



Annual Institutional Profile Report

2021



Submitted to the
New Jersey
Office of the Secretary of Higher Education
by
The Office of Institutional Effectiveness
New Jersey Institute of Technology

September 2021



September 17, 2021

New Jersey Institute of Technology (NJIT) takes great pride in presenting this Institutional Profile to the State of New Jersey. This report highlights our efforts in education, scholarly and applied research, economic development, and engagement during Fiscal Year 2021.

NJIT has much to celebrate. Thanks to the efforts of our dedicated faculty and staff, we continue to be recognized for our success in graduating students ready for the challenges of the 21st century workforce by *U.S. News and World Report*, *The Princeton Review*, *Forbes*, and other national and international ranking agencies. The *Times Higher Education Impact* rankings, based on the United Nation's Sustainable Development Goals, ranked us 90th globally for Affordable and Clean Energy and 2nd nationally for Decent Work and Economic Growth.

Despite the restrictions necessitated by the pandemic, our faculty were highly successful in obtaining funded research grants this year, with awards exceeding FY2020 totals by almost 20%. This growing research portfolio has placed us on the list of 131 Very High (R1) Research Activity doctoral institutions according to the Carnegie Classification of Institutions of Higher Education, positioning us as one of only three R1 universities in New Jersey along with Princeton University and Rutgers New Brunswick.

NJIT is committed to continuing and expanding our contributions to our state, the nation, and the world. We continue to support our host city of Newark through a number of initiatives including the Mayor's Scholarship, a collaboration with the Office of Newark Mayor Ras J. Baraka, and we continue to be recognized by *U.S. News and World Report*, PayScale, and other ranking organizations for our excellent return on investment that facilitates the upward socio-economic mobility of our students.

This Institutional Profile Report highlights NJIT's continuing commitment to the State of New Jersey and to its citizens. All information supplied in this document is, to the best of my knowledge, complete and accurate.

Sincerely on behalf of NJIT,

Joel S. Bloom
President

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SECTION I – NEW JERSEY INSTITUTE OF TECHNOLOGY

New Jersey Institute of Technology (NJIT) was founded in 1881 as the Newark Technical School, becoming the Newark College of Engineering in 1930. Today, NJIT has six schools and colleges: Newark College of Engineering (1930), the College of Architecture and Design (1973), the College of Science and Liberal Arts (1982), the Martin Tuchman School of Management (1988), the Albert Dorman Honors College (1993), and the Ying Wu College of Computing (2001).



NJIT has evolved from a commuter school teaching applied engineering skills to a nationally ranked public research university. This evolution has been achieved through an aggressive faculty recruitment plan matched by an extensive building effort that doubled the size of the main campus over the past decade and added major research facilities for environmental engineering and science, advanced manufacturing, microelectronics and life sciences.

Enrollment increased from 6,300 students in 1979 (the first year for which there is publicly available federal data) to over 11,600 students in the fall of 2020. Total research expenditures in fiscal year 2020 amounted to over \$156 million.

At the same time, NJIT remains true to its urban mission and its commitment to helping motivated and talented students overcome educational challenges. In early 2018, Forbes ranked NJIT #1 among their Best Value Colleges for student economic upward mobility. That is, of Forbes' Best Value Colleges, NJIT had the highest percentage of students from the bottom fifth of the income distribution moving into the top fifth. The study is based on an analysis by The Equality of Opportunity Project, comparing the financial status of a student's family before they enter college and the graduate's earnings after college.



NJIT's 48-acre, computing-intensive, residential campus is located in the University Heights section of Newark, less than 10 miles from New York City and Newark International Airport. It is easily reached by interstate highways and public transportation. Graduate, undergraduate, and continuing education classes are offered at the main campus, at extension sites at colleges and other locations throughout New Jersey, and increasingly through a variety of electronically-mediated distance learning formats.

NJIT Mission Statement

NJIT, the state's public polytechnic research university, is committed to excellence and global impact through:

- Education—preparing diverse students for positions of leadership as professionals and as citizens through innovative curricula, committed faculty, and expansive learning opportunities
- Research—advancing knowledge to address issues of local, national, and global importance with an emphasis on high impact basic, applied, and transdisciplinary scholarship
- Economic development—anticipating the needs of business, government, and civic organizations to foster growth, innovation, and entrepreneurship
- Engagement—applying our expertise to build partnerships, serve our community, and benefit society as a whole



These four elements guide NJIT in contributing solutions for the grand challenges of the future and improving the quality of life today.

SECTION II – DATA BY CATEGORY

A. Accreditation Status

II.A.1 Institutional Accreditation

New Jersey Institute of Technology as an institution is accredited by the following organization:

Middle States Commission on Higher Education (MSCHE)



II.A.2 Professional Accreditation

Association to Advance Collegiate Schools of Business (AACSB)

Accreditation Board for Engineering and Technology (ABET)

Council for Interior Design Accreditation (CIDA)

National Architectural Accrediting Board (NAAB)

National Association of Schools of Art and Design (NASAD)



II.A.3 Statement of Accreditation Status

STATEMENT OF ACCREDITATION STATUS

The Statement of Accreditation Status (SAS) is the official statement of the Middle States Commission on Higher Education (MSCHE) about each institution's current accreditation status and scope of accreditation. The SAS also provides a brief history of the actions taken by the Commission.

