ALFRED UNIVERSITY PUBLICATION

THE NEW YORK STATE COLLEGE OF CERAMICS

Catalogue Number for 1943-1944

Announcements for 1944-1945

Vol. XIX November, 1943 No. 9

ALFRED NEW YORK

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FIRST SEMESTER

		1943
Entrance Examinations	Tuesday	Aug. 31
Registration for seniors, juniors, and sophomores	Tuesday, Wednesday	Aug. 31, Sept. 1
Freshman Days	Wednesday, Thursday	Sept.1, 2
Instruction begins	Friday	Sept. 3
Founders' Day Exercises	Thursday	Nov. 4
Thanksgiving Recess begins	Wednesday, 10 A. M.	Nov. 24
Instruction resumed	Monday, 8:00 A. M.	Nov. 29
Review Days	Monday, Tuesday	Dec. 13, 14
Examinations begin	Wednesday	Dec. 15
Examinations end, semester ends	Wednesday, 10 A. M.	Dec. 22

SECOND SEMESTER

		1944
Registration of new students	Tuesday	Jan. 4
Instruction begins	Wednesday	Jan. 5
Spring Recess begins	Friday, 6 P. M.	Mar. 17
Instruction resumed	Monday, 8 A. M.	Mar. 27
Review Days	Thursday, Friday	Apr. 27, 28
Examinations begin	Monday	May 1
Examintions end; semester ends	Friday	May 5
One Hundred and Eighth Anniversary Commencement	Monday	May 8

SUMMER SEMESTER

Registration	Monday	May 15
Instruction begins	Tuesday	May 16
Semester ends	Wednesday	Aug. 30

SUMMER SCHOOL, 1944

Inter-session, three weeks—Surveying		
Term begins	Tuesday	May 9
Term ends	Friday	May 26
Regular session, six weeks		
Term begins	Monday	July 3
Term ends	Friday	Aug. 11

Students enrolled in the three year course will take all three semesters each year. Students enrolled in the four year course will take only the first and second semesters each year.

CALENDAR FOR 1944–1945

FIRST SEMESTER

		1944
Entrance Examinations	Monday	Sept. 18
Registration	Monday, Wednesday	Sept. 18-20
Freshman Days	Tuesday, Wednesday	Sept. 19, 20
Instruction begins	Thursday, 8 A. M.	Sept. 21
Founders' Day Exercises	Thursday	Nov. 2
Thanksgiving Day	Thursday	Nov. 23
Christmas recess begins	Friday, 5:30 P. M.	Dec. 15
		1945
Instruction resumed	Wednesday, 8 A. M.	Jan. 3
Review Days	Wednesday, Thursday	Jan. 24, 25
Mid-year Examinations begin	Friday	Jan. 26
Examinations end; semester ends	Friday	Feb. 2

SECOND SEMESTER

Registration of new students	Tuesday	Feb. 6
Instruction begins	Wednesday, 8 A. M.	Feb. 7
Spring Recess begins	Friday, 5:30 P. M.	April 6
SPRING RECESS		
Instruction resumed	Monday, 8 A. M.	April 16
Review Days	Wednesday, Thursday	May 30, 31
Final Examinations begin	Friday	June 1
Examinations end; semester ends	Friday	June 8
One Hundred and Ninh Anniversary Commencement	Monday	June 11

SUMMER SCHOOLS, 1945

Surveying summer school		
Term begins	Tuesday	June 12
Term ends	Friday	June 29
Regular summer school		
Term begins	Monday	July 2
Term ends	Friday	Aug. 10

BOARD OF MANAGERS

J. Nelson Norwood, *Chairman*	Alfred, N. Y.
B. Sheffield Bassett	Alfred, N. Y.
D. Sherman Burdick	Alfred, N. Y.
Burton B. Crandall	Alfred, N. Y.
J. C Hostetter, Mississippi Glass Co.	St. Louis, Mo.
J. L. Jova, The Jova Brickworks	Roseton, N. Y.
John J. Merrill	Alfred, N. Y.
R. H. Pass, Pass and Seymour, Inc.	Syracuse, N. Y.
C. Forrest Tefft, Claycraft Mfg. Co.	Columbus, Ohio

ADMINISTRATION

J. Nelson Norwood, Ph.B., M.A., Ph.D.	*President*
M. E. Holmes, B.A., M.A., Ph.D.	*Dean*
Burton B. Crandall, B.A., M.B.A.	*Treasurer*
Grace Marsteiner	*Secretary to the Dean*

INSTRUCTIONAL AND RESEARCH STAFF

DEPARTMENT OF GLASS TECHNOLOGY

Samuel R. Scholes, A.B., Ph.D.	*Head of Department*
Archie M. Chisholm	*Instructor and Store Room Keeper*
(Temporary vacancy)	*Graduate Instructor*

DEPARTMENT OF CERAMIC ENGINEERING

Robert M. Campbell, B.S.	*Head of Department*
Van Derck Frechette, M.S., Ph.D.	*Professor of Ceramic Technology*
Clarence W. Merritt, B.S.	*Assistant Professor of Ceramic Engineering*
Willard J. Sutton, B.S., Ph.D.	*Assistant Professor of Ceramic Engineering*
William B. Crandall, B.S.	*Graduate Instructor*
Leon B. Bassett, B.S.	*Instructor*

DEPARTMENT OF INDUSTRIAL CERAMIC DESIGN

Charles M. Harder, B.S.	*Head of Department*
Don Schreckengost	*Professor of Ceramic Design*
Marion L. Fosdick	*Professor of Ceramic Art*
Clara K. Nelson	*Assistant Professor of Drawing*
Vivian P. Timiriasieff, B.A.	*Graduate Instructor*
Alexander Giampietro, B.A.	*Student Assistant*

DEPARTMENT OF RESEARCH (Ceramic Experiment Station)

Charles R. Amberg, B.S., M.S.	*Head of Department*
John F. McMahon, B.S.	*Professor of Research*
Robert B. Burdick, B.S.	*Senior Instructor in Research*
John J. Reimer, B.S.	*Research Fellow*
Wesley E. Curts, B.S.	*Research Fellow*
Forest Burnham	*Research Fellow*
Alice M. Flannigan, B.F.A.	*Research Fellow*
Richard L. Galusha, B.S.	*Research Fellow*
Lucius C. Washburn, B.S.	*Research Fellow*
(Temporary vacancy)	*Junior Instructor in Research*

DIVISION OF CHEMISTRY

Murray J. Rice, B.S., M.A., Ph.D.	*Professor of Chemistry*
Tobias H. Dunkelberger, B.S., Ph.D.	*Assistant Professor of Chemistry*
L. Eugene Reynolds, B.A.	*Store Room Keeper*
Alfred C. Saunders	*Research Fellow*

OTHER EMPLOYEES

Clarence M. Mitchell, A.B., M.S., B.S. in L.S.	*Librarian*
Vida S. Titsworth	*Dormitory Hostess*
Stanley C. Stillman	*Janitor and Carpenter*
Lawrence Stillman	*Janitor and Mechanic*

COMMITTEES OF THE FACULTY

EXECUTIVE

M. E. Holmes, C. R. Amberg, R. M. Campbell, C. M. Harder, S. R. Scholes

ADMISSIONS ADVISORY

M. E. Holmes, R. M. Campbell, C. M. Harder, S. R. Scholes

POST-WAR PLANNING

R. M. Campbell, M. J. Rice, Don Schreckengost

PROFESSIONAL DEGREES

M. E. Holmes, C. R. Amberg, R. M. Campbell, S. R. Scholes

SCHOLARSHIP ADVISORY

M. E. Holmes, R. M. Campbell, C. M. Harder, S. R. Scholes, W. A. Titsworth

HISTORY, OBJECTIVES AND POLICY

History. With prophetic vision of the prominent position that ceramic education was destined to achieve in the professional and industrial life of the Nation, Boothe C. Davis and John J. Merrill established at Alfred University in 1900 the New York State School of Clay Working and Ceramics. With another ceramic school that was just getting under way at that time, it became the function of the institution to pioneer in the field of ceramic education, leading the way to what is now a nation-wide scope of university education in ceramics, firmly established as an essential part of higher education.

The growth and development of the school under the direction of Charles Fergus Binns, exemplify the extent to which these functions were fulfilled. He served as its director from the time of its founding until 1931 when age necessitated his retirement. Year by year the enrollment increased from five in 1900 to one hundred sixty-nine in 1931. The development of the courses of instruction kept pace with the growth of the school so that the needs of the ceramic profession, as they developed from year to year, were served at all times.

During this period of the school's history the institution became a guiding beacon for ceramic education everywhere. The vision of its founders was fully realized. Emphasis was laid upon ceramic art and the school became distinguished particularly for training in the field of fine ceramics.

The year 1932, however, marked a transition in the career of the institution. It is an important matter for prospective students and prospective employers of graduates to note that although no less attention is given to fine ceramics than formerly, the school is now primarily an institution of ceramic technology and engineering rather than ceramic art. Art is not neglected, but technology and engineering are emphasized.

This changed status of the institution was made possible by large increases in State appropriations. A new building added 24,000 square feet of floor space to the 18,000 square feet formerly available. This building was completely furnished with the most up-to-date equipment. The building and equipment represented a cost of over one-quarter of a million dollars.

The courses of instruction were developed to include all of the most modern phases of scientific instruction in ceramic technology and engineering. Special emphasis was applied to the field of general ceramic technology and engineering, but, in keeping with the pioneering faith of its founders, the first and only four-year university course of specialized instruction in glass technology was added to the other curricula of the College. These developments rounded out the facilities of the College for the education of students in the art, technology and engineering branches of the ceramic profession, but there remained the need

of facilities for research and development work. This need was filled in 1936 by the establishment of a Department of Research or Ceramic Experiment Station, thereby making it possible to render a research service to the ceramic industries of the State as well as to educate students.

Keeping pace with these major developments were the improvements in library facilities, the expansion of non-curricular student activities and the development of contact with the ceramic industries. The faculty was enlarged by the addition to it of distinguished specialists in their various fields. The administrative, teaching, and research staff, exclusive of part-time employees, now numbers fourteen. This development program yielded an immediate response in student enrollment. The enrollment increased nearly one hundred per cent in three years, and taxed the capacity of the enlarged plant to the limit. The enrollment is restricted and limited to the capacity of the college which is 330 students.

As an indication of the changed status of the institution, the State authorities raised its ranking from that of a school to that of a college, and it is now known as the New York State College of Ceramics. As such, it stands accredited by the Engineer's Council for Professional Development for the training of professional engineers.

Objectives. The objectives of the college were stated in the Legislative act which provided for its establishment. Chapter 383 of the Laws of New York of 1900 state that the purpose of the institution is "to give scientific, technical, art and practical training for the manufacture of all kinds of ceramic products and to conduct experiments in reference to the value for commercial purposes of clays and shales of New York State." When allowance is made for the fact that, in 1900, the authors of this law had nothing other than their vision of the future to guide them, it must be admitted that this is a satisfactory enough statement of the natural and logical functions of a college of this kind. The same thought can now quite adequately and more specifically be expressed by the statement that the purposes of the College are to give students a ceramic education and to do ceramic research and development work. These are the established objectives of the College. Furthermore, it undertakes to give the students the most complete and up-to-date training possible and to render to the ceramic industries of the State the most effective research and development work that can be rendered.

Policies. These objectives and ideals determine the administrative policies of the College. Experience has demonstrated that teaching of technical and engineering subjects is not adequately vitalized unless it is done in a research environment. Students must be brought into contact with experienced workers who are broadening the frontiers of knowledge. The Research Department of the College supplies that environment. Furthermore, it renders the more

tangible service of contributing to the improvement of ceramic products and the cheapening of manufacturing operations. In this capacity it serves the public, the consumer, and the producer of ceramic products. Fundamental scientific research is done and contributions to the ceramic literature are constantly being made in the form of books, bulletins and articles, but it is the policy of the department to emphasize applied research in the interest of the industries.

In order to keep the work directed along the most effective and practical lines, the ceramic industries were organized into an association known as the Ceramic Association of New York. Through its Board of Directors, the Dean is kept advised of the best thoughts and suggestions of the leading ceramic industrialists of the State and the research work is directed accordingly.

However important may be its research and development work, the main function of the College must always be the education of young men and women for the ceramic professions. This is an age of specialization. Ceramics as a whole is a specialized branch of technology, but the ceramic profession requires specializations within its own field. Ceramic artists, ceramic technologists, and ceramic engineers are required. Furthermore, they must have a thorough and up-to-date training in their respective fields. The day is past when key positions are filled by faithful workers rising from the ranks. The ceramic industry is now one of high technical, art, and engineering status. A four-year university course of instruction of high order consisting of a thorough grounding in fundamentals, followed by specialized application of these fundamentals, is required adequately to prepare one for the responsible positions. This implies modern and up-to-date equipment, a competent staff and curricula that meet with general approval. It is the policy of the College to supply these essentials in a way that will fully meet the industrial requirements of the times.

Students come to this institution primarily to prepare themselves for a career in the ceramic profession. Therefore, the development of the highest possible degree of professional ability on the part of its graduates is the main duty of the institution. Ability to serve is the keynote of the training.

It is recognized, however, that something more than professional training is required to prepare one for the highest degree of professional service. Character and personality must be developed. Success in the ceramic profession implies good citizenship. It is fortunate that a technical education is in itself one of the most effective in developing character and the capacity for good citizenship. But professional training would not thrive in an environment which is exclusively professional in character. Non-curricular activities are, therefore, provided which occupy an important although secondary position in the educational policy.

Physical education and athletic sports supply the need for the development of health as well as the more intangible thing called college spirit. The cultural development that comes from the professional training itself is enhanced by the

inclusion of certain liberal arts courses in the curricula and by lectures, plays and musical entertainment provided by the University Forum. Opportunities for the development of art appreciation are afforded by art exhibits, and participation in the University musical organizations and dramatic societies. The social instincts are fostered by life in the dormitories, clubs, fraternities and sororities, as well as by the numerous private and all-college social functions. Journalistic activities in connection with the student publications is another divertisement. Special emphasis is placed upon the development of the ability for team work and the maintenance of a high degree of student esprit de corps. This is done by organizations managed exclusively by the students. Most important of these are the Ceramic Guild for the art students and the Student Branch of the American Ceramic Society for the technology and engineering students.

In normal times the social activities have reached their climax in the celebration of St. Patrick's Festival. The celebration of this birthday of the patron saint of engineers was accompanied by an open house, a formal ball and numerous other activities. It is hoped that this can be done again but in the interests of the war effort and the accelerated program this event and some other social events have had to be curtailed.

