

Adventure in Higher Learning

*University of
Massachusetts
Bulletin*



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**GENERAL
INFORMATION
BULLETIN**

UNIVERSITY
OF
MASSACHUSETTS

Table of Contents



	Page
A Word from the President	3
The University and Its Campus	4
Admission—How to Get Ready	5
What It Costs to Attend	7
A Place to Live, to Work, to Learn	8
The Program and Its Opportunities	11
Arts and Sciences	12
Agriculture	14
Business Administration	16
Education	18
Engineering	20
Home Economics	22
Nursing	24
Physical Education	26
Public Health	28
Military and Air Science	28
Course Requirements in the Freshman Year	29
Where to Write for Further Information	32

A WORD FROM THE PRESIDENT

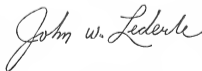
IN the pages that follow, you will find the University of Massachusetts described as "a place to live, to work, to learn." The University is, in other words, not only a place — but an opportunity. And the emphasis is on people, on teachers and students, on the men and women who contribute to and make our society what it is.

The full resources of the University are therefore always at the disposal of our students, whom we regard as the most important resource of all. And certainly if the young people we accept are to live, work and learn well, then we must be sure that they are *interested and dedicated people*, who will profitably and effectively participate in all that the University has to offer.

This is important, for the University itself is committed to serving national objectives in one of the most challenging eras of world history. We therefore see our students as integrally involved in helping our society to grow and to contribute in all significant ways to fulfilling these objectives.

In the process, students can derive enjoyment and satisfaction in the largest measure. The University has rich opportunities both in its curricular and extracurricular activities. Those who wisely balance their programs, who place studies first and carefully select other activities, can experience the "connection between knowledge and the zest of life" that is reflected in the program of all true universities.

Cordially,



JOHN W. LEDERLE
PRESIDENT

THE UNIVERSITY

THE University of Massachusetts is the state university of the Commonwealth, founded in 1863 under provisions of the Morrill Land Grant Act passed by the United States Congress one year earlier.

The University is a member of the great community of Land Grant colleges and state universities serving the nation as principal resources of higher education for the country's citizenry. Incorporated as the Massachusetts Agricultural College in April, 1863, the institution was opened to a handful of students in 1867. Rooted in the liberal arts tradition (its early presidents were graduates of such colleges as Dartmouth, Williams, Amherst, and Harvard), it has grown steadily from the four teachers and four wooden buildings available for its opening session. Reflecting the broadening interests of its students, the General Court of the Commonwealth of Massachusetts authorized a second name, Massachusetts State College, in April, 1931. Sixteen years later, in May, 1947, the institution became the University of Massachusetts.

Situated in one of the most picturesque sections of the state, the University on its Amherst campus joins with its academic neighbors — Amherst, Smith, and Mount Holyoke Colleges — in maintaining the rich tradition of educational and cultural activity associated with this beautiful Connecticut Valley region. The University's campus in Amherst consists of approximately 950 acres of land and 110 buildings. These structures include classroom and laboratory facilities as well as dormitories and other units.

To augment the Commonwealth's facilities at the university level, the University of Massachusetts in Boston will be opened in September, 1965. The new University will offer educational programs comparable in quality to those available on the campus in Amherst. Day sessions, late-afternoon classes, evening school as well as full summer sessions will be offered in the new program.

The total resources of the University of Massachusetts are dedicated to giving all qualified students full opportunities to develop their capabilities for service in a growing society.



Busy morning scene in the central quadrangle.

Autumnal setting near the Student Union.



ADMISSION - - HOW TO GET READY

Applications for admission may be obtained by writing the Admissions Office of the University. *There is no application fee required at the University of Massachusetts.* High school seniors are advised to file their applications early in the senior year. Out-of-state and foreign applications must be received prior to *February 1st*, for fall admission. College Board tests should be taken no later than the January testing date. If they are to be considered during the normal processing, in-state applications should be received by *March 1st*. Thereafter, they may be considered only as vacancies occur. Qualified applicants are admitted at the beginning of the fall and spring semesters and at the beginning of the summer session.

All applicants for admission, except veterans, must take the Senior Scholastic Aptitude Test given by the College Entrance Examination Board. In addition, the University requires three College Board Achievement tests, including English Composition of every applicant whose scholastic record in grades 9 through 11 contains four or more grades below the college recommending mark of his high school. All *postgraduate* students and *out-of-state* students are also required to submit these three Achievement tests. All College Board Test reports must be sent *directly* to the University from the College Board Testing Center. The applicant himself must notify the Board that he wishes his scores sent to this University. Candidates for early admission should, as well, ask the High School to include the junior scores on the application. The Scholastic Aptitude Test may be taken on any of the scheduled dates, although the December testing date is preferred. The May date is too late for seniors, but is appropriate for juniors taking the test for guidance purposes.

An autobiographical letter must be submitted with the application. The University recognizes the importance of a first-hand acquaintance with the colleges a student may be considering, and hopes that he will find it possible to visit the campus for his own information and satisfaction. He should be assured, however, that it will not disadvantage his application if he is unable to do so. The University holds several Guest Days for high school seniors in the fall. These are particularly appropriate times to visit the campus and high schools are notified concerning them. *An interview is, however, not part of the admissions procedure.* It is physically impossible for the admissions staff to interview all applicants; therefore, personal conferences will be scheduled only if the candidate or his guidance counselor has a question which cannot be readily resolved by correspondence. If it seems necessary to schedule an admissions counseling conference, it would be prudent for the applicant to make certain that his application and academic

records have been received by the Admissions Office prior to his visit so that his situation may be discussed intelligently.

In most cases applicants will be notified by letter during April of the action taken on their applications. Applicants who present strong academic records, enthusiastic school recommendations, and satisfactory College Board scores will receive earlier notification. This early notification should reassure the well-qualified applicant regarding college entrance and enable the student who has selected the University as his choice of college to settle his plans. Applicants accepted at an early date, however, are under no pressure to make a final decision in regard to their choice of college before the Candidate's Reply Date. In this way the burden of multiple applications on high school guidance counselors and college admissions officers may be lessened.

High Ranking High School Juniors

Applicants who have completed with very high academic standing work through the junior year may be admitted to the University for the semester following the junior year. Such applicants must take the Scholastic Aptitude and three achievement tests given by the College Board in May of the junior year and make scores satisfactory to the University. They must be highly recommended by their high school principal. The maturity and social adjustment of the applicant will be considered along with his intellectual development. Such applicants should apply before the end of the junior year.

Veterans

Veterans are not required to take the Scholastic Aptitude test. Instead, they must take entrance examinations in Algebra and English and a College Qualification test. These are administered by the University Testing Service in December, May and August. Information in regard to these tests will be furnished the veteran at the time he files his application for admission. Six months Active Duty for Training students are not considered veterans. They must take the College Board Scholastic Aptitude test rather than the Veterans' Examinations. Veterans in college or in full time postgraduate studies at present are considered in the same category as other applicants and do not take the Veterans Tests.

Bachelor of Vocational Agriculture Degrees

Superior graduates of vocational schools of agriculture in Massachusetts and vocational agricultural departments in Massachusetts high schools may be accepted for the Degree of Bachelor of Vocational Agriculture, provided:

They are unqualifiedly recommended by the Vocational Division of the Department of Education as *bona fide* Vocational Graduates with

superior ranks; they can present at least 16 units of certified entrance credits, approved as to quality and quantity by the State Department of Vocational Education; they successfully pass the English and College Qualification Test administered by the University Guidance Office. Those who have had algebra will be required to include the algebra examination.

Transfers

A limited number of transfers from approved colleges may be admitted. Since applicants for such transfer exceed the number that can be accepted, they are placed on a competitive basis. Ratings will be based upon high school and college records and on the College Board Scholastic Aptitude Test, which is required of all transfers. Any student who has been previously enrolled in a college is considered a transfer and must file a transfer application form. Applicants for transfer should write the Registrar for a transfer application. At least 45 semester credits taken in residence at the University are required of all transfers who are candidates for the Bachelor's Degree.

SUBJECT REQUIREMENTS

The subjects of preparatory study required for admission call for the satisfactory completion of a four-year high school course or its equivalent and are stated in terms of units. A unit is the equivalent of at least four recitations a week for a school year. High school graduation alone is not sufficient. The applicant's record must indicate capacity for handling the quality of scholastic work which the University has established as its standard of achievement.

Sixteen units of secondary school work must be offered, selected according to the following requirements:

College Preparatory Mathematics	3*
English	4
Foreign Language (2 years of 1 language)	2
U. S. History	1
Laboratory Science	1

The remaining units are elective and may be selected from the following subject matter:

- a. Mathematics
- b. Science
- c. Foreign Language
- d. History and Social Studies
- e. Free electives (not more than four units)

*Preferably two years of Algebra and one of Plane Geometry.

Free elective subjects are those not included in groups a-d, as for example: Music, art, drawing, typewriting, aeronautics, agriculture, home economics, etc. Such free electives are allowed in order that the student who wishes may have some opportunity to elect other high school offerings, while at the same time covering the fundamental requirements for college work.

Students planning to major in the physical sciences and mathematics should, if possible, offer two years of algebra, one of plane geometry, and one-half year of trigonometry. Analytical or solid geometry, chemistry, and physics, and an introduction to analytical geometry and calculus are also strongly recommended.

Students planning to pursue an engineering curriculum should offer two years of algebra, one of plane geometry, and one-half year each of trigonometry and solid geometry. Chemistry and physics are also advised. Those deficient in the mathematics should plan to cover it during the summer prior to entrance or expect to take five years to complete the college course.

Candidates who are deficient in any of the prescribed courses can be considered only if their over-all scholastic records indicate exceptional academic promise.

PHYSICAL EXAMINATION

Physical examination by their personal physician is required of all entering freshmen, re-entering students and all students participating in athletics. Physical report forms for this examination will be mailed to each student with the bill for the first semester and must be completed and returned to the University Health Service 10 days before the opening of the semester. Evidence of a *successful* smallpox vaccination and active tetanus immunization are required.

VETERANS' AFFAIRS

The Veterans' Coordinator is a staff member of the Placement and Financial Aid Services. All veterans affairs should clear through the Placement and Financial Aid Services.

Veterans and eligible dependents of veterans who are entering the University for the first time must present a Certificate of Eligibility at registration. This may be obtained from your nearest Veterans Administration office. Board and room fees must be paid in advance whether the veteran is enrolled under the G.I. Bill or not.