Institution: NEW JERSEY INSTITUTE OF
TECHNOLOGY Newark, NJ

Address: University Heights
Newark, NJ 07102-1982

Phone: (973) 596-3000

URL: www.njit.edu

Accreditation Liaison Officer (ALO): Dr. Eugene Deess

Commission Staff Liaison: Dr. Melissa Hardin, Vice President

Accreditation Summary

For more information, see the Commission's [Accreditation Actions Policy and Procedures](#).

Phase: Accredited

Status: Accreditation Reaffirmed

Accreditation Granted: 1934

Last Reaffirmation: 2017

Next Self-Study Evaluation: 2021-2022

Next Mid-Point Peer Review: 2026

Alternative Delivery Methods

The following represents approved alternative delivery methods included in the scope of the institution's accreditation:

Distance Education

Approved to offer programs by this delivery method

Correspondence Education

Not approved for this delivery method

Credential Levels

☑ **Approved Credential Levels**

The following represents credential levels included in the scope of the institution's accreditation:

- **Bachelor's Degree or Equivalent**
Included within the scope:
- **Post-baccalaureate Certificate**
Included within the scope:
- **Master's Degree or Equivalent**
Included within the scope:
- **Doctor's Degree- Research/Scholarship**
Included within the scope:

Locations

The following represents branch campuses, additional locations, and other instructional sites that are included within the scope of the institution's accreditation:

Location	Type
Beijing University of Technology Beijing China	Additional Location
NJIT@Jersey City 101 Hudson St Jersey City, NJ 07302	Additional Location
Central High School (NPS) 246- 18th Avenue Newark, NJ 07103	Other Instructional Site
East Orange Board of Education 199- 4th Avenue East Orange, NJ 07040	Other Instructional Site
Essex County Vocational Technical Schools 91 West Market Street Newark, NJ 07103	Other Instructional Site
High Point Regional High School 299 Pidgeon Hill Road Sussex, NJ 07461	Other Instructional Site
Hillside High School 195 Virginia Street Hillside, NJ 07205	Other Instructional Site
John E. Dwyer Technology Academy 123 Pearl Street Elizabeth, NJ 07201	Other Instructional Site
Manasquan High School 167 Broad Street Manasquan, NJ 08736	Other Instructional Site
Morris County School of Technology 400 East Main Street Denville, NJ 07834	Other Instructional Site

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<p>Mt. Olive High School 18 Corey Rd Flanders, NJ 07836</p>	Other Instructional Site
<p>New Brunswick Public Schools 268 Baldwin Street, PO Box 2683 New Brunswick, NJ 08901-2683</p>	Other Instructional Site
<p>Northern Highlands Regional High School 298 Hillside Avenue Allendale, NJ 07642</p>	Other Instructional Site
<p>Northern Valley Regional High School 162 Knickerbocker Road Demarest, NJ 07627</p>	Other Instructional Site
<p>Passaic Valley Regional High School East Main Street Little Falls, NJ 07424</p>	Other Instructional Site
<p>Paterson School District- John F. Kennedy Complex 61-127 Preakness Avenue Paterson, NJ 07522</p>	Other Instructional Site
<p>Rising Star Academy 4613 Cottage Place Union City, NJ 07087</p>	Other Instructional Site
<p>Roselle Park High School 510 Chestnut Street Roselle Park, NJ 07204</p>	Other Instructional Site
<p>School District High School, Warren County Technical High School 1500 Route 57 Washington, NJ 07882</p>	Other Instructional Site
<p>Sojourn High School 80 Duryea Street Newark, NJ 07103</p>	Other Instructional Site
<p>St. Benedict's Preparatory 520 Dr Martin Luther King Jr Blvd Newark, NJ 07103</p>	Other Instructional Site
<p>Sojourn High School 80 Duryea Street Newark, NJ 07103</p>	Other Instructional Site
<p>St. Benedict's Preparatory 520 Dr Martin Luther King Jr Blvd Newark, NJ 07103</p>	Other Instructional Site
<p>The Academy for Math, Science & Engineering- Morris County 520 W Main St Rockaway, NJ 07866</p>	Other Instructional Site

The Academy for Math, Science & Engineering- Morris County 520 W Main St Rockaway, NJ 07866	Other Instructional Site
West Morris Central High School 259 Bartley Rd Chester, NJ 07930	Other Instructional Site
West Morris Mendham High School 65 E Main St Mendham, NJ 07945	Other Instructional Site
West Orange School District 179 Eagle Rock Avenue West Orange, NJ 07052	Other Instructional Site
Woodbridge Township District High School (Colonia High School) 180 East Street Colonia, NJ 07067	Other Instructional Site

Definitions: For definitions of branch campus, additional locations, or other instructional sites, see the [Commission's Substantive Change Policy and Procedures](#).