Intimate and friendly contact between faculty and students is provided by a system of student counselling whereby the individual problems of each student receive the personal attention of a member of the faculty. Personality ratings are kept from semester to semester for each student and all possible aid is given him in developing the traits of resourcefulness, originality, industriousness, reliability, honesty, judgment, and cooperativeness.

Rounding out all of these non-curricular activities which have to do with the development of personality and character is the religious life. Although absolutely non-sectarian in character, the institution emphasizes the importance of spiritual development and undertakes to inculcate in the student the desire for Christian living. Chapel and weekly church services provide facilities for this purpose.

Although every form of effective help is offered the student in all of his curricular and non-curricular activities, he is never relieved of his own responsibilities. He solves his own problems but he does so with the aid and cooperation of the faculty. The more brilliant students are not neglected in order to favor the less brilliant ones, nor are the less brilliant students neglected in order to favor the more brilliant ones. Regimentation in all of its aspects is studiously avoided. The principle of equal rights and opportunities for all prevails. Each student knows that regardless of financial, social or intellectual status, he will get what he earns, but that, also, he must earn what he gets.

It is evident that the educational policy of the institution is to lay emphasis upon the scientific-technologic aspect of the student's education but the humanistic-social aspect of it is not neglected as evidenced by the inclusion of general cultural subjects in the curricula. Good citizenship as well as professional skill is an objective of the entire educational program. This applies to both men and women as the institution is wholly coeducational in character.

M. E. HOLMES
Dean

GENERAL INFORMATION

THE CERAMIC INDUSTRY AND PROFESSION

Etymologically, the word "ceramics" signifies non-metallic raw materials and firing operations. Ceramic products are those made of non-metallic raw materials by the manufacturing operation of firing. The ceramic industry is the industry engaged in the manufacture of these kinds of products. The ceramic profession consists of designers, technologists, and engineers engaged in work connected directly or indirectly with the operation of the ceramic industries.

A common building brick is made of the non-metallic material clay by subjecting it to a firing operation. It is a typical ceramic product and is representative of a wide variety of ceramic wares which come under the classification of clay products. Other ceramic products made wholly of clay are face brick, paving brick, stoneware, terra cotta, drain tile, sewer pipe, electrical conduits, wall tile, floor tile, roofing tile, hollow building blocks, and fire brick. Ceramic products made of clay in admixture with other ingredients include tableware of the semi-vitreous and vitreous classes, porcelain, electrical insulators, sanitary ware and art pottery. The broad scope of the clay products division of the ceramic industry is indicated by this list of products. Their manufacture varies in character all the way from the mass-scale production of common brick, which is primarily a ceramic engineering operation, to the production of fine tableware and pottery, which is primarily a ceramic art operation.

Ranking next in importance to the clay products industry is the glass industry. Glass is made by a firing operation using non-metallic raw materials of which the most important are silica, soda ash, and lime. The manufacture of glass is, therefore, wholly ceramic in character but differs from the manufacture of clay products in that ceramic science and technology rather than ceramic engineering receives the emphasis. Glassware covers a wide variety of products including containers, plate glass, window glass, tableware, glass wool, building blocks, illuminating ware, cooking ware, mirrors, lenses, and tubing.

Refractories, porcelain enamel, lime, gypsum, portland cement and raw materials, each with a wide variety of products within its own field, complete the list of ceramic products.

In all, there are about 3600 ceramic plants in operation in this country, employing about 260,000 people, using 53,000,000 tons of raw materials and turning out in a normal business year more than $1,000,000,000 worth of ceramic products.

The ceramic profession is one of the oldest in point of time but one of the newest in point of development. Over six thousand years ago, ceramists

were making brick and pottery, but it was not until 1900, just after the initiation of ceramic education and the establishment of the American Ceramic Society, that the profession started its development into its present high art, technical, and engineering status. Now, some six hundred students are preparing themselves in American ceramic schools for careers in the ceramic profession. Approximately eighteen hundred are practicing the profession. They are being added to at the rate of about one hundred a year. About one-third of them are graduated by the New York State College of Ceramics. It is of important significance that only about one hundred ceramic technologists and engineers are graduated in this country each year and that they have a highly technical industry, turning out one billion dollars' worth of products a year, to go into. Obviously, therefore, the opportunities for ceramic graduates are unexcelled.

Ceramists practice the professions of ceramic art, ceramic technology, and ceramic engineering. Although their duties are not definitely prescribed in detail, and each may perform functions more rigidly belonging to other branches of the profession, it will serve to differentiate them by stating that the artist is most concerned with the design of ceramic products, the technologist with scientific research and control work, and the engineer with the building, equipping and operation of ceramic plants. All may rise to executive positions, depending on their abilities and opportunities.

LOCATION

The New York State College of Ceramics is located at Alfred University, Alfred, N. Y. Alfred is in Allegany County, 74 miles south of Rochester, 12 miles southwest of Hornell, and 14 miles northeast of Wellsville. It is located on N. Y. highway No. 244 which, two miles away at Alfred Station, connects with N. Y. highway No. 17F and the main line of the Erie Railroad. Alfred is a village of 700 population situated at an elevation of 1800 feet. Detached from the distractions of large municipal centers and with an exceptionally fine climate, its location offers the students splendid opportunities for a successful college career.

BUILDINGS AND EQUIPMENT

The Ceramic College is housed in two brick buildings. Binns Hall was erected in 1900, and the new Ceramic Building was erected in 1932. The two buildings provide 32,000 sq. ft. of floor space for lecture rooms, laboratories, kiln rooms, libraries, and offices. Both are completely equipped with the most up-to-date equipment for the study of all branches of ceramics. In addition to all the ordinary equipment such as grinding and screening machinery, equipment for washing clay, forming machines, driers, kilns, etc., the College has recently installed such modern facilities as an X-ray laboratory, a petrographic laboratory, a spectrographic laboratory, humidity driers, glass melting furnaces,

electric furnaces, and a long list of such items of equipment as mobilometers, reflectometers, torsion machines, and the like. The equipment of the College is generally considered to be outstanding, not only in quantity but also in quality.

This equipment is installed, and operated in such a way as to eliminate all hazards not directly due to carelessness. No serious accident or impairment of health has ever occurred in the history of the institution.

STUDENT HOUSING

In normal times all freshmen, unless excused by the Dean of Men or the Dean of Women, live and take their meals in one of the University dormitories. These include Bartlett Memorial Dormitory, for men, and The Brick, for women. Each is in charge of a hostess, who is assisted by upperclass counselors. Most of the rooms in Bartlett are single, whereas all in The Brick are double. All bedding is furnished and laundered regularly, and daily maid service is provided.

During the current year, at least, these dormitories are occupied by the Army Specialized Training Corps. Meanwhile, men are accommodated in homes in the village, and women in the several University residences. Mainly fraternity houses, these are operated by the University with the same furnishings and services that have been characteristic of the regular dormitories.

After the freshman year, students who have joined fraternities or sororities live and board in those houses. Other women, normally accommodated in The Brick, are for the time-being housed in the University residences. Men who do not live in fraternity houses are lodged in private homes.

OTHER CAMPUS FACILITIES

Other buildings used by the ceramic students include the Clawson Infirmary, Susan Howell Social Hall, Alumni Hall, the Track and Field House, and the various academic buildings of Alfred University, all of which are described in detail in the catalogue of the College of Liberal Arts of Alfred University.

ORGANIZATION

The College is organized on the basis of four departments, which are: Industrial Ceramic Design, Ceramic Engineering, Glass Technology, and Research. The head of each of these departments reports to the Dean of the College, who in turn reports to the Board of Managers, of which the President of Alfred University is the Chairman. The personnel of the Board of Managers, which is given on a preceding page, consists of industrial executives, who represent the various branches of the ceramic industry, and other persons qualified to supervise the operation of the College. In accordance with a legislative statute, the members of the Board of Managers are appointed annually by the Board of Trustees of Alfred University with full power to act for them as the agent of the Education Department of the State of New York. The College, therefore, is a unit of the University of the State of New York operating under the executive supervision of the State Education Department.

FINANCES

Appropriations made annually by the Legislature of the State of New York finance the operation of the College. These appropriations amount to approximately $400 per year per student. Tuition by out-of-state students supplements these appropriations to a slight extent. Private endowments cannot be accepted but awards by industrial concerns for research work are accepted and encouraged.

REGISTRATION

All students will register on the days designated for that purpose in the College calendar. Any student not registering on the days set therefor will be charged a fee of five dollars for late registration.

Each student in the Technology and Engineering Departments is expected to register for at least sixteen hours of work. Each student in the Art Department is expected to register for at least fifteen hours of work.

The conditions under which students may register for more than the number of hours specified in the curriculum are the following: (1) physical training and assembly may be taken in addition to the regular schedule; (2) if a student had an average grade of B or higher in the preceding semester, he may register for additional work with the approval of the Dean of the College.

With the exception of the electives, all courses are definitely prescribed and no change can be made in the schedule. Electives may be chosen by the student from the permissible list, but in making his selection he should be governed by the advice of the faculty.

FRESHMEN ORIENTATION WEEK

The first week of the College year is devoted to orienting the freshmen into university life and into their scholastic work. Full attendance by all freshmen is required. Instructional programs are provided by upper classmen and members of the faculty. Intelligence and adaptation tests are given. Private conferences with individual members of the faculty are provided. These more formal parts of the week's program are supplemented by amusements and "get-acquainted" meetings. The result is that by the end of the week, the freshmen are informed on what the College has to offer, what is expected of them, and how to go about getting adjusted to their new environment and bridging the gap between high school and college.

ATTENDANCE

The class period is fifty minutes. The laboratory periods vary from two to four hours in length. Regular attendance without tardiness is

required of all of the students. Penalties are imposed upon all students who absent themselves unduly. Absence on the day preceding or the day following a vacation period during the College year draws an extra heavy penalty.

STUDENT NON-CURRICULAR ACTIVITIES

To a large extent, student life on the campus is controlled by the students themselves. The Blue Key, Student Life Committee, Student Senate, Women's Student Government, and the Christian Associations assume responsibilities in varying degrees and kinds for initiating and managing general student activities. Fraternity and sorority life, social functions, receptions, sports, and amusements are, to a large extent, under the supervision of these student organizations, with power to act under the control of the Dean of Men and Dean of Women.

Of more specialized interest to the ceramic students of the University are the Student Branch of the American Ceramic Society, the Ceramic Guild, the Keramos Fraternity, and St. Patrick's Board. All technology and engineering students in the number of about 230 belong to the Student Branch of the American Ceramic Society. The students elect their officers, who manage the monthly program of lectures by outside speakers and other activities throughout the year. The students take an enthusiastic interest in the work of this society. The Ceramic Guild functions for the art students in much the same way as the Student Branch of the American Ceramic Society functions for the technology and engineering students. The Keramos Fraternity is a national honorary professional society. Admission to it is governed by vote of the members who elect new members from the upper classmen of high scholastic standing. St. Patrick's Board is made up of senior ceramic technologists and engineers selected by the vote of the class. This Board manages the most important social event of the year, which is a celebration in honor of the birthday of the patron saint of the engineers, St. Patrick. It is a one-and-half day jubilee of fun and relaxation from the routine scholastic work of the College, including a formal ball, an all-University assembly program, a tea dance, a parade of floats, and a Ceramic College open house in which all of the work of the College is depicted.

RELIGIOUS LIFE

A well-organized religious program under the direction of the University Chaplain is an integral part of life on the campus. Distinctly non-sectarian in character, it provides for a strong emphasis on spiritual development of the students. Through the cooperation of various religious denominations and the University administration, there is maintained a Director of Religious Activities whose full time is devoted to the engendering of a wholesome attitude toward things spiritual. The Director of Religious Activities and College Chaplain is also the pastor of the Union University Church, an inter-

denominational church attended and supported by faculty and students alike. For the Catholic students, Mass is held each Sunday morning, and for the Episcopal group, a Vesper Service is held. Seventh Day Baptists worship on Saturday. Chapel is voluntary and attended by members of all denominations.

SELF-HELP

No assurance can be offered that any student will find work to pay part of his expenses. However, the juniors and seniors do find employment in the dormitories, village shops, garages, and adjoining farms. Some handle laundry, others sell books, and some engage in such miscellaneous ventures as barbering, typing, etc. A considerable number secure student assistantships in the College. Most of these openings are available only to upper class students.

There have recently been established three graduate instructorships in glass technology, ceramic engineering and industrial ceramic design. These instructorships pay $750.00 for 10 months for half-time work. The incumbent can, therefore, put in one-half of his time studying for an advanced degree.

Five other student assistantships are maintained for undergraduate students.

In addition industrial fellowships, which are described elsewhere in this catalogue, operate in varying numbers from year to year.

Students, as they enter the College, should be able to finance their first two years, at least. In one way and another, many students find ways and means of earning considerable portions of the funds required for their college expenses. Generally, the best means for an enterprising student to augment his resources substantially is to find employment during the summer vacations. The administration frequently is able to suggest opportunities for this type of work.

INDUSTRIAL EXPERIENCE

Students are urged to secure temporary employment in ceramic plants during the summer vacations. A few months' work under industrial conditions aids very much in rounding out their training. Every possible aid is given students in securing these summer jobs and in years of good business activity, all should be able to find employment of this kind.

Closely related to industrial experience are plant inspection trips, which are taken at various times by the seniors during the senior year, and attendance at the annual meeting of the American Ceramic Society.

Those who take the Summer Semester work in the accelerated program will, of course, not be able to enjoy this opportunity.

Closely related to industrial experience is the plant inspection trip which is taken by the seniors during the week prior to graduation, and also attendance at the Annual Convention of the American Ceramic Society. For the duration of the war the limitations on bus and railroad traffic may cause changes in these customary activities.

HONORS, PRIZES AND AWARDS

Members of the freshmen, sophomore, and junior classes, who have a cumulative grade point index of 2.0 or more, are eligible for a certificate of merit.

Members of the senior class may receive honors as follows:

a. *Summa cum laude,* or highest scholastic honors to those having a cumulative index of 2.9 or more, with no grade below B.

b. *Magna cum laude,* or high honors to those having a cumulative index between 2.6 and 2.9, with no grade below C.

c. *Cum laude,* or honors to those having a cumulative index between 2.2 and 2.6.

d. Departmental honors to those who are recommended by the heads of the various departments as having done superior work and who have a cumulative index of 2.2 or more.

The Ceramic Association of New York thesis prize of $25 is awarded to the senior in either of the Technology or Engineering Departments who submits the best research thesis. The award is decided by a committee of industrial executives.

The Charles Fergus Binns medal is awarded each year to the ceramic artist who has made the outstanding contribution to ceramic art during the year and who has not previously received the medal.