Veterans who are transferring to the University of Massachusetts from another institution or who have done summer work at another institution will be required to submit a supplemental Certificate of Eligibility at registration. This may be obtained by applying through the veterans' office at the institution last attended.

WHAT IT COSTS TO ATTEND

Expenses vary from approximately \$1,250 to \$1,400 per year for the normally economical student. First year costs are usually greater than those of the other three years and there is less opportunity for earnings. Therefore, a student is advised to have a definite plan for meeting the expenses of the first year before entering.

The following estimate of a year's expenses, based chiefly upon last year's costs, includes only those items which are strictly college and does not include amounts for clothing, laundry, travel, etc. These costs vary slightly from year to year. Tuition for residents of Massachusetts is \$200 per year and for others \$600.

	<i>Normal</i>
Tuition (citizens of Massachusetts)	\$ 200.00
Room in college residence hall or private home (approx.)	300.00
Board at college dining halls	448.00*
Athletic Fee	30.00
Student Union Fee	20.00
Student Activity Tax (approx.)	28.00
Student Health Services Fee	40.00
Student Medical/Surgical Insurance, 12 months' coverage (optional)	18.00
Books, stationery, and other supplies (estimate)	150.00
	<u>\$1,234.00</u>

INITIAL PAYMENT FOR FRESHMEN

The initial payment for first semester expenses required of freshmen at the time of fall registration is indicated below and is made up of the following items:

Tuition (citizens of Massachusetts)	\$ 100.00
Room rent in college residence halls (approx.)	150.00
Board at college dining halls	224.00*
Athletic Fee	15.00
Student Union Fee	10.00
Student Activity Tax (approx.)	14.00
Student Health Services Fee	20.00
Student Medical/Surgical Insurance, 12 months' coverage (optional)	18.00
Physical Education Equipment Fee (men only)	10.00
Books, stationery, and other supplies	100.00
	<u>\$ 661.00</u>

These are only approximate figures. A bill will be rendered to the parent of each student prior to the beginning of the semester.

*Above plan for 7 days, 5-day plan available for approximately \$370.00 per year or \$185.00 per semester

TUITION

As a state institution the University of Massachusetts offers a low rate of tuition to all students entering from the Commonwealth. Eligibility for admission under the low residential rate is determined in accordance with the following policy established by the Board of Trustees.

A student must present evidence satisfactory to the Treasurer of the University that his domicile is in the Commonwealth of Massachusetts in order to be considered eligible to register in the University as a resident student. This means that he must have established a "bona fide" residence in the Commonwealth with the intention of continuing to maintain it as such.

The domicile of a minor shall follow that of the parents unless such minor has been emancipated. In case of emancipation the student, in addition to the requirements of these regulations, respecting residence, shall present satisfactory proof respecting emancipation. Minors under guardianship shall be required to present, in addition to the certification of the domicile of the guardian, satisfactory documentary evidence of the appointment of the guardian. No student shall be considered to have gained residence by reason of his attendance in the University nor shall a student lose residential preference during his continuous attendance at the University. The residence of a wife shall follow that of the husband.

The prescribed form of application for classification as to residence status must be executed by each student. Misrepresentation of facts in order to evade the payment of out-of-state tuition shall be considered sufficient cause for suspension or permanent exclusion from the University. Discretion to adjust individual cases within the spirit of these rules is lodged with the President of the University. Students receiving credit by special examination must pay \$5.00 per credit to be received before the examination may be taken.

ROOM AND BOARD

The University provides accommodations in residence halls for a large number of its students. Freshmen, sophomores and juniors, unless 21 years of age, are required to live in University residence halls unless excused by the Dean's office. All freshmen, sophomores and juniors residing in University residence halls will be required to board at University dining halls, except that such students who are members of fraternities or sororities may be permitted to board at their respective fraternities or sororities. Any student not required to board on campus may eat at the Dining Commons on a cash basis.

SUMMER ORIENTATION FEE

Members of the incoming freshman class attending the summer orientation program will pay a non-refundable fee of \$15.00 to cover the cost of meals, housing, testing and counseling.

PAYMENT DUE DATES

In accordance with University policy, all charges for tuition, fees, board and room rent in University dormitories are due and payable twenty-one days prior to the date of registration of each semester. Bills will be rendered in advance and payment may best be made by mail. Students may not register until all University charges are paid.

A WORD ABOUT FINANCIAL AID

Scholarships, loans, and part-time employment are available for a limited number of needy and deserving students. A limited number of such grants are available to entering freshmen who have made outstanding records in

high school. Applicants for scholarships must file the Parent's Confidential Statement prepared by the College Scholarship Service when the Admissions Application is sent, or no later than March 1st of the admissions year. Students may also apply for certain kinds of loans, including those available under the National Defense Student Loan Program, University loans (after the first semester of the freshman year), and the Higher Education Loan Plan (at the end of the freshman year). Also, students may engage in part-time work after the completion of the first semester of their freshman year. Information about each of these programs may be obtained by writing to the Director of Placement and Financial Aid Services. Veterans or dependents of veterans who are eligible for benefits may also apply to this office for information.

A PLACE TO LIVE, TO WORK, TO LEARN

How can I make the most of my college career? Every student asks this question just before the start of his freshman year. Specific answers usually wait until the student is actually in college where teachers and advisers help him to decide on the major course of study he should pursue. Often, of course, a student has already made a decision about his "major," and if the decision is based on a sound assessment of aptitudes and abilities, this is all to the good.

But even for students who are sure about what they want to "take" in college, the question is still very important. The danger in approaching college work lies in the assumption that this is, as with many other activities, "just a routine." As a student reads the general catalogue, he finds rules, regulations, requirements, and prescribed courses of study. All these tend to make him feel that the curriculum is indeed just a routine for getting enough credits to graduate.

For many students this is certainly true. But for the wise student, the word "routine" is supplanted by the word "adventure." The rules, regulations and requirements are not thereby eliminated, for every college must have the means of order and stability by which to achieve basic objectives. But the good student recognizes that he need not work merely to satisfy *minimal* requirements: he can do much more. If he learns early that thought is not locked within the four walls of a classroom, if he is alive with interest, if he realizes that his four years in college will be the best he will ever have for stocking his mind and exercising his imagination, then his "prescribed course of study" will become a springboard to a fascinating realm of knowledge and ideas that only he himself can attain.

The following paragraphs, therefore, are simply intended to show what the University can offer a student, what it requires of him, and what he must do to fulfill these minimal obligations. Beyond these basic offerings and requirements lies the real adventure—the adventure in learning.

A YEAR-ROUND OPERATION

The University conducts its program on virtually a year-round basis. The regular two semesters of the academic schedule are supplemented by a two-term summer session in which a student can earn nearly the equivalent of a full semester's work. Combining the work of the regular academic year with a complete schedule of courses in the summer sessions, students can finish their college careers in three years instead of four. The summer session is open to all freshmen who wish to begin their college education immediately following graduation from high school. It is also available to high school juniors who are accepted for study at the University under the Early Admission Plan (see below under Program for Superior Students).

THE ACADEMIC PROGRAM

The University consists of two main divisions, the four-year undergraduate curriculum and the Graduate School. Instruction in the undergraduate program is assigned to the College of Arts and Sciences, the College of Agriculture, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing, and Physical Education, and the Department of Public Health. A qualified student may enter any one of these units and

work toward the appropriate bachelor's degree, as described on Page 11. The total program is built around a core of studies designed to provide a sound general background. Beyond this, the student elects a program within a particular branch of learning in order to prepare for advanced study in that field or for a career in one of the professions. Offerings in the various branches range from accounting to zoology, and a student electing any major course of study has opportunities for a comprehensive education in the four-year program. Descriptions of the courses of study offered in each of the undergraduate branches can be found in the section beginning on Page 12.

THE PRELIMINARIES: FRESHMAN ORIENTATION

All students entering as freshmen must attend a two-and-a-half-day orientation program at a specified time during the summer prior to entrance. The program consists of testing, counseling, and pre-registration for courses to be taken during the coming semester. Guidance and placement tests are given and scored, and each student is assigned a faculty adviser who will help in the selection of courses and planning of a class schedule. On the final day of each of these periods, a special program is held for parents so that they may learn about the student's proposed courses and schedule for the fall semester, the results of the testing sessions, and the facilities and opportunities available at the University.

GENERAL UNIVERSITY SERVICES

The University is a community of individuals working toward a common goal—the acquisition and dissemination of knowledge. As a community, therefore, the institution has all of the adjunct resources needed to further that goal and to provide for the general well-being of the community's members.

Thus, the University maintains an extensive library system, both through the University Library and the 30 departmental and laboratory libraries. In addition, the University is a participating member in the Hampshire Inter-Library Center, housed at the University and containing journals, documents and reference sets for use in study and research. The Center is jointly operated by Amherst, Smith, and Mount Holyoke Colleges and the University under the Four College Cooperation Program engaged in by the four area institutions.

Concerned as it is with the need for spiritual underpinnings for the educated man, the University gives support to the religious life of its students in various ways. It affords the use of facilities for student groups of all faiths, and it honors the work of the Campus Religious Council which provides a cooperative interrelationship among religious groups. Chaplains are assigned to campus by the various faiths, and students are urged to meet with their own chaplain upon coming to the campus.

The University's Health Service, housed in one of the newest buildings on campus, is concerned with the total health of individuals and groups, as reflected in the need for complete physical, mental and social well-being. The new infirmary contains a fully-equipped out-patient department, X-ray and laboratory resources, and physiotherapy facilities. The Health Service staff of physicians, technicians and nurses is devoted to promoting good physical and mental health, conditions of safety, and other factors affecting the health of students in the campus community. In addition, the University maintains a Speech and Hearing Center to assist students and others with speech and hearing problems.

GRADING SYSTEM

Enrollment in and graduation from the University involve both quality and quantity of work. The quantity of work is measured by the credits obtained by successful completion of courses. The quality of work is measured by grades. Each grade is equated with a quality point as noted below. The quality point average required for continued enrollment and for graduation is set by the Faculty Senate. At present the graduation requirement is a cumulative average of 1.80.