Accreditation Actions

The following represents the MSCHE accreditation actions taken in the last ten (10) years. For more information, see the [Commission's Accreditation Actions Policy and Procedures](#) and the [Substantive Change Policy and Procedures](#).

June 17, 2020	To acknowledge receipt of the substantive change request. To note the institution's decision to close the additional location at 1200 Old Trenton Road, Windsor, NJ 08550. To require immediate notification when instruction ceases at the additional location. To note that the Commission reserves the right to rescind approval of this substantive change if any developments reveal additional information that might have affected the Commission's decision and/or the requested substantive change is not implemented within one calendar year from the date of this action. The next evaluation visit is scheduled for 2021-2022.
April 30, 2019	To acknowledge receipt of the substantive change request. To include the additional location at NJIT@Jersey City, 101 Hudson Street, Jersey City, NJ 07302 within the institution's scope of accreditation. To note that the Commission may rescind this action if instruction does not commence within one calendar year from the date of this action. The next evaluation visit is scheduled for 2021-2022.
November 16, 2017	To accept the Periodic Review Report, to reaffirm accreditation, and to commend the institution for the quality of the report and the PRR process. The next evaluation visit is scheduled for 2021-2022.
July 5, 2017	To acknowledge receipt of the substantive change request. To include the additional location at Mercer County Community College, 1200 Old Trenton Road, Windsor, NJ 08550 within the scope of the institution's accreditation. The Commission requires written notification within thirty days of the commencement of operations at this additional location. Operations at the additional location must commence within one calendar year from the date of this action. To note that the Periodic Review Report has been received and will be acted upon by the Commission at the November meeting.
March 6, 2014	To accept the progress report. The Periodic Review Report is due June 1, 2017.
August 1, 2013	To note the institution never opened the additional locations in Kochi, India and Thiruvananthapuram, India. To also note that approval has lapsed and to remove the contractual agreement with NeST Group of Companies and these additional locations from the institution's accreditation.
June 28, 2012	To reaffirm accreditation. To request a progress report, due December 1, 2013, documenting evidence of steps taken to strengthen shared governance (Standard 4). The Periodic Review Report is due June 1, 2017.
February 28, 2012	To acknowledge receipt of the substantive change request and to include the contractual agreement with NeST Group of Companies and the additional locations in Kochi, India and Thiruvananthapuram, India, provisionally within the scope of the institution's accreditation, pending a site visit to one of these locations within six months of commencing operations. The Commission requires written notification within thirty days of the commencement of operations at these additional locations. In the event that operations at the additional locations do not commence within one calendar year from the approval of this action, approval will lapse. The next evaluation visit is scheduled for 2011-2012.

Information about the Middle States Commission on Higher Education

The Middle States Commission on Higher Education (MSCHE) is one of seven institutional accrediting organizations in the United States and is recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA). MSCHE accreditation applies to an institution as a whole rather than the specific programs within an institution. MSCHE does not approve or accredit individual programs. The MSCHE accreditation review cycle is continuous and accreditation does not expire. Each institution is reevaluated and monitored on a regular and consistent basis in accordance with the institution's assigned accreditation review cycle and Commission policy and procedures. An institution maintains its accreditation unless it is voluntarily surrendered or withdrawn by the Commission for cause, after the institution has been afforded due process. The institution's current accreditation phase and accreditation status are displayed on the institution's listing in the Institution Directory and in the Statement of Accreditation Status (SAS).

B. Number of Students Served

NJIT served 11,652 enrolled students in the fall of 2020.

II.B.1 Number of Undergraduate Students by Attendance Status

Table II.B.1
UNDERGRADUATE ENROLLMENT BY ATTENDANCE STATUS, FALL 2020

	Number	Percent
Full-time	7,389	81.3%
Part-time	1,695	18.7%
Total	9,084	100%

II.B.2 Number of Graduate Students by Attendance Status

Table II.B.2
GRADUATE ENROLLMENT BY ATTENDANCE STATUS, FALL 2020

	Number	Percent
Full-time	1,360	53.0%
Part-time	1,208	47.0%
Total	2,568	100%

II.B.4 FY2019 (12-Month) Unduplicated Enrollments

Table II.B.4
UNDUPLICATED ENROLLMENT, FY2020 (IPEDS 12-MONTH)

	Number	Credit Hours	FTE
Undergraduate	10,275	239,203	7,973
Graduate	3,344	37,766	1,574
Total	13,619	276,969	9,547

C. Characteristics of Undergraduate Students

A total of 10,299 individuals applied for admission as first-time freshmen to NJIT for fall 2020.

II.C.1 Mean Math and Evidence-Based Reading & Writing SAT Scores

Fall 2020 freshmen entered NJIT as either regular admits or Educational Opportunity Fund (EOF) admits. By admitting students using different admissions categories, the university provides opportunities to a broader range of students.