The award of research fellowships is discussed in another section of this catalogue.

INDUSTRIAL FELLOWSHIPS

Ceramic industries and groups of industries usually have a limited number of research fellowships in operation at the College. Students are assigned to these fellowships, which enable them to earn between $300 and $750 per year for part-time employment, or as much as $3,600.00 for full-time employment. When the research fellow is employed only part time, he is enabled to pursue his studies during the other part of his time and to obtain his degree after a more or less prolonged period of residence. Most of these fellowships are

assigned to graduate students, but some are assigned to undergraduates. The main advantages of holding them are the educational benefit derived from the work, the development of research ability, and the contact that is made with the industry which finances the fellowship. Therefore, these fellowships are looked upon as being prizes that go to outstanding students. At the time of this writing, five fellowships are in operation which are financed by the following companies: North American Cement Corporation; Braebender Corporation; Briggs Clarifier Company; Electro Refractories and Alloys Corporation; Edward Orton, Jr. Ceramic Foundation, Barium Reduction Co., Buffalo Pottery and the Universal Asbestos Co.

EXAMINATIONS

In addition to the routine quizzes that are given periodically throughout the semester, final comprehensive examinations are given in each course at the end of the semester covering the entire semester's work. This examination is the main factor in determining the scholastic standing of the student. A "block week" period of several days immediately preceding these examinations is provided with no classes in operation so as to afford ample opportunity for the student to review the semester's work and correlate all parts of it. The full time of the faculty is available for private consultation during this period.

GRADUATE WORK

The College is primarily an undergraduate institution and no special effort is being made to develop a graduate school. However, a limited number of candidates for the master's degree are accepted each year. The candidate must have a bachelor's degree, or its equivalent. Thirty-six hours of advanced work consisting of eighteen hours of research work and eighteen hours of lecture and laboratory courses selected by the Dean of the College are required. Graduate students registered in senior undergraduate courses are required to complete work in addition to that required of the undergraduate students. These additional requirements may consist of submitting special reports, performing additional experiments, or other additional work specified by the instructor, and the number of such courses that may be taken is limited. The candidate must pass a three-hour oral examination on his major and minor subjects and the thesis must be of high enough quality to be accepted for publication by the leading ceramic journals. Two copies of the thesis appropriately typed and bound must be submitted two weeks before Commencement.

REQUIREMENTS FOR GRADUATION

Graduation depends upon successfully completing the prescribed courses of study with a grade point index of 1.00 or more. No substitutions for the prescribed courses are permitted, but by means of the elective courses, from which selections may be made in the senior year, a small degree of variation in the curriculum to meet the individual wishes of the student is possible. The curriculum is developed to meet the needs of the profession rather than the wishes or preferences of the student.

The College reserves the right to withhold a diploma for poor scholarship or other reasons.

DEGREES

Degrees in Course

The degree of Bachelor of Science (B.S.) is awarded to those students of the Department of Ceramic Engineering and the Department of Glass Technology who successfully complete the prescribed courses of study in these departments with a scholastic cumulative grade-point index of 1.00. The department in which the student majored is stated in the diploma.

The degree of Bachelor of Fine Arts (B.F.A.) is awarded to graduate students who successfully complete the prescribed courses of study in the department of Industrial Ceramic Design with a scholastic cumulative grade-point index of 1.00.

The degree of Master of Science (M.S.) is awarded to those students who successfully complete the thirty-six hours of prescribed graduate studies and submit an approved research thesis.

A minimum of one year's residence is required for all degrees in course.

Professional Degrees

The professional degree of Ceramic Engineer (Cer.E.) may be conferred upon candidates who hold a degree in some branch of engineering or science and who, after at least four years of industrial ceramic experience, are adequately recommended as having demonstrated superior ability in industrial engineering work. A full statement of his training and experience and an acceptable thesis on some of his engineering achievements must be submitted at least two weeks before Commencement. A graduation fee of $10 is charged, and the candidate must present himself in person to receive the degree.

Honorary Degrees

The honorary degree of Doctor of Science (D.Sc.) may be conferred upon candidates of exceptionally high distinction in any branch of ceramics.

The awarding of all degrees is under the immediate supervision of the Board of Trustees of Alfred University and is based upon the recommendation of the duly constituted agencies.

EMPLOYMENT

The College does not guarantee employment of its graduates. Neither does it "place" graduates. But the entire faculty accepts the duty of helping each student find the kind of employment for which he is best fitted. The College is operated in its entirety with this objective in mind. Nation-wide contact in one way and another between the ceramic industries and the College makes it possible to bring industrial openings to the attention of graduates as they develop. After an investigation of the requirements of the position, the best qualified of the Ceramic College graduates is recommended and an effort is made for his receiving due consideration. The graduate gets his own job, and it is not presented to him as a gift from the College or anyone else. At present the U. S. Civil Service and the armed forces, as well as the ceramic industry, is finding the training of our graduates very useful.

The College caters to a very much higher status of employment than that of trade and vocational schools. Most of the positions have to do with industrial ceramic design, sales-engineering work, scientific laboratory research work, or plant production work. There are, of course, many other openings of a miscellaneous character. All students are advised to try to find the field of work for which they are best fitted and to develop themselves primarily along those lines.

The starting salary is on a par with that of graduates in other lines of technology and engineering but varies with the individual and the position. Advancement depends primarily upon the ability to produce results.

In years of normal business activity, the demand for ceramic technologists and engineers cannot be supplied. In times of business depression, however, the supply exceeds the demand. When it is realized that there are only about one hundred technologists and engineers graduated in the entire country each year and that they have a billion-dollar industry of a highly technical nature to go into, it becomes apparent that the opportunities must be excellent. At the present time the demand for ceramic graduates far exceeds the supply.

ADMISSION

In the past the college has had to reject many applications in order to limit enrollment to the capacity of the institution. Under the present emergency conditions it is not anticipated that any properly qualified students will have to be rejected.

GENERAL REQUIREMENTS

The basic requirement for admission to the College is graduation from an accredited four-year secondary school. Beyond this, and the special requirements stated on succeeding pages, the candidate must present the specific credits itemized below.

For purposes of secondary-school accrediting, the College relies upon the evaluations of the New York State Board of Regents or the various regional associations of colleges and secondary schools. Detailed statements by principals of such schools are regarded as sufficient evidence, not only of graduation but of the units completed and achievement in them, although candidates from New York State schools are expected to present Regents credit.

In general, full compliance with the unit requirements is necessary, but in exceptional cases applicants may be given the opportunity to make up certain deficiencies in summer sessions or by taking entrance examinations. Application for such an examination, which is given only during the first week of the fall semester, must be made not later than July 1.

The following table gives the specific subjects and the number of units required for admittance to the Departments of General Ceramic Engineering and Glass Technology:

English	4	units
Mathematics	2½	units
Science	2	units
*Foreign Language	2	units
Electives	5½	units
	16	units

* In certain cases, substitutions may be made for the foreign language requirements.

Admission to the Department of Industrial Ceramic Design is governed by substantially the same requirements as those for Technology and Engineering, but high school art work, if of superior quality, may be substituted to a limited extent for some of the requirements listed above.

The unit represents a course of five recitations per week throughout the academic year. Since, in the total of 16 units, four years of English are counted as four units, a total of 15 units will be accepted from states in which four years of English are counted as only three units.

Additional information regarding these requirements is given in the following paragraphs.

ENGLISH—4 units.

The candidate must be familiar with elementary rhetoric, both as a science and an art, and must be proficient in spelling, punctuation, idiom, and division into paragraphs. Preparation must include the work in English prescribed by the various college associations.

FOREIGN LANGUAGE—2 units.

Latin, German, French, or Spanish is acceptable for the foreign language requirements. In certain cases, substitutions of other courses for foreign language may be made, or the fulfilling of the foreign language requirements may be deferred until the summer following the freshman year.

MATHEMATICS—2½ units.

Elementary and intermediate algebra, including fundamental operations, factoring, fractions, ratio, proportion, radicals, quadratics; plane geometry, including the straight line, angle, circle, proportion, similarity, and areas.

SCIENCE—2 units.

Biology, general science, physical geography, physics or chemistry. Any two subjects may be offered.

ELECTIVES—5½ units.

Electives may be chosen from any of the regular high school subjects such as foreign languages, social sciences, mathematics or natural sciences. One or two units may also be chosen from each of the following, but not more than four units may be chosen from these subjects altogether: agriculture, domestic science, commercial subjects, drawing and design, industrial arts, music, public speaking, and dramatics.

SPECIAL REQUIREMENTS

After applicants are found to meet the general requirements stated above, the Admissions Committee proceeds to consider them as potential candidates for the next entering class. These deliberations are made on an individual basis with careful attention to the following considerations. Rigorously applied in normal times, when the number of candidates substantially exceeds the capacity of the College, certain of these requirements may be waived for the duration of the war.

1. Scholarship. Experience has shown that high school students who rank low scholastically rarely make a success of their ceramic education. It is the policy of the institution, therefore, to reject the applications of all students who do not have a good high school scholastic record.
2. Adaptability. In addition to general scholastic ability, adaptability to the special requirements of a ceramic education are required. Applicants for admission to the Ceramic Art Department should, by a personal

interview or by submitting exhibits of their high school art work, show satisfactory evidence of adaptation to art work. This may be done either before or after they make formal application for admittance. In some cases, it is required, and in all cases, it is advised that applicants for admission to the Technology and Engineering Departments meet the Admissions Committee for an interview to determine their adaptability to technical and engineering work.

3. Interest. Evidence of special interest in gaining a ceramic education of the kind offered by the New York State College of Ceramics, and absence of too absorbing an interest in other fields of education, will influence the committee in making its decisions.

4. Personal qualities. Personal traits of character, such as initiative, industry, appearance, honesty, originality, and resourcefulness are given consideration, but they are not determining considerations. It is recognized that these traits can be developed in college, and this is one of the main objectives of the College education.

5. Likelihood of continuing through the four-year course. It is necessary to refuse admittance to applicants who want to enroll in the College and transfer to another institution before completing the course. Admittance may also be refused in cases where the applicant cannot make satisfactory financial arrangements.

6. Age, character, and health. Applicants must be at least sixteen years of age, of good moral character, and possessed of health which permits them to do satisfactory work. All entering students must have a physical examination.

7. Date of application. The choice between applicants who equally meet the foregoing requirements will be determined by the date of application.

8. Interviews. It is highly desirable for each candidate to present himself at the College for an interview with the Dean, and, if possible, with other members of the Admissions Committee. Interviews will be much more profitable if, at least several days before them, the applicant's credentials, particularly the certificate of recommendation conveying the high-school record, have been received by the College officers. Appointments for interviews should be made several days in advance by writing to the Dean. Applicants who wish on the same visit to look over the campus or investigate rooming and boarding arrangements should make an appointment with the Counselor to Prospective Students.

CORRESPONDENCE

Requests by prospective students for literature, general information and admission blanks should be addressed to the Counselor to Prospective Students.

Special queries relating to the nature of the courses should be addressed to the Dean of the College of Ceramics. After the application is submitted, correspondence and consultations regarding admission should be carried on with the Dean of the College of Ceramics. If applicants are accepted for admission, they should make arrangements for living accommodations and employment, if necessary, with the Counselor to Prospective Students.

PROCEDURE AND NOTIFICATIONS

The admission blanks that are to be obtained from the Counselor include three separate documents. The Certificate of Recommendation is to be filled out by the secondary-school principal and mailed directly to the Counselor. The Health Certificate is to be handled similarly by the family physician. The Application for Admission is to be completed by the candidate and mailed to the Counselor together with the application fee of $5.00. This should be in the form of a check or money order payable to Alfred University.

Only after these three credentials and the fee have been received are they assembled by the Counselor and presented to the Admissions Committee.

The Committee meets at least once a month and notifies applicants of its action shortly after each meeting. Ordinarily the candidate is definitely accepted or rejected, but in borderline cases decision may be deferred until nearer the time of College opening.

ADMISSION TO ADVANCED STANDING

Students in other approved institutions may transfer to the College. Their admittance is subject to the following regulations:

1. They must supply a statement of their entrance units and date of graduation from high school, a transcript of their college credentials, a letter of honorable dismissal by the proper official, and a statement that they are eligible to return to the institution which they are leaving.
2. Credit will be granted for equivalent courses in which the grades are C or higher. No credit is given for grades of D or lower.
3. Transfer students are subject to the same standards of selection as entering freshmen.

SPECIAL STUDENTS

It is not the policy of the institution to encourage the enrollment of special students who are not candidates for a degree. Disappointment, both to the institution and the student, usually results from this arrangement. However, in special cases where the applicant is of mature age, and of extraordinary ability, arrangements may be made for admittance as a special student. In all cases, he must be a graduate of some approved institution.

SCHOLASTIC REGULATIONS

REGISTRATION

All students are expected to register on the days designated for that purpose in the College calendar. Any student not registering on the days set therefor will be charged a fee of five dollars for late registration.

Each student in the Technology and Engineering Departments is expected to register for at least sixteen hours of work. Each student in the Art Department is expected to register for at least fifteen hours of work.

The conditions under which students may register for more than the number of hours specified in the curriculum are the following: (1) physical training and assembly may be taken in addition to the regular schedule; (2) if a student had an average grade of B or higher in the preceding semester, he may register for additional work with approval of the Dean of the College.

With the exception of the electives, all courses are definitely prescribed, and no change can be made in the schedule. Electives may be chosen by the student from the permissible list, but in making his selcetion he should be governed by the advice of the faculty.

CREDIT, ATTENDANCE, EXAMINATIONS

One class period, lecture or laboratory, constitutes one unit of credit. The number of these credits required for graduation varies between the three departments as indicated in the curricula.

The class period is fifty minutes. The laboratory periods vary from two to four hours in length. Regular attendance without tardiness is required of all the students. Penalties are imposed upon all students who absent themselves unduly. Absence on the day preceding or the day following a vacation period during the College year draws an extra heavy penalty.

In addition to the routine quizzes that are given periodically throughout the semester, final comprehensive examinations are given in each course at the end of the semester covering the entire semster's work. This examination is the main factor in determining the scholastic standing of the student. A "block week" period of several days immediately preceding these examinations is provided, with no classes in operation, so as to afford ample opportunity for the student to review the semester's work and correlate all parts of it. The full time of the faculty is available for private consultation during this period.

ADMINISTRATION OF SCHOLASTIC STANDARDS

Owing to the exacting demands of the ceramic profession, relatively high standards of scholarship must be maintained. Students unable to meet these standards are dropped from the College. However, every possible effort is made by the faculty to assist every student to meet these standards. Every instructor is available for private consultation and help, and the instructional work itself is supplemented by a system of faculty advising intended to help the student with all of his problems.