Grades are reported according to a letter system, as follows: A—Excellent, B—Good, C—Average, D—Passing (but not satisfactory), F—Failure, and Inc—Incomplete. Quality points per semester hour are assigned as follows: A, 4; B, 3, C, 2; D, 1, and F, 0. To compute the semester grade point average, as well as the cumulative average, the total points earned are divided by the total credits carried. Any student whose semester quality point average falls below the cumulative requirement is warned of his status by the Registrar and informed of the rules governing dismissal. Students who achieve high averages are placed in one of three honors groups each semester, as follows: First Honors: 3.8 or higher; Second Honors: 3.4 to 3.7 inclusive; and Third Honors: 3.0 to 3.3 inclusive.

ADVISORY SYSTEM

In order that, from the day he enrolls, the freshman may have someone to whom he may go for consultation and assistance, each student selects a tentative educational objective and is assigned a faculty adviser within that academic area.

In the second semester of the freshman year, each student is given an opportunity to change to a new department or to remain in his current department. In succeeding semesters, students may change to another major department by execution of a Major Change Card (available in the Registrar's Office). It is the function of this adviser to help the student in adjusting himself to the work and life of the University. Academic progress reports issued by the Registrar's Office are sent to the advisers periodically, and the students are expected to report to their advisers from time to time to discuss

their academic standing. The University also forwards reports of academic standing to the parents. Both students and parents are encouraged to consult with the adviser whenever there are problems regarding studies or personal adjustments to college life.

PROGRAMS FOR SUPERIOR STUDENTS

The University regularly provides superior students with challenging educational programs extending from the freshman through the senior year. Under the Early Admission Plan, the University considers applications from students of high standing who have completed their junior year of secondary school.

Many entering students are able to achieve advanced standing and credit for college-level courses successfully completed in their secondary schools as part of the College Entrance Examination Board Advanced Placement Program or an equivalent. The University also administers a number of its own advanced placement tests. A student who demonstrates he is proficient in a basic college subject may by-pass the beginning course and go on to advanced work in the subject. Upon attaining satisfactory standing in many of these courses, students are granted academic credit for the courses by-passed. Also, up to thirty semester hours of credit may be granted students of high standing who can fulfill the requirements of some of their courses through independent study.

The major feature of the program for superior students is the honors curriculum available to all who qualify. Freshmen are eligible for the Honors Colloquium program conducted for the first three undergraduate classes.

The Senior Honors Program recognizes merit and gives highly qualified students time and opportunity for independent study under closer, more personal direction than is ordinarily provided in the University curriculum. Students who complete their work satisfactorily are eligible for graduation with honors.

STUDENT HOUSING

It is the policy of the Board of Trustees that all men and women undergraduate students shall be housed in campus dormitories and be required to eat at University dining halls unless given permission to commute from their parents' home or to live at sorority or fraternity houses. University board is optional for seniors and is available on a cash basis. Sororities and fraternities may furnish regular board to members up to the approved capacity for each house. Students who are assigned to housing operated by the University are expected to remain for the academic year and may not be released sooner except as their places are taken by suitable substitutes. The University reserves the right to change room assignments whenever necessary.

Most dormitory rooms are double and are furnished with beds, mattresses,

desks, chairs, and a chest of drawers. Students care for their own rooms and are responsible for any damage. Dormitories open for occupancy on the day immediately preceding the opening of the University. All student property must be removed from the rooms and the key turned in immediately after final examinations in June. Such property not removed by the owner will be removed by the University and stored at the owner's expense. Students assigned to dormitory rooms will be responsible for the room rent of the entire semester. Room rent is not refundable. Room rental charges do not include the several regular school vacation periods. The University reserves the right to utilize student rooms during vacations for conferences and other groups which meet occasionally on the campus.

APARTMENTS FOR MARRIED STUDENTS

The University owns and operates two groups of apartments: Lincoln Apartments for junior faculty, married graduate and undergraduate students, and the County Circle apartments for married graduate and undergraduate students. Apartments are unfurnished with the exception of kitchen units which contain an electric range and refrigerator. Apartments are assigned as of date of availability. New junior faculty, married graduate students and undergraduate students with children receive consideration in that order. Further information and applications may be obtained from the University Housing Office, Draper Hall.

AUTOMOBILES

Only members of the senior class, students 21 years or over, and commuters are permitted to have automobiles or other types of automotive equipment on the campus or in the Town of Amherst. Vehicles must be registered with the Campus Police. Driving to and from classes is not permitted. Exceptions may be made in the case of an individual who has a severe physical limitation. Requests for such exceptions must be made through the University Health Service.

STUDENT ORGANIZATIONS

Participation in extra-curricular activities offers opportunities for furthering the broader objectives of a college experience. The knowledge, skills and judgment developed in the classroom can be tested and refined through use in the organizational setting. Thus, more than fifty professional clubs exist on campus as a means of stimulating vocational interest through close contact with members of the teaching staff and representatives of the professions. Student government offers a forum for debate on matters of importance to the entire University community. For those interested in communications, there are several campus publications as well as an FM radio station. Experience in music and drama is available in a number of forms.

Such activities can be a profitable means of fostering maturity and general enrichment in those students who wish to take optimum advantage of all that the University can offer. In encouraging participation in these activities, the University asks only that students plan their time well, in order that they may profit as much as possible from a total University program devoted, first and foremost, to academic studies.

All extra-curricular activities are supervised by the Committee on Recognized Student Organizations composed of alumni, faculty, and students. Recognition for outstanding achievement in this area is given at an annual Student Leaders Night held in the spring. An office devoted to administering and assisting in the conduct of student activities is located in the Student Union. Detailed information about student organizations may be obtained by contacting the Recognized Student Organizations Adviser.

INTERCOLLEGIATE AND INTRAMURAL ATHLETICS

The University maintains well-organized intercollegiate and intramural sports programs. In intercollegiate athletics, the University is represented by teams in all the leading sports, including football, soccer, cross-country, basketball, swimming, wrestling, indoor and outdoor track, hockey, rifle and pistol, baseball, tennis, golf, lacrosse, gymnastics, skiing.

The University also supports a broad program of intramural activities, in which all students are encouraged to participate. The range of sports available each year includes the team sports of touch football, basketball, softball, volleyball. Individual activities include tennis, bowling, badminton, golf, tennis, swimming, and lacrosse.

PLACEMENT SERVICES

The University maintains an Office of Placement and Financial Aid Services whose responsibilities include vocational and financial counseling and the administration of the affairs involved in aiding students to seek appropriate positions and careers; the granting of loans and scholarships; the assignment of part-time work; the coordination of veterans' affairs; and the dissemination of information relative to military service through the draft or reserves. While providing vocational and career counseling for all undergraduates, the emphasis is on aid to seniors in planning their future following graduation and providing them with job-hunting techniques and other media for finding permanent employment. Actual contact with employers is provided during the year when employers from business, industry, schools, and other sources visit the campus to interview prospective graduates.

Cumulative student personnel records; occupational information and industrial literature libraries, preparation of credentials including personal resumes and recommendations coupled with counseling and guidance are provided to enable senior men and women to accomplish their career objectives consistent with their interests, abilities, aptitudes and education.

THE PROGRAM AND ITS OPPORTUNITIES

The University offers four-year undergraduate curricula leading to the following degrees: Bachelor of Science, Bachelor of Arts, Bachelor of Science in Chemical, Civil, Electrical, Industrial and Mechanical Engineering, and Bachelor of Business Administration. Work toward these degrees is carried on in the College of Arts and Sciences, the College of Agriculture, the Schools of Business Administration, Education, Engineering, Home Economics, Nursing, and Physical Education, and the Department of Public Health. Special arrangements are made for some graduates of county agricultural schools and of agricultural departments of certain high schools to complete the college course with majors in agriculture and horticulture. Upon completion of their course, these students are granted the degree of Bachelor of Vocational Agriculture.

The aim of the four-year course is to give the student as high a degree of proficiency in a particular branch of learning as is possible without sacrificing the breadth, knowledge and general training which should characterize a well-rounded college education. Under this philosophy, the University has made recognized contributions, through its graduates, to the life and culture of America. University alumni hold positions in government, education, business, science and engineering, the arts, medicine, law, and many other professions. With rising enrollments, the University is educating ever greater numbers of young men and women for significant careers and important contributions to American society.

The following pages are designed to give some indication of the variety of such opportunities open to students who are accepted for admission. Descriptions of curricula are given in brief and general terms so that prospective applicants may become quickly acquainted with the entire range of offerings. Graduation requirements for each curriculum have been omitted, principally because a student admitted to the University will have ample opportunity to acquaint himself with such requirements after he has arrived on campus. Courses required in the freshman year, on the other hand, are included in the section beginning on Page 29. Further information on various phases of the major courses of study may be obtained from the Deans of the Colleges and Schools or from the Registrar. Information about other aspects of the University program may be obtained from the appropriate offices listed on Page 32.



COLLEGE OF ARTS AND SCIENCES



I. Moyer Hunsberger, Dean
Robert W. Wagner, Associate Dean
Bartlett Hall

The College of Arts and Sciences offers instruction in the fine arts, the humanities, the social sciences, the natural sciences, and mathematics both for students enrolled in the College and for those in other undergraduate divisions of the University. The program provides for the breadth of intellectual development essential to a liberal education and for concentration which is the necessary foundation for competence in a selected discipline.

The Bachelor of Arts degree may be earned by students majoring in any division of the College. The Bachelor of Science degree may be earned by students in the natural sciences, mathematics, or psychology.

The following major courses of study are available in the College:

ART. The Department of Art is interested in providing two kinds of training: first, to give each student a good general historical and aesthetic knowledge of the arts; second, to give each student an opportunity to develop his creative ability in the several media of the arts.

ASTRONOMY. A Department of Astronomy conducted jointly with Amherst, Mount Holyoke, and Smith Colleges provides instruction in this field. All advanced courses are given on a joint basis for students from the four participating institutions.

BOTANY. Programs in botany prepare students for teaching and research in biological sciences in high schools, universities, industry, and experimental stations.

CHEMISTRY. The prime purpose of the Department of Chemistry is to afford sound preparation for graduate study in chemistry. Accordingly, emphasis is placed upon intellectual accomplishment and broad understanding rather than on terminal training for specific chemical tasks. The program designed for this purpose also affords sound preparation for direct entry into chemical industry, chemical institutes, or governmental laboratories.

ECONOMICS. In economics the aims are twofold: (1) to give the student an understanding of economic theory and of the application of economic principles to the organization of society; (2) to provide students with the elementary training necessary for further study and solution of economic and business problems.