Table II.C.1 contains information on the average SAT scores of NJIT’s fall 2020 enrolled full-time and part-time first-time freshmen. It should be noted that the first-time, full-time freshman population differs slightly from the cohort of first-time, full-time undergraduates who are tracked for federal reporting purposes using the IPEDS Graduation Rate Survey (GRS). This is because the IPEDS cohort also includes first-time, full-time students who are admitted above the freshman level because of advanced placement credits.

Table II.C.1
MEAN MATH, READING, AND WRITING SAT SCORES FOR FIRST-TIME FRESHMEN BY ADMISSION STATUS AND OVERALL, FALL 2020

Full-Time Students				
	ERW*	N	Math	N
Regular Admits	631.7	854	664.6	854
EOF Admits	597.7	94	646.2	94
Special Admits	0.0	0	0.0	0
All Admits	628.3	948	662.8	948
Missing Scores		127		127
Part-Time Students				
	ERW*	N	Math	N
Regular Admits	610.4	45	623.3	45
EOF Admits	570.0	4	617.5	4
Special Admits	0.0	0	0.0	0
All Admits	607.1	49	622.9	49
Missing Scores		9		9

*Note: ERW is Evidence-Based Reading & Writing.

II.C.2 Enrollment in Remediation Courses by Subject Area

Only 0.4% percent of first-time, full-time students required remediation in English.

**Table II C.2
ENROLLMENT IN REMEDIATION COURSES**

Total Number of Undergraduate Students Enrolled in Fall 2020

Total Fall 2020 Undergraduate Enrollment	Number of Students Enrolled in One or More Remedial Courses	Percent of Total
9,084	14	0.2%

Total Number of First-time, Full-time (FTFT) Students Enrolled in Remediation in Fall 2020

Total Fall Number of FTFT Students	Number of FTFT Students Enrolled in One or More Remedial Courses	Percent of FTFT Enrolled in One or More Remedial Courses
1,129	5	0.4%

First-time, Full-time (FTFT) Students Enrolled in Remediation in Fall 2020 by Subject Area

Subject Area	Number of FTFT Enrolled In:	Percent of FTFT Enrolled In:
Computation	0	0.0%
Algebra	0	0.0%
Reading	0	0.0%
Writing	0	0.0%
English	5	0.4%

II.C.3 Race/Ethnicity, Sex, and Age

In the fall of 2020, 11,652 students enrolled in various programs at New Jersey Institute of Technology. Seventy-eight percent (9,084) of these students enrolled at the undergraduate level.

Seventy-eight percent of undergraduates enrolled as full time, and 25% of undergraduates were female. The majority of undergraduates were from the state of New Jersey.

Table II.C.3.a
UNDERGRADUATE ENROLLMENT BY RACE/ETHNICITY: FALL 2020

	Full-Time		Part-Time		Total	
	N	Percent	N	Percent	N	Percent
White	2,479	33.5%	369	21.8%	2,848	31.4%
Black	578	7.8%	124	7.3%	702	7.7%
Hispanic	1,512	20.5%	281	16.6%	1,793	19.7%
Asian*	1,758	23.8%	214	12.6%	1,972	21.7%
American Indian	12	0.2%	4	0.2%	16	0.2%
Alien	623	8.4%	67	4.0%	690	7.6%
Unknown	427	5.8%	636	37.5%	1,063	11.7%
Total***	7,389	100.0%	1,695	100.0%	9,084	100.0%

*Asian includes Pacific Islanders.

**Race Unknown includes Two or More Races.

Table II.C.3.b
UNDERGRADUATE ENROLLMENT BY SEX: FALL 2020

	Full-Time		Part-Time		Total	
	N	Percent	N	Percent	N	Percent
Male	5,560	75.2%	1,176	69.4%	6,736	74.2%
Female	1,829	24.8%	519	30.6%	2,348	25.8%
Total	7,389	100.0%	1,695	100.0%	9,084	100.0%

Table II.C.3.c
UNDERGRADUATE ENROLLMENT BY AGE: FALL 2020

	Full-Time		Part-Time		Total	
	N	Percent	N	Percent	N	Percent
Less than 18	17	0.2%	335	19.8%	352	3.9%
18-19	2,142	29.0%	187	11.0%	2,329	25.6%
20-21	2,671	36.1%	201	11.9%	2,872	31.6%
22-24	1,756	23.8%	446	26.3%	2,202	24.2%
25-29	602	8.1%	305	18.0%	907	10.0%
30-34	132	1.8%	116	6.8%	248	2.7%
35-39	43	0.6%	47	2.8%	90	1.0%
40-49	23	0.3%	39	2.3%	62	0.7%
50-64	3	0.0%	18	1.1%	21	0.2%
65 and more	0	0.0%	1	0.1%	1	0.0%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total*	7,389	100.0%	1,695	100.0%	9,084	100.0%

**Some totals will be higher than 100.0% due to rounding.*

II.C.4 Numbers of Students Receiving Financial Assistance under Each Federal-, State-, and Institution-Funded Aid Program

During the 2019-2020 academic year, undergraduates at NJIT received financial aid from multiple sources, i.e. Federal, State, institution, and other private sources. Aid was provided in the form of scholarships, grants, loans, and waivers.

