

### III. Other Institutional Information

#### III.A. Number of Collaborative Academic Programs

##### Collaborative Academic Programs

###### *Joint Programs*

- Rutgers - The State University, Newark Campus
- University of Medicine and Dentistry of New Jersey (UMDNJ)

###### *Joint programs with Rutgers - The State University, Newark Campus include:*

- Applied Mathematics (B.A.) 270301
- Applied Physics (B.S.) 400899
- Biology (B.A.) 260101
- Biology (B.S.) 260101
- Computer Science (B.A.) 110101
- Environmental Science (B.S.) 030102
- Geoscience Engineering (B.S.) 141601
- History (B.A.) 450801
- Human Computer Interaction (B.S.)
- Information Systems (B.A.) 110401
- Industrial Engineering (B.S.) 143501
- Applied Physics (M.S.) 400899
- Biology (M.S.) 260101
- Computational Biology (M.S.)
- Environmental Science (M.S.) 030102
- History (M.A.T.) 131328
- History (M.A.) 450801
- Public Health (M.P.H.) 512201
- Applied Physics (Ph.D.) 400899
- Biology (Ph.D.) 260101
- Environmental Science (Ph.D.) 030102
- Mathematical Sciences (Ph.D.) 270101
- Public Health (M.P.H.)
- Urban Systems (Ph.D.)

###### *Joint programs with the University of Medicine and Dentistry of New Jersey include:*

- Nursing (M.S.N., Nursing Informatics Track only)

- Public Health (*M.P.H.*) 512201
- Biomedical Engineering (Ph.D.) 104501
- Urban Systems (Ph.D.) 459999

*Joint Research Programs – Centered at NJIT*

- Center for Solar Research (NJIT, Cal. Tech.)
- Hazardous Substance Management Research Center (NJIT, UMDNJ, Rutgers, Princeton, Stevens)
- Microelectronics Research Center (NJIT, Rutgers, Columbia)
- Multi-Lifecycle Engineering Research Center (NJIT, Rutgers, Princeton, Stevens)
- National Center for Transportation and Industrial Productivity (NJIT, Rutgers)
- New Jersey Program for Engineered Particulates (NJIT, Princeton, Rutgers)
- New Jersey Center for Micro-Flow Control (NJIT, Princeton)
- New Jersey Center for Multimedia Research (NJIT, Princeton)
- New Jersey Center for Transportation Information and Decision Engineering (NJIT, Princeton)
- New Jersey Center for Internet Security (NJIT, Princeton, Stevens)
- New Jersey Center for Wireless Telecommunications (NJIT, Rutgers, Princeton, Stevens)
- New Jersey MEMS Initiative: From Concept to Commercialization (NJIT, Rutgers, Columbia)
- Northeast Hazardous Substance Research Center (NJIT, UMDNJ, Rutgers, Princeton, Stevens, Tufts, MIT)
- Polymer Engineering Center (NJIT, Stevens)

*Research Partnerships Centered at Other Institutions*

- Center for Airborne Organics (MIT, NJIT, Cal. Tech.)
- Center for Applied Genomics (NJIT, UMDNJ)
- Center for Embedded System-On-a-Chip Design (Princeton, Rutgers, NJIT)
- Center for Ultra-fast Laser Applications (Princeton, Rutgers, NJIT, UMDNJ)
- New Jersey Center for Biomaterials and Medical Devices (Rutgers, UMDNJ, Princeton, NJIT)
- Collaborative Telemedicine Environments (Rutgers, NJIT, UMDNJ)
- New Jersey Center for Optoelectronics (Princeton, NJIT)
- New Jersey Center for Pervasive Computing (Princeton, NJIT, Rutgers)
- Particle Processing Research Center (Rutgers, NJIT)
- Phytoremediation of Dredge Spoils Using Living Plants/Associated Microorganisms (Rutgers, NJIT)
- Software Engineering for Distributed Computing and Networking (Stevens, Rutgers, NJIT)

*NJIT's articulation arrangements*

NJIT currently has articulation arrangements with the following 18 institutions:

- Bergen Community College
- Brookdale Community College
- Burlington County College
- Camden County College
- County College of Morris
- Cumberland County College
- Essex County College
- Hudson County Community College
- Mercer County College
- Middlesex County College
- Ocean County College
- Passaic County Community College
- Raritan Valley County College
- Union County College
- Lincoln University of Pennsylvania
- Seton Hall University
- Stockton State College
- William Peterson University