ENGLISH. The major in English affords the student opportunities to improve his knowledge of the English language and his ability to use it clearly, logically, and artistically; to increase his knowledge of Western literature written in English or translated with distinction into English; to read and discuss a literary work with perception and understanding, and to form an independent estimate of it by valid critical standards.

GEOLOGY. For students considering geology as a career, the opportunities are many. Those interested primarily in basic science may look to positions

in teaching, in museum work, on state and federal surveys, and in various research organizations. Those concerned mainly with applied science may direct their efforts toward work in mining geology, petroleum geology, engineering geology, and ground-water geology, and industrial mineralogy.

GERMAN. The courses in German are intended to give a practical knowledge of the language for the purpose of wider reading, research, and oral communication.

GOVERNMENT. The courses offered by the Department of Government are designed to aid the student in gaining a knowledge of the nature, functions, and problems of government, and of the place of government in the modern world. Political theory, constitutional law, international relations, comparative government, politics and public administration are the principal areas covered.

HISTORY. Courses in history are designed to provide an understanding of man through a study of patterns of development in the past. The study should also give the student an introduction to major problems in world affairs.

JOURNALISM. The journalism program is concerned with (1) the study of writing and of communication problems relevant to the media of mass communication, and (2) the best utilization of the University's liberal education resources by students who plan careers in newspaper work, communications research, public relations, magazine and radio journalism, or some other field of communications.

MATHEMATICS. The department offers courses designed to furnish a cultural background as well as a foundation for both undergraduate and graduate work in mathematics, statistics, physics, chemistry, engineering, econometrics, and biometrics.

MICROBIOLOGY. The courses in microbiology are designed to aid the student in acquiring special knowledge of the nature and function of the micro-organisms and to provide an appreciation of the role of experimental biological science in widening man's horizons.

MUSIC. The undergraduate major program in music is pre-professional, so that courses, music organizations, and private study are the means used to prepare each student. Other undergraduates may minor in music, or follow a sequence of courses for continuing study.

PHILOSOPHY. Philosophy seeks a comprehensive understanding of the various areas of man's experience in their interrelatedness. In the context of the historically important theories, the courses concentrate on methods of inquiry into the persisting questions of philosophy, standards of thought, clarification of ethical and aesthetic values, and the basis of criticism.

PHYSICS. Courses are designed to accommodate students who desire specialized training in physics, and also to provide required or elected courses for students majoring in engineering, mathematics, chemistry, or other fields.

PRE-MEDICAL AND PRE-DENTAL CURRICULUM. Pre-medical and pre-dental students are assigned to faculty advisers for their freshman year. At the end of their second semester, they will be assigned to a member of the Upperclass Committee who will be their adviser for the remainder of the course of study. Pre-veterinary students may register in the College of Agriculture or College of Arts and Sciences.

PSYCHOLOGY. The courses in the Psychology Department are planned (1) to impart an understanding of the basic principles, methods and data of psychology as a science and the application of this knowledge to problems of human adjustment; (2) to prepare some majors for graduate study which may lead to a professional career in psychology; and (3) to help prepare others for non-professional careers. In carrying out these aims, majors are urged to elect, with the help of a departmental adviser, a broad program of courses. **ROMANIAN LANGUAGES.** Three majors are offered: French, Spanish, and Classics—the latter through cooperation with Amherst, Smith, and Mount Holyoke Colleges. The courses of these curricula are intended to give (1) a thorough training in the language skills, (2) an appreciation of the aesthetic and intellectual qualities of the literatures, and (3) a serious insight into the cultures of the nations concerned. Language and literature courses in Portuguese and Italian also are available.

RUSSIAN. Students choosing Russian as their field of major concentration will receive training in reading, writing, speaking and understanding the language, and a knowledge of Russian literature. Russian majors will also acquire the background in Russian history, government and economy necessary for an understanding of the literature and culture of the Russian people.

SOCIOLOGY AND ANTHROPOLOGY. Students may major either in Sociology or Anthropology. Courses are planned with two aims in view: to give the student an understanding of the factors which influence men in their activities and interests as members of society, and to help prepare students for a wide variety of occupational outlets, including social work.

SPEECH. An undergraduate major in speech may be earned by completing thirty semester hours of course work in the department although nine of these may be earned in English and philosophy. Psychology 26 should be elected as a basic requirement. The student must select an area of concentration in (1) Rhetoric and Public Address, (2) Interpretation and Theatre, (3) Radio and Television, (4) Speech Education, (5) Speech and Hearing Therapy.

STATISTICS. Although there is no undergraduate major in statistics, the courses are designed for those who are preparing for graduate work in statistics or for those who require statistics as a basic preparation for their own subject-matter discipline.

ZOOLOGY. The courses in zoology have two major aims: (1) to offer students an opportunity to develop an understanding and appreciation of the scientific method as a part of a liberal education; and (2) to provide training for prospective graduate students in biology, medicine, dentistry, and related fields, as well as future teachers and laboratory technicians in the biological sciences.



Arless A. Spielman, Dean
Stockbridge Hall

The College of Agriculture offers a broad general education with specific training in a specialized area. Upon the completion of the requirements for the Bachelor of Science degree, the student will have devoted about one-quarter of his time to pure science, one-quarter to social and humanistic studies, and about one-half to applied science and technology. A broad choice of electives within the required courses of each curriculum gives the student the opportunity to prepare for a career in research, industry, business, education, conservation, services. Each department of the College has specific requirements for graduation which are included in the General Catalog under the name of the department. During the first semester of the freshman year, students interested in teaching vocational agriculture, extension work, or specializing in research work, should consult with the head of the department in which they plan to major.

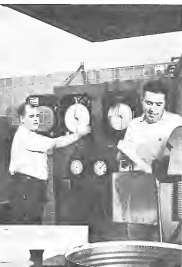
For those students interested in a two-year program in food and agricultural industries, the University provides offerings in the Stockbridge School. A separate bulletin describes these offerings in detail.

The four-year courses of study available in the College of Agriculture include the following:

AGRICULTURAL AND FOOD ECONOMICS. This curriculum is designed (1) to prepare students for employment in executive positions with firms related to agriculture or for administrative positions with governmental agencies concerned with agriculture and (2) to give the essential undergraduate preparation for a career in agricultural economics, in research, teaching, or extension work. The course of study, which leads to the degree of Bachelor of Science, combines training in technical agricultural sciences with courses in business management and economics.

AGRICULTURAL ENGINEERING. Agricultural engineering is concerned with the application of scientific engineering principles to agricultural industries. This professional field includes engineering activities related to the design, development and use of mechanical and electrical equipment; structures; and soil and water control systems for the production, processing and preservation of agricultural products and the improvement of rural living. Agricultural engineers are employed by a variety of agricultural industries and organizations for research, development, teaching, and promotional activities.

COLLEGE OF AGRICULTURE



Shown above, on left, is Stockbridge Hall, center of activities in College of Agriculture. On right, research in animal science. Lower panel pictures modern laboratory facilities in the College of Agriculture: equipment for chemical treatment of wood (Forestry); work in gas chromatography (Food Science); and laboratory in foods research.

ANIMAL SCIENCES. The curriculum in the animal sciences, including poultry, is designed to provide fundamental training and knowledge in the comparative nutrition, physiology, breeding, selection and management of various classes of livestock and to understand the role of animal production in the national and world economy. The curriculum provides for an important degree of flexibility depending upon the students' interests and abilities. Options emphasizing commercial animal production are supported by electives in agricultural economics, agricultural engineering, and business administration. Students interested in graduate work in such specialized areas of the animal sciences as nutrition, physiology or genetics should elect programs with special emphasis on the basic sciences.

ENTOMOLOGY. Courses in entomology acquaint students with all phases of insects and insect control, as well as beekeeping. Trained entomologists find positions in public service and industry, such as teaching at all levels; research, quarantine and regulatory work in State or Federal Service, various roles in public health and pest control activities; research, sales and public relations work in the agricultural chemicals industry; and commercial beekeeping.

FOOD SCIENCE AND TECHNOLOGY. The curriculum in Food Technology provides scientific and applied training in the principles concerned with the processing, preservation, and packaging of foods and food products. The student's background in chemistry, physics, and microbiology is applied to food technology problems and food analysis. Major fields open to graduates include: (1) technical and production work in the food industries; (2) quality control and analytical work related to food products; (3) government food inspection and grading; (4) technological work and research in government, industry, and education.

FORESTRY. The technical curriculum in forestry is concentrated in the field of forest production and management, and leads to the degree of Bachelor of Science. It has professional status, being accredited by the Society of American Foresters. Graduates are prepared for employment with Federal and State agencies and in private industry.

LANDSCAPE ARCHITECTURE. Students following this curriculum, which requires 125 credits for graduation, are prepared through a broad academic approach to take up work in the various phases of landscape architecture. This applied design profession is concerned with the development of land for human use and enjoyment. In addition to the usual areas of interest, such

as site planning for private, semi-public and public works of many types, considerable city and regional planning is now available for those interested.

PARK MANAGEMENT. A new course of study for those planning a career in park management or administration. In addition to landscape design this program permits the student to elect widely from the biological and social sciences.

PLANT AND SOIL SCIENCE. The major in plant and soil science permits specialization in many areas of agronomy, soil science, horticulture and plant pathology. Emphasis is on basic sciences that will prepare students for a wide variety of careers in research, teaching, industry, business, marketing, sales, production, control and regulatory services with state and federal agencies. The major in plant science will be required to take a basic core group of subjects related to the physical, biological, and social sciences as well as the humanities.

PRE-VETERINARY. Students may enroll in either the College of Arts and Sciences or in the College of Agriculture. The two-year pre-veterinary curriculum provides 64 semester credits and satisfies the requirements of those veterinary schools which have accepted the largest number of Massachusetts students in the past. Departure from this curriculum necessitates more than two years in preparation. Students who anticipate three or four years of college work in preparation for veterinary school should be guided by the requirements of the pre-professional curriculum.

RESTAURANT AND HOTEL MANAGEMENT. The curriculum in Restaurant and Hotel Management is offered by the Food Science and Technology Department. The program is designed to give the student a general well-rounded background of arts and sciences, coupled with training in subjects useful to the hotel, restaurant, and other food service industries. The nature of the food service industry requires persons with broad, general backgrounds of business training coupled with a scientific knowledge of foods.

