and with successful completion of the equivalent of thirty-four credits. A cumulative average of C- (1.67) or higher is required for graduation. No more than two of the thirty-four credits may consist of fieldwork or internship placements. No more than five of the thirty-four credits may consist of Tufts online courses. Up to two semesters of full-time study after matriculation at Tufts may be spent at other approved four-year institutions or on approved foreign study programs. (See Residence Requirement in the general information section for details.)

Three-fourths of all courses taken at Tufts with standard grading must be completed with a grade of C- or better. There is no rigid program of courses that must be taken by every student. Students are regarded as individuals, and each student is encouraged to pursue a course of study appropriate to his or her training, experience, aptitudes, and plans for the future. Within a framework designed to ensure both breadth and depth in intellectual development, there is a broad range of choice. Students work with their advisors to select those courses best suited to their particular needs and interests.

Each student selects courses to fulfill the foundation and distribution requirements. All courses used to fulfill these requirements must be taken for a letter grade, not pass-fail. A grade of D- or above is passing. Also, a grade of D- or above will fulfill foundation and distribution requirements.

### Foundation Requirements

The faculty recognizes the following elements as basic to any program leading to a bachelor's degree in liberal arts, whatever a student's particular interests may be. First, an educated person in our society must be able to write coherent English and must be able to apply that writing ability to the critical analysis of information and ideas in any field. Second, the study of another language and of foreign cultures is indispensable to a liberal education; such study provides a basis for locating oneself within a larger cultural and international context. Courses in college writing, foreign language and culture, and world civilizations constitute the foundation of a liberal arts education at Tufts.

The foundation requirements should be met early in a student's college career, so that these courses may serve as a foundation for later work. In some cases, a single course may be used toward fulfillment of both a foundation and a distribution requirement.

#### 1. Writing

Two semesters of college writing are normally required for graduation in liberal arts. In general, students should complete this requirement in the first year. Most students do so by taking English 1 (Expository Writing) in the first semester and, in the second semester, English 2 (College Writing Seminar) or Philosophy 1. A Philosophy 1 class transferred from another college will not count for English 2 or 4. Students may not count Philosophy 1 as English 2 if taken before or at the same

time as English 1. Students for whom English is a second language may take English 3 with consent of the instructor. *Courses taken toward fulfillment of this requirement must be taken for letter grades, except English 3, which is pass-fail.*

There are also other alternatives for satisfying the college writing requirement. In summary, the requirement may be satisfied in any of the following ways:

- Exemption from the entire requirement by attaining a score of five on the Advanced Placement Test in English Language and Composition or English Literature and Composition; an A on the British A-Level exams; or a score of seven on the Higher-Level International Baccalaureate.
- Exemption from the first half of the requirement by attaining one of the following: a score of four on the Advanced Placement Test in English Language and Composition or English Literature and Composition, 760 or above on the SAT Writing exam, six on the Higher-Level International Baccalaureate, seven at the Subsidiary Level, or a B on the British A-Level exams. Students so exempted from the first half of the requirement must complete English 2.
- Satisfactory completion of English 1 or 3 and of English 2, English 4, or Philosophy 1.
- Completion of English 1 with a grade of A or A- (resulting in exemption from the second half of the requirement).

This exemption does not apply to writing courses equivalent to English 1 that were taken at another college.

## **2. Foreign Language/Culture Option**

This foundation requirement has two parts. First, every student must satisfy a basic language requirement, demonstrating knowledge of a foreign language through the third-semester college level. The second part of the requirement may be satisfied in several different ways. Students may take advanced courses in the same foreign language or they may undertake study of a second language. Students are offered the alternative of studying a foreign culture through courses taught in English.

Students who attended a school through grade twelve where instruction was in a language other than English may be exempted from both Parts I and II of the foreign language requirement. They should contact their academic dean in Undergraduate Education, Dowling Hall.

Students who can speak, read, and write proficiently in a language other than English that is not taught at Tufts, but who attended high school with English as the language of instruction, should take the following steps:

1. Go to <http://flats.byu.edu> and follow the instructions for language testing.
2. Arrange with the Academic Resource Center to have the exam proctored. This service is available only through the third week that classes are in session during any fall or spring semester.
3. Have the results reported to your academic dean, Dowling Hall.

No credit is awarded for this option.

### **PART I. Basic Language Requirement**

Every student must demonstrate competence in a second language through the third-semester college level. Language competence may be determined on the basis of a placement examination taken at Tufts, SAT Subject Test scores, AP scores, or an approved college course. Entering students who do not demonstrate the required level of competence must take college language courses until that level is reached. American Sign Language may be used to fulfill this option.

### **PART II. Continued Language Study/Culture Option**

After the basic language requirement has been satisfied, the student has four options:

1) To continue study in the foreign language used to fulfill Part I until two courses have been completed at the third-year level; e.g., French 21–22 or French 31–32, German 21–22 or German 33–44. Because the fourth-semester college-level course (e.g., French 4, Spanish 4) is normally a prerequisite for courses at the advanced level, the option usually involves taking three courses beyond the basic language requirement.

2) To complete courses through the third college semester level (e.g., Spanish 1, 2, and 3) in a language different from the one used to satisfy Part I.

3) To complete three credits dealing with a single culture or designated cultural area, either the same as or different from the language used to fulfill Part I. All three courses must deal with the same culture area. For purposes of this requirement, a foreign culture is defined as having non-English speaking origins. Anglo-American, English, Anglo-Irish, and

Anglo-Australian cultures do not qualify, but Aboriginal Australian, Celtic, and African-American, Latino/a, and Asian American, for example, do to the degree that they are discrete from the Anglo-American tradition.

At least one of the three culture credits must focus on the region of origin. For instance, a student choosing the East Asian and Diasporas culture area must take at least one course rooted in East Asia.

*Students wishing to submit courses that are not pre-approved must petition the Academic Review Board; forms are available under Student Forms on the student services home page.*

4) Foreign language courses beyond the third-semester college level may be counted as part of the culture option, e.g., Spanish 4, French 4, or courses at higher levels. For example, a student who has completed four semesters of foreign language study may choose to complete the foundation requirement by taking two culture credits in the same culture area as that of the language studied.

Travel or residence in another country, while admittedly educational, may not be applied toward fulfillment of the culture option. Courses accepted for transfer from other colleges or universities may be used upon approval.

### **3. World Civilizations**

The world civilizations requirement focuses on an in-depth study of a non-Western civilization or civilizations, or the interaction of non-Western and Western civilizations with equal attention given to both. The definition of the non-Western world is considered to include Africa, Asia, the Caribbean, Latin America, and selected indigenous cultures of Oceania and North America.

The course taken in fulfillment of the world civilizations requirement may be used to fulfill the culture option or that distribution requirement for which the course would normally be appropriate, but not both.

For courses that are not pre-approved, a petition form is available under Student Forms at <http://go.tufts.edu/registrar>.

### **Distribution Requirements**

The faculty holds that a student enrolled in any program leading to a liberal arts degree must demonstrate a reasonable acquaintance with each of the following five areas of inquiry: the humanities, the arts, the social sciences, the natural sciences, and the mathematical sciences.

- A student must take the equivalent of two course credits in each area.
- No more than two of the ten credits may be from the same department or program.
- Students may use only one approved prematriculation credit (e.g. AP or IB) toward fulfillment of each distribution area, for a total of five.
- No single course may be used in more than one distribution area. For example, a history course may be counted as either a humanities or a social science requirement, but not both.
- Courses used in the foundation requirement or as part of the concentration (major) may also be used to fulfill distribution requirements (with some exceptions noted below).

Several Tufts departments offer courses in statistics. Students may take more than one statistics course for academic credit. Students majoring in fields that require statistics should check with their department to find out which are acceptable for the major.

Special restrictions apply to Experimental College courses. Approval of the Academic Review Board must be obtained in all cases. Only one Experimental College credit may be used as a distribution requirement. Those courses graded pass-fail may not be used to satisfy any distribution requirement.

### **Summary Sheet of Requirements**

A grade of D- or above will fulfill foundation and distribution requirements.

#### **Foundation Requirements**

##### **1. WRITING**

- 1)
- 2)

## 2. FOREIGN LANGUAGE/CULTURE OPTION

Part I: Competence equivalent to three semesters of college language courses.

- 1)
- 2)
- 3)

Part II: Competence equivalent to three semesters of college language courses, or culture option. (Fulfill a, b, or c.)

- 4)
- 5)
- 6)

- a. Continue in the first language for three more semesters
- b. Three semesters in a *second* language
- c. Culture option—there are two ways to fulfill the culture option:

1. Continue through the fourth or fifth semester of the language used to fulfill Part I, and take one or two credits in the same culture area as that language.

2. Take three credits related to a single culture either the same as or different from the language taken to fulfill Part I. One credit must focus on the region of origin.

## 3. WORLD CIVILIZATIONS

- 1)

This credit may also be used toward a culture OR a distribution requirement, but not both.

### Distribution Requirements

#### 1. HUMANITIES

- 1)
- 2)

#### 2. ARTS

- 1)
- 2)

#### 3. SOCIAL SCIENCES

- 1)
- 2)

#### 4. NATURAL SCIENCES

- 1)
- 2)

#### 5. MATHEMATICAL SCIENCES

- 1)
- 2)

Only students with a math SAT score below 560 or a math ACT score below 23 may use Math 4 toward the mathematical sciences distribution requirement.

### Concentration (Major) Requirement

The object of the concentration (or major) requirement is to provide the student with an integrated and thorough program of study in a well-developed field of learning. Most students satisfy the concentration requirement within established academic departments and programs, selected from among those listed below. An alternative program, called the

Interdisciplinary Studies major, is available to students with unique academic interests not clearly encompassed by the established fields of concentration.

All courses used toward fulfillment of the concentration requirement must be taken for letter grades.

### **Department or Program Major**

Students are expected to choose their major and to have a faculty advisor in the major field during the second semester of the sophomore year. With the assistance of the faculty advisor, the student plans a concentration program of ten or more courses as specified by the major department. In some cases, the student must complete prerequisite courses in addition to those that constitute the concentration program.

For students with multiple concentrations, no more than half the credits used to fulfill the requirements for one concentration may be used to satisfy the requirements for a second or subsequent one. However, for courses taught in a foreign language beyond the third-year level of instruction, this overlap may be extended: up to 80 percent of the courses used to fulfill the requirements for one concentration may be used to satisfy the requirements for a second or subsequent one. Departments and programs may further restrict the amount of overlap between concentrations. Students who wish to complete two sets of concentration requirements are urged to continue to design such programs with minimal course overlap.

### **Interdisciplinary Studies Major**

(See also Center for Interdisciplinary Studies)

The Interdisciplinary Studies major offers students the opportunity to create a self-designed, individual concentration that draws on courses from at least two of the following six areas of study: humanities, arts, social sciences, natural sciences, mathematics (quantitative), and engineering.

Students proposing an Interdisciplinary Studies major must have a high degree of initiative and self-discipline. The Interdisciplinary Studies major consists of an integrated program of at least ten credits plus a two-semester thesis or honors thesis (for eligible students) or a substantial project comparable in scope to a thesis, including a written component. A student who wishes to pursue an Interdisciplinary Studies major must submit a detailed application describing the planned program of study. The student selects an advisory committee of three faculty members who support the application, including representatives from three departments in at least two of the six areas listed above. At least two of the committee members must be full-time members of the Arts and Sciences faculty with the rank of lecturer or above; at least one of the committee members must be a tenured or tenure-track member of the Arts and Sciences faculty. In consultation with this advisory committee, the student develops a rationale for the major, selects courses, and outlines the thesis plan. The proposal is reviewed for approval by the Center for Interdisciplinary Studies (CIS) Board or its designated subcommittee.