### **III.B. Number of Collaborative Student Service and Administrative Programs**

#### *Collaborative Student Service and Administrative Programs*

- South Jersey Economic Development Network (NJIT, Burlington, Cumberland, Georgian Court, Ocean, Salem, UMDNJ)
- Council for Higher Education in Newark (NJIT, Rutgers-Newark, Essex, UMDNJ)
- University Heights Science Park (NJIT, Rutgers-Newark, UMDNJ)
- Cross registration of courses (NJIT, Rutgers-Newark, Essex, UMDNJ)
- Joint student cultural events (NJIT, Rutgers-Newark)
- Joint shuttle bus service (NJIT, Rutgers-Newark)
- Joint library privileges and interlibrary loan arrangements (NJIT, Rutgers-Newark)
- Coordination of security and public safety programs (NJIT, Rutgers-Newark)
- Federated Department of History (NJIT, Rutgers-Newark)
- Federated Department of Physics (NJIT, Rutgers-Newark)
- Southern CIM Consortium (NJIT, Camden + 5 additional county colleges)
- Northern/Central Advanced Technology Consortium
- Joint admissions programs (NJIT, Bergen, Burlington, Essex, Hudson, Mercer, Middlesex, Ocean, Union) Cooperative agreement on B.S. in Engineering Science/M.D. or D.M.D. sequence (NJIT, UMDNJ)
- Articulation agreements (NJIT, 18 county colleges)
- Sharing of facilities: extension sites (NJIT, Bergen, Drew, Mercer, Paterson, Ramapo, Raritan)
- Energy Conservation Committee (NJIT, Rutgers-Newark)
- Joint street cleaning program (NJIT, Rutgers-Newark)
- Consortium for Pre-College Education in Newark (NJIT, Rutgers-Newark, UMDNJ)
- Communiversity
- New Jersey Higher Education Network

### **III.C. The Process for Assessing Outcomes for Graduates**

NJIT assesses outcomes for graduates through a program that includes multiple measures and surveys. Most programs of the college include exit examinations and projects completed in capstone courses. In addition, all graduates have the opportunity to participate in the survey program conducted by the Office of Institutional Research and Planning. In order to help in assessing outcomes for graduates, the program surveys graduating students, alumni, and employers of NJIT graduates. General results from the surveys include the Graduating Student Survey, and Alumni Survey.

#### **III.C.1. Graduating Student Survey**

The Graduating Student survey was redesigned in Fall 2007 to improve its assessment effectiveness in its delivery via the web. The survey instrument consists of 36 questions relating to achievement of goals, self-assessment of acquired skills and knowledge, and items evaluating academic programs and student services. Graduates were also asked to describe current employment and educational plans

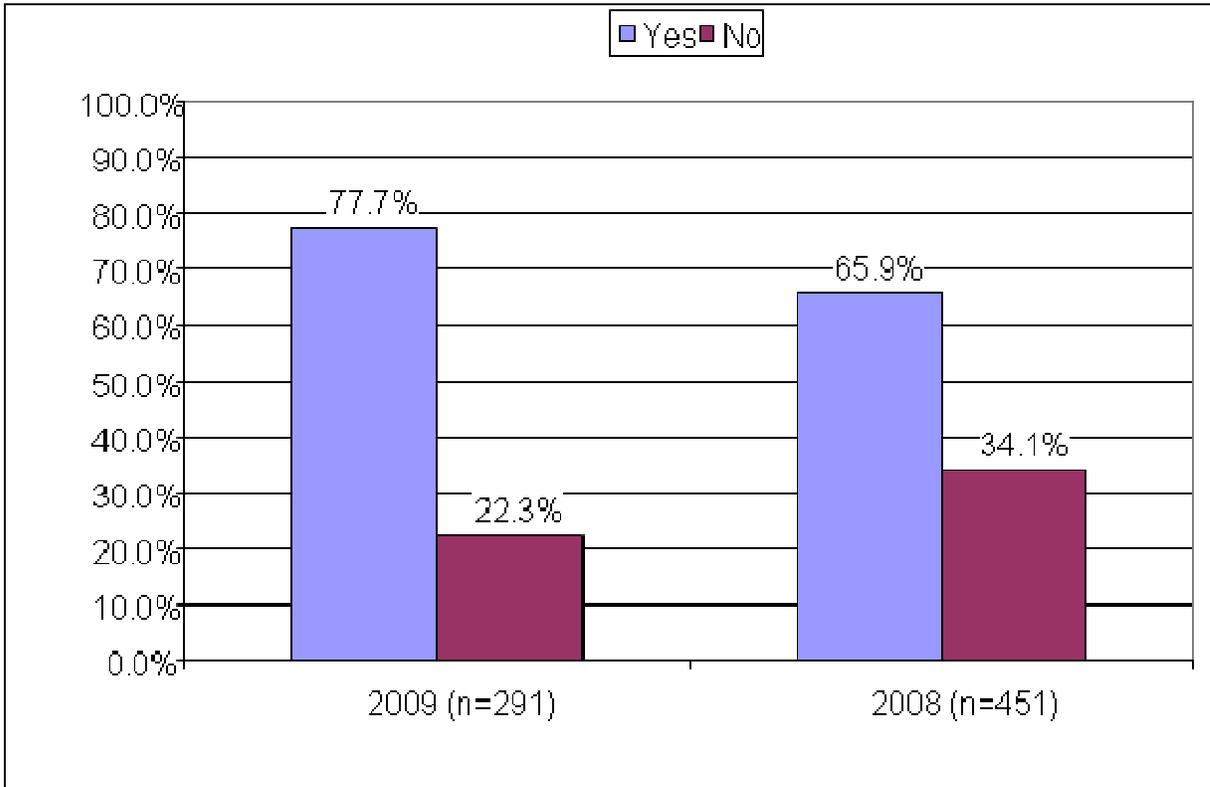
For Spring 2009, both graduating undergraduate and graduate students rated NJIT highly on a five point scale (5=high, 1=low). The current difficult economic climate has had an effect on our graduates. Compared to last year, the mean for the educational goal, improved ability to make more money declined for graduating undergraduate students (3.73 to 3.48) and graduate students (3.52 to 3.24). There was also a decline in the ratings of preparation to enter job market and helpfulness of financial aid services especially for graduating graduate students.