WILDLIFE AND FISHERIES BIOLOGY. Wildlife and fisheries biology is concerned with the acquiring and application of knowledge concerning terrestrial and aquatic animal populations which are of recreational or commercial value. This knowledge includes the dynamics of animal populations and their responses to changes in environmental conditions, including changes incurred by land use and direct exploitation by man. A broad understanding of geology, forestry, soils, agriculture, botany, and zoology is required.

H. B. Kirshen, Dean
School of
Business Administration Building



SCHOOL OF BUSINESS ADMINISTRATION



The School of Business Administration prepares students to take advantage of important economic opportunities and eventually to assume positions of responsibility in business. The School's educational program is directed toward the broad aspects of business, encouraging high standards of ethical conduct, broad social responsibilities and the development of competence in particular courses of study.

The first two years emphasize general education by providing fundamental courses in the humanities, mathematics, science and social science. In addition, basic courses in accounting and economics prepare the student for further work in the School of Business Administration. The junior and senior years emphasize a greater degree of specialization and provide for this in the programs indicated below. But even in these last two years all students need to view business as a whole in so far as a "core" of courses can do this. This "core" of courses is listed below and is required of all students. A total of at least 120 credit hours is required (122 in Accounting) for graduation exclusive of credit received in the required physical education courses. Each course of study leads to the degree of Bachelor of Business Administration.

All students in the School of Business Administration must attain, as a graduation requirement, a 2.0 average in Accounting 25 and 26, Elementary Economic Statistics 21, and the junior "core" courses: Finance 55, Financial Institutions; Finance 65, Corporation Finance; General Business 71, Business Law I; Management 61, Principles of Management; and Marketing 53, Principles of Marketing. The "core" must be completed by the end of the junior year unless a student, on recommendation of his department chairman, has received permission from the Dean to postpone any such course to the senior year.

Students transferring from any School or College within the University shall receive junior and senior elective credit only for those courses passed with a grade of C or better.

Students transferring from outside the University as juniors or seniors must complete a minimum of 12 credit hours in courses offered by his major Department.

Student transferring from junior or community colleges should complete two years of a program in the Liberal Arts including only the one year course in Accounting and in Economics.

Above is the recently completed School of Business Administration building.

Below, a class in computer techniques for business analyses.

The School of Business Administration is a member of the American Association of Collegiate Schools of Business.

Major courses of study are available in the School of Business Administration as follows:

ACCOUNTING. The accounting program is designed to prepare students for public accounting and for positions as accountants in business, industry and government.

GENERAL BUSINESS AND FINANCE. The department has four major programs: *Finance, Business Administration and Economics, General Business and Urban and Regional Studies.* The curriculum in finance is directed towards the fields of banking, investment, brokerage, insurance or governmental agencies concerned with finance. The curriculum in Business Administration and Economics comprehends a wider field to balance a knowledge of both economics and business. The curriculum in General Business was designed for students who do not wish to specialize in any particular field. The curriculum in Urban and Regional Studies is an interdisciplinary program directed toward the problems of metropolitan areas.

MANAGEMENT. Industry and business offer qualified students an opportunity to find careers in General Management, Production Management, and in Personnel Management and Industrial Relations. Course programs are offered in each of these fields and provide the student both a specialized and a comprehensive understanding of the managerial process in industrial enterprises.

MARKETING. Students in marketing prepare for a variety of positions in wholesale and retail enterprises and in the sales activities of manufacturers. The program includes specialized study of basic types of market operations such as advertising, sales management and retailing.

Students in the School learn to use complex office machines.



Periodicals library in the School of Business Administration.

An advanced class in general business and finance.





SCHOOL OF
EDUCATION



The School of Education through its undergraduate program seeks to utilize the forces of the University to prepare teachers for elementary and secondary schools and through its graduate offering to prepare administrators and specialists in public education. Its program is based upon the assumption that teachers and other school personnel should have a broad liberal education, considerable mastery of at least one field, and professional courses which should lead to a knowledge of the persons to be taught, familiarity with the problems to be met, and practice in the best techniques of teaching and supervision. In all of this the School of Education takes the position that teacher education is a University function and that success will come only if the School is successful in maintaining the closest possible relationships with other schools and departments that contribute to the program.

All students who contemplate teaching as a career should register early, in their freshman year if possible, with the School of Education although their courses in education do not begin until the junior year. In general, students are admitted without question to the various service courses of the junior and senior years, but admission to the teacher-training program of the concentrated semester block is determined by a composite rating based on scholarship as shown by University grades (a three-year average at least as high as the University median is desired), success in the beginning courses in education, recommendations of University teachers in general education fields, and personality ratings by members of the staff.

ELEMENTARY SCHOOL TEACHING. Candidates for this program major in elementary education. In certain cases, with the approval of the Dean of the School of Education, the student may be permitted to major in some department of the College of Arts and Sciences where the general education program is deemed the equivalent of that designed for elementary education majors. This permission should be requested in freshman year. Such students will satisfy the requirements of their major department so far as the first two years are concerned but they should utilize their electives to take such courses as Government 25, Zoology 54, History 25, 26 and Art or Music which are recommended by the School of Education. They should take Education 9, 39, 59. The core program for elementary education majors including Education 51 and 64, and Psychology 65 or Home Economics 70, Music 85 and the Elementary Education Block should be taken in the junior and senior years.

SECONDARY SCHOOL TEACHING. All candidates for secondary school teaching will major in the subject field to be taught and minor in education. A maximum of eighteen hours should be taken in this minor. Education 51 and Psychology 56 are required during junior year and Education 52, 88, 85

Above, the new School of Education building. Below, a laboratory in remedial reading techniques.

(called the secondary block) in one semester of senior year. Since the concentrated semester block in secondary school teacher-training carries only twelve credits for some majors, students should consult with their major adviser regarding means of making up the extra three credits, and of meeting all their major requirements in the three semesters of junior and senior years.

SPECIAL FIELD PROGRAMS FOR PROSPECTIVE TEACHERS. In Vocational Agriculture (R. C. Jones, adviser). This program is based on a cooperative agreement between the University and the Vocational Division of the State Department of Education which provides supervisors and consultants in conducting the program. Students otherwise qualified may prepare to teach vocational agriculture by the satisfactory completion of Education 72, 73, and 75. Education 52 is also recommended. To insure a desirable range of preparation, students who contemplate vocational teaching should consult, early in the freshman year if possible, Professor Jones and Mr. T. McGarr.¹

¹Mr. McGarr is State Supervisor for Agricultural Teacher-Training representing the Vocational Division of the State Department of Education in the administration of vocational agricultural acts.

A vocational teacher-training certificate is awarded by the Vocational Division to those who fully qualify.

In Home Economics (Mrs. Marjorie Sullivan, adviser). These students will major in home economics and minor in education. They should elect Education 51, Psychology 56, Home Economics 81 and the concentrated semester block (Education 52, 85).

In Teacher Coaching (S. W. Kauffman, adviser). These students will major in physical education and minor in education. They should elect Psychology 56 and the concentrated semester block (Education 52, 88, 85). They should elect a minor teaching field from the College of Arts and Sciences consisting of a minimum of eighteen hours.

In Music (D. Alviani, adviser). These students will major in music and minor in education. They should elect Education 51, Psychology 56, Music 87, and the concentrated semester block (Education 52, 85).

Class in audio-visual methods.



Students observing a classroom in the Mark's Meadow Laboratory School.





**E. E. Lindsey, Acting Dean
Main Engineering Building**

The departments of Chemical Engineering, Civil Engineering, Mechanical Engineering and Electrical Engineering comprise the School of Engineering. Each department offers a curriculum leading to a Bachelor of Science degree in that particular branch. A curriculum in Industrial Engineering is offered in the Mechanical Engineering department. All curricula are accredited by the Engineers Council for Professional Development.

Engineering can be defined as the combination of science and art by which materials and power are made useful to mankind. An engineer requires intensive technical training but at the same time he should acquire the broad education that distinguishes the professional man from the technician. His education does not end with formal schooling but continues throughout his life as he accumulates experience.

The curricula in engineering have been carefully prepared to offer each student the opportunity to acquire the sound training in mathematics and the basic sciences of chemistry and physics upon which is built the work in the engineering sciences. In the senior year courses are offered which enable the student to use his previous training for engineering analysis, design and engineering systems in his particular field of interest. About twenty per cent of his time is devoted to studies in the social science and humanistic area. Same opportunity is provided to elect courses from both the technical and humanistic-social fields.

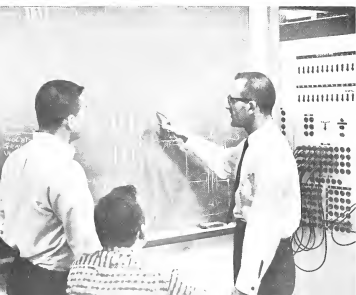
The curriculum of the freshman year is the same for all. Specialization to a limited extent begins in the sophomore year.

CHEMICAL ENGINEERING. Chemical Engineering is concerned with the development of manufacturing processes in which chemical or certain physical changes of materials are involved. These are resolved into a coordinated series of unit operations (physical changes) and unit processes (chemical changes). The work of the chemical engineer is primarily concerned with the design, construction, and operation of equipment and plants in which these are applied. Chemistry, physics, and mathematics are the underlying sciences of chemical engineering, and economics is its guide in practice.

Chemical engineers are employed not only in industry manufacturing chemicals but in many others, such as petroleum refining, coal processing, refractories and clay products, cement, waste treatment, pulp and paper, rayon and textiles, paint and varnish, natural and synthetic rubber, foods, leather, plastics, soap, penicillin and other antibiotics. Much of the work of the atomic energy program is chemical engineering. The types of work done by chemical engineers include: design, construction, research, development, production, financial and patent appraisal, management, and sales.

Above, the Main Engineering Building. Below, classroom demonstration in electrical engineering.

**SCHOOL OF
ENGINEERING**



CIVIL ENGINEERING. Civil engineering is concerned with structures, transportation, movement of fluids, use and storage of water, sanitation, and surveying and mapping. A civil engineer may be engaged in research, in planning and designing, in construction, or in maintenance and operation.

The curriculum gives a thorough training in the fundamental physical sciences and at the same time prepares a student for work in any branch of civil engineering, allowing him to specialize to some extent in whatever branch is most interesting to him—sanitation, mechanics and structures, hydraulics, foundation engineering, highway engineering.

ELECTRICAL ENGINEERING. Electrical engineering deals with the engineering applications of electricity. Because of its unusual amount of diversity, it is usually convenient to separate it into such main divisions as power, communications, electronics and control, and others.