**Table II.C.4
FINANCIAL AID FROM FEDERAL, STATE, & INSTITUTION-FUNDED PROGRAMS, AY2019-2020**

Federal Programs	Recipients	Dollars (\$)	\$ / Recipient
Pell Grants	3,560	17,090,000	4,800.56
College Work Study	390	620,000	1,589.74
Perkins Loans	0	0	--
SEOG	1,436	508,000	353.76
PLUS Loans	395	6,590,000	16,683.54
Stafford Loans (Subsidized)	3,377	14,553,000	4,309.45
Stafford Loans (Unsubsidized)	2,984	11,100,000	3,719.84
SMART & ACG or Other	0	0	--
CARES ACT- HEERF Student Aid	1,987	3,269,000	1,645.19

State Programs	Recipients	Dollars (\$)	\$ / Recipient
Tuition Aid Grants (TAG)	2,917	23,268,000	7,976.69
Educational Opportunity Fund (EOF)	407	594,000	1,459.46
Other State Programs (OSRP, NJ-GIVS, WTC, etc.)	0	0	--
Distinguished Scholars	0	0	--
Urban Scholars	25	25,000	1,000.00
NJ STARS	27	55,000	2,037.04
NJCLASS Loans	123	1,615,000	13,130.08

Institutional Programs	Recipients	Dollars (\$)	\$ / Recipient
Grants/Scholarships	4,182	36,666,000	8,767.58
Loans	0	0	--

II.C.5 Percentage of Students Who Are New Jersey Residents

Ninety-one percent of first-time undergraduates were from the state of New Jersey in the fall 2020 cohort.

Table II.C.5
Fall 2020 First-Time Undergraduate Enrollment by State Residence

State Residents*	Non-State Residents	Total	% State Residents
1,089	101	1,190	91.5%

**Residence unknown included with New Jersey residents*

D. Student Outcomes

The one-year retention rate of first-time, full-time freshmen (fall 2020 cohort) is 89%, and the six-year graduation rate has increased by 3% to a total of 70% for the fall 2014 cohort.

II.D.1 Graduation Rates

Table II.D.1.a
FOUR-, FIVE- AND SIX-YEAR GRADUATION RATE OF FALL 2014 FULL-TIME, FIRST-TIME
DEGREE/CERTIFICATE SEEKING STUDENTS

Race/Ethnicity	Cohort Size	Graduated in 4 Years		Graduated in 5 Years		Graduated in 6 Years	
		N	Percent	N	Percent	N	Percent
White	346	128	37.0%	221	63.9%	237	68.5%
Black	54	12	22.2%	25	46.3%	33	61.1%
Hispanic	178	54	30.3%	104	58.4%	115	64.6%
Asian	245	139	56.7%	182	74.3%	195	79.6%
Alien	39	22	56.4%	26	66.7%	28	71.8%
Nat. Haw. or Pac. Isl.	1	1	100.0%	1	100.0%	1	100.0%
American Ind.	0	0	--	0	--	0	--
Two or More Races	37	16	43.2%	25	67.6%	25	67.6%
Unknown	30	10	33.3%	17	56.7%	17	56.7%
Total	930	382	41.1%	601	64.6%	651	70.0%

II.D.2 Third-Semester Retention Rates

Table II.D.2.a
THIRD-SEMESTER RETENTION OF FIRST-TIME UNDERGRADUATES BY ATTENDANCE STATUS, FALL
2019 TO FALL 2020

Fall 2019 First-Time Undergraduates	Full-Time		Part-Time		
	Retained in Fall 2020	Retention Rate	Fall 2019 First-Time Undergraduates	Retained in Fall 2020	Retention Rate
1,299	1,153	89.0%	44	30	68.2%

E. Faculty Characteristics

A total of 444 full-time faculty (including tenured/tenure-track faculty and non-tenured University Lecturers) taught classes in Fall 2020.