The National Association of College and Employers reported that 19.7 percent of college seniors who were seeking a job got one. Previously, 26 percent of those graduating in 2008 who had applied for a job had one in hand by the time of graduation (see <http://www.naceweb.org/press/display.asp?year=&prid=301>). The NJIT undergraduate full-time employment rate is substantially better than the national average.

Our graduating undergraduate full-time employment rate is about 36 percent or about 16 percent higher than the national average (19.7 percent). It is interesting to note that the overall average starting salary for undergraduates is about 2.5 percent higher than last year.

More undergraduates are planning to go to graduate school. About 78 percent of the undergraduate graduates plan on attending graduate school. This is a 12 percent increase from last year. While the rate of attending graduate school immediately within the year is the same as the previous year, 58 percent will be full-time students which is an increase of 19 percent. See table on next page.

**Graduating Undergraduate Students Spring 2009 Survey**  
**Q30. Are you planning to attend graduate school?**



Forty-two percent of graduating undergraduate students plan on attending a graduate program in engineering. As compared to last year, more of them intend to enroll in computer/information technology programs, engineering and liberal arts.

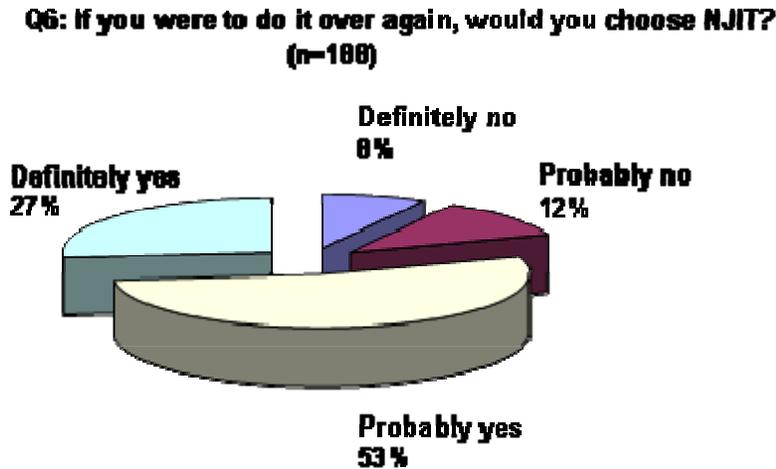
Compared to our undergraduate employment rate, graduating graduate students have fared better in the competition for jobs. Forty percent reported full-time employment which is only a 5 percent decrease from last year. Ninety-four percent has a job related to their field. Compared to last year, the overall average starting salary for graduating graduate students fell from \$63,350 to \$57,979. Fifty percent of the graduating graduate students found new employment.

**III.C.2. Alumni Survey**

In Spring of 2008, after an environmental scan of our peers, the Alumni survey was revised with input from Advancement and Career Development services. The instrument consisted of 26 items that asked alumni to rate their overall experience, assess their skill development, academic program and alumni services. Alumni were also asked if they had undertaken further formal education and their employment status. An email invitation and subsequent email reminders were sent to all alumni who graduated in the last three years. Many of the respondents reported that classes, professors and classmates were the most meaningful part of their university experience. If they had to choose a

college again, 80 percent of the respondents would choose NJIT, this is identical to the Fall 2005 Alumni survey response.