The undergraduate curriculum is designed to prepare the student for work in any of these fields and to serve as a basis for further specialization. Courses in liberal arts and in engineering courses outside of the department give the student an understanding of the broader aspects of engineering and other fields.

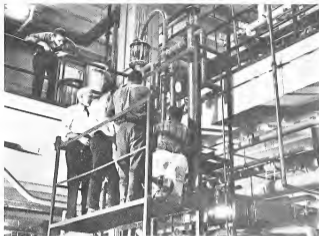
MECHANICAL ENGINEERING. Mechanical engineering is that branch of the profession which, broadly speaking, covers the fields of heat, power, design of machinery, industrial management and manufacturing problems.

Building upon a foundation of mathematics, physics, and chemistry, the department of mechanical engineering undertakes to show the student how fundamental physical laws apply to this field and to give him thorough training in the basic principles so that particular application can be mastered in professional practice. Therefore, no attempt is made to give highly specialized instruction.

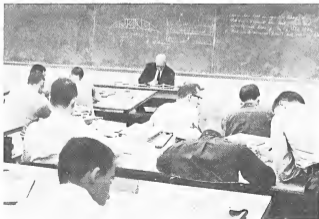
INDUSTRIAL ENGINEERING. Industrial engineering is concerned with the engineering aspects of the organization, operation and management of manufacturing plants. Consequently, the industrial engineering curriculum is built on a foundation of mechanical engineering. To the technical knowledge and scientific attitude developed through the study of engineering is added the study of certain courses in the humanities, in economics, and in management.

ENGINEERING SCIENCE OPTION. Engineering science is concerned with the application of the basic sciences to research and development in the engineering field. As such the curriculum contains extensive mathematics, physics, and other courses in the basic sciences designed to develop the student's skill in precise physical reasoning, analysis and synthesis. The student may elect the option from one of the four major departments at the end of his sophomore year provided he has completed his freshman and sophomore years with a quality point average of 2.80 or above or has achieved a cumulative average of 3.20 for the two preceding semesters.

The freshman year is the same for all students and the sophomore year corresponds to that major department in which the student is enrolled.



Studying techniques in chemical engineering.



Class in structural design in the School of Engineering.



**Marion A. Niederpruem, Dean
Skinner Hall**

Home Economics encompasses areas of study which apply the principles and concepts of fundamental arts and sciences to the physiological, psychological, social and economic environmental needs of man.

The School of Home Economics has five subject matter areas (departments), namely: Food and Nutrition (FN); Textiles, Clothing and Environmental Arts (TCEA); Management and Family Economics (MFE); Human Development (HD); and Home Economics Education (HEE.). The letters in parenthesis are area codes. Within these five areas the following undergraduate majors are offered:

- DIETETICS AND INSTITUTIONAL ADMINISTRATION
- FOODS IN BUSINESS
- FASHION MERCHANDISING
- HOME MANAGEMENT (Sept. 1965)
- CHILD DEVELOPMENT
- SECONDARY EDUCATION AND EXTENSION

The undergraduate program of the School, leading to a Bachelor of Science degree, emphasizes a liberal education in the sciences, arts and humanities with specialized instruction as preparation for professional careers. The transitional continuing relationships between liberal and professional education seek to develop in the student a disciplined mind, mental curiosity and professional competence.

Professional home economists are college and university graduates with bachelor degrees in Home Economics. They serve individuals, families, and communities through schools and colleges, extension programs, business organizations of many kinds all over the world, community and government organizations and agencies, newspapers, magazines, radio and television. Representative types of activities that Home Economists participate in include teaching, research, writing, dietetics, extension work, interior decoration, fashion merchandising, food consulting, food service management and product development. Experience and advanced study in areas of specialization lead to positions of great responsibility.

Food and Nutrition

Food and Nutrition curricula provide courses in Food and Nutrition combined with a strong foundation in the Arts and Sciences with two majors: Dietetics and Institutional Administration; and Foods in Business.

Above, Skinner Hall, which houses School of Home Economics. Below, left, students learn to use television to extend food and nutrition information to consumers; learning experience for student majoring in nursery school education. On right, students in fashion merchandising prepare for careers in business.

SCHOOL OF HOME ECONOMICS



DIETETICS AND INSTITUTIONAL ADMINISTRATION. This curriculum prepares the student for positions as therapeutic and administrative dietitians; teaching and research dietitians and nutritionists with public and private agencies. An increasing number of new opportunities continually challenge graduates in this major.

The sequence offers opportunities for further work at the graduate level. This program is planned to meet the basic requirements of the American Dietetic Association for admission to approved dietetic internships.

FOODS IN BUSINESS. This curriculum is based on professional training in Food and Nutrition combined with other selected courses in Home Economics, the humanities, Western cultures, social sciences and business. The program is designed for the student who is oriented to the business world, and leads directly into development and promotion with food, equipment and utility industries. Positions are open in the field of communications for the student who combines her knowledge of Food, Nutrition and Equipment with Journalism, English, Speech, Television and Radio. Graduates with a major in this sequence are also placed in advertising and public relations agencies or with a consulting firm. This curriculum allows students to pursue graduate study.

Textiles, Clothing and Environmental Arts

FASHION MERCHANDISING. The retailing and professional opportunities associated with clothing, textiles, home furnishings and related merchandise are limitless. They include positions with manufacturers, producers, retailers, buying organizations, newspapers and magazines, radio and TV and consumer groups, as well as educational institutions and social and government agencies. The student who is interested in the business field pursues, by specializing in this area, a curriculum with a strong program of liberal arts emphasizing the social sciences. Courses which build on this foundation providing professional business competency include fundamentals of clothing, textiles, fashion and environmental arts as well as courses in business, retailing and related subjects. Those students who are particularly interested in Interior Design may follow a slightly different sequence of courses.

Management and Family Economics

The area of Management and Family Economics is concerned with achievement of goals and mediation of values within the family. Decision-making and organizing processes are studied as the means to these ends. The field is concerned with the family as an economic unit and social system. Sociology, Economics, Anthropology and Philosophy provide support for the field.

HOME MANAGEMENT. The undergraduate specialization in this area is planned for September 1965. The curriculum provides breadth in Home Economics and depth in the Social Sciences. It will prepare students for positions as home economists in private and governmental agencies con-

cerned with family education and welfare here and abroad. It meets the requirements for Civil Service positions. In addition, the curriculum provides the foundation for graduate work.

Field experience with agencies serving families will be provided to aid the student in gaining competence in implementing programs related to family education and welfare.

Human Development

The area of Human Development is of necessity interdisciplinary in nature. The program brings together knowledge from Psychology, Sociology, Anatomy, Physiology, Nutrition, Education, the Arts, Anthropology, and relates it to Human Development and early childhood education. It is concerned with all maturational and environmental effects upon developing individuals, and with all theoretical and empirical descriptions of how this development occurs.

CHILD DEVELOPMENT. The child development program prepares the student for work in various types of group programs serving preschool-aged children, such as laboratory, public, and private nursery schools, clinics for exceptional children, hospital recreation programs, and community and welfare agencies. In addition, the child development curriculum provides a good background for graduate work in various other child serving professions.

Directed experience with the children of the laboratory nursery school and their families provides the necessary opportunity for students to develop a sound personal philosophy of early childhood education, and to achieve competence in implementing it. More intensive specialization for qualified students may be obtained by the election of a one-semester affiliation with: (1) Merrill-Palmer Institute in Detroit, Michigan, which specializes in the study of human development and family life; (2) the Eliot-Pearson School in Boston, Massachusetts, which specializes in the education of the three- to six-year-old child.

Home Economics Education

Home Economics Education offers a curriculum which provides a broad cultural education and preparation for teaching in secondary schools and the Cooperative Extension Service.

SECONDARY EDUCATION AND EXTENSION. The School of Home Economics, in cooperation with the School of Education, prepares students for teaching home economics in junior and senior high schools. This curriculum serves also as a base for graduate study in subject matter areas in home economics and home economics education. Students interested in the Cooperative Extension Service will, with the assistance of an extension adviser, select courses in preparation for continuing education positions in adult and 4-H programs.



**Mary A. Maher, Dean
School of Nursing
Western Massachusetts
Public Health Center**

The basic nursing curriculum is designed as a four-year academic program to prepare the qualified high school graduate for a career in professional nursing, as well as for the responsibilities of family and community life.

The program aims to equip the graduate with those understandings and skills which are needed to function effectively in beginning positions in a variety of nursing situations. These include the ability to provide competent nursing care to patients and families in the hospital, home and community; to participate with allied professional and citizen groups for the improvement of total health services to individuals and communities; to participate in organizing, planning and directing the work of nursing auxiliary workers. A foundation is laid for advanced study, through which the nurse may prepare for positions in teaching, supervision, administration, consultation and research.

During the first two years the students build a firm educational foundation upon which to base the more specialized portion of the program. Courses in the humanities and in the sciences—biological, physical and behavioral—are taken with other students on the campus.

The clinical aspects of the program are developed beginning with the second year. Instruction and correlated clinical practice are given in selected co-operating agencies by the nursing faculty of the University and the allied professional staffs of the cooperating agencies. These agencies include: the Springfield Hospital; the Wesson Maternity Hospital, and the Wesson Memorial Hospital, Springfield; the Northampton State Hospital; the Day Care Center of the Springfield Adult Mental Health Clinic; the Visiting Nurse Association of Springfield, the Springfield Health Department; and other community health, educational and welfare resources.

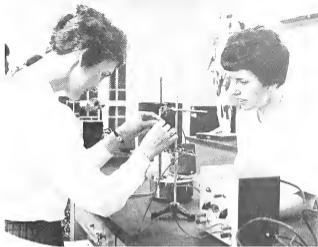
The Bachelor of Science degree, awarded upon successful completion of this program, qualifies the graduate for State Board Examinations in Nursing. If achievement in these examinations is satisfactory, the candidate receives legal status as a registered nurse within the state.

The program is approved by the Massachusetts Board of Registration in Nursing and accredited by the Accrediting Service of the National League for Nursing.

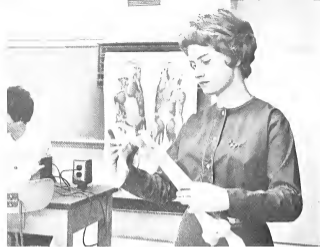
Above, the Western Massachusetts Public Health Center, home of the School of Nursing. Below, Students involved in study session in hospital library. Uniform is one designed especially for University nursing students.

