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VI

# UNDERGRADUATE INSTRUCTION

#### Introduction

Undergraduate teaching and learning are at the core of NJIT's mission. The university prepares students for a range of professional positions, an endeavor requiring balance between general and specialized courses. (See Table 6.1 for current list of undergraduate degree programs.) The General University Requirements (GUR) are designed to ensure that all graduates develop a broad range of abilities that they can apply responsibly to their professional, public and personal lives. Professional programs are designed to prepare students for entrylevel positions in engineering, computer science, applied sciences and mathematics, architecture, management and other technological fields, as well as for graduate studies.

In general and professional education, the university seeks to offer teaching of superior quality and access to an appropriate range of instructional resources. The university's commitment to educating a diverse undergraduate student body entails not only recruiting and admitting qualified students from non-traditional backgrounds, but providing appropriate programs and services so that those with lesser relative initial preparation proceed through the program without any sacrifice of traditional academic standards.

Because NJIT adjoins the Rutgers-Newark campus, and because both institutions are state universities with generally similar objectives, a sharing of resources can further these goals and expand the educational opportunities available to NJIT students. Such a relationship is a strategic alliance designed to strengthen both institutions.

The ability of the university to meet its goals depends substantially on its student population, course offerings and the quality of its faculty. Accomplishments and concerns in these areas are crucially linked with NJIT's ability to achieve its objectives. The following sections analyze general education, professional education, the student academic profile, the quality of instruction, retention, extracurricular activities and student rights.

#### **General Education**

In a public technological university, general education emerges from a threefold environmental context. As in any institution of higher learning, general education must contribute to a student's intellectual growth. In addition, general education requirements may be structured to emphasize the development of academic abilities that have professional usefulness. The university is also accountable to state initiatives in this area.

Since the 1982 Middle States visit, NJIT has seen innovative changes in general education motivated by its internal and external environments. Internally, the faculty has struggled with the question of how to strengthen a common core of learning while allowing each professional program to shift course requirements

#### Table 6.1

### Undergraduate Degrees offered by NJIT

Degrees Offered by the School of Architecture

B. of Architecture

Degrees Offered by the School of Industrial Management

\*B.S. in Management

Degrees offered by the Newark College of Engineering

B.S. in Applied Chemistry

Dept.: Chemical Engineering, Chemistry, and

**Environmental Science** 

B.S. in Chemical Engineering

Dept.: Chemical Engineering, Chemistry and Environmental Science

B.S. in Civil Engineering

Dept.: Civil and Environmental Engineering

\*B.S. in Computer Engineering

Dept.: Interdisciplinary

Directed by: Electrical and Computer Engineering

B.S. in Electrical Engineering

Dept.: Electrical and Computer Engineering

B.S. in Engineering Science Dept.: Interdisciplinary

Directed by: Chemical Engineering, Chemistry, and Environmental Science

Options: Premedical (BS/MD) with UMDNJ Predental (BS/DMD) with UMDNJ

B.S. in Engineering Technology Dept.: Engineering Technology

Options: Computer Engineering Technology Construction and Contracting Engr'g.

Technology

Electrical Engineering Technology

Manufacturing Engineering

Technology

Mechanical Engineering Technology Surveying Engineering Technology

B.S. in Industrial Engineering

Dept.: Mechanical and Industrial Engineering

\*B.S. in Manufacturing Engineering

Dept.: Interdisciplinary

Directed by: Mechanical and Industrial Engineering

B.S. in Mechanical Engineering

Dept.: Mechanical and Industrial Engineering

Degrees Offered by the College of Science and Liberal Arts

\*B.S. in Applied Mathematics

Dept.: Mathematics

\*B.S. in Applied Physics

Dept.: Physics (with Rutgers)

Options: Microelectronics

Computer Physics Nuclear Science

B.S. in Computer Science

Dept.: Computer and Information Science

B.A. in Computer Science

Dept.: Computer and Information Science (with

Rutgers)

B.A. in Information Systems

Dept.: Computer and Information Science (with

Rutgers)

B.S. in Materials Science and Engineering (pending

approval)

Dept.: Interdisciplinary Directed by: Physics

\*B.S. in Science, Technology, and Society

Dept.: Interdisciplinary

Directed by: Social Science and Policy Studies

Options: Environmental Studies Communications

Science and Technology Policy

Medicine and Society

Urban Studies

History and Philosophy of Technology

B.S. in Statistics and Actuarial Science

Dept.: Mathematics

Options: Actuarial Science

Statistics

<sup>\*</sup>Initiated since 1987

relatively quickly in response to a varying environment. The solution was to add structure by having area requirements for a core curriculum and flexibility by altering the procedures necessary for curriculum modification.