II.E.1 Full-Time Faculty by Race/Ethnicity, Gender, and Tenure Status

Table II.E.1
FULL-TIME FACULTY BY RACE/ETHNICITY, SEX, TENURE STATUS AND ACADEMIC RANK: FALL 2020

	White		Black		Hispanic		Asian		Pacific Islanders		American Indian		Alien		Two or More Races		Race Unknown		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	All
TENURED																					
Professors	66	9	4	3	2	0	33	5	0	0	0	0	1	0	0	0	11	0	117	17	134
Associate Professors	41	9	2	1	3	1	21	8	0	0	0	0	1	3	0	0	0	0	68	22	90
Assistant Professors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	107	18	6	4	5	1	54	13	0	0	0	0	2	3	0	0	11	0	185	39	224
WITHOUT TENURE																					
Professors	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Associate Professors	1	1	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	7	1	8
Assistant Professors	19	14	0	0	1	0	14	5	0	0	0	0	19	9	0	0	0	0	53	28	81
All Others	59	34	2	0	10	2	2	2	0	0	9	0	5	2	0	2	1	0	88	42	130
Total	80	49	2	0	11	2	19	7	0	0	9	0	27	11	0	2	1	0	149	71	220
TOTAL																					
Professors	67	9	4	3	2	0	33	5	0	0	0	0	1	0	0	0	11	0	118	17	135
Associate Professors	42	10	2	1	3	1	24	8	0	0	0	0	4	3	0	0	0	0	75	23	98
Assistant Professors	19	14	0	0	1	0	14	5	0	0	0	0	19	9	0	0	0	0	53	28	81
All Others	59	34	2	0	10	2	2	2	0	0	9	0	5	2	0	2	1	0	88	42	130
Total	187	67	8	4	16	3	73	20	0	0	9	0	29	14	0	2	12	0	334	110	444

II.E.2 Percentage of Course Sections Taught by Full-Time Faculty

Table II.E.2
PERCENTAGE OF COURSE SECTIONS TAUGHT BY FULL-TIME FACULTY FALL 2020

	Total	Taught by Full-Time Faculty		Taught by Part-Time Faculty		Taught by Others*	
		Number	Percent	Number	Percent	Number	Percent
**Total Number of Course Sections	1711	862	50.4%	635	37.1%	214	12.5%

* Others include Full-time Administrators and Teaching Assistants.

** Excludes Service Learning, Co-ops, Labs, Seminars, etc.

II.E.3 Ratio of Full- to Part-time Faculty

Table II.E.3
RATIO OF FULL-TIME TO PART-TIME FACULTY, FALL 2020

	Number	Percent
Total number of Full-time Faculty	444	56.4%
Total number of Part-time Faculty	343	43.6%
Total	787	100.0%

F. Characteristics of the Trustees or Governors



II.F.1 Race/Ethnicity and Sex (simultaneously)

Table II.F.1
RACE/ETHNICITY AND SEX OF BOARD OF TRUSTEES AT
NEW JERSEY INSTITUTE OF TECHNOLOGY, FALL 2021

	Male	Female	Total
White	7	1	8
Black	1	1	2
Hispanic	0	1	1
Asian	1	0	1
American Indian	1	0	1
Non Resident Alien	0	0	0
Unknown	0	0	0
Total	10	3	13

II.F.2 List of Trustees/Governors with Titles and Affiliations

Table II.F.2
MEMBERS OF THE BOARD OF TRUSTEES, FALL 2021

Name	Title	Affiliation
Hon. Philip D. Murphy, ex-officio	Governor	State of New Jersey
Hon. Ras J. Baraka, ex-officio	Mayor	City of Newark
Robert C. Cohen '83, '84, '87 (Chair)	President, Digital Robotics and Enabling Technologies	Stryker Orthopaedics
Norma J. Clayton '81 (Co-Vice Chair)	VP of Learning, Training & Development (Retired)	The Boeing Company
Nicholas M. DeNichilo '73, '78 (Co-Vice Chair)	President & CEO	Mott MacDonald
Diane Montalto '82 (Co-Vice Chair)	President	DSA Engineering, LLC
Demetrios (Jim) Stamatis '85 (Co-Vice Chair)	CEO	Louis Berger (A WSP Company)

Joseph M. Taylor '11 (HON) <i>(Co-Vice Chair)</i>	Chairman and CEO (Retired), Managing Officer of the parent Panasonic Corporation	Panasonic Corporation of North America
Dr. Jason R. Baynes	Founding Member/Manager	Baynes Orthopaedics
Elisa Charters '92, '93	President	Latina Surge National
Gary C. Dahms PE, PP, CME	President and CEO	T&M Associates
Kuo-Lin (Jordan) Hu '89	CEO	RiskVal Financial Solutions, LLC
Richard M. "Rich" Maser '73	Executive Chairman	Maser Consulting P.A.
Dhiraj Shah '00H	Founder and CEO	AVAAP
Dennis M. Toft, Esq.	Environmental, Regulatory Attorney	Chiesa Shahinian & Giantomasi PC

II.F.3 URLs of Webpages with Information on Trustees/Governors

Table II.F.3
URL OF WEBPAGE WITH INFORMATION ON TRUSTEES

URL
https://www.njit.edu/boards/board-trustees-membership/

G. Profile of the Institution

II.G.1 Degree and Certificate Programs

In fall 2020, NJIT students were enrolled in 20 Ph.D. programs, master's programs in 46 specialties, 22 Post Baccalaureate Certificate programs and 51 active baccalaureate degree programs.