### Alumni Survey Spring 2008



*General professionalism of the program, faculty relationship with the students, relevance of the program in major to job performance and intellectual atmosphere* were rated good/excellent by approximately 60 percent or more of the respondents. More than 65 percent rated their skills (i.e., problem solving, computer skills, science, program specific skills and mathematics) as good/excellent. Nearly 80% percent are satisfied with their NJIT experience. Fifty-eight percent reported that NJIT prepared them well for their career/profession.

Within three years of graduation, 85 percent of NJIT graduated were employed full-time, and 82 percent have job related to their major. Since graduating, 30 percent have undertaken further formal education. More than 50 percent sought a Master's degree and 24 percent pursued a doctorate or other professional degree. Seventy-one percent plan on seeking further formal education in the future.

### III.C.3. Tracking by Office of Career Development, Faculty & Others

In addition to the survey program, numerous other mechanisms are in place that help to provide NJIT with feedback and information about graduates. The Office of Career Development conducts a survey of graduates at the time of graduation, and this survey occurs approximately 1 month after the graduating student survey. At the time of graduation, the number of students reporting that they are employed increased several percentage points across all levels. Many alumni of NJIT continue to participate in the life of the NJIT community through membership in the alumni association, advisory boards established for academic programs, and through other events. Such participation generally includes the opportunity to advise NJIT on the graduate's experiences, achievements, and recommendations regarding programs.

**III.D. Degrees****III.D.1. Bachelor's Degrees Awarded in Fiscal Year 2009**

<b>CIP Code</b>	<b>Institutional Program Title</b>	<b>Total</b>
030104	Environmental Science	2
040201	Architecture	106
040201	Industrial Design	3
110101	Computer Science	46
110103	Information Technology	66
110401	Information Systems	24
140501	Biomedical Engineering	44
140701	Chemical Engineering	38
140801	Civil Engineering	54
140901	Computer Engineering	34
141001	Electrical Engineering	53
141301	Engineering Science	9
141401	Environmental Engineering	2
141901	Mechanical Engineering	74
143501	Industrial Engineering	12
150000	Engineering Technology	119
231101	Professional & Technical Communication	5
260101	Biology	19
261103	Computational Biology	1
270101	Mathematical Sciences	31
301501	Science Technology and Society	4
400501	Chemistry	3
400899	Applied Physics	5
520201	Management	102
540101	History	5
	<b>Total</b>	<b>861</b>

**III.D.2. Master's Degrees Awarded in Fiscal Year 2009**

<b>CIP Code</b>	<b>Institutional Program Title</b>	<b>Total</b>
030104	Environmental Science	8
040201	Architecture	33
040301	Infrastructure Planning	6
110101	Computer Science	154
110199	Emergency Management & Business Continuity	1
110401	Information Systems	72
110901	Internet Engineering	3
140501	Biomedical Engineering	70
140701	Chemical Engineering	9
140801	Civil Engineering	45
140804	Transportation Engineering	15
140901	Computer Engineering	12
141001	Electrical Engineering	112
141001	Telecommunications	37
141401	Environmental Engineering	3
141801	Materials Science and Engineering	4
141901	Mechanical Engineering	39
143501	Industrial Engineering	19
143601	Manufacturing Engr/Manufacturing Systems Engineering	14
149999	Pharmaceutical Engineering	28
151501	Engineering Management	91
231101	Professional & Technical Communication	8
260101	Biology	6
261103	Computational Biology	12
270301	Applied Math	11
270501	Applied Statistics	7
400501	Chemistry	5
400899	Applied Physics	1
440501	Environmental Policy Studies	10
520201	Management	29
520299	Management of Technology	79
521101	International Business	1
	<b>Total</b>	<b>944</b>

**III.D.3. Doctoral Degrees Awarded in Fiscal Year 2009**

<b>CIP Code</b>	<b>Institutional Program Title</b>	<b>Total</b>
110101	Computer Science	4
110401	Information Systems	6
140501	Biomedical Engineering	4
140701	Chemical Engineering	5
140804	Transportation Engineering	4
140901	Computer Engineering	2
141001	Electrical Engineering	7
141401	Environmental Engineering	2
141801	Materials Science and Engineering	6
141901	Mechanical Engineering	7
143501	Industrial Engineering	2
260101	Biology	1
270101	Mathematical Sciences	6
400501	Chemistry	1
400899	Applied Physics	3
	<b>Total</b>	<b>60</b>