Ten years ago, NJIT had no single common list of core area requirements for all students, although certain individual courses were required of everybody. Each department set its own curriculum requirements; if change was needed, it required a majority vote of the full university faculty. With the growth in the number of degree programs, the faculty voted to establish a list of general university requirements (GUR) constituting core learning for all students and to simplify the procedures for changing a curriculum so that departments could modernize their offerings as necessary. NJIT's GUR is designed for students planning careers within NJIT's mission. Students may select from a variety of courses in English, mathematics, the natural sciences, computer science, cultural history, social sciences, humanities, management, engineering technology and physical education.

Under the plan of curriculum review, a department wishing to alter internal requirements for its own degree can make the changes by majority vote of department members and concurrence of the dean. If the change involves other departments, it requires majority votes of the departments affected and their respective deans. This plan for curriculum revision has been effective in maintaining the GUR while enabling the mechanical and electrical engineering programs, for example, to effect substantial revisions in their professional offerings.

Interinstitutional cooperation, particularly with Rutgers-Newark, has also expanded student options and opportunities. An agreement of cooperation was signed by NJIT's President and Rutgers' Provost in February 1991 to formally articulate and widely disseminate the goals of the evolving consortial relationship. Beginning with the Spring 1991 semester, NJIT's registration information lists literature, social science, philosophy and history courses offered at

Rutgers. While NJIT students have always been able to take appropriate Rutgers courses for credit, this cross-listing heightens the visibility of these offerings. This relationship with Rutgers-Newark is advantageous because it extends students' liberal arts choices in a time of scarce resources. The proximity of Rutgers-Newark, however, does not substitute for development by NJIT of general education courses whenever these might be better suited for its student population. The two universities will seek to maintain parity in this relationship, with Rutgers publicizing NJIT courses adequately for its students and giving NJIT students and faculty adequate notice of changes in its course offerings.

With GUR in place, it is important that NJIT monitor course offerings to ensure that the sequence continues to be appropriate to the university's mission in a changing world. This means that before students begin the regular GUR curriculum, the university should provide effective remediation where necessary. The GUR is currently undergoing review with the goal of better providing a basic undergraduate education for a changing student population.

Several recent curricular developments have led to the reexamination. First, critical thinking is being treated as an interdisciplinary subject that warrants attention on all levels of the curriculum. Testing procedures for critical thinking are being used in several specific programs in the sophomore and senior years. Next, special attention is being given to strengthening writing requirements across the curriculum, including introductory composition, technical writing, business writing, and writing in senior engineering and architecture projects. A new Writing Center in the College of Science and Liberal Arts is coordinating these writing programs. In addition, the mathematics GUR now includes introductory courses specifically tailored for the different needs of engineering, architecture, and management students. Finally, introductory courses in the social sciences and humanities are giving increased attention to international multicultural, race and gender

subjects. As a result of these efforts, the entire GUR is being considered for possible major restructuring, consistent with recommendations of the accrediting agencies for engineering, architecture and management.

#### **Professional Education**

A primary NJIT mission is the preparation of professionals for leadership in a global economy. Educating engineers has been the university's mission for more than seventy years. A majority of current undergraduates major in one of eight engineering fields with electrical and mechanical engineering the two most popular. Today, NJIT's Newark College of Engineering also offers programs in engineering technology and applied chemistry. In addition, students can matriculate in the School of Architecture and the School of Industrial Management. The College of Science and Liberal Arts offers majors in computer science, its most popular program; applied physics; applied mathematics; statistics and actuarial science; and Science, Technology and Society (STS).

This diversity offers a stimulus to useful interdisciplinary activities but also necessitates careful attention to resource allocation to ensure that each program has adequate support. The consortial relationship with Rutgers-Newark seeks to maximize resource use. For example, the required freehand drawing class in NJIT's undergraduate architecture program is offered by Rutgers, and STS is designated as a cooperative major. In addition, NJIT faculty teach all the upper-level computer science courses required for the joint Rutgers-Newark/NJIT B.A. degrees in Computer Science and Information Systems.