*Note: Two credits used to fulfill another major may be used toward the Interdisciplinary Studies major; students may not triple major if one major is in Interdisciplinary Studies.*

For specific information and application guidelines visit the CIS website: <http://cis.tufts.edu>.

### **Departmental, Interdepartmental, and Program Concentrations:**

Africana Studies  
American Studies  
Anthropology  
Applied Mathematics  
Applied Physics  
Arabic  
Archaeology  
Architectural Studies  
Art History  
Astrophysics  
Biochemistry  
Biology  
Biomedical Engineering  
Biopsychology  
Biotechnology  
Chemical Physics

Chemistry  
 Child Study & Human Development  
 Chinese  
 Classics  
 Cognitive and Brain Sciences  
 Community Health  
 Computer Science  
 Drama  
 Economics  
 Economics/Quantitative  
 Engineering Psychology  
 English  
 Environmental Studies  
 Film and Media Studies  
 French  
 Geological Sciences  
 Geology  
 German Language and Literature  
 German Studies  
 Greek  
 Greek and Latin Studies  
 History  
 Interdisciplinary Studies  
 International Literary and Visual Studies  
 International Relations  
 Italian Studies  
 Japanese  
 Judaic Studies  
 Latin  
 Latin American Studies  
 Mathematics  
 Middle Eastern Studies  
 Music  
 Peace and Justice Studies  
 Philosophy  
 Physics  
 Political Science  
 Psychology  
 Psychology/Clinical  
 Religion  
 Russian  
 Russian and East European Studies  
 Sociology  
 Spanish  
 Women's, Gender, and Sexuality Studies (WGSS)

The degree of Bachelor of Arts or Bachelor of Science is conferred on all students who complete this program. Students whose major concentration is applied mathematics, applied physics, astrophysics, biochemistry, biology, biopsychology, chemical physics, chemistry, cognitive and brain sciences, computer science, engineering psychology, environmental studies (as second major only), geological sciences, geology, mathematics, and physics are eligible to receive a Bachelor of Science or Bachelor of Arts degree. Those majoring in psychology, psychology/clinical, and quantitative economics may choose to receive the degree of Bachelor of Science or Bachelor of Arts at the time they complete their degree sheet. Students in all other majors will receive a Bachelor of Arts degree. Students whose multiple majors make them eligible for

either a Bachelor of Arts degree or a Bachelor of Science degree may choose between the two when completing their degree sheet.

### **Pass-Fail Option**

Within the limits stated below, students may elect to have their grades in certain courses recorded simply as pass or fail. The purpose of this option is to encourage students to extend their academic interests; it is not designed as a safety valve to permit students to carry unrealistic academic loads. A student will be graded as usual throughout the course, with final grades transcribed by the registrar into pass (if D- or better) or fail. A pass does not affect the grade point average; a failing grade is averaged into the grade point average. A course that has been taken using the pass/fail grading option and for which the student earned a pass may not be repeated for credit. If a class that has been taken pass/fail is later needed for a requirement that was not anticipated, the student may submit a petition request to his or her academic dean to have the originally assigned grade restored.

In a thirty-four course credit program, students are normally required to take at least twenty-six semester course credits under standard grading; the pass-fail option may be applied to any courses in excess of twenty-six, with the exceptions stated elsewhere in this section.

Transfer students and those students who transfer credit to Tufts from programs at other institutions must complete three-fourths of their work at Tufts under standard grading subject to the stated quality requirement. The pass-fail option may be applied to courses in the remaining one-fourth of the program, with the exceptions stated below.

No distinction is made between regular courses that a student elects to take under pass-fail grading and those courses that may only be taken pass/fail.

All decisions with respect to the pass-fail option must be made within the first five weeks of any term for sophomores, juniors, and seniors, and within the first ten weeks of any term for first-year students. After five weeks (ten weeks for first-year students), the student must complete a course under the grading system then in force or withdraw from the course. For liberal arts students, only electives may be taken pass-fail; courses taken to fulfill the foundation, distribution, concentration, and minor requirements may not be taken pass/fail.

### **Additional Graduation Requirements**

Other courses to complete the thirty-four credits required for graduation may be selected without restriction. However, students should be guided in their choice by the purpose of promoting breadth as well as depth in intellectual development. In planning their programs of study, students should keep in mind that a good general education in the humanities, the arts, the sciences, mathematics, and the social sciences is a distinguishing characteristic of members of all the established professions. Faculty advisors are ready at all times to aid and counsel in making decisions.

Seniors must file a degree sheet the semester prior to their expected date of graduation. (Consult Undergraduate Education in Dowling Hall.)

### **Undergraduate Minor Programs**

A minor is a coherent group of four to six course credits that may be a limited version of a field of concentration (major) or a group of courses having closely related subject matter. Minors are optional and in no way replace the field of concentration. The object of a minor program is to present students with the basic concepts in a single scholarly discipline or interdisciplinary area, including an introduction to appropriate methodologies and ways of thinking about the subject.

Two course credits used toward the departmental minor may be used toward a foundation, distribution, or concentration requirement. Students may not complete a major and a minor, or two majors, or two minors from the same department or program unless the department or program explicitly permits it. A student may have any number of majors and minors. All courses used in fulfillment of a minor must be taken for a grade (not pass/fail). There is a wide variety of minors offered within Arts and Sciences. Not all departments and programs have minors, so students should consult department and program websites for additional information.

### **Interdisciplinary Minor**

An interdisciplinary minor involves a designated group of five credits from at least three departments or programs of the university, bringing to bear the knowledge and perspectives of various disciplines on a single subject. In addition to the five credits, students pursuing an interdisciplinary minor are required to complete a capstone project such as a research paper, an oral presentation, or a performance, which integrates the knowledge and methodologies of the disciplines involved.

There is a wide variety of interdisciplinary minors offered within Arts and Sciences (see list below). Students should consult the individual program website and/or program director prior to declaring a minor. Students may declare a minor only after they have declared a major concentration. Students may have more than one interdisciplinary minor, regardless of the number of majors they have, and may have an interdisciplinary minor in addition to a departmental minor. Two credits used toward the interdisciplinary minor may be used toward a foundation, distribution or concentration requirement.

While each interdisciplinary minor has its own requirements and processes, in general students are responsible for selecting an advisory committee of two appropriate faculty members to support and evaluate the work on the capstone project. Capstone projects are letter graded by the faculty advisory committee and may be taken for one-half or one course credit either within the individual program or, if the individual program does not have its own capstone course number, through CIS (CIS 120: Interdisciplinary Minor Capstone). Individual interdisciplinary programs provide opportunities for students pursuing minors to share knowledge and resources in capstone courses, cohort meetings, and/or capstone presentation events.

The programs offering interdisciplinary minors approved by the Subcommittee on Academic Minors of the Committee on Curricula are listed below and should be consulted for their specific requirements and processes:

- Africana Studies
- Asian American Studies
- Colonialism Studies
- Cognitive and Brain Sciences
- Film and Media Studies
- Judaic Studies
- Latin American Studies
- Latino Studies
- Leadership Studies
- Medieval Studies
- Multimedia Arts
- Urban Studies
- Women's, Gender, and Sexuality Studies

### **Pre-matriculation Credits**

Pre-matriculation credits are defined as credits earned from certain scores on Advanced Placement and SAT Subject examinations, scores on examinations of certain international diplomas, as well as credits earned from college courses taken prior to matriculation at Tufts or any four-year accredited college or university. These scores and their equivalencies have been determined by the individual departments and are listed below. Pre-matriculation credits are treated as regular course credits, but are not normally applied toward the concentration. Liberal Arts students are limited to five pre-matriculation credits toward their degree. Credits earned prior to matriculation via Tufts Summer Session are not included in this limit. Only one pre-matriculation credit may be used toward each of the five distribution areas. If the student chooses to take a course that is equivalent to a pre-matriculation credit received and passes, then the pre-matriculation credit will be removed from the student's record. Students do not need to take the next level course in order to keep the pre-matriculation credit (except where stated). Students with more than five eligible Advanced Placement credits will be awarded five credits by the registrar. If they wish to make any changes, they may do so by completing the appropriate form under Student Forms at <http://students.tufts.edu/registrar>.

Students who took college classes while still in high school may request transfer of credit for those courses online through SIS on the Student Services web page. Credit is awarded only for courses taken at a college with regularly enrolled college students. Some colleges offer their courses at nearby secondary schools for classes composed entirely of secondary school students; credit is not awarded for these courses. Also, students requesting such credit must provide a letter from their principal or guidance counselor stating that the course was not used to complete requirements for the high school diploma.

Tufts does not grant credit for international diplomas as a whole; rather, credit is awarded for each approved subject examination passed at an appropriate level. For possible credit from international diploma examinations not listed here, students may contact a professional academic equivalency service—such as the World Educational Service—to provide an official evaluation. However, Tufts reserves the right to determine whether or not to accept the evaluation toward the Tufts degree.

See Tufts Exam Equivalency Chart on page 31.

### Standardized Exam Equivalencies

If a student completes a course at Tufts for which a prematriculation credit was awarded, the prematriculation credit will be removed from the student's record.

A student will be awarded 1.0 credit for the highest level achieved in a single language, even if multiple tests were taken in that language. This applies only to scores for which departments award credit.

Health professions graduate programs, such as medical and dental schools, will generally expect actual college science courses with laboratory on the transcript.

### Academic Standing/Satisfactory Progress Toward the Degree

Determination of a student's academic status is made by the faculty Committee on Academic Standing. The committee reserves the right to make decisions on an individual student's academic progress.

**Academic Alert:** A student will be sent an academic alert at the end of any semester in which the student earned fewer than 3.0 credits but more than 1.0, and/or had lower than a 2.0 but higher than a 1.66 GPA. Incompletes are not earned credits.

**Academic Probation:** A student will normally be placed on academic probation by the Committee on Academic Standing at the end of any semester in which the student earned 1.0 credit or fewer and/or lower than a 1.67 GPA. If put on academic probation, the student will no longer be in good academic standing, and notification of this status will be sent to the student's advisor and parents or guardians. The probation status will also be recorded on the student's transcript. To be removed from academic probation, in the following semester the student must complete a minimum of 3.0 credits and earn a minimum term GPA of 2.0, with a cumulative GPA of 1.67 or higher. Incompletes are not earned credits. Students on academic probation who do not meet these criteria will either remain on academic probation or will be required to withdraw for one semester.

**Required Academic Withdrawal:** If a student's academic performance in any subsequent semester meets the criteria for academic probation, then the student will normally be required to withdraw for one semester.

#### Summary:

- Academic Alert: 1.5–2.5 credits and/or term GPA 1.67–1.99. In good academic standing; student and advisor notified; no transcript notation.
- Academic Probation: 0–1.0 credit and/or term GPA 0–1.66. No longer in good academic standing; student, advisor, and parents/guardians notified; transcript notation.
- Required Academic Withdrawal for one semester: Credits and GPA meet the criteria of academic probation for any subsequent semester. No longer in good standing; student, advisor, and parents/guardians notified; transcript notation.

**Permanent Academic Withdrawal:** A student who returns from having been required to withdraw for a semester and meets the criteria for academic probation in any semester after the return will be subject to a permanent academic withdrawal, determined by the Committee on Academic Standing.

**Satisfactory Progress Toward the Degree:** Liberal arts undergraduates will be alerted by their academic dean if they are not earning adequate credits to make satisfactory progress toward the degree. Satisfactory progress is defined by the number of credits completed by the end of each semester, as follows:

	Credits completed	
	Fall	Spring
First-year	3 credits	6 credits
SOPHOMORE	10 credits	14 credits
Junior	19 credits	23 credits
Senior	27 credits	34 credits

## **Dean's List**

Each semester, students who have been enrolled with a minimum of 4.0 credits, received letter grades in a minimum of three credits with no work incomplete (with the exception of Y), and earned a minimum grade point average of 3.40 in the College of Liberal Arts will be placed on the Dean's List in recognition of their academic achievement. An indication of Dean's List status will be placed on their permanent record. Students in the combined-degrees program with the New England Conservatory of Music whose total course load equals 4.0 credits or more will be awarded Dean's List honors at both institutions if they meet Dean's List GPA requirements for the course work taken at each institution. Students in the BFA/BA combined-degrees program with Tufts/School of the Museum of Fine Arts whose total course load equals 4.0 credits or more will be awarded Dean's List honors if they meet Dean's List GPA requirements at Tufts.