Table II.G.1
ACTIVE DEGREE AND CERTIFICATE PROGRAMS

College of Architecture and Design

- BA, Digital Design
- BA, Interior Design
- BAR, Bachelor of Architecture
- BS, Architecture
- BS, Industrial Design
- MAR, Master of Architecture
- MS, Architecture
- MS, Infrastructure Planning
- PhD, Urban Systems

College of Science and Liberal Arts

- BA, Biology
- BA, Communication and Media
- BA, History
- BA, Law, Technology & Culture
- BA, Theatre Arts & Technology
- BS, Applied Physics
- BS, Biochemistry
- BS, Biology
- BS, Biophysics
- BS, Chemistry
- BS, Communication & Media
- BS, Cyberpsychology
- BS, Environmental Science
- BS, Forensic Science
- BS, Mathematical Sciences
- BS, Science, Technology & Society
- CRT, Biotechnology
- CRT, Environmental Science

- CRT, Social Media Essentials
- CRT, Statistics for Data Science
- CRT, Technical Communication Essentials
- CRT, User Experience Essentials
- MS, Applied Mathematics
- MS, Applied Physics
- MS, Applied Statistics
- MS, Biology
- MS, Biostatistics
- MS, Chemistry
- MS, Environmental Science
- MS, Materials Science & Engineering
- MS, Pharmaceutical Chemistry
- MS, Professional & Technical Communication
- PHD, Applied Physics
- PHD, Biology
- PHD, Chemistry
- PHD, Environmental Science
- PHD, Materials Science and Engineering
- PHD, Mathematical Sciences

Martin Tuchman School of Management

- BS, Business
- CRT, Financial Technology
- CRT, Management Essentials
- CRT, Management of Technology
- MBA, Business Administration
- MS, Management
- PHD, Business Data Science

Newark College of Engineering

- BS, Biomedical Engineering
- BS, Chemical Engineering
- BS, Civil Engineering
- BS, Computer Engineering
- BS, Concrete Industry Management
- BS, Electrical Engineering
- BS, General Engineering
- BS, Industrial Engineering
- BS, Mechanical Engineering

- BS, Engineering Technology - Computer Technology
- BS, Engineering Technology - Concrete Industry Management
- BS, Engineering Technology - Construction Engineering Technology
- BS, Engineering Technology - Construction Management Technology
- BS, Engineering Technology - Electrical and Computer Engineering Technology
- BS, Engineering Technology - Manufacturing Engineering Technology
- BS, Engineering Technology - Mechanical Engineering Technology
- BS, Engineering Technology - Medical Informatics Technology
- BS, Engineering Technology - Surveying Engineering Technology
- BS, Engineering Technology - Technology Education
- CRT, Biomedical Device Development
- CRT, Construction Management
- CRT, Pharmaceutical Management
- CRT, Pharmaceutical Manufacturing
- CRT, Pharmaceutical Technology
- CRT, Project Management
- CRT, Power Systems Engineering
- CRT, Supply Chain Engineering
- CRT, Transportation Studies
- MS, Biomedical Engineering
- MS, Chemical Engineering
- MS, Civil Engineering
- MS, Computer Engineering
- MS, Critical Infrastructure
- MS, Electrical Engineering
- MS, Engineering Management
- MS, Engineering Science
- MS, Environmental Engineering
- MS, Healthcare Systems Management
- MS, Industrial Engineering
- MS, Internet Engineering
- MS, Manufacturing Systems Engineering
- MS, Materials Science & Engineering
- MS, Mechanical Engineering
- MS, Occupational Safety and Health Engineering
- MS, Pharmaceutical Engineering
- MS, Pharmaceutical Systems Management
- MS, Power and Energy Systems
- MS, Telecommunications
- MS, Transportation
- PHD, Biomedical Engineering
- PHD, Chemical Engineering

- PHD, Civil Engineering
- PHD, Computer Engineering
- PHD, Electrical Engineering
- PHD, Environmental Engineering
- PHD, Industrial Engineering
- PHD, Materials Science & Engineering
- PHD, Mechanical Engineering
- PHD, Transportation

Ying Wu College of Computing

- BA, Computer Science
- BA, Information Systems
- BS, Bioinformatics
- BS, Business & Information Systems
- BS, Computer Science
- BS, Computing & Business
- BS, Human Computer Interaction
- BS, Information Technology
- BS, Web & Information Systems
- CRT, Big Data Essentials
- CRT, Business and Information Systems Implementation
- CRT, Data Mining
- CRT, Data Visualization
- CRT, Information Security
- CRT, IT Administration
- CRT, Network Security and Information Assurance
- CRT, Software Engineering Analysis and Design
- CRT, Web Systems Development
- MS, Bioinformatics
- MS, Business & Information Systems
- MS, Computer Science
- MS, Computing & Business
- MS, Cyber Security and Privacy
- MS, Data Science
- MS, Information Systems
- MS, IT Administration & Security
- MS, Software Engineering
- PHD, Computer Science
- PHD, Information Systems