NJIT is alert to the need to develop new programs as appropriate. Leadership for such development may come from the faculty, department chairpersons, or senior administrators. Recommendations for new programs or options also come from members of the various industrial advisory boards. Various perspectives on a proposed program are analyzed

by the Committee on Academic Affairs which consists of senior administrators and department chairpeople. All professional programs seek to develop in students the technical skills, problemsolving abilities and ethical sensitivities necessary for effective professional practice. Departments often add or delete courses to ensure that their curricula remain up-to-date in these areas. Since the last Middle States visit, virtually all programs have undergone minor revisions using the new system where only affected departments and/or colleges need approve changes. The former Bachelor of Science in Industrial Administration, for example, has been restructured into a contemporary management curriculum in the School of Industrial Management.

Sensitivity to ethical issues must be a cornerstone of professional education. Faculty can promote such sensitivity by integrating ethical concerns into existing courses, developing special courses in ethics and introducing ethics as a topic in senior-level capstone courses. A specialist in moral philosophy and applied ethics has recently joined the faculty to reinforce the university's commitment to teaching ethics across the curriculum. He has worked to initiate courses in engineering ethics, environmental ethics and business ethics, and is involved with the engineering departments in adding an emphasis upon ethics in a variety of professional courses. As a result, some engineering curricula already include a one-credit required course in ethics and professionalism. It is also encouraging to note that NJIT students have become increasingly interested in promoting an ethics-aware campus, as evidenced by the Student Senate's proposing the adoption of a university honor code.

## The Student Academic Profile

Data indicate, on average, relative stability in recent years with respect to the overall academic profile of incoming NJIT freshmen. The average high school rank of incoming freshmen has been at the 76th

percentile for much of the past decade. SAT scores have fluctuated somewhat, but with no significant difference between the 1981 and 1991 results. In 1981, the combined average was 1032, with a math score of 574 and a verbal score of 458. The comparable numbers ten years later were 1062, 597 and 465 respectively. There was some growth during the first half of the decade followed by a slight decline during the last five years, but the thirty point difference between the 1981 and 1991 combined scores falls well within one standard deviation.

Evidence suggests, however, that recent freshman classes enter NJIT with a wider range of academic preparedness. The Honors Program has attracted approximately 300 outstanding students to NJIT, about half of whom immediately pursue graduate studies at such institutions as Massachusetts Institute of Technology, Stanford, Cornell, Johns Hopkins and Carnegie Mellon Universities; the others have gone on to positions in some of the nation's most widely recognized corporations. At the same time, NJIT has sought to attract larger numbers of students who are both educationally and economically disadvantaged.

Educating populations who have been underrepresented in technological and scientific professions is not only a matter of equity; in large measure, these individuals represent the future of the U.S. economy. Lower levels of student preparedness, however, present a special challenge to NJIT given the rigor of its curriculum and the importance of maintaining high academic standards. The number of conditionally admitted students has more than doubled in recent years from an average of forty between 1982 and 1988 to just over eighty between 1989 and 1991. This was the result of a considered decision testifying to NJIT's continuing efforts to provide access to students who, under regular admissions standards, would not have qualified as NJIT students. Special admits typically are students who have low SAT scores, above average grades and a strong class rank, as well as apparently high levels of motivation.

NJIT takes pride in its efforts to increase student access, but recognizes that this requires special support services. The results of the State's Basic Skills Placement Examination, administered to all entering freshmen, provide a useful picture of the level of preparedness of new students in verbal and mathematical skills. During the early 1980s, NJIT freshmen scored well above the senior public sector in all areas and above Rutgers in all but verbal ability. Concern has been expressed, however, over a pattern of declining verbal skills beginning in the early 1980s. Data from the New Jersey Basic Skills Council's 1991 annual report show, for example, that 14% of the entering class in 1981 lacked proficiency in verbal skills; that number rose to 23% in 1990. Moreover, in all the subskills measured by that test, the standard deviation has increased among new NJIT students, suggesting growing academic disparity among incoming students.