## **Degrees with Honors**

Distinction (*cum laude*) is conferred at commencement on liberal arts students who achieved a record of five credits of A or A- in satisfying their concentration requirements, including related fields, and whose cumulative average for all Tufts courses is 3.50 or higher.

High distinction (*magna cum laude*) may be conferred at commencement on liberal arts students who achieved a record of six credits of A or A- in satisfying their concentration requirements, including related fields, and whose cumulative average for all Tufts courses is 3.65 or higher. Students must be recommended in writing by their departmental major.

Highest distinction (*summa cum laude*) may be conferred at commencement on liberal arts students who achieved a record of six credits of A or A- in satisfying their concentration requirements and whose cumulative average for all courses is 3.80 or better. Such candidates must also have earned at least one credit of A or A- in four of the five areas of the distribution requirement. All of these A or A- grades must be received in courses offered by a department or interdisciplinary program at Tufts or in Tufts Programs Abroad. Please note that Advanced Placement scores are not interpreted as grades.

It is important to emphasize that the numerical criteria for *magna cum laude* and *summa cum laude* determine only eligibility for consideration; actual award of these honors is contingent on departmental recommendation. A description of additional departmental criteria (such as independent research) for honors recommendations is available from each academic department or program. In addition, for students recommended for *summa cum laude*, the department must supply a letter supporting the recommendation. Finally, *summa cum laude* is awarded only by special vote of the entire faculty, recognizing extraordinary achievement in the breadth, as well as the depth, of the student's intellectual development. Students whose record includes a serious disciplinary infraction will not normally be eligible for *summa cum laude* honors. Exceptions to this policy can be made only after disclosure by the Dean of Student Affairs of the details of the infraction and subsequent vote by the faculty.

Grades in courses taken at institutions other than Tufts shall not be considered as criteria for honors. Exceptions to this rule are courses taken through cross-registration, the domestic exchange programs, the Mystic Seaport Program, or Tufts programs abroad.

See also Thesis Honors Program.

## **Phi Beta Kappa**

Founded at the College of William and Mary in Virginia on December 5, 1776, Phi Beta Kappa is the highest national academic honor for students in the liberal arts. There are chapters of Phi Beta Kappa at 283 colleges and universities. Delta Chapter of Massachusetts at Tufts University was established on September 7, 1892, and women became eligible from the time of their acceptance at Tufts. Although second-semester juniors and all seniors will be considered without any action on their part, students can be recommended for election to Phi Beta Kappa by their major departments or programs or by individual professors. Election is determined by the student's cumulative average together with his or her program: the courses selected in the field(s) of concentration and in fulfilling the foundation and distribution requirements, the general nature and difficulty of the program, its breadth and depth, the student's progress in the program, and the use of the pass-fail option.

## **Thesis Honors Program**

The Thesis Honors Program allows students to pursue a program of independent study usually leading to a senior honors thesis. (In some fields, the thesis may take the form of a creative project or research experience.) The principal purpose of the program is to give special impetus to the development of self-reliance, individual initiative, habits of critical analysis, and correlation of knowledge. Departments and programs are responsible for establishing specific guidelines for senior theses. Intensive specialization in a field of knowledge may be considered an appropriate corollary in some cases,

depending on the student's individual approach and the particular area of investigation. Students pursuing a major in Interdisciplinary Studies or a CIS thesis are eligible for thesis honors.

Since this is an honors program, admission is normally restricted to students whose names have appeared on the Dean's List at least two times before their senior year. Students may take on an honors thesis with one semester on the Dean's List if they have transferred to Tufts or have received special permission from their major department or program. Application should be made no later than the end of the junior year. The student is responsible for finding an advisory committee. While three members are recommended, the committee may have two members, one of whom may be outside the student's major department. The advisory committee is normally chaired by a member of the student's major department or by the primary faculty advisor in the case of a major in Interdisciplinary Studies. The committee will direct the student's reading and research or other creative work and will guide the student in preparing for a qualifying examination in the area of investigation. All such programs will include a thesis course, which normally will count as two one-semester credits. Students who would like to be recommended for degrees with honors by departments or programs that require a thesis should be aware that a thesis within their own department or program is required and a CIS thesis will not usually count as a substitute.

If you plan to write a thesis, you must submit a Senior Honors Thesis Candidate form and return it to Dowling Hall by the end of September. The form is located under Student Forms on the student services home page.

The thesis may be of a creative, critical, or historical nature, or may embody critical analysis of the results of experiments carried out by the student under supervision. Its subject and scope will be agreed upon in advance by the student and sponsor and approved by the committee. The completed thesis will be presented for consideration no later than two weeks before the last day of classes of the student's final semester.

Each candidate for a degree with thesis honors is required to undergo examination on the thesis and on the principal area of investigation (or major concentration). The specific character of the examination is determined by each department or advisory committee and may be oral, written, or both.

The department or advisory committee is empowered to determine the level of thesis honors to be awarded, basing its recommendation on an evaluation of the thesis. Degrees are designated bachelor of arts or bachelor of science, with highest thesis honors, with high thesis honors, or with thesis honors. (Thesis honors will be indicated on the student's transcript, but not on the diploma.) Students who, in the judgment of the department or advisory committee, have not attained the standards required for a thesis honors designation, but whose work is worthy of a degree, are recommended for the bachelor of arts or bachelor of science degree subject to the general regulations. Students who, in the judgment of the department or advisory committee, have attained the standards required for a thesis honors designation may also receive the degree summa cum laude, magna cum laude, or cum laude, in accordance with the procedures governing degrees with distinction.

For answers to frequently asked questions and a style sheet, visit the website <https://students.tufts.edu/academic-advice-and-support/academic-advising/what-we-offer/senior-honors-thesis>.

## **Internship Programs**

Internships provide juniors, seniors, and in some cases sophomores with the opportunity to apply various types of knowledge and skills in a field-based situation. Two internship programs are available: internships for academic credit and internships that award transcript notation but no academic credit.

Internships for academic credit in a wide range of fields are offered by some departments and programs. Students granted internships for academic credit must register for a relevant course and have a faculty advisor on campus as well as professional supervision at their workplace. They also complete and submit an internship agreement at the time they register for the course. All agreements must be signed no later than the add deadline of the semester. Participants are expected to demonstrate in a written project the learning that has taken place on the job by placing the work experience in an academic context. A minimum of twelve hours of work each week or 150 hours for the semester is required, and only two one-credit internships are normally accepted toward a degree. No credit is granted retroactively for these activities, and the two internships may not be done in the same semester. Students may develop their own field placement programs. However, all new proposals must be submitted to the appropriate department for approval. *Tufts does not accept transfer credits for internships.*

Students may also participate in the All-College Internship Program, which awards transcript notation but no academic credit. A faculty advisor is not needed to participate in this program because there is no academic component, but students do receive official recognition of their work on their transcript. Students register for the internship in the Career Center by the second week of classes, spend a minimum of 100 hours over the course of the semester at the site, and complete an

evaluation form at the close of the semester. Internships cannot be filed retroactively, and students may receive no more than two notations on their transcript.

### **Auditing**

Tufts undergraduates may audit a class only with permission of the instructor. The student will not be registered for the class, no credit will be received, and there will be no record of the audit on the student's transcript. Only students currently enrolled at Tufts in the semester may audit. The student is expected to attend class regularly, but the exact character of each audit must be determined by the instructor at the beginning of the semester. However, the student may not submit papers, take exams, or participate in any form of evaluation of performance. Auditing for credit is possible through the Experimental College. (See the Experimental College website for Auditing for Breadth.)

### **Cross-Registration**

Up to twenty undergraduate Tufts students may enroll in each of the following institutions during the fall and spring semesters: Boston College, Brandeis University, and Boston University. Online classes may not be cross-registered. Qualifying students must be enrolled full time and be in good academic standing in their home institution. The course must be taken for credit and may not be taken pass-fail. There is no exchange of fees, and both course credits and grades are recorded at the home institution. Only one cross-registered course at the above institutions may be taken per semester. Cross-registration is not allowed during Summer Session. Normally, Tufts students are limited to a total of two courses taken in departments for which there is no Tufts equivalent (e.g., business). Tufts students are subject to the requirements of the course taken at the host institution, including attendance.

Any student from the above institutions wishing to take a course at Tufts University is subject to the same rules as the resident Tufts University students. One course per fall and spring semester for up to twenty enrollments per institution may be taken at the Tufts University Medford, Boston, and Grafton campuses. This does not include classes being held at the School of the Museum of Fine Arts.

Tufts students may also cross-register for courses at certain schools within the university, with permission of the course instructor and the registrar of the relevant school.

For questions and forms, contact Student Services at 617-627-2000 or email [studentservices@tufts.edu](mailto:studentservices@tufts.edu).

### **Domestic Exchange and Off-Campus Programs**

Tufts offers one-semester student exchanges with Spelman College and Swarthmore College. Juniors in good standing may participate. For the Spelman program, participating students pay tuition, room and board (subject to availability), and special fees to Spelman. Information on the application and selection process is available from Undergraduate Education. For the Swarthmore exchange program, students pay all charges to their home institution; there is no exchange of fees. The course credits and grades earned in both exchange programs by Tufts students are recorded on the Tufts transcript.

Sophomores and juniors are also eligible to participate in a one-semester program in American Maritime Studies, accredited by Williams College and held at Mystic Seaport, Connecticut. Both credits and grades are recorded on the Tufts transcript. For more information on this program, contact Undergraduate Education.

## Graduate School of Arts and Sciences

The Graduate School of Arts and Sciences is the academic unit responsible for all post-baccalaureate degree programs and certificate programs offered through the School of Arts and Sciences. The advanced degrees offered are the master of arts, master of science, master of fine arts, master of arts in teaching, master of public policy, educational specialist, doctor of occupational therapy, and doctor of philosophy. The Graduate School of Arts and Sciences also partners with other Tufts schools and several Boston area colleges and universities to offer joint and dual degrees, including juris doctorate, master of public health, and master of business administration.

Through its doctoral programs, the Graduate School of Arts and Sciences aims to advance knowledge and to develop intellectual leaders in selected areas of the natural sciences, social sciences, and humanities. In order to encourage the close association of doctoral candidates and faculty, the number of programs offered is relatively small and the number of students admitted to each is limited. Through its wide variety of master's level programs, the school provides students with a focused education and specific skills to further their professional careers.

Please refer to the individual department sections of this bulletin to obtain further details on specific programs offered at the Graduate School. The Graduate School of Arts and Sciences website, <http://asegrad.tufts.edu/>, and a specific departmental website will provide more information on program offerings. The [Graduate Student Handbook](#) should be referenced for information on the policies specific to graduate students.

### Admission

Graduate program and application information is available online at <http://asegrad.tufts.edu/admissions>. The application must be accompanied by a nonrefundable application fee. The fee is waived if the applicant is a current Tufts undergraduate, graduate, or certificate student. The admission deadlines and requirements vary by program, as do the scholarship packages.

### Reserving Graduate-Level Courses While an Undergraduate

Tufts undergraduate students may reserve graduate-level courses taken prior to completion of their baccalaureate degree that are not needed for completion of those degree requirements. Through arrangement with the registrar, these courses are designated on the transcript and may be applied toward a master's degree at Tufts or elsewhere. Undergraduate students must complete the appropriate paperwork, located at <http://students.tufts.edu/registrar/student-forms>, in order to reserve courses for graduate education.