The scholastic standing of a student is indicated by his grade point index which, in turn, is determined by the grades reported by his instructors.

The Scholarship Committee of the College of Ceramics has charge of the application of all scholastic regulations. Students have the privilege of meeting with the committee for the purpose of presenting any information they wish to have the committee consider in connection with their scholastic difficulties, but in no case are the regulations voidable by any excuse.

Continuation in college depends upon the student's meeting the scholastic and disciplinary regulations of the institution.

Students who fail to meet the scholastic requirements of the college are placed on probation for one semester. If, at the end of the probation semester, the student has failed to raise his scholastic index to the required figure, he is dropped from college. In this case he is not eligible to apply for readmission until one semester has intervened. For this purpose a six-week summer session does not constitute an intervening semester. However, for the students who have previously enrolled in the three year program the fifteen weeks' summer session does constitute an intervening semester.

GRADES AND INDICES

The grades used by the instructors in reporting the scholastic status of the students and the points corresponding with the grades are given in the following table:

Grade	*Quality of Work*	*Points per credit hour*
A	Excellent	3
B	Good	2
C	Fair	1
D	Poor	0
E	Conditioned failure	—1
F	Failure	—1
I	Incomplete	—1
W	Withdrawn	—1

The grade point index is obtained by dividing the total number of points by the total number of credit hours. In determining the semester grade point

index only the grades and points for the semester are included. In determining the cumulative grade point index all of the work for which the student has credit is included.

In order for students to be in acceptable scholastic standing, the quality of their work in all their courses must be such as to yield the following cumulative grade point indices:

Year	*Required Cumulative Grade Point Index*
Freshman	0.50
Sophomore	0.75
Junior — First semester	.85
Junior — Second semester	1.00
Senior	1.00

These requirements apply to either semester of the College year. A student who for the first time fails to meet these requirements but whose cumulative grade point index is within 0.5 of the specified figure, will not be dropped from College immediately but will be given one semester of scholastic probation to bring his index up to the required standard. If at the end of the probationary semester he fails to raise the index to the required standard, he becomes ineligible to continue in College. A student who is not on probation but whose cumulative grade point index is more than 0.5 below the required index, immediately becomes ineligible to continue in College.

REQUIREMENTS FOR GRADUATION

Graduation depends upon successfully completing the prescribed courses of study with a grade point index of 1.00 or more. No substitutions for the prescribed courses are permitted, but by means of the elective courses, from which selections may be made in the senior year, a small degree of variation in th curriculum to meet the individual wishes of the student is possible. The curriculum is developed to meet the needs of the profession rather than the wishes or preferences of the student.

A minimum of one year's residence is required for all degrees in course.

The College reserves the right to withhold a diploma for poor scholarship or other reasons.

DEGREES

Degrees in Course

The degree of Bachelor of Science (B.S.) is awarded to those students of the Department of Ceramic Engineering and the Department of Glass Technology who successfully complete the prescribed courses of study in these departments with scholastic cumulative grade-point indices of 1.00. The department in which the student majored is stated in the diploma.

The degree of Bachelor of Fine Arts (B.F.A.) is awarded to those students who successfully complete the prescribed courses of study in the department of Industrial Ceramic Design with a scholastic cumulative grade-point index of 1.00.

The degree of Master of Science (M.S.) is awarded to gradutae students who successfully complete the thirty-six hours of prescribed graduate studies and submit an approved research thesis.

PROFESSIONAL DEGREES

The professional degree of Ceramic Engineer (Cer.E.) may be conferred upon candidates who hold a degree in some branch of engineering or science and who, after at least four years of industrial ceramic experience, are adequately recommended as having demonstrated superior ability in industrial engineering work. A full statement of his training and experience and an acceptable thesis on some of his engineering achievements must be submitted at least two weeks before Commencement. A graduation fee of $10 is charged, and the candidate must present himself in person to receive the degree.

HONORARY DEGREES

The honorary degree of Doctor of Science (D.Sc.) may be conferred upon candidates of exceptionally high distinction in any branch of ceramics.

The awarding of all degrees is under the immediate supervision of the Board of Trustees of Alfred University and is based upon the recommendation of the duly constituted agencies.

GRADUATE WORK

The College is primarily an undergraduate institution and no special effort is being made to develop a graduate school. However, a limited number of candidates for the masters' degree are accepted each year. The candidate must have a bachelor's degree, or its equivalent. Thirty-six hours of advanced work consisting of eighteen hours of research work and eighteen hours of lecture and laboratory courses selected by the Dean of the College are required. Graduate students registered in senior undergraduate courses are required to complete work in addition to that required of the undergraduate students . These additional requirements may consist of submitting special reports, performing additional experiments, or other additional work specified by the instructor. The number of such courses that may be taken is limited. The candidate must pass a three-hour oral examination on his major and minor subjects and the thesis must be of high enough quality to be accepted for publication by the leading ceramic journals. Two copies of the thesis appropriately typed and bound must be submitted two weeks before Commencement.

SUMMER SESSION

In the summer of 1944 a six-week summer session will be offered by the Liberal Arts College of Alfred University. Liberal Arts courses constitute most of the work given in this session, but courses in pottery production, drawing and modelling may be included. For further information regarding this six-week course address Director M. Ellis Drake, Alfred, N. Y.

During the summer of 1944 the Ceramic College will be in regular operation, offering a full semester of 15 weeks' work for students who have elected to take the three-year program and others who may care to enroll. Only senior work will be given, but sophomores and juniors as well as seniors are eligible to enroll for it. Students taking this summer work are enabled to graduate earlier than otherwise.

EXPENSES

ESTIMATED TOTAL ANNUAL EXPENSES

For students who are legal residents of the State of New York, total expenses for the two semesters of the college year, exclusive of personal expenditures, such as transportation, clothing, recreation, etc., may be estimated as follows:

	Ceramic Engineering and Glass Technology		*Industrial Ceramic Design*	
	Minimum Budget	*Moderate Budget*	*Minimum*	*Moderate*
Board	$170	$260	$170	$260
Room	95	130	95	130
General Fee	100	100	75	75
Deposits	17	17	25	25
Books, etc.	30	40	30	40
Total	$412	$547	$395	$530

The minimum figures are based upon securing the least expensive room and board in the village. Moderate figures include room and board in University dormitories or residences.

Out-of-state students can compute comparable budgets by adding to each of the columns $100 for tuition.

Freshmen are required to live in the dormitories, or, for the duration, University residences, unless excused for a very compelling reason. By doing so they have the services of upperclass counselors and the advantage of living with one another. Most upperclass students live in private homes, clubs, fraternities and sororities. Board and room in private families may be obtained at from $9 to $13 a week.

All freshmen in the General Ceramic Engineering and Glass Technology courses are required to take Mathematics 21S, Plane Surveying, which is given during the three weeks immediately following Commencement. Students who take this course make their own arrangements for board and room during that period.

TUITION

Legal residents of the State of New York pay no tuition. All students who are not legal residents of the State pay tuition at $50 per semester, in addition to all other fees and expenses.

The burden of registering under proper residence rests upon the student. If there is any possible question of his right to legal residence, the matter should be adjusted with the Dean before registering. Any student who registers improperly is required to pay a penalty fee of $10 in addition to the

tuition. Students who do not pay this fee within thirty days after they have been notified that the non-resident fee has been assessed against them, will have their registration cancelled.

No person is considered eligible to register as a resident of the State of New York unless he has been a *bona fide* resident in New York for the six consecutive months next preceding the date of his enrollment. No person shall be considered to have gained or lost his residential status in this State for the purpose of registering by any conduct of his own while he is a student in the College, unless, after attendance at the College for one year, it can be clearly established by the student that his previous legal residence has been abandoned and a new one established in New York for purposes other than merely attending the College.

The residence of a minor follows that of parents or legal guardian, regardless of emancipation. The residence of a wife follows that of her husband. Any student whose residence thus follows that of another person, and who has not been a resident for the six months immediately preceding marriage or assignment to a guardian, cannot be considered to have gained residence until the full six-month period has elapsed.

FEES AND DEPOSITS

The College reserves the right to change fees and deposits without notice.

GENERAL FEES

Department of General Ceramic Engineering	$100.00 per year
Department of Glass Technology	100.00 per year
Department of Industrial Ceramic Design	75.00 per year

The general fees cover expenses for which students are obligated for laboratory courses, medical and infirmary service, athletics, library, campus tax, student year book, Student Branch of the American Ceramic Society, the college paper, the University Forum and the senior plant inspection trips.

SPECIAL FEES

Application (to accompany application for admission)	$5.00
Graduation	10.00
Summer Surveying (freshmen)	5.00
Special Tests	1.00
Special Examinations	5.00
Late Registration	5.00

DEPOSITS

Chemistry Breakage:	Chemistry 1	10.00
	Chemistry 5	10.00
	Chemistry 11, 14, 41, 44, and 73	15.00
Art Supplies (Art Students only)		20.00

DORMITORY EXPENSES

Dormitory Room Deposit, each year $10.00

The room deposits must be paid in advance at the time the room is reserved. This is not a part of the room rental. In case a student fails to occupy a room so reserved, the deposit is forfeited. Upon surrender of the room in good condition at the close of the school year, the deposit will be refunded to the student.

Dormitory Room Rentals, Per Semester:

In The Brick or Bartlett Dormitory	$55.00 to $70.00
In Burdick Hall, for upperclassmen	40.00 to 50.00

The prices vary according to size and location of room. Prices in all cases are per person. All rooms are completely furnished. Students are to supply their own towels. Maid service is furnished daily.

Board in Dormitory Dining Halls, Per Semester:

In The Brick or Bartlett Dormitory $130.00

Residents of these two dormitories are required to board in the dining halls connected therewith. No credits or rebates for absences are allowed on board bills. The charges for board and room in dormitories will be in effect unless cost of food and labor or new forms of taxation make it necessary for the University to increase them. If and when such increases are made, they will become effective at the beginning of the following semester.

TERMS OF PAYMENT

Tuition and other regular charges are billed at the beginning of each semester, during the process of registration. These bills cover the semester charges for tuition, laboratory and other fees, also room rental and board if the student rooms in a University dormitory.

All deposits are on a yearly basis and, in most cases, appear on the first semester bill. The breakage deposits provide for replacement of equipment broken or damaged and material wasted by students. The art supplies deposit covers the cost of supplies used by the student in the Industrial Ceramic Design Department. Unused portions of these deposits will be returned to the students.

Semester bills are due when issued and must be paid, or definite and satisfactory arrangements made at the Treasurer's Office for payment, before the student is eligible to attend classes. If extension of time for payment is granted, a service charge is added to the bill in accordance with the time allowed. No regular extensions for a period longer than to December 1 for the first semester, and to April 1 for the second semester will be granted. No extension will be allowed on more than one-half of the general and special fees and deposits.

REBATES

No rebates on account of tuition and fees will be allowed if the student withdraws after the middle of the semester.

A student withdrawing before the middle of the semester because of serious illness or other good and sufficient reason, may be granted a rebate by the Treasurer of the University, the amount of such rebate, if any, to be determined after full investigation of the circumstances.

Board and room charges will be rebated on a pro-rata basis.

DEPARTMENTS OF INSTRUCTION

The courses of instruction are patterned after the essential needs of the ceramic industries. The ceramic industries require three types of ceramists, trained for three different types of work: designers, technologists, and engineers.

These industrial needs can be illustrated by considering the production of any typical ceramic product, such as a dinner plate. The first thing to do is to design the plate. Its shape, form, color, and decoration must be developed by means of drawings. That is ceramic design. After the plate is designed, it is necessary to assemble the technical information regarding the ingredients to be used, their properties, and their behavior under fire. These data are representative of ceramic technology. Finally, the plate must be made. Doing so involves choosing and operating the proper machinery, kilns, and other manufacturing facilities. This operation represents ceramic engineering. A ceramic educational institution that offers complete educational facilities must, therefore, offer training in ceramic design, ceramic technology and ceramic engineering.

The New York State College of Ceramics is unique in that it is the only educational institution that has in operation under one direction all three of these essential phases of ceramic education. Corresponding with these are the three departments of industrial ceramic design, glass technology and ceramic engineering. Students may take all three courses, but to do so would require at least seven years' work. If a student expects to graduate in four years he must choose one of these departments in which to specialize. The choice must be made when he enters college, in the case of industrial design. The choice between technology and ceramic engineering may be delayed until the end of the freshman year, as the work of the first year is the same for both departments. The work of the three departments is described in more detail in the sections that follow.

A. DEPARTMENT OF CERAMIC ENGINEERING

A ceramic product is one made out of non-metallic, earthy, raw materials by a firing operation. With the exception of the glass industry, ceramic products are fundamentally similar. It is possible, therefore, to give students a broad fundamental training in ceramics that fits them for usefulness in all of the divisions of the industry. Although the work of this department is directed primarily toward the clay products, which is the largest of all the ceramic industries, the training is of such a character that the graduate is prepared, also, to enter the portland cement, lime, gypsum, enamel ware, abrasives, and refractories industries. His career in these industries will be determined by his

development in the industry along the lines of laboratory research work, plant production work, or sales engineering work. The college training is designed to give him the background on which to build.

In addition to a general cultural development, the department provides first of all for a thorough grounding in the fundamental sciences of mathematics, chemistry, and physics. Most of the first two years' work is devoted to these subjects. The last two years of the course are devoted primarily to the application of these fundamental sciences to the technical and engineering problems of the ceramic industries.

Graduates of this department receive the degree of Bachelor of Science (B.S.).

CERAMIC ENGINEERING CURRICULUM

First Year

First Semester		*Second Semester*	
Mathematics 5a	2	Mathematics 6a	2
Mathematics 5b	3	Mathematics 6b	3
Chemistry 5	4	Chemistry 6	4
English 1	3	English 2	3
Ceramics 151	½	Ceramics 102	1
Industrial Mechanics 1	3	Industrial Mechanics 2	3
Physical Education 1	1	Physical Education 2	1
Assembly	0	Ceramics 152	½
		Assembly	0
	16½		17½

Summer School

Mathematics 21s, Plane Surveying ..... 3 credit hours
Three weeks following the end of the second semester

Second Year

Mathematics 15	4	Mathematics 16	4
Physics 11	4	Physics 12	4
Chemistry 11	3	Chemistry 14	3
Ceramics 103	3	Ceramics 104	3
Mineralogy 1	3	Ceramics 154	2
Physical Education 11	1	Physical Education 12	1
Assembly	0	Assembly	0
	18		17

Third Year

Mathematics 37	4	Mathematics 38	4
Chemistry 71	4	Chemistry 72	2
Chemistry 73	1	Chemistry 44	3
Chemistry 41	3	Geology 4	3
Ceramics 113	1	Chemistry 74	1
Ceramics 105	3	Ceramics 106	3
Ceramics 155	2	Ceramics 156	2
Ceramics 107	1	Ceramics 108	1
	19		19

* *Fourth Year*

Economics 13	2	Economics 14	2
Physics 31	3	Elective	4
Petrography 1	3	Ceramics 110	1
Elective	4	Ceramics 162	2
Ceramics 121	2	Ceramics 122	2
Ceramics 161	2	Ceramics 114	3
English 35	2	Ceramics 172	3
		Plant Inspection Trip	1
		Ceramics 112	1
	18		19

The electives are to be chosen with the consent of the Dean from the following subjects: German or French, eight hours; Petrography, two hours; Glass Technology, eight hours; Portland Cement, Lime, Gypsum, three hours; Enamels, five hours; Applied X-ray, four hours; Advanced Physical Chemistry, two hours; Economics, four hours; Industrial Problems of the Heavy Clay Products Industries, two hours; Spectroscopy, two hours; Micro Qualitative Analysis, one hour; and research, four hours.