Special programs are in place to help students who are not adequately prepared to meet the rigorous demands of the curriculum. In addition to the University Learning Center under EOP auspicies, a faculty-staffed Language Learning Center offers one-to-one and small group tutorial assistance in reading and writing. Sequenced remedial mathematics and English courses, as well as slower paced courses in chemistry and physics, are provided for incoming students based upon course placement exams and related academic profile data. (See Appendix 5)

Conditionally admitted freshman students are required to take a reduced course load and participate in the University Learning Center and study skills program. Preliminary data on the large group of conditional admits who entered in Fall 1989 and 1990 suggest that the strategy of increasing this cohort of students and providing them with strong support systems has validity. There is no difference in the first to second year retention rates of the regularly and conditionally admitted students in those years, and the mean grade point average of approximately 2.5 would seem to indicate that many conditionally admitted students are capable of doing above

average work. Several years of confirming data will, of course, be necessary. Moreover, the increasing number of conditional admits calls for expanded efforts to meet these students' needs.

The growing number of language minority students also contributes to the changing profile of the NJIT student body. Based on an annual survey of incoming freshmen, for approximately 40%, English is not the primary language spoken at home. This is consistent with statewide trends which led recently to the establishment by the Board of Higher Education of the New Jersey Council for the Education of Language Minority Students to formulate educational policy for developing programs in support of these students. (President Fenster chairs this board.)

To serve NJIT's language minority students, English as a Second Language (ESL) has received increased emphasis. Four years ago, there were two ESL teachers and two courses. Today, there is a program director and seven additional people teaching an increasingly wide array of courses. Five of these individuals devote fifty percent or more of their teaching time to ESL; all have special experience in this area and four have Ph.D.s. Enrollment in ESL more than tripled between 1986-87 and 1989-90, and the Fall 1990 enrollment of 291 students represents a 33.5% increase over the previous Fall. More than half of these students were undergraduates, representing approximately forty countries. As many as eight percent of the freshman class presently enroll in ESL, most of whom (75%) are not classified as international students.

Six undergraduate ESL courses are now offered, including two semester courses that precede the required freshman English composition course, which is also offered as an ESL option. The focus in these is reading and writing (unlike the graduate level ESL courses, which are principally conversational). Two other ESL courses fulfill requirements in Humanities and Technical Writing. In addition, an innovative ESL section of Twentieth Century American Literature was recently introduced. The last three courses were developed with support from

the Department of Higher Education's Ethnolinguistic Grant Program. NJIT is, in fact, the only institution in the State to receive an award each year since the inception of the grant program.

To better ensure that all students begin the required NJIT curriculum, both the GUR and professional courses, at comparable levels of preparedness, a proposal has been developed to offer a pre-professional program to entering students who are underprepared in mathematics and English. Still in draft after more than a year of work by the committee, the proposal is undergoing extensive review and thoughtful input from the deans, chairpersons and members of the faculty. The approach is designed to provide greater coherence and cohesiveness to a process that had been developing on an ad hoc basis over the past several years. It will systematically provide a set of curricular options specific to individual student capabilities, with slower paced math and English immersion courses as two possible approaches.

Students may be assigned to the preprofessional program at the time of admission, following placement testing, or after completing the summer EOP component. It is designed to replace the existing program for conditional admits but will be available to regularly admitted students as well. Issues being carefully considered include the implications of the program for participating faculty and its potential impact on NJIT's Learning Center.

## **Quality of Instruction**

Instructional quality depends upon the expertise and commitment of the faculty, as well as providing them and their students with access to appropriate educational resources. NJIT has high expectations regarding faculty commitment to students. Neither tenure nor promotion is awarded to individuals who do not evidence strong commitment to teaching regardless of their other achievements.

How to promote superior teaching is the subject of much campus discussion and debate.

As NJIT has evolved from an undergraduate engineering college to a comprehensive technological university, faculty responsibilities have shifted from an exclusive focus on undergraduate teaching to include research and graduate instruction. The commitment to undergraduate teaching remains an important goal, however. One might convincingly argue, in fact, that with the appointment of large numbers of research faculty, classroom vitality has increased and greater attention is being paid to maintaining curricula at the state of the art. Increased opportunities are also available for undergraduates to participate in faculty research. With few exceptions, faculty teach both undergraduate and graduate courses without protest. Nevertheless, NJIT must remain alert to the dangers of promoting research at the expense of teaching, particularly at the undergraduate level.

Another area of concern is the impact of a more diverse student body on teaching. Faculty may need to consider reconceptualizing their teaching methods and the resources necessary to sustain excellence. This calls for improving teaching strategies in a more explicit manner than previously.