### Combined Bachelor's/Master's Degrees Program

The College of Liberal Arts and the Graduate School of Arts and Sciences (GSAS) offer combined degrees programs through select departments. The following description is overarching; details and availability vary by department and program. Interested students should directly contact participating departments and program for the most up-to-date information.

Combined bachelor's/master's degrees programs are offered by the College of Liberal Arts and the Graduate School of Arts and Sciences. The combined degrees program is one way of recognizing the increasing number of undergraduates entering college with exceptional preparation in certain areas. Many of these students are capable of doing graduate work by their junior and senior years. In this program students can enroll in bachelor's and master's degree programs with the goal of completing both in five years.

Students seeking admission to the program should consult their undergraduate major advisors and their prospective graduate advisors before applying to the graduate school. Combined degrees students are expected to fulfill all the requirements of the undergraduate and graduate programs. Four years of undergraduate tuition and the entire tuition for the master's degree are required.

Admission to the combined degrees program is normally during the junior year. Only in exceptional cases will an

application be accepted after the junior year. Therefore, students interested in the program should discuss with their advisors early in their academic career to facilitate program planning. A student may elect to withdraw from the program at any time by filing the appropriate petition.

## **College of Special Studies**

The College of Special Studies offers a variety of academic programs, including various certificate programs, in conjunction with certain non-degree-granting Tufts initiatives, such as the Certificate in Water: Systems, Science, and Society, coordinated through the Tufts Institute of the Environment.

### **Graduate Career Advancement Program and Graduate Certificates**

The Graduate Career Advancement Program, which allows holders of baccalaureate degrees to enroll in courses at Tufts to prepare for further study or simply to expand their knowledge of particular disciplines, is offered through the College of Special Studies. A number of advanced certificate programs are also offered through the College of Special Studies. Each program consists of a coherent set of credit-bearing courses in an emerging or rapidly evolving field. The certificate can serve as a credential for professional advancement or as an intermediate step toward a master's degree. For more general information, visit <http://asegrad.tufts.edu/>. For more information about the certificate program in Water: Systems, Science, and Society, visit <http://www.tufts.edu/water/>.

# School of Engineering

## Mission Statement

### A Unique Learning Environment

The Tufts University School of Engineering offers a rigorous engineering education in a unique environment that blends the intellectual and technological resources of a world-class research university with the strengths of a top-ranked liberal arts college. Our size and educational philosophy support a distinctive sense of community, a diversity of perspectives, and a student-centric learning environment. Engineering curricula across a wide spectrum of majors emphasize project-based learning, the nurturing of leadership skills, and cultivation of creativity through innovative design. Close partnerships with Tufts' cadre of excellent undergraduate, graduate, and professional schools, coupled with a long tradition of collaboration, provide a strong platform for interdisciplinary education and scholarship. Proximity to a thriving Boston metropolitan area facilitates close relationships with local industry and research labs, student internship and employment opportunities, and the committed engagement of seasoned practitioners in the school professoriate.

### Mission

- To educate engineers committed to the innovative and ethical application of science and technology in addressing the most pressing societal needs
- To develop and nurture twenty-first-century leadership qualities, perspectives, and skills in our students, faculty, and alumni
- To develop and disseminate transformational new knowledge and technologies that further the well-being and sustainability of society
- To provide national leadership in enhancing the role and visibility of the engineering profession in the education of our youth and the development and implementation of public policy

## School of Engineering Information

### Undergraduate Programs

The School of Engineering offers courses leading to the bachelor of science in five departments of engineering (biomedical, chemical and biological, civil and environmental, electrical and computer, and mechanical), as well as in the computer science department. Students may also enroll in special programs in the School of Engineering in preparation for careers in architecture, medicine, dentistry, veterinary medicine, law, public health, human factors, urban planning, and biomedical engineering. The school offers twelve bachelor of science degrees: bachelor of science in biomedical engineering, chemical engineering, civil engineering, computer engineering, computer science, electrical engineering, environmental engineering, mechanical engineering, engineering science, engineering physics, and bachelor of science (no major).

The programs of study leading to these degrees differ in structure and in the manner in which they are administered. Departments administer professional degrees in programs accredited by the Engineering Accreditation Commission (EAC) or the Computing Accreditation Commission (CAC) of ABET, Inc., for students who wish to be recognized as practicing professionals, especially those who wish to become registered professional engineers. Whereas the professional degree programs are the most structured, the bachelor of science degree program with no major is the most flexible. Through consultation with an individual faculty member in the Department of Civil and Environmental Engineering, students may pursue an individualized program of study leading to the bachelor of science degree with no major. The bachelor of science in engineering (Architectural Health, Environmental Health programs) and in engineering science are also administered by the Department of Civil and Environmental Engineering and allow for some departure from the curriculum for the professional degree. The Department of Mechanical Engineering administers a bachelor of science degree program for students who are interested in the field of human factors and ergonomics. The Department of Electrical and Computer Engineering, in cooperation with the Department of Physics, offers a bachelor of science in engineering physics. This program combines a mastery of the fundamental principles of physics with the professional aspects of engineering.

### Professional Degree Requirements

#### Bachelor of Science in Biomedical Engineering (B.S.B.M.E.)

**Bachelor of Science in Chemical Engineering (B.S.CH.E.)**  
**Bachelor of Science in Civil Engineering (B.S.C.E.)**  
**Bachelor of Science in Computer Engineering (B.S.CP.E.)**  
**Bachelor of Science in Electrical Engineering (B.S.E.E.)**  
**Bachelor of Science in Environmental Engineering (B.S.EV.E.)**  
**Bachelor of Science in Mechanical Engineering (B.S.M.E.)**

The programs leading to these degrees are accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc.

**Bachelor of Science in Computer Science (B.S.C.S.)**

The Department of Computer Science administers the program leading to Bachelor of Science in Computer Science (in the School of Engineering) accredited by the Computing Accreditation Commission (CAC) of ABET, Inc. This program combines mastery of computer science with the breadth and practicality of an engineering education. It is for students who desire a knowledge of computer science, computer systems, and computer applications without the hardware courses required for the computer engineering degree.

The requirements for these professional degrees in engineering are thirty-eight credits to be distributed as detailed below.

Of the thirty-eight course credits required for the professional degrees accredited by the Engineering Accreditation Commission of ABET, a minimum of 9.5 course credits must be college-level math and science appropriate to the discipline, and a minimum of 14.5 course credits must be engineering consistent with ABET general and program criteria ([www.abet.org](http://www.abet.org)).

**INTRODUCTORY COURSE REQUIREMENT**

The introductory courses consist of ten credits:

- a. Mathematics 32, 34 (or 36), 42, 51 (or 61 for computer science majors)
- b. Physics 11
- c. Chemistry 1
- d. One-credit course in introductory engineering
- e. Intro to Computers (one credit)
- f. Physics 12 or Chemistry 2
- g. One approved natural science elective credit

Please see <http://engineering.tufts.edu/undergraduate/degreesMajors.htm> for more information.

**FOUNDATION REQUIREMENT**

There are eight credits required by the student's department of concentration and selected from among the following: computer science, mathematics, natural science, engineering science, engineering topics, and general education topics.

**CONCENTRATION REQUIREMENT**

The twelve credits that constitute the concentration requirement for a particular degree are determined by the department offering the degree.

**HUMANITIES, SOCIAL SCIENCES, AND ARTS REQUIREMENT**

There are six course credits required in the humanities, social sciences, and arts. Accepted courses consist of those listed in SIS with the attribute SoE-HASS-Humanities, SoE-HASS-Arts, or SoE-HASS-Social Sciences. English 1 or 3 is a required course. Courses selected must include a minimum of one credit each in the areas of humanities and social sciences. In addition, at least two course credits must be taken in the same department. Ex-college courses are excluded, including those approved for distribution credit by the College of Liberal Arts.

**FREE ELECTIVE REQUIREMENT**

There are two free elective credits to complete the thirty-eight credits required for these degrees. The courses selected to fulfill the two free elective credits may be chosen without any restriction.

### **Pre-Matriculation Credits**

Pre-matriculation credits are defined as credits earned from certain scores on Advanced Placement and SAT Subject examinations, scores on examinations of certain international diplomas, and credits earned from college courses taken prior to matriculation at Tufts. These scores and their equivalencies have been determined by the individual departments. Pre-matriculation credits are treated as regular course credits and accepted toward satisfaction of the degree requirements. If the credit received is equivalent to a Tufts course, the student may not take that course for additional credit toward the degree. Students are limited to eight pre-matriculation credits toward their degree. Credits earned prior to matriculation via Tufts summer session are not included in this limit.

Secondary school students who have taken college courses should consult the appropriate departments regarding their placement and the possible award of credits. Credit is generally awarded only for courses taken at a college with regularly enrolled college students. Some colleges offer their courses in nearby secondary schools for classes composed entirely of secondary school students; credit is not awarded for these courses.

**See Tufts Exam Equivalency Chart on page 31.**

### **International Diploma Credit**

Tufts does not grant credit automatically for the diploma as a whole; rather, credit is awarded for each approved subject passed at an appropriate level.

For possible credit from all other international diplomas, students must contact a professional academic equivalency service—such as the World Educational Service (WES)—to provide an official evaluation. Tufts accepts possible credit only for certain scores on standardized examinations and reserves the right to determine equivalencies toward the Tufts degree.

### **Engineering Double Majors**

Students pursuing a major within the School of Engineering may undertake a second major with the consent of the respective department in the College of Liberal Arts or the School of Engineering. To do so, the student must notify the department of the second major at least one semester before graduation. No more than half the courses used to fulfill the requirements for one concentration may be used to satisfy the requirements for a second or subsequent one. Students may not complete the second or subsequent concentration in the same discipline.

Students following the bachelor of science in engineering and the bachelor of science in engineering science are considered to have engineering and engineering science, respectively, as majors and may participate in double-major programs. Students following the bachelor of science with no major may not participate in double-major programs.

### **Undergraduate Minor Programs**

In addition to completing the courses for the concentration requirement, an undergraduate may elect to enroll in a minor program in the College of Liberal Arts or the School of Engineering. All courses used in fulfillment of the minor program must be taken for a grade. No more than two courses used to fulfill a foundation or concentration requirement may be counted toward fulfillment of the minor.

Minor programs offered in the School of Engineering are:

#### **Architectural Engineering**

(For liberal arts students) Department of Civil and Environmental Engineering

#### **Biotechnology Engineering**

Department of Chemical and Biological Engineering

#### **Computer Science**

Department of Computer Science

#### **Engineering Education**

Administered by the Center for Engineering Education and Outreach

#### **Engineering Management**

Administered by the Gordon Institute

#### **Entrepreneurial Leadership**

Administered by the Gordon Institute

**Environmental Science and Policy**

(For engineering students only) Department of Civil and Environmental Engineering

**Geoengineering**

(For liberal arts students) Department of Civil and Environmental Engineering

**Human Factors Engineering**

Department of Mechanical Engineering

**Multimedia Arts**

(For liberal arts and engineering students) Department of Electrical and Computer Engineering. Administered by the Film and Media Studies Program

**Music Engineering**

(For liberal arts and engineering students) Department of Mechanical Engineering

**Musical Instrument Engineering**

(For liberal arts and engineering students) Department of Mechanical Engineering

For more information, see departmental listings in this bulletin.

**Dean's List**

Each semester, students who have been enrolled with a minimum of 4.0 credits, received letter grades in a minimum of three credits, completed every course in which they were enrolled with no work incomplete (with the exception of Y), and earned the minimum grade point average of 3.2 will be placed on the Dean's List in recognition of their academic achievement. An indication of Dean's List status will be placed on their permanent record.