SCHOOL OF
NURSING





Tools for learning: a laboratory in School of Nursing.



The essential background—knowledge of anatomy and physiology . . .

Clinical study in the children's ward of a hospital.



Today a student—tomorrow, a professional in her field.





SCHOOL OF PHYSICAL EDUCATION



Warren P. McGuirk, Dean
Frank L. Boyden Physical Education Building

The School of Physical Education includes the Departments of Physical Education for Men, Physical Education for Women, Recreation, and Athletics. It offers undergraduate majors in Physical Education and in Recreation and a graduate degree in Physical Education.

Physical Education for Men

GENERAL PROGRAM. Each male freshman and sophomore student, unless exempted under certain conditions, must successfully complete four semesters of physical education and demonstrate his ability to swim as a requirement for his degree. The physical education requirement does not apply to those students excused by the University physician, veterans of more than six months of military service, and certain transfer students.

Students may receive credit for physical education, during the sport in season by becoming squad members of any freshman or varsity team. Freshmen who elect an athletic team sport for physical education credit must rejoin their class sections at the termination of the seasonal sport. Students may not participate in a given sport for credit for more than two semesters.

MAJOR PROGRAM. The major program leading to the degree of Bachelor of Science in physical education is designed to train the student for a career as a teacher of physical education. The curriculum combines both general and professional education and provides for full teacher certification for the student who has met the prescribed requirements of preparation. The program also provides for adequate training in a minor area of teaching, elected by the student, including the coaching of inter-school athletics.

Physical Education for Women

GENERAL PROGRAM. Physical Education is required of all women students during their freshman and sophomore years. The courses are planned to provide recreative activity, to improve individual skills, to develop body grace and efficiency and to increase health and vigor.

The first and second year women students are required to take three class hours a week for a total of eight credits, one for each quarter of satisfactory work.

Above, the Frank L. Boyden Physical Education Building.
Below, the Women's Physical Education Building.

MAJOR PROGRAM. The major course in physical education is planned to prepare women students for professional careers. Special attention is given to preparing teachers for elementary and secondary schools in both physical and health education. Other areas for which the graduate will qualify are teaching sports and dance in social agencies, industrial plants, civic centers and camps. A foundation will be laid for specialization in graduate study. The curriculum gives a broad general background as well as the professional preparation.

Recreation

MAJOR PROGRAM. The department seeks to prepare men and women for positions involving administrative, supervisory and program leadership responsibilities in municipal recreation agencies, voluntary and youth-serving agencies, hospitals, and industrial and institutional organizations.

The program is designed to provide opportunities for a general education, a knowledge and understanding of people and society, activity skills and resource knowledge, professional competency, and practical experience in various leadership situations.

In addition to completing the curriculum as described below, the student is required to:

- (1) attend a professional conference approved by the department;
- (2) participate in programming activities at the Student Union, with a scout troop, or in a similar setting approved by the department;

TO KEEP AMERICA PHYSICALLY FIT—A few of the activities associated with the major areas in the School of Physical Education.



- (3) devote one summer (minimum of six weeks) to a recreation position, preferably with pay, in a camp, playground, or similar setting approved by the department.

Department of Athletics

(W. P. McGuirk, *Director*; E. E. Larden, *Assistant Director*.) The following men coach intercollegiate athletics and intramurals: R. E. Bergquist, freshman coach of baseball and Stockbridge basketball; R. L. Bresciani, Assistant Director of Sports Information; L. E. Briggs, coach of varsity soccer; M. G. Brsky, freshman coach of wrestling; J. L. Cobb, freshman coach of track; J. J. Delaney, assistant coach of football; J. G. Douglas, coach of wrestling; W. Faatrick, coach of track and cross country; Capt. R. Fowler, coach of rifle; V. H. Fusia, coach of football; R. F. Garber, coach of lacrosse; C. S. Gladchuk, director of intramurals and coach of golf; F. J. Glatz, assistant coach of football; J. Gundersheim, coach of freshman gymnastics; G. Karras, assistant football coach; V. A. Keedy, physiotherapist; E. K. M. Kjeldsen, varsity coach of gymnastics; S. R. Kasakowski, director of Stockbridge athletics and coach of hockey and tennis; J. A. Leaman, Jr., freshman coach of basketball and soccer; E. E. Larden, coach of baseball; Capt. W. McGinnis, coach of pistol; W. P. MacConnell, coach of ski; Col. J. C. Marchant, coach of Stockbridge rifle; R. W. O'Connell, financial manager of athletics; J. M. Orr, coach of basketball; R. H. Page, director of sports information; J. R. Rogers, Jr., coach of swimming; T. S. Schmitt, assistant football coach; R. W. Gage, M.D., team physician and medical advisor.

DEPARTMENT OF PUBLIC HEALTH

Robert W. Gage, Chairman

The Department of Public Health offers undergraduate instruction in the area of environmental health, public health administration, and medical technology. It also offers a graduate program leading to the degree of Master of Science in Environmental Health.

PUBLIC HEALTH. Public health practice is offering an increasing variety of significant career opportunities in many areas. Among these are the following: (1) administration of community health services; (2) general or specialized direction of environmental health services; (3) work and research in the basic sciences related to health; (4) work in the food and drug protective services; (5) involvement in health education, and (6) participation in programs of health information and communication. It is the intent of the Department of Public Health to provide, within the University's framework of presenting a liberal education to all its students, a basis for competence and skill in at least one of these areas. In addition, the program is intended to provide a solid comprehensive foundation upon which subsequent specialized or graduate study can be continued in any of the major areas of public health.

MEDICAL TECHNOLOGY. The curriculum in medical technology is recommended for young men and women in preparation for a wide variety of

occupational opportunities. Medical technology graduates may be prepared for positions in medical laboratories, in federal, state, and local health departments, and in commercial and research laboratories. In this area there are two possibilities for arrangement of the curriculum. Students may complete the full four years of undergraduate instruction and, after receiving their baccalaureate degree, enter a 12-month internship in an approved hospital laboratory. At the end of this (fifth) year of preparation, the student will be eligible for examination by the American Society of Clinical Pathologists to qualify for the Registry of Medical Technology. An optional three-and-one program is now offered which allows the student to obtain the baccalaureate degree and complete the requirements for examination for registration in a total of four years. In this program the student is able to complete the University's core requirements and complete the preparation for the clinical laboratory training within three years. The fourth year of study is taken in one of the hospitals affiliating with this department and approved for clinical laboratory training. Academic credit is allowed for participation in this program so that by the end of four years, a student will have gained a total of 120 credits, which is sufficient for graduation.

DIVISION OF MILITARY AND AIR SCIENCE

The Division of Military and Air Science includes the Department of Military Science and the Department of Air Science. No major is offered in either department. Effective academic year 1963-1964, the ROTC (Army and Air Force) program is voluntary. Male students who are physically qualified may register in the two-year basic ROTC course and receive credit toward graduation. Completion of the basic course is a requirement for enrollment in the advanced course which leads to a commission in the armed forces.

DEPARTMENT OF MILITARY SCIENCE (Army)

Albert W. Aykroyd, Colonel, U. S. Army, Head

The Army Reserve Officers Training Corps is the means by which young men who have taken the leadership step of coming to the state university may assure themselves that their military service is performed in commissioned status. The first two years are basic training in leadership and citizenship. The student is informed on the position of the military in the current scene and as it relates to his future. The second two years of ROTC are not only elective, but selective. The best qualified students are selected and are permitted to contract to continue on to a commission. The Army provides these men a subsistence allowance and additional emoluments. There is a six-week summer camp training period between the junior and senior year. Participation in ROTC has notable effect in character development. It also discloses to the Army existing officer material and its potential leaders.

Successful completion of this program leads to a commission as a Second Lieutenant, U. S. Army. Active duty requirements are, at the present time, two years service with an active Army unit.

DEPARTMENT OF AIR SCIENCE

Roy D. Simmons, Lt. Colonel, USAF, Head

The mission of the Department of Air Science is to develop in select students those qualities of leadership and other attributes essential to their progressive advancement to positions of increasing responsibility as commissioned officers. It is not expected that all students commissioned will select the United States Air Force as a career; however, the program provides excellent preparation for such a career. Further, even though an Air Force career is not selected, the experience gained and the leadership qualities developed will enhance professional and managerial opportunities in the business society.

The program is presented in two phases; the Freshman and Sophomore years are designated as the Basic Course, and the Junior and Senior years as the Advanced Course.

The first two years of the program are not obligatory and are designed primarily to educate the student to the point where he can make a more intelligent decision concerning his military obligation and whether a tour of active duty as a commissioned officer corresponds with his career objectives.

COURSE REQUIREMENTS IN THE FRESHMAN YEAR

The following listings are designed to give prospective students a complete schedule of the courses required in the freshman year in all colleges and schools of the University.

Note: Courses in Military and Air Science, although listed among the programs below, are elective offerings and are not required for graduation.

COLLEGE OF ARTS AND SCIENCES

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Speech 3 ^a	2	Speech 3 ^a	2
Mathematics or Natural Science ¹	3	Mathematics or Natural Science ¹	3
Natural Science or History 5 ²	3	Natural Science or History 6 ²	3
Foreign Language ³	3	Foreign Language ³	3
Elective ⁴	3	Elective ⁴	3
Military or Air Science 1 (men)	1	Military or Air Science 2 (men)	1
Physical Education 1, 2 (men)**	2	Physical Education 3, 4 (men)**	2
Physical Education 5, 7 (women)**	2	Physical Education 6, 8 (women)**	2

¹Candidates for the B.S. degree take Mathematics. Those planning to major in chemistry or physics should, if possible, elect Mathematics 5 and 6.

²Candidates for the B.S. degree take natural science; candidates for the B.A. degree take History 5 and 6.

³Subject to exemption on basis of proficiency examination.

⁴Candidates for the B.S. degree take science.

*May be taken either semester.

**Not quality point credit.

SCHOOL OF BUSINESS ADMINISTRATION

In each subject a one year sequence is required.