* Students enrolled in the three year program will take the fourth year work during the summer semesters of their sophomore and junior years.

DEPARTMENT OF GLASS TECHNOLOGY

Glass differs from other ceramic products in two essentials: the firing operation is carried to complete fusion; the forming process follows the furnace treatment instead of preceding it.

The purpose of the curriculum in glass technology is to prepare the graduate for immediate usefulness in the glass or related fields of silicate technology. Through his laboratory work, the student becomes familiar with the raw materials and their behavior at high temperatures, with melting and annealing practice, and with the characteristics of glass, hot and cold. The actual working of glass into ware is not attempted. Fundamental science necessarily constitutes most of the required courses.

The department offers an opportunity for research in glass, to those who are adequately prepared by college or plant experience. Glass manufacturers are invited to send their employees for further training, and to establish fellowships for the study of special problems.

Graduates receive the degree of Bachelor of Science (B.S.).

GLASS TECHNOLOGY CURRICULUM

First Year

First Semester		Second Semester	
Mathematics 5a	2	Mathematics 6a	2
Mathematics 5b	3	Mathematics 6b	3
Chemistry 5	4	Chemistry 6	4
English 1	3	English 2	3
Industrial Mechanics 1	3	Industrial Mechanics 2	3
Ceramics 151	½	Ceramics 102	1
Physical Education 1	1	Ceramics 152	½
Assembly	0	Physical Education 2	1
		Assembly	0
	16½		17½

Summer School

Mathematics 21s, Plane Surveying ..... 3 credit hours
Three weeks following the end of the second semester

Second Year

Mathematics 15	4	Mathematics 16	4
Physics 11	4	Physics 12	4
Chemistry 11	3	Chemistry 14	3
Ceramics 103	3	Ceramics 200	3
Economics 11	3	Economics 12	3
Physical Education 11	1	Physical Education 12	1
Assembly	0	Assembly	0
	18		18

Third Year

Mathematics 35	3	Mathematics 36	3
Chemistry 41	3	Chemistry 44	3
Chemistry 71	4	Chemistry 72	2
Chemistry 73	1	Chemistry 74	1
Mineralogy	3	Geology 4	3
Ceramics 201	3	Ceramics 202	3
Ceramics 251	1	Ceramics 252	1
Ceramics 113	1	Ceramics 118	2
	19		18

Fourth Year

Physics 31	3	Physics 32	3
English 35	2	Ceramics 114	3
Petrography 1	3	Ceramics 204	3
Ceramics 203	3	Ceramics 254	1
Ceramics 253	1	Ceramics 262	2
Ceramics 261	2	Plant Inspection Trip	1
Elective	5	Elective	6
	19		19

The electives are to be chosen with the consent of the Dean from the following subjects: General Ceramics, German or French, Economics, Chemistry, Physics, Spectroscopy, Petrography, X-ray Analysis.

Students taking the three-year course will do the fourth-year work in the summer semesters of their sophomore and junior years.

DEPARTMENT OF INDUSTRIAL CERAMIC DESIGN

The department provides for the training of specialized designers for the ceramic industries.

For the first two years, the student concentrates on the fundamentals of drawing, design, modeling, perspective, lettering, and architectural drafting.

In his junior year, he enters the shops and laboratories, where he begins the study of ceramic materials and processes; the development of bodies, glazes, and colors; and the shaping and burning of ceramic wares. He experiments with various decorative processes and their adaptation to the production limitations of industry. The equipment and facilities of a modern pottery are placed at his disposal so that he may prove the practical value of his designs by expressing them in the finished product. Contacts with manufacturing and retail outlets provide talented students with an opportunity further to check the practicability of their designs in actual production.

Because of present limitation of facilities, enrollment of freshman students is limited to twenty-five. Those who wish to apply for admission should submit samples of drawing or other evidence of their adaptability to this type of work.

Students who receive failing marks in English, chemistry, drafting or architectural drawing must satisfactorily complete such work before entering school the following year. Sophomore students must have demonstrated more that average ability in drawing and design in order to be eligible for the junior class.

The College reserves the right to retain ware, drawings, and designs, made by students.

Graduates receive the degree of Bachelor of Fine Arts (B.F.A.).

INDUSTRIAL CERAMIC DESIGN CURRICULUM

First Year

First Semester		Second Semester	
Ceramics 321 (Drawing-Design)	3	Ceramics 322 (Drawing-Design)	3
Ceramics 321A (Lettering)	1	Ceramics 322A (Lettering)	1
Ceramics 323 (Drawing-Design)	5	Ceramics 324 (Drawing-Design)	5
Ceramics 301 (History of Art)	2	Ceramics 302 (History of Art)	2
Ceramics 325 (Modeling)	2	Ceramics 326 (Modeling)	2
Mechanical Drawing 3	2	Mechanical Drawing 4	2
English 1	3	English 2	3
Physical Education	1	Physical Education	1
Assembly	0	Assembly	0
	19		19

Second Year

Ceramics 327 (Design)	2	Ceramics 328 (Design)	2
Ceramics 329 (Drawing-Design)	7	Ceramics 330 (Drawing-Design)	7
Ceramics 331 (Modeling)	2	Ceramics 332 (Modeling)	2
Chemistry 1	3	Chemistry 2	3
English 21	3	English 22	3
Physical Education 11	1	Physical Education 12	1
Assembly	0	Assembly	0
	18		18

Third Year

Ceramics 333 (Applied Design)	6	Ceramics 334 (Applied Design)	6
Ceramics 335 (Drawing-Design)	2	Ceramics 336 (Drawing-Design)	2
Ceramics 337 (Pottery)	6	Ceramics 338 (Pottery)	5
Ceramics 337A (Pottery Lab.)	1	Ceramics 338A (Pottery Lab.)	1
Ceramics 303 (Raw Materials)	2	Ceramics 304 (Raw Materials)	2
Mechanical Drawing 31	2	Mechanical Drawing 32	2
		Plant Tour	1
	19		19

** Fourth Year*

Ceramics 339 (Applied Design)	5	Ceramics 340 (Applied Design)	5
Ceramics 341 (Drawing-Design)	2	Ceramics 342 (Drawing-Design)	2
Ceramics 343 (Pottery Shop)	5	Ceramics 344 (Pottery Shop)	3
Ceramics 345 (Ceramic Calculations)	2	Ceramics 344A (History of Ceramics)	2
		Ceramics 346 (Thesis)	2
Elective	2	Elective	2
	16		16

Electives may be chosen with the consent of the Dean from the following courses: Fundamentals of Speech, 1 and 2, two hours each; Music Appreciation, two hours; Comparative Religion, three hours; Psychology, 11 and 12, two hours each; Anthropology, 87 and 88, two hours each; Contemporary Society, 3 and 4, three hours each; Public Speaking 11, three hours; Economics, 13 and 14, two hours each; Ancient History, 69 and 70, two hours each; Special electives in Ceramic Art, four hours; Marketing, 2 hours.

* Students enrolled in the three year course will do the fourth year work in the summer semesters of their sophomore and junior years.

DEPARTMENT OF RESEARCH

The Department of Research, also known as the Ceramic Experiment Station, is the agency by which the New York State College of Ceramics renders service to the producers and users of ceramic products in the State of New York. It serves the ceramic interests of the State as the agricultural schools serve the agricultural interests. It promotes a greater use of New York raw materials. Improved ceramic processes and products are developed. New fundamental knowledge of ceramic processes is discovered. The research very often produces new combinations of old and new ceramic raw materials more useful to

man; hence, the public benefits by better and more serviceable products, the manufacturer gets the benefit of new products, new markets, and more efficient operations, and labor benefits by more employment and better salaries.

War conditions have made it necessary to develop substitutes for ceramic materials formerly imported from abroad, such as French and Italian talc, Indian kyanite and English and German clays. In some cases new methods of refining domestic materials are necessary to make them satisfactory substitutes for the foreign materials. The Station is also assisting ceramic manufacturers who as a result of war conditions, no longer can manufacture their regular products, or are starting to use their plants for manufacturing ware of more importance to the war effort. This work tends to make this country more self-sufficient and aids in our national war program.

Research is also being done to help ceramic manufacturers in the post-war period. New products are being developed which these companies can make when the present demand for war materials ceases.

These results are achieved by an intensive research program carried out by a staff of research experts. Preliminary tests are carried out in the laboratory, and, if promising, they are tested in service to determine their practical value. Through the cooperation of the Ceramic Association of New York, whose Board of Directors acts as an advisory committee, the Experiment Station gets the advice of the leading ceramic industrialists of the State and the active cooperation of their companies.

More and more fundamental and industrial research is being conducted in university laboratories like the Experiment Station. There is always some risk to industries in investing large sums for equipment to investigate specific problems. The way out of this dilemma often will be found in cooperative research between the industries and the Ceramic Experiment Station. Several of the industries are maintaining Fellowships in the Research Department to conduct research on problems peculiar to their industries. The financial support and work of Fellowships sponsored by industries in the Ceramic Experiment Station is almost equal to that sponsored by the State at the present time. In some cases the Fellowships are maintained by an association of manufacturers, thereby rendering service to a whole group instead of to an individual. Duplication of research is thereby avoided. It is difficult to conceive a more economical way to investigate such problems than to arrange for this study through a cooperative fellowship such as those of the Experiment Station.

The scope of the work of the department covers the entire field of ceramics, including heavy clay products, refractories, enamel ware, glass, whiteware, abrasives, gypsum, lime and cement. Although it is impossible to do research on all of the commodities at one time, the work is so planned that research will be done on all of them over a period of years.

Students profit by working in a research environment. The Station not only provides this environment but assists indirectly by supervising the senior students' research. The Station cooperates with ceramic and other scientific societies in extending the frontiers of ceramic knowledge and hence increases the scope of ceramic education. It cooperates with the American Society for Testing Materials in developing tests and specifications. The ceramic literature is enriched by publications.

The Experiment Station endeavors to do research which will be of most value to the industries. All ceramic companies of the State are kept informed of the progress of the work by monthly reports which are sent to over 200 manufacturers. Visits and correspondence by representatives of the individual companies dealing with the application of this work of the Station are welcome. No charge is made for this service.

While space does not permit a complete picture of current activities, mention of some of the specific accomplishments may serve to give a clearer conception of the workings of the Station: (1) the substitution of New York talc for foreign talc no longer available because of war conditions, (2) the development of a protective coating for light-weight refractories, (3) testing of New York clays for ceramic purposes, (4) the use of boron compounds together with salt in salt glazing, (5) the resistance of New York building brick to freezing, (6) improving the glaze fit on ceramic bodies, (7) substitution of American clays for English clays in dinnerware bodies, and (8) improving the drying properties of clays.

DESCRIPTIONS OF COURSES

CERAMIC ENGINEERING

Ceramics 102. A Brief History of the Ceramic Industries. A study of the use of pottery plaster. One lecture per week, second semester.
One credit hour.

Ceramics 103. Ceramic Raw Materials. A detailed study of the chemical and physical properties of the important ceramic raw materials in relation to the manufacturing operation and the properties of ceramic products. Three lectures per week, first semester.
Three credit hours.

Ceramics 104. Processing of Clays. An engineering course dealing with the manufacturing operations of the industry up to the operations of drying and firing. Three lectures per week, second semester.
Three credit hours. Prerequisite, Ceramics 103.

Ceramics 105. Drying and Firing. This course deals with the technology and engineering aspects of the commercial drying and firing of all types of ceramic products. Three lectures per week, first semester.
Three credit hours. Prerequisite, Ceramics 104.

Ceramics 106. Whitewares. A study of bodies, glazes and colors. A specialized course in the technology and engineering aspects of the industry in which complex whiteware mixtures and glazes are employed.
Three lectures per week, second semester.
Three credit hours. Prerequisite, Ceramics 105.

Ceramics 107. Drier Calculations. One period per week, first semester.
One credit hour. Prerequisite, Ceramics 104.

Ceramics 108. Whiteware Calculations. One period per week, second semester.
One credit hour. Prerequisites, Ceramics 105.

Ceramics 110. Phase Rule Calculations. One period per week, second semester.
One credit hour. Prerequisite, Chemistry 6.

Ceramics 112. Furnaces and Kilns. A study of the design and operation of ceramic furnaces and kilns. One lecture per week, second semester.
One credit hour. Prerequisites, Ceramics 105 and 106.

Ceramics 113. Pyrometry. The theory and use, as well as the care of, thermoelectric, optical and radiation pyrometers.
One lecture per week, first semester.
One credit hour. Prerequisite, Ceramics 103.

Ceramics 114. Refractories. A study of the fundamental technology of all kinds of refractories and the engineering aspects of their production and use. Three lectures per week, first semester.
Three credit hours. Prerequisite, Ceramics 103.

Ceramics 115. Lime, Gypsum and Cement. The properties, manufacture, testing, and uses of cementing materials. Elective.
Three lectures per week, first semester.
Three credit hours. Prerequisite, Ceramics 103.

Ceramics 118. Enamels. The technology and engineering aspects of the application of porcelain enamels to metals. Elective.
Three lectures per week, second semester.
Three credit hours. Prerequisite, Ceramics 103.

Ceramics 121. Equipment, Design and Plant Layout. The engineering features of structural planning and design, plant layout and ceramic plant design. Two lectures per week, first semester.
Two credit hours. Prerequisite, Ceramics 106 and Math. 37 and 38.

Ceramics 122. Equipment, Design and Plant Layout. The engineering features of structures and of ceramic equipment design, particularly as applied to drying and firing of ceramic ware.
Two lectures per week, second semester.
Two credit hours. Prerequisites, Ceramics 106 and Math. 37 and 38.