**Pass-Fail Option**

The spirit of the pass-fail option is to encourage academic exploration. A maximum of eight pass-fail credits may be counted toward the total credits required for graduation. No introductory, foundation, or departmental concentration course may be taken pass-fail. Normally, no more than one course per semester may be taken pass-fail. No distinction is made between regular courses that students elect under the pass-fail grading and those courses in which grading is pass-fail. Refer to the academic calendar for deadlines. After the deadline, the only choices are to complete a course under the existing grading system or to withdraw for the remainder of the term. Forms are available at <http://students.tufts.edu/registrar>.

**Academic Standing/Satisfactory Progress Toward the Degree**

The following are guidelines for maintaining satisfactory progress toward the degree. Determination of a student's academic status is made by the faculty Committee on Academic Standing.

**Academic Alert**

A student will be sent an academic alert at the end of any semester in which the student fails to make satisfactory progress and/or earns a semester GPA lower than 2.0 but not lower than 1.67. Notification of this status will be sent to the student's advisor. Satisfactory progress is defined by the number of credits completed by the end of each semester, as follows:

	Credits completed	
	Fall	Spring
First year	3	7
SOPHOMORE	12	17
Junior	22	27
Senior	32*	38*

\* For BS degrees (Engineering Psychology and No Major): Senior Fall, 31; Senior Spring, 36.

**Academic Probation**

A student will be considered for academic probation by the Committee on Academic Standing at the end of any semester in which the student earned 1.0 credit or fewer and/or a semester GPA lower than 1.67. If put on academic probation, the

student will no longer be in good academic standing, and notification of this status will be sent to the student's advisor and parents or guardians.

#### **Required to Withdraw for One Semester**

The Committee on Academic Standing will consider requiring a student to withdraw for one semester if that student meets the criteria for academic probation after having previously been placed on academic probation in any prior semester while at Tufts (consecutive or not).

#### **Permanent Academic Withdrawal**

A student who returns from having been required to withdraw for a semester and meets the criteria for academic probation after the semester of the return will be considered by the Committee on Academic Standing for permanent academic withdrawal.

#### **Grade Requirements**

For graduation, grades of C- or better are required in 67 percent of the courses submitted for the degree. It is expected that grades of C- or better will be earned in at least 75 percent of the courses taken in the concentration.

#### **Degrees with Honors**

Distinction (cum laude) is conferred at commencement on deserving students who earned an academic average of 3.20 or higher.

High distinction (magna cum laude) is conferred at commencement on deserving students who have an academic average of 3.50 or higher.

Highest distinction (summa cum laude) is conferred at commencement to deserving students who have a cumulative grade point average of 3.80 or higher.

These nominations are approved by a special vote of the faculty.

The above criteria may be replaced by special evaluation of the Tufts academic record if substantial transfer credit is submitted in fulfillment of the degree requirements, or if the degree program is of unusual duration. Students whose permanent record includes a serious disciplinary infraction will not normally be eligible for degrees with honors.

#### **Tau Beta Pi**

Tau Beta Pi, the national engineering honor society, founded in 1885, affords engineering students the same recognition for high scholastic achievement and exemplary character as is provided for liberal arts students in Phi Beta Kappa. The Tufts chapter is designated as Delta Chapter of Massachusetts.

#### **Thesis Honors Program**

The Thesis Honors Program allows students to pursue a program of independent study usually leading to a senior thesis and a qualifying examination. The principal purpose of the program is to give special impetus to the development of self-reliance, individual initiative, habits of critical analysis, and correlation of knowledge. Students pursuing a Center for Interdisciplinary Studies (CIS) thesis are eligible for thesis honors.

Because this is an honors program, admission is normally restricted to students whose names have appeared on the Dean's List at least two times before their senior year. Students may take on an honors thesis with one semester on the Dean's List if they have transferred to Tufts or have received special permission from their department. The application process should be completed during the junior year, including the summer of the senior year. The student is responsible for finding an advisory committee (one principal advisor who is a full-time faculty member in the School of Engineering, and at least one other full-time faculty member from the faculty of Arts, Sciences, and Engineering, or industry expert). Admission to the program requires formation of an advisory committee, consent of the student's advisor, and approval of either the student's major department or, in the case of a CIS thesis, the CIS Board. The membership of the advisory committee and the title of the thesis must be registered with the Academic Resource Center.

The advisory committee will be chaired by a full-time faculty member in the School of Engineering. Exceptions to this rule may be made at the discretion of the department chair for the student's major. The committee will direct the student's reading and research or other technical work, and will guide the student in preparing for a qualifying examination in the area of investigation. All such programs will include two one-semester course credits (with at least one credit toward the concentration elective). The thesis should be of quality comparable to a paper publishable in a peer-reviewed journal. Its subject and scope will be agreed on in advance by the student and sponsor and approved by the committee.

The completed thesis will be presented for consideration no later than two weeks before the last day of classes of the student's final semester.

Each candidate for a degree with thesis honors is required to undergo examination on the thesis and on the principal area of investigation. The specific character of the examination is determined by each advisory committee and may be oral, written, or both. After the defense, a final copy of the thesis, in electronic form, should be submitted to the Tisch Library archive.

The advisory committee is empowered to determine the level of thesis honors to be awarded, basing its recommendation on an evaluation of the thesis. Degrees are designated bachelor of science with highest thesis honors, with high thesis honors, or with thesis honors. (Thesis honors will be indicated on the student's transcript, but not on the diploma.) Students who, in the judgment of the advisory committee, have not attained the standards required for a thesis honors designation, but whose work is worthy of a degree, are recommended for the bachelor of science degree subject to the general regulations. Students who, in the judgment of the advisory committee, have attained the standards required for a thesis honors designation may also receive the degree summa cum laude, magna cum laude, or cum laude, in accordance with the procedures governing degrees with distinction.

After the defense, a final copy of the thesis should be submitted to the Digital Collections and Archives (DCA). The DCA will accept thesis submission electronically as an alternative to submitting a bound paper copy. Please contact the DCA for more information on how to submit your thesis. For important information about guidelines and deadlines, as well as advice and support for writing a thesis, it <https://students.tufts.edu/academic-advice-and-support/academic-advising/what-we-offer/senior-honors-thesis>.

### **Undergraduate Internship Programs**

Internships provide undergraduate students with the opportunity to apply their education and skills directly toward a field-based situation, at an off-site organization.

Most often, internships are paid positions that are performed on a full-time basis over the summer months, or for approximately ten to fifteen hours a week during the semester. These internships may be awarded transcript notations without any academic credit.

In rare instances, students may receive credit toward degree requirements for which the following conditions must be met: the internship proposal is approved in advance by the department, a faculty mentor has supervisory and technical control of any work that receives credit, a minimum of 150 hours of work for the semester is required, and a written report is submitted that will be evaluated by the faculty mentor and the outside institution supervisor.

Undergraduate international students who wish to participate in the Curricular Practical Training (CPT) program should contact the International Center.

The Office of Engineering Internship helps qualified engineering students identify potential internship opportunities.

### **Combined Bachelor's/Master's Degrees Program**

The School of Engineering offers exceptional engineering students the option of pursuing a combined bachelor of science and master of science degree (B.S.-M.S.) as a thesis or non-thesis program. Combined-degrees students must pay four years of undergraduate tuition and two semesters of graduate tuition (plus continuation fees as applicable).

Students seeking admission to the program must submit an application by March 1<sup>st</sup> of their junior year. Admission to the program requires (1) a minimum cumulative GPA (through the fall semester of the junior year) of 3.60 for the B.S.-M.S. program, and (2) acceptance by the department in which the student intends to complete the master's portion of the program. Applicants not meeting the GPA requirement will still be considered and reviewed by the department.

Combined-degrees students are expected to fulfill all the requirements of the bachelor's degree program (38 credits); of these, two graduate-level credits are allowed to count toward the master's degree requirements as long as they carry the designation of the department in which the master's portion of the combined degree program is to be completed.

### **Graduate Programs**

The School of Engineering is the academic unit of Tufts University responsible for postbaccalaureate degrees in engineering and computer science. The nonacademic aspects of graduate engineering programs, such as admissions, registration, special student program, transfer credit and degree certification, are administered along with the nonengineering programs by the Graduate School of Arts and Sciences. Several combined undergraduate-graduate degree programs are offered by the school, including tracks in the traditional engineering disciplines, engineering management in collaboration with the Gordon Institute, biomedical engineering/medicine in collaboration with Tufts' health science schools, and international engineering in collaboration with the Fletcher School of Law and Diplomacy.

Through its six academic departments and the Gordon Institute, the School of Engineering offers the master of science degree (thesis or non-thesis); and the doctor of philosophy degree in selected areas of research excellence. Students may enroll full time or part time in any program subject to the residence requirements described on the Graduate School of Arts and Sciences website: <http://asegrad.tufts.edu/>. Full time non-thesis masters students can complete their program in as little as one year. Departments award tuition scholarships, teaching assistantships, and research assistantships to doctoral students on a competitive basis to graduate admissions candidates. Prospective and current students should consult with the individual departments to obtain detailed policies regarding degree requirements and programs.

**TUFTS EXAM EQUIVALENCY CHART  
LIBERAL ARTS & ENGINEERING  
2016/17**

**Key:**

AP = Advanced Placement  
 AC = Accelerated Credit  
 A-Level = British Certificate of Education  
 FB = French Baccalaureate  
 IB/HL = International Baccalaureate  
     Higher Level  
 IB/SL = International Baccalaureate  
     Subsidiary Level

ATTENTION: ENGINEERING STUDENTS MUST PAY SPECIAL ATTENTION TO ALL INFORMATION NOTES WITH \*\* OR \*\*\*.

SUBJECT	EXAM	SCORE	CREDIT	EQUIVALENT	NOTES
Anthropology	A-level	A, B	1.0	ANTH 10	
	IB/HL	6, 7	1.0	ANTH 10	
Art History	AP	5	0.0	FAH 1/2	
Biology	AP	4, 5	1.0	BIO AP **	
	A-level	A, B	1.0	BIO AC **	
	IB/HL	6, 7	1.0	BIO AC **	
Chemistry	AP	5	2.0	CHEM 1 & 2	Lose credit if CHEM 11 & 12 are taken
		(5)	1.0	CHEM 1	If CHEM 2 or 12 is taken
	A-level	A	1.0	CHEM 2	Exempt from CHEM 1 & 11
		B	1.0	CHEM 1	Lose credit if CHEM 11 is taken
	IB/HL	7	1.0	CHEM 2	Exempt from CHEM 1 & 11
		6	1.0	CHEM 1	Lose credit if CHEM 11 is taken
Chinese	AP	5	0.0	CHNS 4	
		4	0.0	CHNS 3	
	SAT	760–800	1.0	CHNS 22	
		710–750	0.0	CHNS 21	
		660–700	0.0	CHNS 4	
		600–650	0.0	CHNS 3	
		490–590	0.0	CHNS 2	
	410–480	0.0	CHNS 1		
Classics	A-level	A, B	1.0	CLS AC	
	IB/HL	6, 7	1.0	CLS AC	
* Computer Science	AP	4, 5	1.0	COMP 10 **	Either COMP A or COMP AB exam
	A-level	A, B	1.0	COMP 10 **	
	IB/HL	6, 7	1.0	COMP 10 **	
Drama/Theater	A-level	A, B	1.0	DR AC	
	IB/HL	6, 7	1.0	DR AC	
Economics	AP	5	1.0	EC AP	Students should enroll in EC 5
		5/5	2.0	EC 5 & AP	If both Macro and Micro AP
	A-level	A, B	2.0	EC 5 & AC	
	IB/HL	6, 7	2.0	EC 5 & AC	
* English	AP	5	1.0	ENG 1/2	Exempt from Writing Req
		4	1.0	ENG 1	
	SAT	760+	0.0	ENG 1	For SAT Writing
	A-level	A	1.0	ENG 1/2	Exempt from Writing Req
		B	1.0	ENG 1	
	(General Paper Exam)		A	1.0	ENG 1/2
		B	1.0	ENG 1	
	IB/HL	7	1.0	ENG 1/2	Exempt from Writing Req
		6	1.0	ENG 1	