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Speech 3 ^a	2	Speech 3 ^a	2
Mathematics	3-4	Mathematics	3-4
Hist. 5, 25, or Govt. 25	3	Hist. 6, 26, or Govt. 26	3
Science: elect one	3	Science: elect one	3
Chemistry 1		Chemistry 2	
Physics 3		Physics 4	
Botany 1		Botany 25	
Geology 1		Geology 2	
Zoology 1		Zoology 25 or 35	
Elective	3	Elective	3
Military or Air Science 1	1	Military or Air Science 2	1
Physical Ed. 1, 2 (men)**	2	Physical Ed. 3, 4 (men)**	2
Physical Ed. 5, 7 (women)**	2	Physical Ed. 6, 8 (women)**	2

*May be taken either semester.

**Not quality point credit.

COLLEGE OF AGRICULTURE

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Speech 3 ^a	2	Speech 3 ^a	2
Mathematics	3	Mathematics	3
Chemistry 1	3	Chemistry 2	3
Botany 1	3	Zoology 1	3
Military or Air Science 1 (men)	1	Elective ²	3
Food Economics 1	2	Military or Air Science 2 (men)	1
Physical Education 1, 2 (men)**	2	Physical Education 3, 4 (men)**	2
Physical Education 5, 7 (women)**	2	Physical Education 6, 8 (women)**	2

¹Elective may be any freshman or sophomore course—most will elect Animal Husbandry 2, Horticulture 2, Entomology 26 or Forestry 26. A foreign language may be substituted for the Food Economics-elective sequence.

²May be taken either semester or during a later year.

^aNot quality point credit.

Freshmen majoring in Agricultural Engineering take the program listed under the School of Engineering. Freshmen majoring in Landscape Architecture will take Government 25 in place of Zoology 1, Art 33 in place of Food Economics 1, and Sociology in place of Chemistry 2.

SCHOOL OF EDUCATION

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Speech 3*	2	Speech 3*	2
Math. 1 or Chem. 1	3	Math. 2 or Chem. 2	3
Zool. 1 or Bot. 1	3	Bot. 1 or Zool. 1	3
Foreign Lang.**	3	Foreign Lang.**	3
History 5	3	History 6	3
Education 9†		Education 9†	
Military or Air Science 1 (men)	1	Military or Air Science 2 (men)	1
Physical Ed. 1, 2 (men)‡	2	Physical Ed. 3, 4 (men)‡	2
Physical Ed. 5, 7 (women)‡	2	Physical Ed. 6, 8 (women)‡	2

*May be taken either semester.
 **Intermediate Proficiency Required.
 †To be completed in a school year.
 ‡Not quality point credit.

SCHOOL OF ENGINEERING

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3	2	Math. 6, Calculus	2
Math. 5, Anal. Geom. and Calc.	3	Chem. 2 or 4, General†	3 or 4
Chem. 1 or 3, General†	3 or 4	Engineering 4, Engrg. Probs.	2
Engineering 3, Graphics	3	Physics 5	3
Social Sci. Elective	3	Social Sci. Elective	3
Military or Air Science 1**	1	Military or Air Science 2**	1
Physical Ed. 1, 2†	2	Physical Ed. 3, 4†	2

*It is recommended that Chemical Engineering majors take Chemistry 3 and 4 in place of Chemistry 1 and 2.

**Military and Air Science are optional.

†Not quality point credit.

SCHOOL OF HOME ECONOMICS

Key: FN—Food and Nutrition
 TCRA—Textiles, Clothing and Related Arts

MAJOR IN DIETETIC AND INSTITUTIONAL ADMINISTRATION

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3*	2	Chemistry 2, General	3
Chemistry 1, General	3	Psychology 1, General	3
FN 27, Man and Nutrition	3	Mathematics 1, Introduction	3
Foreign Language or Humanities Elective	3	Zoology 1, Introduction	3
Sociology 25, Introductory	3	Physical Education 6, 8†	2
Physical Education 5, 7†	2		

*May be taken either semester.
 If a foreign language is elected, student must complete the intermediate year.
 †Not quality point credit.

SCHOOL OF HOME ECONOMICS (Continued)

MAJOR IN FOOD AND NUTRITION IN BUSINESS

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3, Communications	2	Psychology 1, General	3
Chemistry 1, General	3	Chemistry 2, General	3
FN 27, Man and Nutrition	3	Zoology 1, Introductory	3
Sociology 25, Introductory	3	TCRA 23, Art for Living	3
Elective	3	Elective	3
Physical Education 5, 7†	2	Physical Education 6, 8†	2

†Not quality point credit.

MAJOR IN FASHION IN RETAILING AND BUSINESS

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3, Communication	2	Science, Physical or Biological	3
Science, Physical or Biological	3	Psychology, 1	3
Sociology 25	3	Language	3
Language	3	TCRA 24, Textiles I	3
TCRA 23, Art for Living	3	Physical Education 6, 8†	2
Physical Education 5, 7†	2		

†Not quality point credit.

MAJOR IN SECONDARY EDUCATION AND EXTENSION

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 1, Composition	2
Speech 3, Oral Communication	2	Psychology 1, General	3
Chemistry 1, General	3	Chemistry 2, General	3
FN 27, Man and Nutrition	3	Mathematics 1, Introductory	3
Sociology 25, Introductory	3	TCRA 24, Textiles I	3
Government 25	3	Physical Education 6, 8†	2
Physical Education 5, 7†	2		

†Not quality point credit.

MAJOR IN NURSERY SCHOOL EDUCATION

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Zoology 1, Introductory	3	Economics 25, Elements of	3
Foreign Language	3	Foreign Language	3
FN 27, Man and Nutrition	3	Sociology 25, Introductory	3
Psychology 1 or 5, General	3	Elective	3
Speech 3, Oral Communication	2	Physical Education 6 and 8†	2
Physical Education 5 and 7†	2		

†Not quality point credit.

SCHOOL OF NURSING

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Chemistry 1	3	Chemistry 2	3
Soc. 25 or Psych. 1	3	Soc. 25 or Psych. 1	3
Zoology 1	3	Nursing 1	3
Social Science Elective	3	Social Science Elective	3
Speech 3**	2	Speech 3**	2
Physical Ed. 1a, b	2	Physical Ed. 6 and B	2

**May be taken either semester.

SCHOOL OF PHYSICAL EDUCATION

PHYSICAL EDUCATION FOR MEN

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
P. E. 23, Principles of Health Ed.	3	Speech 3	2
Statistics 21	3	Social Science Elective	3
P. E. 21, Intro. to Phys. Ed.	3	P. E. 22, First Aid and Safety	3
P. E. 5, Skills and Techniques (Locrosse—Gymnastics)	1	P. E. 6, Skills and Techniques (Gymnastics—Badminton)	1
		Elect One	
Chemistry 1	3	Chemistry 2	3
Botany 1	3	Botany 1	3
Zoology 1	3	Zoology 1	3

PHYSICAL EDUCATION FOR WOMEN

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3	2	Zoology 1, Introductory	3
Hist. 5, Mod. Europ. Civ.	3	Hist. 6, Mod. Europ. Civ.	3
W. P. E. 1, Intro. to P. E.	2	W. P. E. 2, Intro. to Child. thru P. E.	2
Statistics 21	3	W. P. E. 10, Health for Adults	2
W. P. E. 11, Skills	1	W. P. E. 12, Skills	1
Elective*	3	Elective*	3

*Chemistry 1 and 2 are required if students have not had chemistry in high school. Others may select from Chemistry, Physics, Microbiology, or foreign language.

RECREATION

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3	2	Statistics 21	3
Bot. 1, Intro. Bot.	3	Zool. 1, Intro. Zool.	3
Govt. 25, American Govt.	3	Soc. 25, Intro. to Soc.	3
Humanities Elective	3	M. P. E. 22, First Aid & Safety	3
Rec. 1, Intro. to Rec.	3	Rec. 2, Social Rec.	2
P. Rec. 13, Skills & Tech.	1	P. Rec. 14, Skills & Tech.	1

DEPARTMENT OF PUBLIC HEALTH

PUBLIC HEALTH

1st Semester	Credits	2nd Semester	Credits
English 1	2	English 2	2
Speech 3, I or II*	2	Speech 3, I or II*	2
Mathematics 1 or 9**	3	Mathematics 2 or 10**	3
Chemistry 1	3	Chemistry 2	3
Zoology 1	3	Zoology 35 or Elective	3
Psychology 1 or Sociology 1	3	Psychology 1 or Sociology 1	3
Phys. Ed. 1a, b	2	Phys. Ed. 2a, b	2

MEDICAL TECHNOLOGY

1st Semester	Credits	2nd Semester	Credits
English 1, Composition	2	English 2, Composition	2
Speech 3, I or II*	2	Speech 3, I or II*	2
Chemistry 1, General	3	Chemistry 2, General	3
Botany 1 or Zoology 1	3	Botany 1 or Zoology 1	3
Foreign Language***	3	Foreign Language***	3
Mathematics 1, Intro.	3	Mathematics 2, Intro.	3
Phys. Ed. 1a, b	2	Phys. Ed. 2a, b	2

*May be taken either semester.

**On basis of placement tests and interest in advanced science.

***If a language is elected, intermediate proficiency is required.

DEPARTMENT OF MILITARY SCIENCE (ARMOR)

1st Semester	Credit	2nd Semester	Credit
M. S. 11	1	M. S. 12	1

FRESHMAN YEAR

1st Semester	Credits	2nd Semester	Credits
Air Science 11 (AFCE 111)		Air Science 12 (AFCE 112)	
Foundations of Aerospace Power I	1	Foundations of Aerospace Power II	1

and

One of the following which may be completed in either semester:

	Credits
English 1 or 3	3
Speech 3	2
Psychology 1 or 5	3

WHERE TO WRITE FOR FURTHER INFORMATION

Academic Affairs

Oswald Tipppo, *Provost*

Admissions

William D. Tunis, *Dean of Admissions*

Expenses, Payments

Kenneth W. Johnson, *Treasurer*

Health Services

Dr. Robert W. Gage

Housing

John C. Wells, *Director of Housing*

Men's Affairs

Robert S. Hopkins, *Dean of Men*

Placement and Financial Aid Services

(Loans and Scholarships)

Robert J. Morrissey, *Director*

Records and Transcripts

William Starkweather, *Associate Registrar*

Stockbridge School of Agriculture

Fred P. Jeffrey, *Director*

Student Affairs

William F. Field, *Dean of Students*

Summer Sessions

Office of the Provost

Women's Affairs

Helen Curtis, *Dean of Women*

All correspondence should be addressed to the appropriate office, University of Massachusetts, Amherst, Massachusetts.



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