Ceramics 123. Industrial Problems in Heavy Clay Products Plants. A study of the practical problems of manufacturing heavy clay products. Elective. Two lectures per week, first semester.
Two credit hours. Prerequisite, Ceramics 121.

Ceramics 151. An Introduction to the Laboratory Technique of Making Plaster Forms for Test and the Production of Ware. Particular attention is given to the production of ware by the casting process.
One laboratory period each two weeks, first semester.
One-half credit hour.

Ceramics 152. Continuation of Course 151.
One laboratory period each two weeks, second semester.
One-half credit hour.

Ceramics 154. Laboratory Testing of Ceramic Materials.
Two laboratory periods per week, second semester.
Two credit hours. Prerequisite, Ceramics 103.

Ceramics 155. Ceramic Processes and Products. A laboratory course dealing with the manufacturing operations involved in forming and firing of various types of ceramic products.
Three laboratory periods per week, first semester.
Two credit hours. Prerequisite, Ceramics 103.

Ceramics 156. Laboratory Practice in Whiteware Technology. Laboratory studies to demonstrate the properties of whiteware raw materials, the preparation and testing of typical whiteware bodies, glazes and colors.
Three laboratory periods per week, second semester.
Two credit hours. Prerequisite, Ceramics 105.

Ceramics 161. Thesis. Original research on some problem decided upon in conference with the instructor.
Two laboratory periods per week; first semester.
Two credit hours. Prerequisite, Ceramics 106.

Ceramics 162. Thesis. Continuation of Ceramics 161.
Two laboratory periods per week, second semester.
Two credit hours. Prerequisite, Ceramics 161.

Ceramics 168. Laboratory Practices in Enamels. Elective.
Two laboratory periods per week, second semester.
Two credit hours. To be taken with Ceramics 118.

Ceramics 172. Equipment, Design and Plant Layout. Laboratory practice in which the structural engineering details of plant design, plant layout and plant equipment, including kilns and driers, is carried out.
Three laboratory periods per week, second semester.
Three credit hours. Prerequisite, Ceramics 121.

CHEMISTRY

Chemistry 1–2. Elementary Inorganic Chemistry. An elementary course in inorganic chemistry to be taken by Ceramic College students only if they are majoring in Industrial Ceramic Design. Two lectures, one recitation, one laboratory period per week.
Three credit hours each semester.

Chemistry 5–6. General Inorganic Chemistry. A systematic study of fundamental principles, theories, and calculations. High-school chemistry is a desirable foundation for taking this course. Two lectures, one recitation and two laboratory periods per week.
Four credit hours each semester.

Chemistry 11. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds and the chemical principles involved.
One lecture, one quiz, two laboratory periods per week, first semester.
Three credit hours. Prerequisite, Chemistry 6.

Chemistry 14. Quantitative Analysis. Volumetric and gravimetric analysis. One lecture, one quiz, two laboratory periods per week, second semester. Three credit hours. Prerequisite, Chemistry 11.

Chemistry 41. Quantitative Analysis. The analysis of silicate rocks, clays and ceramic materials. One lecture and two laboratory periods per week, first semester.
Three credit hours. Prerequisite, Chemistry 14.

Chemistry 44. Fuels and Combustion. Fuels, principles of combustion, and heat balance, second semester.
Three credit hours. Prerequisite, Chemistry 14.

Chemistry 71–72. Physical Chemistry. An elementary course in theoretical chemistry.
Four lectures, first semester; two lectures, second semester.
Six credit hours. Prerequisites, Chemistry 14, Mathematics 16, Physics 11.

Chemistry 73–74. Physical Chemistry Laboratory.
One period, each semester.
Two credit hours. To be taken with Chemistry 71–72.

Chemistry 75. Advanced Physical Chemistry. An advanced lecture course.
Second semester.
Two credit hours. Prerequisite, Chemistry 72.

Chemistry 76. Semi-Micro-Qualitative Analysis. Analysis of metallic and non-metallic ions with emphasis on spot tests and micro methods not requiring the use of the microscope. One laboratory period per week, second semester.
One credit hour. Admittance by special permission.

Chemistry 77. Spectroscopy. Emission and absorption spectroscopy in chemical analysis. The construction and use of spectroscopic equipment, spectrum analysis by arc or spark method of excitation, qualitative and quantitative analysis. One lecture per week, first semester.
One credit hour. Admittance by special permission.

Chemistry 78. Spectroscopy Laboratory. Analysis of inorganic salts and ceramic materials. One laboratory period per week, second semester.
One credit hour. Prerequisite, Chemistry 77.

ECONOMICS

Economics 11–12. Principles and Problems. A study of modern economic society and the functioning of the price-system. The technique of economic analysis. The application of economic principles and methods of analysis to present-day economic problems. Prerequisite for all advanced courses in the department. Three lectures per week.
Three credit hours each semester.

Economics 13–14. Principles and Problems. A similar but more summary study than Economics 11–12.
Two lectures per week.
Two credit hours each semester.

ENGLISH

English 1–2. English Composition. The use of written and oral language.
Three lectures and discussions per week.
Three credit hours each semester.

English 21–22. Introduction to English Literature. A survey of the development of English literature from its beginning to the close of the Nineteenth Century, with emphasis on the most significant writings of the representative authors in each period. Three lectures per week.
Three credit hours each semester.

English 35. Professional English. Study and practice in business writing and speaking, with particular attention to the most frequently used types of letters, written and oral reports, and interviews.
Two lectures and discussions per week, second semester.
Two credit hours.

GEOLOGY AND MINERALOGY

Mineralogy 1. This course includes an introduction to crystallography and a study of minerals and their identification by chemical and physical tests. One lecture and two laboratory periods per week, first semester.
Three credit hours.

Geology 4. This is a course in general geology with special reference to the materials of ceramic importance.
Three lectures per week, second semester.
Three credit hours.

GLASS TECHNOLOGY

Ceramics 200. Raw Materials for Glass. The chemistry of the glass-forming oxides. A study of the methods of production of the minerals and chemicals used in glass, their chemical reactions and properties.
Three lectures per week, second semester.
Three credit hours.

Ceramics 201 and 251. Glass-Making Materials and Melting Processes. An elementary laboratory study of raw materials; methods of testing purity, chemical composition, functions in glass-melting. Simple glasses are melted and the melting process studied in relation to refractories, containers, temperatures, batch composition, and fining agents. Lectures, study-outlines, and references to the literature of glass, covering raw materials, furnace design and operation, tank blocks and pots, the fundamental chemistry of glass-making and calculations.
Three lectures and one laboratory period per week, first semester.
Four credit hours. Prerequisite, two years' college work in science or equivalent experience.

Ceramics 202 and 252. Glass Working and Testing. Laboratory studies of glasses for specific commercial purposes; demonstrations of hand-working by skilled workmen; studies of annealing; testing of laboratory and commercial specimens for strain, mechanical and chemical resistance, and visible defects. Lectures, recitations and reports on compounding glasses, working processes, annealing, finishing, etching and other forms of decoration, testing and defects in commercial glassware.
Three lectures and one laboratory period per week, second semester.
Four credit hours.

Ceramics 203 and 253. Glass Colors and Decolorizing. A laboratory study of colorants. Experimental meltings, demonstrating the effects of the common and unusual colorants, the influence of batch and glass compositions, studies of temperature, time, and furnace atmosphere with relation to colors. Similar practice in decolorizing crystal glass. Lectures and reading assignments.
Three lectures and one laboratory period per week, first semester.
Four credit hours.

Ceramics 204 and 254. The Physics of Glass. Laboratory practice in the measurement of the physical and optical properties of glass. The identification of defects. Both laboratory specimens and commercial glasses are examined. Lectures on relation between composition and specific physical properties, optical properties, constitution theory, historical development.
Three lectures and one laboratory period per week, second semester.
Four credit hours.

Ceramics 205. Survey of Glass Technology. A lecture course offered for the benefit of students in General Ceramics or other departments, covering the subject in a summary manner.
Two lectures per week, first semester.
Two credit hours.

Ceramics 261. Glass Thesis. Laboratory study of a problem selected in conference with the department head.
Two laboratory periods, first semester.
Two credit hours.

Ceramics 206. Advanced Ceramic Chemistry. A study in detail of special topics of chemical reactions which have direct applicability to ceramic manufacturing operations. Available to senior and graduate students only. Elective. Two lectures per week, second semester.
Two credit hours. Prerequisites, Chemistry 71, 72.

Ceramics 262. Glass Thesis. Continuation of Ceramics 261.
Two laboratory periods, second semester.
Two credit hours.

INDUSTRIAL CERAMIC DESIGN

Ceramics 321–322. Drawing-Design. Perspective, mechanical, and freehand drawing for use in the designing of three-dimensional forms preparatory to course in rendering in the junior year. Interior decoration problems involving use of texture, form, and color, accompanied by lectures on architecture, furniture, textiles, and ceramics.
Three laboratory periods per week.
Three credit hours each semester.

Ceramics 321A–322A. Lettering. Fundamentals of letter construction, creative problems involving the adaptation of various letter forms. Professional methods of execution with pencil, pen, brush and air brush.
One laboratory period per week.
One credit hour each semester.

Ceramics 323–324. Drawing-Design. Freehand drawing and creative design in charcoal and color from still-life, landscape, the figure, and memory.
Five periods per week.
Five credit hours each semester.

Ceramics 325–326. Modeling. A course in three-dimensional modeling from still-life and the figure. Contemporary sculpture is studied in its relation to problems of modeling in clay.
Two periods per week.
Two credit hours each semester.

Ceramics 327–328. Design. Three-dimensional design; model construction.
Two laboratory periods per week.
Two credit hours each semester.

Ceramics 329–330. Drawing-Design. Plastic drawing, spatial organization, from life, still-life and landscape. Various media are used.
Seven laboratory periods per week.
Seven credit hours each semester.

Ceramics 331–332. Modeling. A course in three-dimensional modeling from the figure. Creative composition in clay. The study of sculpture in its relation to pottery form. Problems of creative form in pottery.
Two periods per week.
Two credit hours each semester.

Ceramics 333–334. Applied Design. Basic principles of industrial design. Problems in professional design for ceramic materials and processes. Work in this course is closely correlated to that in course 337–338, and to the course in architectural drafting.
Six laboratory periods per week.
Six credit hours each semester.

Ceramics 335–336. Drawing-Design. Pattern, form, color, and texture in relation to problems and processes of ceramic decoration.
Two laboratory periods per week.
Two credit hours each semester.

Ceramics 337–338. Pottery.
I. Shop. Pottery production. Tools and equipment. Methods of using plaster for pottery models and molds. The properties and preparation of casting clays. Throwing on the potter's wheel. Turned forms in clay and plaster. Kiln operation, glaze application, processes of decoration. Creative problems in ceramic art. The work in this course is closely coordinated with that of the courses in design.
II. Laboratory. Exploratory problems in the nature of ceramic raw materials. Problems in properties of clay, glaze and bodies. Industrial bodies and glazes, creative use of ceramic colors and textures. This course is closely coordinated with courses 303 and 304.
Six laboratory periods per week.
Five credit hours each semester.

Ceramics 337A–338A. Pottery Laboratory. Laboratory courses in ceramic color and textures. One laboratory period per week.
One hour credit each semester.

Ceramics 339–340. Applied Design. A continuation of courses 333 and 334. In this course practical problems of industrial design are presented, planned and criticized. The creative use of ceramic materials and processes is emphasized. Students are encouraged to discover new design treatments for ceramic wares and to experiment with the adaptation of decorative processes to the demands of modern production. This work includes design for the lithographic process, the silk screen and underglaze print. Problem solutions are presented in three dimensional models, renderings and working drawings. Ceramic tests and actual production in the final material is carried out in courses 343 and 344. Five periods per week.
Five credit hours each semester.

Ceramics 341–342. Drawing-Design. Continuation of courses 335–336.
Two periods per week.
Two credit hours each semester.

Ceramics 343. Pottery Shop. Work in this course is closely related to that in courses 341 and 342. Advanced work in ceramic art. Industrial methods of decoration, including the decalcomania, silk screen, and underglaze printing process. Advanced work in bodies and glazes. The execution of individual creative problems in ceramic art.
Six laboratory periods per week, first semester.
Five credit hours.

Ceramics 344. Continuation of course 343.
Four laboratory periods per week, second semester.
Three credit hours.

Ceramics 344A. History of Ceramics. Lectures and reading on the history of ceramic art. Two periods per week, second semester.
Two credit hours.

Ceramics 345. Ceramic Calculations. A study of molecular weights of ceramic raw materials. The calculation of formulas and batches of raw and fritted glazes. Two lectures per week, first semester.
Two credit hours.

Ceramics 346. Thesis. Research and experimental work on some problem decided upon conference with the instructor.
Two laboratory periods per week.
Two credit hours each semester.

Ceramics 301–302. History of Art. Architecture, painting, sculpture and related crafts through the ages. The course begins with contemporary art. Two periods each week.
Two credit hours each semester.

Ceramics 303–304. Ceramic Raw Materials. A study of the formation, occurrence, properties and composition of the important ceramic raw materials, bodies, glazes and colors. Reactions during firing. Temperature measurements and indicators. Two lectures per week.
Two credit hours each semester.

Ceramics 348. Marketing of Ceramic Products.
Two lectures per week, second semester.
Two hours credit. For seniors only.

INDUSTRIAL MECHANICS

Industrial Mechanics 1–2. Engineering Drawing. The fundamental principles of drafting.
Three credit hours each semester.

Industrial Mechanics 3–4. Mechanical Drawing. A fundamental drafting course to acquaint the beginning art student with the graphical language used by engineers.
Two credit hours each semester.

Industrial Mechanics 31–32. Advanced Mechanical Drawing. Mechanical drawing which parallels the commercial design course for junior art students, to give them as much practical industrial training as possible.
Two credit hours each semester.

MATHEMATICS

Mathematics 5a–6a. College Algebra. A study of progressions, variation coordinates and graphs, simultaneous equations and determinants, exponents and radicals, the binomial theorem, complex numbers, partial fractions, and theory of equations. Much emphasis is given those algebraic manipulations which are important to the further study of mathematics.
Two hours each semester.

Mathematics 5b. Trigonometry. A study of the trigonometric functions and their applications.
Three hours.

Mathematics 6b. Analytic Geometry. An application of algebra and coordinate systems to the study of geometry, including an analysis of general loci and a detailed study of the straight line, the circle and the conic sections.
Three hours. Prerequisites, Mathematics 5a and 5b or their equivalents.