SUBJECT	EXAM	SCORE	CREDIT	EQUIVALENT	NOTES
* English (contd.)	IB/SL	7	1.0	ENG 1	
EnvironmentalScience	AP	4, 5	1.0	BIO 7 **	
	A-level	A, B	1.0	BIO 7 **	
	IB	6, 7	1.0	BIO 7 **	Both HL & SL
French	AP	5	1.0	FR 21	
		4	0.0	FR 4	
		3	0.0	FR 3	
	SAT	770–800	1.0	FR 22	
		720–760	0.0	FR 21	
		660–710	0.0	FR 4	
		590–650	0.0	FR 3	
		500–580	0.0	FR 2	
		420–490	0.0	FR 1	
	A-level	A, B	1.0	FR 3	
	IB/HL	7	1.0	FR 21	
		6	0.0	FR 4	
		5	0.0	FR 3	
	IB/SL		0.0		Take placement exam
	FB	122	1.0	FR 122	
German	AP	5	1.0	GER 21	
		4	0.0	GER 4	
		3	0.0	GER 3	
	SAT	770–800	1.0	GER 22	
		720–760	0.0	GER 21	
		660–710	0.0	GER 4	
		600–650	0.0	GER 3	
		490–590	0.0	GER 2	
		410–480	0.0	GER 1	
	IB	7	1.0	GER 21	Both HL & SL
		6	0.0	GER 3	Both HL & SL
Hebrew	SAT	770–800	1.0	HEB 22	
		720–760	0.0	HEB 21	
		660–710	0.0	HEB 4	
		600–650	0.0	HEB 3	
		490–590	0.0	HEB 2	
		410–480	0.0	HEB 1	
History	AP	4, 5	1.0	HIST AP	A max of 2.0 credits are awarded
	A-level	A, B	1.0	HIST AC	
	IB/HL	6, 7	1.0	HIST AC	
Human Geography	AP	5, 4	1.0	ANTH AP	
Italian	AP	5	0.0	ITAL 4	
		4	0.0	ITAL 3	

SUBJECT	EXAM	SCORE	CREDIT	EQUIVALENT	NOTES
* Italian (contd.)		3	0.0	ITAL 2	
	SAT	770–800	1.0	ITAL 22	
		720–760	0.0	ITAL 21	
		660–710	0.0	ITAL 4	
		590–650	0.0	ITAL 3	
		500–580	0.0	ITAL 2	
		420–490	0.0	ITAL 1	
	IB/HL	7	1.0	ITAL 21	
		6	0.0	ITAL 3	
	IB/SL				Take placement exam
Japanese	AP	5	0.0	JPN 4	
		4	0.0	JPN 3	
		3	0.0	JPN 2	
	SAT	760–800	1.0	JPN 22	
		710–750	0.0	JPN 21	
		660–700	0.0	JPN 4	
		600–650	0.0	JPN 3	
		490–590	0.0	JPN 2	
		410–480	0.0	JPN 1	
Latin	AP	4, 5	1.0	LAT 3	
		3	0.0	LAT 3	
	SAT	720–800	1.0	LAT 21	
		620–710	0.0	LAT 3	
		480–610	0.0	LAT 2	
	IB/HL	6, 7	1.0	LAT 3	
Mathematics AB	AP	4, 5	1.0	MATH 32	
***Mathematics AB	AP	5	1.0	MATH 32	*** Rule for Engineering Students
Mathematics BC	AP	5	2.0	MATH 32, 34	
		3, 4	1.0	MATH 32	With AB subscore of 4 or 5
***Mathematics BC	AP	5	2.0	MATH 32, 36	*** Rule for Engineering Students
	AP	4	1.0	MATH 32	*** Rule for Engineering Students
Mathematics	A-level	A	1.0	MATH 34	
		B	1.0	MATH 32	
*** (Mathematics)	A-level	A, B	1.0	MATH 32	*** Rule for Engineering Students
Mathematics	IB/HL	6, 7	1.0	MATH 32	
	IB/SL	6, 7	1.0	MATH 30	No credit for Engineering students
Further Math	IB/SL	7	1.0	MATH 14	No credit for Engineering students
Music	AP	5	0.0	n/a	See Department for placement
	A-level	A, B	1.0	MUS AC	See Department for placement
	IB/HL	6, 7	1.0	MUS AC	See Department for placement
Philosophy	A-level	A	1.0	PHIL AC	Knowledge and Inquiry Exam
		A, B	1.0	PHIL 1	

SUBJECT	EXAM	SCORE	CREDIT	EQUIVALENT	NOTES
Philosophy (contd.)	IB/HL	6, 7	1.0	PHIL AC	
Physics 1	AP	5	1.0	PHY 1	No credit for Engineering students
		4	1.0	PHY 1	With Mechanics placement exam No credit for Engineering students
Physics 2	AP	5	1.0	PHY 2	No credit for Engineering students
Physics B	AP	5	1.0	PHY 1	No credit for Engineering students
		4	1.0	PHY 1	With Mechanics placement exam No credit for Engineering students
Physics C ( M)	AP	5	1.0	PHY 11	Lose credit if PHY 1 is taken
		4	1.0	PHY 11	With Mechanics placement exam Lose credit if PHY 1 is taken
Physics C (E)	AP	5	1.0	PHY 12	
Physics	A-level	A	1.0	PHY 2	No credit for Engineering students
		B	1.0	PHY 1	No credit for Engineering students
Physics	IB/HL	7	1.0	PHY 2	No credit for Engineering students
		6	1.0	PHY 1	No credit for Engineering students
*Political Science	AP	4, 5	1.0	PS AP	
	A-level	A, B	1.0	PS AC	Cannot be used toward the major
	IB/HL	6, 7	1.0	PS AC	Cannot be used toward the major
Psychology	AP	4, 5	0.0	PSY 1	Exempt from PSY 1
	A-level	A, B	1.0	PSY 1	
	IB/HL	6, 7	1.0	PSY 1	
Sociology	A-level	A, B	1.0	SOC 1	
	IB/HL	6, 7	1.0	SOC 1	
Spanish	AP	5	1.0	SPN 21	
		4	0.0	SPN 4	
		3	0.0	SPN 3	
	SAT	770–800	1.0	SPN 22	
		720–760	0.0	SPN 21	
		660–710	0.0	SPN 4	
		590–650	0.0	SPN 3	
		500–580	0.0	SPN 2	
		420–490	0.0	SPN 1	
	IB/HL	7	1.0	SPN 21	
		6	0.0	SPN 3	
		5	0.0	SPN 2	
	IB/SL	6, 7	0.0	SPN 2	
		5	0.0	SPN 1	
Statistics	AP	4, 5	1.0	MATH 10 **	
	A-level	A, B	1.0	MATH 10 **	
	IB/HL	6, 7	1.0	MATH 10 **	
Studio Art	A-level	6, 7	1.0	FAM AC	
Visual Arts	IB/HL	6, 7	1.0	FAM AC	

\* If both exams are taken, only one credit will be awarded.

\*\* Counts as a free elective for Engineers.

\*\*\* Rule for Engineering students.

**Please note:** If a student elects to take the Equivalent course at Tufts, the Exam credit will be removed upon completion of

the course.

A student will be awarded 1.0 credit for the highest level achieved in a single language, even if multiple tests were taken. This applies only to scores for which departments award credits.

For other types of A-level exams and Foreign Diplomas, please consult your Academic Dean.

# General Undergraduate Information

## Undergraduate Policies

### Residence Requirement

The university requires eight semesters of full-time study for the baccalaureate degree. After matriculating at Tufts, a student may spend no more than two semesters of full-time study at other approved institutions or on approved non-Tufts study abroad programs. Ordinarily, four semesters of the undergraduate's course of study must be taken at Tufts University's home campus. Up to two semesters may be spent in a Tufts-related program, either foreign or domestic. Normally, students will be in full-time residence at Tufts for the final two semesters. Transfer students must spend at least four full-time semesters at Tufts or on Tufts study abroad programs. Candidates for combined bachelor's degrees (liberal arts/engineering combined degrees, and the programs with New England Conservatory and the School of the Museum of Fine Arts) must complete their programs in no fewer than ten full-time semesters.

All students must earn a minimum number (17 for liberal arts, 19 for engineering) of their required graduation credits (34 for liberal arts, 38 for engineering) at Tufts or on Tufts study abroad programs. Pre-matriculation credits received from certain standardized examinations (such as Advanced Placement and international diplomas) are not considered Tufts credits for this purpose.

Matriculated students may transfer courses only from accredited four-year colleges and universities. No online courses will be accepted for transfer.

Students earning a total of five credits from pre-matriculation credits and/or Tufts summer session credits (including Tufts in Talloires) may elect to use these five credits in fulfillment of one semester of residence; students earning a total of nine such credits may elect to use these nine credits in fulfillment of two semesters of residence. Pre-matriculation credits are defined as credits earned from certain scores on Advanced Placement and SAT examinations, certain international diploma examinations, as well as credits earned from approved college courses taken prior to matriculation at Tufts or at any four-year college or university. Students may elect to use this option during their last semester of full-time study and should consult their academic dean. Courses taken during summer school at other institutions do not count toward the residence requirement.

Completion of a specified number of credits does not in itself constitute an undergraduate education. Students need time to reflect on and absorb knowledge. Four years of full-time study in an academic environment provide the opportunity to explore a varied curriculum at a reasonable pace; to interact with and learn from fellow students representing a variety of national, ethnic, religious, and racial backgrounds; to be enriched by study in a foreign country; and to survey the cultural, recreational, and educational opportunities of Boston and New England.

Exceptions to the policy are rarely granted. Petitions may be made on the basis of unanticipated personal, family, or financial emergencies.

### Graduation Dates

Tufts awards undergraduate degrees three times during the year: May, August, and February. The only commencement ceremony is held in May.

### Resumed Education for Adult Learners (R.E.A.L.)

The Resumed Education for Adult Learners (R.E.A.L.) program is open to students 24 years of age or older, veterans, and students who are married or are parents. This unique undergraduate program meets the need for greater academic flexibility in the education of older students. It is open to those who have some college experience, with recent coursework a requirement. The R.E.A.L. program is particularly receptive to prospective students who have assumed leadership roles in local community affairs as well as to residents of Medford and Somerville. Students in the program are enrolled in regular undergraduate courses and pursue a course of study leading to a college degree in liberal arts or engineering, for which they are expected to fulfill existing requirements. The R.E.A.L. program admits students for both the fall and spring semester of the academic year. For more information about the program, please call the Office of Undergraduate Admissions, located in Bendetson Hall, at 617-627-3170, or call the director, Jean Herbert, at 617-627-2662.

## **Transfer Students**

Entering transfer students are considered sophomores until their transfer credits have been evaluated. Transfer students are entitled to the same advanced placement credits and exemptions from foundation requirements as students who enter Tufts as first-year students, with the same stipulation that transfers may not receive credit for a course covering essentially the same material as that for which advanced placement credit is granted.

Transfer students with eligible scores on the SAT and Advanced Placement Tests should have official records of their scores sent to Undergraduate Education before orientation. Such credits will be approved only on the basis of official test records and not a transcript from the student's previous institution.

Students transferring from other institutions must spend a minimum of four full-time semesters at Tufts or on a Tufts program abroad and must complete at least half the credits toward their degree at Tufts or on a Tufts study abroad program (17 for liberal arts, 19 for engineering). Pre-matriculation credits received from certain standardized examinations (such as Advanced Placement and international diplomas) are not considered Tufts credits for this purpose.