For many years, NJIT has given an annual award to the outstanding teacher of the year. The recipient is chosen on the basis of student and alumni surveys. The Van Houten Award has achieved some level of prestige on campus and has been a factor in the promotion of selected individuals. In 1988, the university initiated annual Excellence in Teaching awards to underscore the importance of instruction. There are two awards for teachers at professorial ranks, one for lower and one for upper division courses; one for a special lecturer; and one for a teaching assistant or adjunct. An award for graduate instruction is also made.

NJIT has also increased on-campus resources available to faculty who wish to improve their teaching. A Master Teacher program enables interested faculty to work in pairs, with each team member observing the classes of his or her peer, talking to the other's

students and generally working together to strengthen instructional skills. Each college also uses student evaluation forms and provides the data collected as part of the promotion and tenure process. In addition, the Newark College of Engineering fully and regularly compiles and analyzes these data to assist in the improvement of instruction. Implementation of this system across all colleges could serve as a useful vehicle for faculty development.

To support instruction, NJIT has also made a significant investment in computer hardware, software, personnel and training. Accrediting team members and others have confirmed that the level of computing intensiveness has placed NJIT at the forefront of academic computing nationally. Since 1985, computers have been provided to all full-time incoming freshmen and to faculty teaching freshman courses using microcomputers. Beginning in 1987, the students have assembled their own machines from components, and in 1990, the system was upgraded to PC-ATs. In addition, students receive a basic software package including word processing, spreadsheet, graphics and statistics software, as well as software in a number of subjects and functional areas. There is a continuing effort to increase the integration of computers into courses, using the available resources to maximum advantage.

Despite these extensive efforts, there are still faculty and students who believe that teaching is not sufficiently rewarded at NJIT; promotion and salary increases are viewed as more likely to come as a result of publication and research. Such perceptions can erode faculty commitment to their teaching responsibilities. Existing programs should be more widely supported and publicized. These efforts, combined with additional visible attempts to identify, highlight and reward superior instruction could moderate existing perceptions.

A major challenge lies in how to better define and measure superior teaching. This is a difficult task at which NJIT, not unlike many other higher education institutions, has not been entirely successful. If we are to continue to

improve the quality of teaching at NJIT, it is important to determine what is meant by high quality teaching and on what basis rewards are made to those who meet the highest standards. Sufficient rewards are in place to recognize faculty for teaching quality. What is needed is a better assessment process which is uniformly implemented across campus (by chairpersons, and departmental and university promotion and tenure committees, among others) and widely recognized for its effectiveness. Components might include peer observation; standardized, professionally designed evaluation forms; analysis of student performance in subsequent courses; a mentoring system in which faculty recognized as being especially effective teachers work with their peers to improve the overall effectiveness of teaching within their discipline; and peer team teaching activities. It has been suggested that the Committee on Academic Affairs assume responsibility for examining NJIT's teaching evaluation and reward mechanisms and make recommendations for improvement. Its responsibilities should include defining high quality teaching and identifying more effective assessment tools.

#### Retention

NJIT maintains retention data on all students who have entered NЛТ as first-time freshmen since 1982. (See Appendix 6) The period of greatest attrition in college is between the first and second years. The university has made recent advances in retaining students into their sophomore year. During the period 1982-84, 70.5 % of NJIT's freshmen returned for their second year; during the period 1985-90, 79.7% of the freshmen returned. This improvement speaks to the effectiveness of increased efforts to work with new students. Responsibility for retention efforts, previously assigned to a university committee whose membership changed regularly, has been redirected to the Office of Student Services. Whereas in 1982, faculty committees of changing composition administered the freshman chemistry, engineering graphics and

computer science courses, the cognizant departments have since created special staff positions combining teaching duties with continuing administrative responsibility for freshman-level courses

Beginning in Fall 1990, a new administrative position, Dean of Freshman Studies, was established to ensure the successful education of all incoming students (first-time freshmen and transfers). The dean coordinates freshman advising, a freshman seminar program and a newly initiated early academic warning system. Students enrolled in 100 level courses are notified if they are in academic difficulty during the fifth week of the semester, thus providing greater opportunity for intervention. In addition, an Office of Academic Advisement reporting to the Dean of Freshman Studies has been proposed; this office would coordinate the freshman advising program and provide administrative support for high-quality advisement to undergraduate students, particularly those who are at-risk academically.