Mathematics 15–16. Calculus. The processes of differentiation and integration and their applications. Course 15 is offered each semester.
Four hours each semester. Prerequisites, Mathematics 5–6 or equivalents.

Mathematics 35–36. Mechanics. A thorough mathematical discussion of statics and kinetics using both analytical and graphical methods. The last half of the second semester is devoted to a general study of the main topics of Strength of Materials, using numerous problems. For Glass Technology students.
Three hours each semester. Prerequisites, Math. 15–16 and Physics 11–12.

Mathematics 37–38. Mechanics and Strength of Materials. A study of statics and kinetics, with emphasis on the determination of forces acting on bodies in equilibrium. Both analytic and graphic methods are used. Other topics included are center of gravity, moment of inertia, work, energy, and power. A large portion of the second semester is devoted to the study of strength of materials. For ceramic engineering students.
Four hours each semester. Prerequisites, Math. 15–16 and Physics 11–12.

PETROGRAPHY AND X-RAY ANALYSIS

Petrography 1. A course designed to prepare the student for the microscopic work ordinarily required in the average ceramic plant.
Two lectures and one laboratory period per week, first semester.
Three credit hours. Prerequisite, Ceramics 105.

Petrography 2. The practical use of the petrographic microscope in identifying natural and artificial minerals. Elective.
Two laboratory periods per week, second semester.
Two credit hours. Prerequisite, Petrography 1.

Applied X-rays. The study of X-ray diffraction as applied to the examination of ceramic materials.
Two lecture periods per week, second semester.
Two credit hours.

Applied X-ray Laboratory. Two laboratory periods per week, second semester.
Two credit hours.

PHYSICAL EDUCATION

Physical Education 1–2. Instruction is given in all the following activities: in the fall—football, cross-country, touch football, soccer, and tennis; in the winter—basketball, volley ball, wrestling, boxing, fencing, badminton, tumbling, games, contests and relays; in the spring—track, baseball, tennis and softball. Required of freshmen.
Two hours practice.
One credit hour each semester.

Physical Education 11–12. A continuation of 1–2 with more advanced instruction in skills of the various activities. Required of sophomores.
Two hours practice.
One credit hour each semester.

PHYSICS

Physics 11–12. General Physics. Lectures illustrated by demonstrations. Special emphasis placed on application of principles studied to natural phenomena and common occurrences of daily life. Laboratory experiments designed to supplement the theory.
Three lectures and one four-hour laboratory period, each semester.
Four hours. Prerequisites, Mathematics 5–6.

Physics 31. Heat. An advanced study of temperature, expansion, specific heat, heats of fusion and vaporization, change of state, transfer of heat, the laws of thermodynamics, kinetic theory of gases, isothermals, adiabatics, and the carnot cycle. Special emphasis placed on methods of measuring coefficients of expansion, specific heats, thermal conductivities, and other important constants.
Two lectures and one laboratory period, first semester.
Three hours. Prerequisites, Physics 11–12 and Mathematics 15–16.

Physics 32. Light. An advanced study of photometers, mirrors, lenses, interference, polarization and the visible spectrum.
Two lectures and one laboratory period per week, second semester.
Three hours credit. Prerequisites, Physics 11–12, Mathematics 15–16.

DEGREES IN COURSE

May 10, 1943

BACHELOR OF SCIENCE

(Department of Ceramic Engineering)

Lawrence Richardson Bickford, Jr.	Elmira
Marvin Gale Britton	Painted Post
Robert Baar Burdick	Alfred
*Edmund Stanley Chrzan	Olean
Wilfred Clay	Newburgh
Francis James DiLaura	Albion
Walter Hendrickson East	Patchogue
Richard Lee Galusha	Almond
George Arthur Jones	Sherrill
Paul Kopko	Yonkers
William Kopko	Yonkers
*Reginald Ray Miner	Teaneck, N. J.
Carl Robert Moebus	Lynbrook
Edward Loren Mooney	Norwich
Arthur Louis Powell	New York
James Charles Prokopec	Elmira Heights
John Forman Rainear	Valley Stream
Gerald Francis Rynders	Elmira
Murray Arthur Schwartz	Yonkers
Robert Ross Sinclair	Caledonia
*Garrison Pixley Smith	Orange, Texas
Benadetto Soldano	Utica
*Ernest Otto Tancous	New York
Douglas Jarvis Taylor	Glenolden, Pa.
James Root Tinklepaugh	Hornell
*Harold Lloyd Weaver	Olean

BACHELOR OF SCIENCE

(Department of Glass Technology)

James Merritt Brownlow	Elmira
Ramon Richard Iles	Deansboro
Howard F. Kingsbury	Elmira
Guy Edward Rindone	Grand Island
Jack Shaw Tuttle	East Rochester

* Degree granted in absentia.

BACHELOR OF FINE ARTS

(Department of Industrial Ceramic Design)

Jean Norris Brockett	Kenmore
Jane Wilson Brownlow	Batavia
Forrest Earl Burnham	Alfred
Reta Claire Farnham	Herkimer
Ailsa Mildred Johnstone	Binghamton
Constance Arey Koegler	Pittsford
Marvin Robert Krassner	Brooklyn
Jane Copeland Lawrence	Ridgewood, N. J.
Beverly Ann Leng	Loudenville
Lee Marion Linhoff	New York
Leon Jay Lippoff	New York
Norman Ruderman	Kew Gardens
James Robert Starkweather	Rochester
Elizabeth Stangl Thomas	Flemington, N. J.
Robert Frederick Timke	Hempstead

ADVANCED DEGREES

MASTER OF SCIENCE

Esther Wilma Miller	Rochester
John Gilbert Mohr	Ridley Park, Pa.

MASTER OF FINE ARTS

*Daniel Rhodes	Alfred

PROFESSIONAL DEGREES

CERAMIC ENGINEER

Horace Norton Clark	New York
Joseph Kruson	State College, Pa.

* Degree granted in absentia.

STUDENT ENROLLMENTS

1942–43

FRESHMEN

Name	Residence	Course
Adamo, Ralph Joseph	Waterloo	Engineering
Adams, Eunice Margaret	Spencerport	Design
Anderson, Herbert Harold	Port Allegany, Pa.	Engineering
Banks, Carolyn Elizabeth	Niagara Falls	Design
Basciani, Marie	East Rochester	Design
Beals, Ralph Winthrop, Jr.	Niagara Falls	Engineering
Beazell, William Henry, Jr.	Bradford, Pa.	Engineering
Bemis, Donald Melvin	Silver Creek	Engineering
Bennett, Marion Sisson	Wayland	Design
Blum, Seymour	Brooklyn	Engineering
Bovee, Frances Evelyn	Niagara Falls	Design
Breitsman, Willis John, Jr.	Medina	Engineering
Brennan, Constance Gratiaa	White Plains	Design
Bruner, Edward	New York City	Engineering
Carpenter, Eugene Ellis	Middletown	Engineering
Cottrell, Henry Loomis	Brooklyn	Engineering
Crawford, Charles Russell	Cameron Mills	Engineering
Currey, Alan Conklin	Pleasantville	Engineering
Daily, William Burton	Wellsville	Engineering
Davis, Nancy Ellen	Baldwinsville	Design
DePuy, Brewster Larson	Nunda	Engineering
Dick, Edward Francis	Garden City	Engineering
Diefendorf, Charles Ostrom	Silver Creek	Engineering
Dunbar, Violet Knauth	Kingston	Design
Dwyer, Stephen William	Utica	Engineering
Eagle, Norman	Staten Island	Engineering
Emhiser, Donald Edward	Painted Post	Engineering
Fenton, James Nathan	New York City	Engineering
Folts, Joanna Lou	Mt. Morris	Design
Foster, Barbara Ann	Rochester	Design
Goldstein, Kenneth	Woodburne	Engineering
Greene, Milton Covel, Jr.	Wellsville	Engineering
Harris, John Milton	Wellsville	Engineering
Hathaway, Ann	Niagara Falls	Design
Herzog, Lester Martin	New York City	Design
Holman, Eugene William	Ransomville	Engineering
Hooker, Anne Jane	Hornell	Design
Horton, Ralph William, Jr.	Stow	Engineering
Hurlburt, Richard Norton	Rochester	Engineering
Johnson, Madeleine Graham	Jamestown	Design
Jordan, Ralph James	Corning	Engineering
Kenney, Patricia Joan	Pelham	Design
Kerns, Dorothy Anne	Freeport	Design
Knowlton, Donald Eugene	Rochester	Engineering
Kourian, John Daniel	New York City	Engineering
Krazinsky, John Charles, Jr.	Horseheads	Engineering
Krieger, Janina	New York City	Design
Land, Joseph Albert, Jr.	Smithtown Branch	Engineering
Lesser, Barbara	Warren, Pa.	Design
Levy, Edna Ruth	Flushing	Design
Lippincott, Donald Richard	Alfred Station	Engineering
Locke, Elaine Judith	Brooklyn	Design
Longfritz, Robert Kirby	Mt. Morris	Engineering
MacIntyre, Donald John	Yonkers	Engineering

Name	Residence	Course
March, Sylvia Elaine	Hemstead	Design
Marder, Jean Adele	Mt. Vernon	Design
Miller, Robert Allen	Friendship	Engineering
Miner, Martha Elizabeth	Sherburne	Design
Occhipinti, Francis	New York City	Engineering
Ormsby, Walter Clayton	Alfred Station	Engineering
Pangborn, William Lewis	Spencerport	Engineering
Price, John Harold	Wayland	Engineering
Rodies, Horst Erwin	Wyandanch	Engineering
Schmidt, William George	Flushing	Engineering
Schwartz, Bernard	Yonkers	Engineering
Setchel, John Robert	Cuba	Engineering
Sheehan, James Ambrose	Canisteo	Engineering
Smith, Richard Earl	Auburn	Engineering
Stratton, Jarvis Cade	Malverne	Engineering
Swanson, Kathryn Leona	Coudersport, Pa.	Design
Thomson, Florence Marie	Olean	Design
Trost, Frank William	Bellerose	Engineering
Trzaskos, Stanley Joseph	Westport	Engineering
Utter, Jack Tousley	Cuba	Engineering
VanGaasbeek, Alice	Albany	Design
Walker, Charles Warner	Hempstead	Design
Walmsley, William Lloyd	Niagara Falls	Engineering
Watkins, Donald Bert	Painted Post	Engineering
Watkins, Richard Albert	Painted Post	Engineering
Whitcomb, James Paul	Oakfield	Engineering
Whiteford, John Richard	Buffalo	Design
Wight, Don Emerson	Lakewood, Ohio	Design
Wightman, Richard Clark	Avoca	Engineering
Wighton, Roger John	Mt. Vernon	Engineering
Winder, Jean Brooks	Norfolk, Va.	Design

SOPHOMORES

Aronsohn, Alan Jay	New York City	Glass
Baker, Ira Martin	Batavia	Engineering
Baker, Robert Lee, Jr.	Wellsville	Glass
Beard, Daryl Adelbert	Himrod	Glass
Bodian, Eugene Lionel	Brooklyn	Engineering
Bracken, Sara Grace	Rye	Design
Burchell, Gloria Jean	Mine Hill, N. J.	Design
Carabillo, John Anthony	Wappingers Falls	Glass
Carlson, David Alfred	Jamestown	Engineering
Collin, Robert Louis	Alfred	Engineering
Cook, Paul William	Bath	Design
Cooper, Alfred Robert, Jr.	White Plains	Glass
Cornish, Frank Lamane, Jr.	Naples	Glass
Coutant, Doris Jean	Highland	Design
Davidson, Martin Jay	Brooklyn	Engineering
Dobson, Isobel	Richfield Springs	Design
Dreyer, Donald Henry	Mt. Kisco	Engineering
Drozdowski, Eugene	New York City	Glass
Faulkner, Richard Dale	Bellerose	Glass
Faust, Ernest Henry, Jr.	Highland	Engineering
Fay, Lillian Elizabeth	Wallace	Design
Frost, Robert Dewey	Lewiston	Engineering
Gallagher, John Martin	Sangerfield	Engineering
Gere, Edwin Andrus, Jr.	Elmira	Glass
Ginther, Jeanne Margaret	Niagara Falls	Design
Gorton, Richard Mack	Olean	Engineering

Name	Residence	Course
Goss, Kenneth George	Merrick	Engineering
Groff, Robert Alfred	Elmira	Engineernig
Guillaume, David Flierl	Williamsville	Design
Haggerty, Fred Joseph, Jr.	Brooklyn	Engineering
Harley, Evelyn Virginia	Penn Yan	Design
Hicks, Robert John	Phelps	Engineering
Hoffman, Lewis Charles	New York City	Engineering
Hommel, Lawrence Granniss	Park Ridge, N. J.	Engineering
Jackson, Beatrice Carol	Batavia	Design
Johnson, Carl Emil	Woodhaven	Engineering
Kaiser, Charles Paul	Lynbrook	Engineering
Kershner, William George	Olean	Engineering
Kobernuss, Grace Ruth	Buffalo	Design
Kupinski, Thaddeus Adam	Utica	Engineering
Leinhos, Russell Frederick	Wellsboro, Pa.	Engineering
Lewin, Warren Leslie	New York City	Engineering
Lindsly, Jo Ann	Des Moines, Iowa	Design
Lorey, George Edwin	Freeport	Glass
McCormick, Jeanne Marie	Lewiston	Design
McWilliams, Frederick Frank	Rochester	Glass
Maguire, Margaret Harold	Rutherford, N. J.	Design
March, Christian Laurin, Jr.	Hempstead	Design
Miscall, Marilynn	Ithaca	Design
Moore, Patricia Ann	Bolivar	Design
Mosher, Lester William	Rochester	Glass
Muenzenmaier, Marjorie	Bellerose	Design
Nelson, Paul Edward	Ardsley	Glass
Parker, Harry	Irving	Engineering
Paul, Wortley Browning	Buffalo	Engineering
Penny, Rodney Edward	Hampton Bays	Glass
Phillips, Jack Elmer	East Quogue	Engineering
Post, Benjamin Franklin	Albany	Engineering
Pozefsky, Abbott	Gloversville	Engineering
Rabinowitz, Joel Stanley	New York City	Engineering
Reuning, George William, Jr.	Wellsville	Glass
Robbins, Francine Miriam	Brooklyn	Design
Sargen, Rita Mildred	New York City	Design
Saunders, Alfred Clarke	East Rochester	Engineering
Schweiger, Marvin	Middletown	Engineering
Shear, Raymond Fred	Wellsville	Engineering
Sims, Helen Ruth	New Rochelle	Design
Staples, Thomas Richard	Auburn	Engineering
Storper, Samuel Jack	New York City	Engineering
Suga, Arthur Makoto	Medford	Engineering
Wiggins, Thomas Eugene	Brooklyn	Glass
Wightman, Charles William, Jr.	Almond	Engineering
Witzleben, William Howard	Ebenezer	Engineering