## **Transfer of Credit from Other Institutions**

In order to receive transfer credit from another accredited institution, a student must have received a grade of C- or better. Transferred credits are entered in the Tufts record without the grade. Students may transfer from other institutions no more than the equivalent of seventeen Tufts course credits for the College of Liberal Arts and nineteen Tufts course credits for the School of Engineering. Tufts does not accept transfer credits for internships nor for online courses.

A matriculated student may take courses at other accredited four-year colleges and universities and receive credit for them toward a Tufts degree by obtaining approval in advance from the relevant department through SIS. Courses taken at a community college after a student has matriculated at Tufts are not accepted for transfer. Up to two semesters of full-time study after matriculation at Tufts may be spent at other approved four-year institutions or on approved foreign study programs. Students who transferred to Tufts must spend a minimum of four full-time semesters at Tufts or on a Tufts study abroad program. Students attending summer schools (other than Tufts Summer Session) are normally allowed to transfer no more than three credits earned in one summer, nor more than a cumulative total of five credits toward a Tufts degree.

Students who plan to complete a full-time semester elsewhere must complete the equivalent of three or more Tufts credits to have it qualify as a full-time semester.

All students planning to transfer credits earned while on leave at other institutions should begin the process by first discussing their plans with their academic dean.

Applied courses in music and dance, such as performance ensembles and lessons, are not normally accepted for transfer.

A course taken at a school using the quarter system will transfer as 0.5 Tufts credit, but in most cases may still be used toward fulfillment of a foundation or distribution requirement. If planning to use a quarter-system course toward a major, students should check with the department first.

## **Registration Information**

Registration for courses is done through SIS online. Students register for courses in November for the coming spring term and in April for the next fall term. It is critical that students register for courses during this time. Failure to register or file the appropriate leave of absence could result in administrative withdrawal from the University. Students taking a leave of absence, including a leave to study abroad on a non-Tufts program, must do so through SIS under Requests.

Registration will reopen during winter and summer breaks. Students will be able to register for any open classes, drop any classes, and sign up for the waitlist during this period. Please note that the waitlist will be active throughout this time. If a student is number one on a waitlist for a course and another student drops this course, then the first waitlisted student will be rolled into the course. The ability to add courses online will remain open for the first two weeks of the term. Once the add period is over, students who wish to enroll in a course must get the instructor's approval and the instructor will need to submit an enrollment correction form to the Registrar's office.

Sophomores, juniors, and seniors are able to drop courses online through the end of the fifth week of classes. First-year students are able to drop courses online through the end of the tenth week of classes. After these deadlines, a student may withdraw from a course until the last day classes meet (before reading period) online. The grade of W (withdrawn) will appear on the transcript, but does not affect a student's cumulative grade point average. After the last day of classes, students must complete the course work and receive the appropriate grade.

## Reduced Course Load

Permission to take a reduced program of courses may be granted to students in the Resumed Education for Adult Learners Program and those who have completed eight semesters of full-time study. Students seeking to go part time after completing the residence requirement should see their academic dean.

## Reduced Course Load (Disability Related)

In very rare instances, health needs and other disabilities may also merit a reduced course load; determination for this is made by the Student Accessibility Services Office. Students must file a petition in advance of the semester for which it is requested and work with the director of the Student Accessibility Office and their academic dean to effect a change to their program. Please see the Student Accessibility Services website for complete details and details: <http://students.tufts.edu/student-accessibility-services>. Students are considered to be making satisfactory progress if they complete each course with a C- or better. A minimum of three credits is full time.

## Grades

The standing of the student in each subject is expressed by one of the following letters:

- A** Superior work
- B** Meritorious work
- C** Satisfactory work
- D** Unsatisfactory work but allowable for credit, subject to the restrictions specified under the requirements for graduation. Some departments disallow credit toward the concentration requirement.
- P** Passing work (D- or better): for courses taken under the pass-fail option, and for selected courses offered only pass-fail by departments. Grade point average is not affected.
- F** Failure: No credit is received. A grade of F is averaged into the grade point average.

## No-grade status

- I** Incomplete: An indication by the instructor that more time will be allowed to complete the requirements for the course. An incomplete may be awarded only if the student has done substantial work in the course, the instructor judges the reasons for granting incomplete status to be valid, and the instructor determines that the work can be completed in the time specified on the incomplete form. The instructor is responsible for specifying on the incomplete form the reason for the incomplete grade and the conditions that must be satisfied for the awarding of a grade. A copy of this form must be submitted to Dowling Hall at the time final grades are reported. It is the responsibility of the student to request an incomplete before the required work is due. If an incomplete is granted, all work in the course must be completed six weeks into the following semester (fall or spring only), but students are encouraged to complete the work before the start of the next semester. The instructor may set an earlier or later deadline than the standard six weeks and the student must abide by that deadline. The work will be evaluated without prejudice, and a grade should be submitted two weeks after the work is received by the instructor. A course not completed by the designated time will either remain a permanent incomplete or be assigned an appropriate grade (such as an F) by the instructor.
- W** Withdrawn: An indication that a student has been permitted to withdraw from a course after the fifth week of a semester (tenth week for first-year students), but no later than the last day of classes.
- Y** An interim symbol used to denote the absence of a grade because the work on which the final grade is to be based extends beyond the time limits of the semester.
- CR** Credit: Credit is received, but is not included in the grade point average.
- NG** No grade: The instructor has no current knowledge of the student listed on the grade sheet.
- NR** No record: There is no record of the student having attended class. The course and grade will be removed by the registrar.

In computing the average of a student's grades, each course grade of A is counted as 4.00; B, 3.00; C, 2.00; D, 1.00. Appropriate value is given to plus and minus grades and to half-credit courses. Averages are computed to three decimal places; semester and cumulative averages are rounded to two decimal places. Since changes cannot be made after graduation, seniors are urged to have rectified any errors on their transcripts well in advance of the graduation date.

### **Changes in Course Grades: Statute of Limitations**

Effective education requires timely and objective evaluation of students' academic work, using clear, standard, fair, and public criteria. Such standards should be listed in the course syllabus. While criteria differ across disciplines and faculty, and while the ultimate responsibility for setting standards and evaluating performance rests with departments and faculty, submitted grades are final and not subject to negotiation. Exceptions should be limited to correcting clerical and calculation errors, and correcting deviations from stated criteria. Of course, students do have the right to know the basis for a grade, and faculty should be open to that post-semester conversation. Following such a conversation, undergraduates who believe that an error or deviation remains may appeal to the department chair or program director and, if necessary, subsequently to a dean of the faculty in Ballou Hall.

Any request for a change in a course grade must be made to the course instructor no later than six weeks into the following regular semester.

### **Repeated Courses**

Students who receive a failing grade for a course may repeat the course and receive degree credit if a passing grade is earned the second time. Both grades remain on the transcript, and both the F and the passing grade are calculated into the cumulative average. Students may choose to repeat a course after receiving a D+, D, or D-. Both the original and the repeated courses and grades will appear on the transcript. The credit value of the original course will be removed, but the full impact of the grades of both the original and repeated courses will be calculated into the cumulative grade point average. The repeated course, if passed, will receive the full credit value.

Students who earn a grade of C- or above for a course may choose to repeat the course for a variety of reasons. Degree credit and cumulative average will reflect only the first passing grade earned in the course; record of the repeat and subsequent grade will appear on the transcript, but the grade will not be calculated into the grade point average.

Some studio art classes and performance classes in dance and music may be repeated for credit. See department for details. Similarly, half-credit physical education skills courses may be repeated for credit. A total of four half credits may be earned for the physical education courses; additional such courses will appear on the transcript with no credit. Creative writing classes at the introductory level may be taken twice in each genre (fiction, poetry, journalism). Creative writing classes in fiction and poetry at the intermediate level may also be taken twice for credit. Journalism and Nonfiction Writing at the intermediate level may be taken only once each.

### **Extra Courses**

Liberal arts students may register for a maximum of 5.5 credits each semester; engineering students may register for a maximum of 6.5 credits each semester. To add an additional credit, students must petition their academic dean for permission at the start of the semester, but not before. Such permission is rarely granted to first-year students.

### **Missed Classes**

Students should make themselves aware of each professor's attendance policy. Students who must miss a class because of an illness should submit the online short-term illness form, available through SIS. Students are encouraged to speak with the professor directly about missed work since illness does not automatically excuse this. Students should consult their academic dean in Undergraduate Education in Dowling if they are missing more than a few classes due to illness. As the academic calendar is constructed, religious holy days are not the sole factor in determining days on which classes are held or suspended. However, it is the policy of the faculty that students be encouraged to observe their appropriate religious holy days; that instructors strive to facilitate this by allowing absence from classes for such purposes and by trying to ensure that no examinations, written reports, oral reports, or other mandatory class assignments are scheduled for or due on holy days; and that instructors provide ample opportunities for such students to make up work missed on such occasions without penalty.

### **Study Abroad—Tufts Programs**

Students are encouraged to study abroad under one of the established programs sponsored by Tufts University. (See Tufts Programs Abroad.) To apply to a Tufts Program Abroad, students must plan a program relevant to their degree program at Tufts, secure in advance the approval of their advisor, and meet the requirements of the program to which they are applying. (For further information on requirements, see <http://students.tufts.edu/study-abroad>.) Among other requirements, students participating in Tufts Programs Abroad must be in good academic and disciplinary standing from the time of application through participation in the program.

### **Study Abroad—Non-Tufts Programs**

To study abroad, students must plan a program relevant to their degree program at Tufts and must secure in advance the approval of their advisor and the director of Programs Abroad. Transfer credit toward the Tufts degree will be accepted only from students who are in good academic and disciplinary standing at the time of enrollment in the foreign program. A list of recommended non-Tufts programs is available online and in Dowling Hall. In order to have a semester of study away from Tufts count as one of the eight semesters of full-time study required for graduation, a student must complete the equivalent of three or more transferable Tufts credits. To meet the costs of administrative procedures connected with study at other institutions, students studying on a non-Tufts program abroad will be charged a fee.

### **Study Elsewhere in the United States**

To study elsewhere in the United States, students must take a leave of absence from Tufts and must secure in advance the approval of their advisor and their academic dean. Approved courses will be transferred from four-year, accredited colleges or universities if the student earns grades of C- or better. Students must get courses approved for transfer from the relevant department at Tufts through SIS. Tufts does not accept online classes for transfer. In order to have a semester of study away from Tufts count as one of the eight semesters of full-time study required for graduation, a student must complete the equivalent of three or more transferable Tufts credits. To meet the costs of administrative procedures connected with study at other institutions, students studying elsewhere will be charged a fee.

### **Leaves of Absence and Transfers**

Students considering a leave of absence or transferring to another school must consult their academic dean and complete the online leave of absence form, available through SIS. The Residential Life Office must be notified if a housing contract has been signed. There is a penalty for failing to notify the Residential Life Office by certain deadlines (consult the Residential Life Office). Students receiving financial aid should also notify Financial Services. International students must contact the International Center for information on visa status. Students taking a personal leave of absence with a plan to return to Tufts should consult their academic dean if they intend to take classes elsewhere while on leave.

### **Medical Leave**

Medical leave is an option available to students who, for physical or psychological reasons, are unable to continue at the university during a semester. Appropriate medical evaluation is a required part of the process. In certain cases, mental health practitioners or physicians may recommend that it is not in a student's or the community's best interests for the student to continue at the university. Decisions about return eligibility are made by the Health Accommodations and Medical Leave Committee. Students on medical leave are allowed to take courses at another four-year, accredited college while away from Tufts, but should consult their academic dean in advance.