While progress has clearly been made in supporting freshmen, graduation rates over the same period indicate the need for increased efforts to help students complete their degree programs within a reasonable period of time. National data reveal that the assumption that college is a four-year activity is increasingly less valid; many students require five or more years to complete their undergraduate studies. This is especially true in colleges with rigorous professional engineering and architecture programs. Although 32-38% of NJIT freshmen who entered with the 1982-84 classes have earned degrees (with another 10-20% still matriculating), only about 14-17% earned them within four years. The five-year retention rate for these students varies between 50% and 57%, a figure that compares favorably with the national average for public institutions.

Retention and graduation of Black students remain a concern. These students return for their second year at about the same rate as other students, but their graduation rate lags behind the total. For instance, the percentage of majority students who enrolled as freshmen in 1983 and graduated by January 1, 1989 was 60.5%, but the percentage for Black students was 42.3%. The five-year retention rate for Black students varies between 29% and 42%, almost 20 points behind the total. In comparison, retention and graduation rates for Hispanic students come close to those of the entire class, and rates for Asian students exceed those of the total cohort.

One hypothesis for the relatively high freshman-sophomore retention rates but low graduation rates for Black students is that most such students enter through the Educational Opportunity Program which provides the highest level of academic support during the first year of study and gradually decreases the level of support as students advance through the curriculum. This suggests the need for increased academic support of EOP students in their second year and beyond.

Another major problem facing minority students is lack of financial resources. For many of these students, college represents foregone earned income necessary to support their families. It has been estimated that about sixteen percent of the EOP students do not have the funds to remain in school and cover their other expenses and leave for that reason. This suggests the need for a review of the criteria for calculating financial aid packages. A more equitable approach might require aggressive packaging that includes room and board, books, and other non-traditional items. Additional support sources would help alleviate the problem.

## Cocurricular Programs

Physical Education and Athletics at NJIT include programs of skills instruction, intramural and intercollegiate competition, sports clubs and open recreation offered in a modern indoor recreational facility and a multi-purpose outdoor area. For more than twenty years, NJIT students have also enjoyed the use of a theater facility on campus. Typically, two full productions are staged each year, and professional drama courses are offered by the Department of

Humanities. The program is currently developing a federation with the Theater and Television majors at Rutgers University - Campus at Newark.

Another opportunity for NJIT students is the Aerospace Studies option offered through the Air Force Reserve Officer Training Corps program. Two to four-year programs, which include course work and field training, may lead to an Air Force commission.

NJIT offers many student chapters of professional, ethnic and special interest organizations. Most bring to the campus speakers from industry who talk about technical topics, career alternatives and ethics issues. Many of these speakers are recent graduates, often alumni, who interact easily with students. Some groups also encourage community involvement such as tutoring high-school students and special community projects.

While professional organizations can help socialize members into the norms of their profession, extracurricular activities may also foster interdisciplinary problem solving. With NJIT's variety of programs, students in each can gain insights from those in other fields when the university arranges opportunities for students in different organizations to work in teams on extracurricular projects.

## Student Rights

At the NJIT convocation in Fall 1991, Chancellor of Higher Education Edward Goldberg presented "a bill of rights to guide all of us in higher education." It was focused on students, "the key to our enterprise... our customers to whom we must render quality service." This declaration has since been widely promulgated and debated. Recognizing the appropriateness of the Chancellor's vision and taking pride in the extent to which we comply, NJIT quickly adopted the bill of rights and pledged to incorporate it into the university's planning process. The goal is to ensure that every student has the opportunity to secure the best higher education available. To achieve this

#### requires that:

- Students have the ability to act as informed consumers through access to information provided by colleges and universities on class size, graduation rates, job placement and other characteristics.
- Students have access to support services necessary to reach graduation.
- Students are guaranteed the opportunity for a smooth transition to college, including assistance in securing financial aid, academic advising, child care and part-time jobs.
- Students are afforded every opportunity to be linked in some important way with the institution, through, for example, small classes, service projects, faculty research and co-curricular activities.

- Students are guaranteed that they, not the subject matter, are at the center of faculty activity.
- Curricula incorporate the most current knowledge in each field, and facilities and equipment are state-of-the-art.
- The campus climate fosters learning in a culture of diversity and openness.
- The highest standards of academic excellence are maintained with students expected to perform to the best of their abilities.

We believe that NJIT embodies these principles as evident throughout this report. Continuing efforts will be made, however, to identify areas for possible improvement.