JUNIORS

Babcock, Martha Anne	Rochester	Design
Baker, John Carlton	Franklinville	Glass
Barnes, Harry Hamilton	Williamsville	Engineering
Bates, Edgar Auser	Snyder	Glass
Berger, Ellis Steven	New York City	Engineering
Bowman, Robert Richards	Elmira	Engineering
Brady, Charles Peper	Bellerose	Engineering
Bray, Jane Kirby	Elmira	Design
Breckon, Haldred Charles	Lewiston	Engineering
Bunnell, Lowell Avery	Middleport	Engineering

Name	Residence	Course
Busch, John Henry	Penfield	Glass
Bussell, Olivia Louise	Ithaca	Design
Campbell, Cory Verle	Oakfield	Engineering
Chapin, Mary Eleanor	Whitesville	Design
Colburn, Robert Bruce, Jr.	Oneonta	Engineering
Cornwell, George Lamoreaux	Blasdell	Engineering
Deyerling, Carl Lester	Batavia	Engineering
Dwinelle, James Dana	Syracuse	Engineering
Elston, Howard Keith	Albany	Engineering
Fitzsimmons, Elmer Scott	Oakfield	Engineering
Gallen, Gerald	Brooklyn	Design
Garvey, Lawrence Peter	Long Island City	Engineering
Gibbo, Margaret Mary	Albany	Design
Greenspan, LeRoy	New York City	Engineering
Grove, Thomas Henry	Wayland	Engineering
Hathaway, Augustus Jeremiah, III	Niagara Falls	Engineering
Heebner, John Culver	Stewart Manor	Engineering
Hickey, Frank Jackson, Jr.	Yonkers	Engineering
Hopkins, William Fenn	Buffalo	Glass
Howe, Carolyn Phipps	Ithaca	Design
Hughes, Ruth Anne	Syracuse	Design
Ingham, David Manley	Ripley	Engineering
Kaplowitz, Fred	Spring Valley	Engineering
Kelem, Louis	Brooklyn	Engineering
Klein, Frank James	Forest Hills	Design
Knapp, Thomas Edward	Cobleskill	Engineering
Kulakowich, Andrew Andreivitch, Jr.	Hastings-on-Hudson	Glass
Lange, Robert Voss	Oneonta	Glass
Large, Rhoda Louise	Glen Head	Design
Lowe, Richard Saunders	Geneseo	Engineering
Ludwig, Urban Wilbert	Jamaica	Glass
McAllister, Mary Jane	Ithaca	Design
Mason, Marian Marie	Oakfield	Design
Merriman, Seth Grant	Utica	Glass
Nadler, Marion Ronald	Homer	Glass
Phillips, Donald Grey	Olean	Engineering
Powell, John Arthur	Jamestown	Engineering
Pozefsky, Leo	Gloversville	Engineering
Rieck, Charles Henry, Jr.	Bloomingdale	Glass
Roberts, Mervin Francis	Far Rockaway	Glass
Rulon, Richard Mayhew	Sayville	Glass
Schmidt, George Earl, Jr.	Rochester	Engineering
Sherman, Jeanne	Rochester	Design
Stockwell, Norma Elaine	Wilson	Design
Taylor, Walter Ellsworth, Jr.	Westbury	Engineering
Thurston, Jane Hamil	Montrose	Design
Tiftickjian, John	Buffalo	Engineering
Tooke, Ida Jane	Alfred	Design
Tucker, Jean Margaret	Rochester	Design
Turnbull, Robert Charles	Canisteo	Glass
Waldron, Kenneth Austin	Phoenix	Glass
Willson, Victor James	Cuba	Engineering
Wilson, Maurice Scott	Mercerville, N. J.	Engineering
Wilson, Roger Earl	Lockport	Engineering
Young, Robert Wesley	Yonkers	Engineering

SENIORS

Bickford, Lawrence Richardson, Jr.	Elmira	Engineering
Boros, John	New York City	Engineering
Britton, Marvin Gale	Painted Post	Engineering

Name	Residence	Course
Brockett, Jean Norris	Kenmore	Design
Brownlow, James Merritt	Elmira	Glass
Brownlow, Jane Wilson	Elmira	Design
Burdick, Phillip Fairbank	Kenmore	Engineering
Burdick, Robert Baar	Alfred	Engineering
Burnham, Forrest Earl	Alfred	Design
Clay, Wilfred	Newburgh	Engineering
DiLaura, Francis James	Albion	Engineering
East, Walter Hendrickson	Patchogue	Engineering
Farnham, Reta Claire	Herkimer	Design
Fink, Howard Delmar	Elmira	Glass
Galusha, Richard Lee	Almond	Engineering
Hauth, Willard Ellsworth, Jr.	Niagara Falls,	Engineering
Iles, Ramon Richard	Deansboro	Glass
Jacobi, Carl Henry	New York City	Engineering
Johnstone, Ailsa Mildred	Binghamton	Design
Jones, George Arthur	Sherrill	Engineering
Koegler, Constance Arey	Pittsford	Design
Kopko, Paul	Yonkers	Engineering
Kopko, William	Yonkers	Engineering
Krassner, Marvin Robert	Brooklyn	Design
Lawrence, Jane Copeland	Ridgewood, N. J.	Design
Leng, Beverly Ann	Loudonville	Design
Linhof, Lee Marion	Rochester	Design
Miner, Reginald Ray	Teaneck, N. J.	Engineering
Moebus, Carl Robert	Lynbrook	Engineering
Mooney, Edward Loren	Norwich	Engineering
Powell, Arthur Louis	New York City	Engineering
Prokopec, James Charles	Elmira Heights	Engineering
Rainear, John Forman	Valley Stream	Engineering
Rindone, Guy Edward	Grand Island	Glass
Rodies, Heinz George	Wyandanch	Engineering
Ruderman, Norman	Kew Gardens	Design
Ryan, Frederick Francis	Brooklyn	Engineering
Rynders, Gerald Francis	Elmira	Engineering
Schwartz, Murray Arthur	Yonkers	Engineering
Sinclair, Robert Ross	Caledonia	Engineering
Soldano, Benadetto	Utica	Engineering
Starkweather, James Robert	Rochester	Design
Tancous, Ernest Otto	New York City	Engineering
Timke, Robert Frederick	Hempstead	Design
Tinklepaugh, James Root	Hornell	Engineering
Tuttle, Jack Shaw	East Rochester	Glass

GRADUATES

Crandall, William Brooks	Alfred	Engineering
Miller, Esther Wilma	Rochester	Engineering
Mohr, John Gilbert	Ridley Park, Pa.	Glass
Timiriasieff, Vivien Place	Caledonia	Design

SUMMARY

Graduates	4
Seniors	46
Juniors	65
Sophomores	73
Freshmen	85
Total	273

STUDENT ENROLLMENTS

1943–44

FRESHMEN

Name	Residence	Course
Adams, Ruth Grace	Croton-on-Hudson	Design
Bassett, William Leon	Alfred	Engineering
Beerman, Henry Peter	Hewlett	Engineering
Brown, Colin Campell	Hornell	Engineering
Bunnell, Kevin Paul	Middleport	Engineering
Burdick, Robert Edwin	Adams Center	Engineering
Case, Douglass Ackerly	Buffalo	Design
Clark, Frederick Dorr	Silver Creek	Engineering
Dewey, Philip Lloyd	Hornell	Engineering
Gaffney, Robert Francis	Attica	Engineering
Guillaume, Barbara Fliere	Williamsville	Design
Harper, Margaret Elizabeth	Rochester	Engineering
Heasley, James Henry	Patchogue	Engineering
Hyde, Barbara Jane	Fort Covington	Engineering
Joerger, David Joseph	Sea Breeze	Engineering
Karpel, Jewell	Gloversville	Engineering
Longfritz, Beverly June	Mt. Morris	Design
Lore, Margaret Ann	Central Lake, Mich.	Design
McKenna, Marion Louise	Bellerose	Engineering
McKinstry, Herbert Alden	Avoca	Engineering
Meissner, Paul Edward	Wellsville	Engineering
O'Connor, Edward Leo	Hornell	Engineering
Orzano, Michael John	Rockville Center	Engineering
Potter, Francis Mitchell	Port Washington	Engineering
Powell, David Ralph	Jamestown	Engineering
Rodies, Eva Maria	Wyandanch	Design
Rubin, Henry	Far Rockaway	Engineering
Saunders, Hannah Arlotta	Alfred	Design
Seaman, Donald Edward	Hornell	Engineering
Snow, Lloyd James	Whitesville	Engineering
Thomson, James Keith	Bellmore	Engineering
Weinrib, David	Brooklyn	Design
Weintraub, David Leon	New York	Engineering
Wright, Mary Janet	Suffern	Design

SOPHOMORES

Adams, Eunice Margaret	Spencerport	Design
Banks, Carolyn Elizabeth	Niagara Falls	Design
Basciani, Marie	East Rochester	Design
Bovee, Frances Evelyn	Niagara Falls	Design
Davis, Nancy Ellen	Baldwinsville	Design
Dunbar, Violet Knauth	Hurley	Design
Eames, William Joseph	Brooklyn	Engineering
Folts, Joanna Lou	Mount Morris	Design
Goldstein, Kenneth	Woodbourne	Engineering
Hooker, Anne Jane	Hornell	Design
Kenny, Patricia Joan	Pelham	Design

Name	Residence	Course
Krieger, Janina	Forest Hills	Design
Levy, Edna Ruth	Flushing	Design
Locke, Elaine Judith	Brooklyn	Design
March, Sylvia Elaine	Hempstead	Design
Miner, Martha Elizabeth	Sherburne	Design
Ormsby, Walter Clayton	Alfred	Engineering
Rodies, Horst Erwin	Wyandanch	Engineering
Swanson, Kathryn Leona	Coudersport, Pa.	Design
VanGaasbeek, Alice Boyd	Albany	Design
Walmsley, William Lloyd	Niagara Falls	Engineering

JUNIORS

Burchell, Gloria Jean	Mine Hill, N. J.	Design
Collin, Robert Louis	Alfred	Engineering
Cook, Paul William	Bath	Design
Cornish, Frank Lamane, Jr.	Naples	Engineering
Coutant, Doris Jean	Highland	Design
Dobson, Isobel	Richfield Springs	Design
Faulkner, Richard Dale	Bellerose	Glass Tech.
Faust, Ernest Henry, Jr.	Highland	Glass Tech.
Fay, Lilliam Elizabeth	Wallace	Design
Fitzroy, Marilynn Miscall	Ithaca	Design
Hauth, Jeanne Ginther	Niagara Falls	Design
Jackson, Beatrice Carol	Batavia	Design
Kobernuss, Grace Ruth	Buffalo	Design
Kupinski, Thaddeus Adam	Utica	Glass Tech.
Leinhos, Russell Frederick	Painted Post	Glass Tech.
Muenzenmaier, Marjorie	Bellerose	Design
Nakamura, Henry Hiroshi	Chicago, Ill.	Engineering
Phillips, Jack Elmer	East Quogue	Engineering
Pozefsky, Abbott	Gloversville	Engineering
Rabinowitz, Joel	New York	Engineering
Robbins, Francine Miriam	Brooklyn	Design
Sargen, Rita Mildred	New York	Design
Saunders, Alfred Clarke	East Rochester	Engineering
Sims, Helen Ruth	New Rochelle	Design
Storper, Samuel Jack	New York	Engineering
Suga, Arthur Makoto	Medford	Engineering
Witzleben, William Howard	Ebenezer	Glass Tech.

SENIORS

*Bray, Jane Kirby	Elmira	Design
Busch, John Henry	Holcomb	Glass
Bussell, Olivia Louise	Ithaca	Design
*Campbell, Cory Verle	Oakfield	Engineering
Chapin, Mary Eleanor	Whitesville	Design
Cornwell, George Lamoreaux	Blasdell	Engineering
Dever, Patricia Moore	Bolivar	Design
Feeney, Marian Mason	Oakfield	Design
*Fitzsimmons, Elmer Scott	Oakfield	Engineering
Gibbo, Margaret Mary	Delmar	Design
Heasley, Martha Babcock	Rochester	Design
Hickey, Frank Jackson, Jr.	Yonkers	Engineering

Name	Residence	Course
*Hopkins, William Fenn	Buffalo	Glass
Howe, Carolyn Phipps	Buffalo	Design
*Ingham, David Manley	Ripley	Engineering
†*Jacobi, Carl Henry	New York	Engineering
*Kaplowitz, Fred	Spring Valley	Engineering
*Kelem, Louis	Brooklyn	Engineering
*Knapp, Thomas Edward	Cobleskill	Engineering
Kulakowich, Andrew Andreivitch, Jr.	Hastings-on-Hudson	Glass
*Large, Rhoda Louise	Glen Head	Design
*Lowe, Richard Saunders	Geneseo	Engineering
McAllister, Mary Jane	Ithaca	Design
McCormick, Jeanne Marie	Lewiston	Design
*Phillips, Donald Grey	Olean	Engineering
*Powell, John Arthur	Jamestown	Engineering
*Pozefsky, Leo	Gloversville	Engineering
*Rieck, Charles Henry, Jr.	New Hartford	Glass
†*Rodies, Heinz George	Wyandanch	Engineering
*Rulon, Richard Mayhew	Sayville	Glass
Sherman, Jeanne	Rochester	Design
*Stockwell, Norma Elaine	Wilson	Design
*Waldron, Kenneth Austin	Phoenix	Glass
*Wilson, Maurice Scott	Trenton, N. J.	Engineering

* Graduated on December 19, 1943, Winter Commencement.
† Work completed in Summer School.

SUPPLEMENT

It is manifestly impossible to present in a college catalogue a complete description of the work of the college. In order to ascertain what the institution has to offer it is necessary to visit it when it is in regular operation. Prospective students, prospective employees of students and anyone interested are invited to inspect the institution. A member of the faculty will be glad to conduct visitors through the buildings and explain all the operations. However, we are supplementing this catalogue with a few pictures that present some aspects of the college that may be of some informational value.

The World's Fair exhibit picture shows some of the ceramic products made by the students and a student potter at work throwing a vase. The building depicted in the second picture is the main building of the college. There is another building of about equal size. A new building program is to be started immediately following the war which will more than double the present facilities. The other three pictures give glimpses of some of the many laboratory operations carried on in ceramic design, ceramic technology, and ceramic engineering. They give some idea of the extensive variety of equipment used and operations involved.

The main building of the College of Ceramics

Industrial Ceramic Design

Ceramic Technology

Ceramic Engineering