Notification of intention to request re-entry must be submitted in writing or via email to the attention of Marisel Perez, Associate Dean of Student Affairs, in the Office of the Dean of Student Affairs ([marisel.perez@tufts.edu](mailto:marisel.perez@tufts.edu)) no later than:

- June 1 for the following Fall semester
- November 1 for the following Spring semester
- March 1 for the following Summer Sessions.

Please visit <http://students.tufts.edu/student-affairs/your-health-wellness-and-safety>.

### **Academic Ethics**

A university is a community of individuals interested in the search for an understanding of knowledge. Absolute honesty on the part of every college student is and always shall be an integral part of the plan of higher education at Tufts University. Examples of academic dishonesty include plagiarism, handing in one paper for two or more courses without the knowledge and consent of the instructors involved, dishonesty on examinations, and the purchase of papers to be submitted in a course.

Certain fundamental principles for the acknowledgement of sources apply to all fields and to all levels of work. The use of source materials of any kind (including the Internet) in the preparation of essays or laboratory reports must be fully and properly acknowledged. In a paper or laboratory report, a student is expected to acknowledge any expression or idea that is not his/her own. In submitting the paper, the student is stating that the form and content of the essay or report, in whole and in part, represent his/her own work, except where clear and specific reference is made to other sources. Even where

there is not conscious intention to deceive, the failure to make appropriate acknowledgement may constitute plagiarism. Any quotation—even of a phrase—must be placed in quotation marks and the precise source stated in a note or in the text; any material that is paraphrased or summarized and any ideas that are borrowed must be specifically acknowledged. A thorough rewording or rearrangement of an author’s text does not release the student from these responsibilities. All sources that have been consulted in the preparation of the essay or report should be listed in the bibliography.

Allegations of student academic misconduct are reported to the Office of the Dean of Student Affairs. Students have the right to review the complaint of academic misconduct made against them and to reply in writing. Students also have the right to appeal disciplinary decisions to the Committee on Student Life (CSL) according to the policies set forth in *Tufts University Student Judicial Process*.

Consequences for academic dishonesty include disciplinary probation, suspension, or expulsion. Instructors are required to follow the grading guidelines outlined in the Academic Integrity Handbook. For more information, please refer to the Academic Integrity Handbook, available online.

## **Privacy**

The federal Family Educational Rights and Privacy Act of 1974 (FERPA) gives each Tufts student access to his or her educational records, the right to correct inaccuracies in the records and the right to control distribution. Since September 11, 2001, the Department of Education has stated that a college must provide (absent a request) information it reasonably believes will assist law enforcement officials in investigating or preventing terrorist activities. In addition, there are exceptions in the statute, such as a subpoena, that allow Tufts to release student records even if the student objects. A description of your rights under the act, the location of records pertaining to you, and the procedures for requesting access and invoking your right to control access appears on the Student Affairs web site: <http://students.tufts.edu/student-affairs/student-life-policies/student-handbook>.

Please note: Only directory information is made available to the public. Directory information includes whether a student is in attendance at the university and the student’s local telephone number and email address. Students may request that directory information not be released to anyone by completing a privacy request form available at the Student Services Desk. Such requests are subject to the exemptions provided by certain policies, including FERPA and the Patriot Act of 2001. Students should verify implementation of their request by calling Dowling Hall. A change in phone number, along with the request not to release the information, is suggested as the best way to ensure privacy.

## **Nondiscrimination Policy**

Tufts University is committed to the fundamental principle of equal opportunity and equal treatment for every prospective and current employee and student in their education and employment. It is the policy of the university not to discriminate on the basis of race; color; national or ethnic origin; age; religion; disability; sex; gender; sexual orientation; gender identity or expression, including a transgender identity; genetics; status as a veteran; retaliation (for filing a complaint or raising a concern about any of the above categories); and any other characteristic protected under federal or state law, including Title IX. This equal opportunity protection applies in the administration of Tufts University’s educational policies, admissions policies, employment policies, scholarship and loan programs, and athletic or other university-sponsored programs. The University expects all Tufts employees, students and community members to join with and uphold this commitment. For more information or to file a complaint of discrimination, contact the Office of Equal Opportunity and Affirmative Action at 617-627-3298 or visit <http://oeo.tufts.edu>.

## Combined-Degrees Programs

### Combined Five-Year Liberal Arts/Engineering Program

For most students entering college, the choice between liberal arts and engineering is a clear-cut matter. For some students, however, the choice is quite difficult. For the latter, both the professional flavor and occupational orientation of the engineering programs, on the one hand, and the variety of course selection in the liberal arts curriculum, on the other, have strong appeal. At Tufts, it is possible for students to secure the advantages of both types of education under the combined five-year program.

With a normal course load in each of 10 semesters, students may complete the degree requirements in both engineering and liberal arts. The five-year program includes two fields of major concentration, one in liberal arts and one in engineering. The plan has particular appeal for engineering students who wish to secure a more liberal arts education than is possible in a four-year engineering curriculum and for liberal arts students who desire a strong technological background. Two degrees are awarded on completion of the program. Both degrees are awarded only on completion of the entire program; a student may not receive one degree earlier, even if the requirements for that degree have been met. Students who start a five-year program, but decide within two years not to continue, may complete the degree requirements for either engineering or liberal arts in the usual period of four years.

Students may apply for and be admitted to the combined five-year program only after entrance to Tufts. Because the program requires careful planning, students are encouraged to apply as early as possible. Five-year students are required to confer with their faculty advisors at the beginning of each semester to make certain that the courses that have been selected constitute a proper program. Five-year students must complete a minimum of forty-six courses and fulfill the foundation, distribution, and concentration requirements of both engineering and liberal arts. Within the School of Engineering, the B.S. degree may not be used as part of this program, except for the engineering psychology (human factors) program.

### Dual-Degrees Program with New England Conservatory of Music

Tufts University and New England Conservatory of Music have by agreement instituted a full five-year program leading to a bachelor of arts or bachelor of science degree from Tufts and a bachelor of music degree from the conservatory. It is designed for students who wish to pursue studies in a musical instrument, voice, composition, music history, and theory without giving up the academic disciplines of a liberal arts degree. Admission to this dual-degrees program is generally gained by simultaneous application to both institutions. Students in the program will complete a minimum of 24 Tufts credits; will be in full-time residence for ten semesters; and will meet the foundation, distribution, and concentration requirements stipulated by the College of Liberal Arts. Prospective students are requested to address their concerns to the Dean of Enrollment Services, Office of Admission, New England Conservatory of Music, 290 Huntington Avenue, Boston, Massachusetts 02115, or Undergraduate Education at Tufts University.

### Dual-Degrees Program with the School of the Museum of Fine Arts

Students interested in earning both a bachelor of fine arts (BFA) degree from the School of the Museum of Fine Arts at Tufts (SMFA) and a bachelor of arts (BA) or bachelor of science (BS) degree from the School of Arts and Sciences (A&S) may apply for admission to the dual-degrees program. Admission to this program is by simultaneous application to both the SMFA and A&S. Students in the program will complete a minimum of twenty-four A&S credits; will be in full-time residence for 10 semesters; and will meet the foundation, distribution, and concentration requirements required by the College of Liberal Arts. Students may double-count many of the same requirements for the BFA in Studio Art (BFA) and must also complete five semester-long courses in art history as well as 76 SMFA credits in studio art. Normally, the majority of the academic work is taken on the Tufts Medford/Somerville campus, and most of the studio art courses are taken at the Museum School. Information regarding the dual-degrees program may be obtained from the Office of Admissions, Tufts University.

### Combined Bachelor's/Master's Degrees Program with the School of Engineering

(SEE SCHOOL OF ENGINEERING FOR DESCRIPTION.)

### Combined Bachelor's/Master's Degrees Program with the College of Liberal Arts

The College of Liberal Arts and the Graduate School of Arts and Sciences (GSAS) offer combined degrees

programs through select departments. The following description is overarching; details and availability vary by department and program. Interested students should directly contact participating departments and program for the most up-to-date information.

Combined bachelor's/master's degrees programs are offered by the College of Liberal Arts and the Graduate School of Arts and Sciences. The combined degrees program is one way of recognizing the increasing number of undergraduates entering college with exceptional preparation in certain areas. Many of these students are capable of doing graduate work by their junior and senior years. In this program students can enroll in bachelor's and master's degree programs with the goal of completing both in five years.

Students seeking admission to the program should consult their undergraduate major advisors and their prospective graduate advisors before applying to the graduate school. Combined degrees students are expected to fulfill all the requirements of the undergraduate and graduate programs. Four years of undergraduate tuition and the entire tuition for the master's degree are required.

Admission to the combined degrees program is normally during the junior year. Only in exceptional cases will an application be accepted after the junior year. Therefore, students interested in the program should discuss with their advisors early in their academic career to facilitate program planning. A student may elect to withdraw from the program at any time by filing the appropriate petition.

### **Combined Bachelor's/Master's in Public Health (M.P.H.) Degrees Program**

(<http://admissions.tufts.edu/academics/special-degree-paths/early-admission-to-tufts-profe/>.)

### **Combined-Degrees Program with The Fletcher School of Law and Diplomacy**

The combined-degrees program is conducted jointly by the undergraduate college and the Fletcher School of Law and Diplomacy. It offers an opportunity for a limited number of highly qualified Tufts undergraduates in Arts and Sciences to earn both the bachelor's degree in their selected major and the Master of Arts in Law and Diplomacy (M.A.L.D.) degree on completion of a total of five to six years of study. Students may apply for the program once they have completed and received grades in at least twenty undergraduate credits.

A total of sixteen Fletcher course credits are required for the M.A.L.D. degree. As many as four of these courses may be used to fulfill requirements for the bachelor's degree. Fletcher courses will be taken over a period of two and a half to three years, during which time the student will complete his or her academic work for the bachelor's degree. No more than a combined total of five undergraduate and Fletcher courses may be taken during any one semester, no more than four of which may be Fletcher courses. The student's program must be coordinated to satisfy both the Fletcher requirements and those of the undergraduate department. Credit toward the M.A.L.D. degree will not be allowed for Fletcher courses taken through cross-registration or Fletcher Summer School before beginning the combined-degrees program. Cross-registration for courses at Harvard or other institutions will not be approved until the student has completed at least eight Fletcher courses. Upon admission to this combined-degrees program, the student must work with his or her major advisor, the respective academic dean, and the Fletcher registrar to ensure that he/she is meeting all requirements for both the bachelor's and M.A.L.D. degrees. These meetings must take place before beginning coursework toward the M.A.L.D. degree.

The normal length of this program is six years. Students who are completing this combined-degrees program in a total of six years will be required to satisfy the residency requirement of eight semesters toward the bachelor's degree and four semesters toward the M.A.L.D. degree. Tuition will be assessed so that during semesters 1–8, they will pay Arts and Sciences tuition and then during semesters 9–12, they will pay tuition at the Fletcher School.

Some students opt for an accelerated program where they complete the combined-degrees program in a total of five years. In this scenario, students would satisfy the residence requirement of the bachelor's degree upon completion of seven semesters, after which they would begin paying tuition to Fletcher for three semesters.

Those wishing to apply for the program should do so during the semester following the one in which they complete twenty undergraduate credits. If admitted to the program, they will begin taking Fletcher courses at the start of the following semester, whether it begins in January or September. The application deadlines are October 15 for January admission and January 15 for September admission.

Eligibility for financial aid will be based upon where the student is charged tuition for a particular semester. When students are charged and pay tuition to Arts and Sciences, they would be eligible to apply for undergraduate financial aid, and when they are charged and pay tuition to the Fletcher School, they would be eligible to apply for financial aid from the Fletcher School. Students should be aware that financial aid eligibility may vary significantly between the undergraduate program and the Fletcher School program.

The application fee is not required for combined-degree program applicants. Application forms, requests for interviews, and information on the Fletcher School may be obtained from the Fletcher School Admissions Office (Goddard 213) or by calling 617-627-3040.