Accelerated Programs

- B.Arch./MBA
- B.Arch./MIP
- B.Arch./MS
- BA/BS/MPH with Rutgers School of Public Health (Master's in Public Health)
- BA/DMD with Rutgers School of Dental Medicine
- BA/DPT with Rutgers NJ Medical School (Physical Therapy)
- BA/JD
- BA/MD with American University of Antigua, West Indies
- BA/MD with Rutgers NJ Medical School
- BA/MD with St. George's University Grenada, West Indies
- BA/MD/MBA with American University of Antigua, West Indies
- BA/OD with State University of New York (SUNY) College of Optometry
- BA/PA with Rutgers NJ Medical School (Physician Assistant)
- BS/DDS
- BS/DMD
- BS/JD with Pace University Law School
- BS/JD with Seton Hall University School of Law
- BS/MBA
- BS/MD
- BS/MIP
- BS/MS
- BS/OD

Agreements with Secondary Schools

Bergen County Technical School, Bergen County Academies

Joint Advancement Standing Admissions Program

Parsippany-Troy Hills Township School District

Joint Advancement Standing Admissions Program

Staten Island Technical School

Qualified Staten Island Tech students will be admitted to the Albert Dorman Honors College

STEM Innovation Academy of the Oranges

Approved NJIT courses offered on site

Union County Vocational-Technical School District

UCVTS AIT and MHS students guaranteed admission into a parallel BS program at NJIT

Articulation Agreements with In-State, Two-Year Colleges

Bergen Community College

Applied Math, Biology, Biomedical Engineering, Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Industrial Engineering, Information Technology, Mechanical Engineering

Bergen Community College Honors Program

Albert Dorman Honors College

Brookdale Community College

Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Computer Technology, Electrical Engineering, Electrical Technology, Engineering Science, Industrial Engineering, Mechanical Engineering

Burlington County College

Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Electrical Engineering Technology, Industrial Engineering, Mechanical Engineering

County College of Morris

Business, Electrical Technology

Essex County College

Biology, Business, Chemistry, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, History, Industrial Engineering, Information Technology, Mechanical Engineering

Hudson County Community College

Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Electrical Technology, Industrial Engineering, Information Systems

Mercer County Community College

Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Computer Technology, Industrial Engineering, Mechanical Engineering, Surveying Technology

Middlesex County College

Business, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Electrical Technology, Industrial Engineering, Manufacturing Engineering Technology, Mechanical Engineering

Ocean County College

Business, Civil Engineering, Computer Engineering, Electrical Technology, Mechanical Engineering, Surveying Technology

Passaic County Community College

Business, Engineering Technology

Raritan Valley Community College

Applied Mathematics, Biology, Business, Chemistry, Computer Science, Electrical Technology, Management

Union County College

Business, Chemical Engineering, Civil Engineering, Construction Engineering Technology, Computer Engineering, Computer Technology, Electrical

Engineering, Electrical Technology, Industrial Engineering, Mechanical Engineering, Mechanical Technology, Surveying Technology

Agreements with Out-of-State, Two-Year Colleges

Lincoln Technical Institute

A.A.S. degree students transfer to NJIT to pursue BS in Electrical Technology

Rockland County College

Electrical Engineering Technology

Agreements with U.S. Four-Year Colleges and Universities (Undergraduate)

New Jersey City University

3+2 Dual Degree Program for NJCU students majoring in Applied Physics to transfer to NJIT to pursue BS in Electrical Engineering

New York Institute of Technology College of Osteopathic Medicine

Early Interview Assurance Program

Pace University

Qualified NJIT students are admitted to Pace University School of Law

Paul Smith College of Arts and Science

2+2 program in Surveying Technology

Ponce Health Sciences University

Undergraduate program leading to BA-MD Degrees

William Paterson University

Students complete coursework in the Pre-Engineering program at WPU, then transfer to NJIT to pursue a degree in one of the engineering disciplines

Stockton State College

3+2 Liberal Arts/Engineering Dual Degree Program

Thomas Edison State University

ASAST students will pursue BS in Engineering Technology degree program at NJIT

Rutgers University

Qualified Albert Dorman Honors College students will enroll at the Rutgers School of Public Health to pursue the Masters in Public Health degree

Agreements with International Institutions

UNDERGRADUATE		
Germany	Technische Universitat Dortmund	Exchange
Italy	Universita degli Studi di Parma	Joint
Korea	Hanyang University	Exchange
Netherlands	University of Twente	Exchange
Sweden	Jonkoping University School of Engineering & Business	Exchange
	Linkoping University	Exchange
Turkey	Istanbul Technical University	Joint
UNDERGRADUATE/GRADUATE		
Antigua	American University of Antigua	Accelerated Degree Agreement
China	Beijing University of Technology	Exchange
	Fujian University of Technology	Joint/Exchange
	Qingdao University of Technology	Joint/Exchange
	Wuchang University of Technology	Exchange
Egypt	Ain Shams University of Cairo and Ocean County College	Joint/Exchange
France	ESDES	Joint/Exchange
	SKEMA	Exchange
Germany	Hochschule Bremen City University of Applied Sciences	Exchange
	University Hochschule Furtwangen	Exchange
India	Indian Institute of Technology Gandhinagar	Exchange
Italy	L'Universita di Siena	Exchange
Jordan	Yarmouk University	Exchange
Korea	Pukyong National University	Exchange
Spain	University of Cantabria	Exchange
	Universidad Pontificia Comillas	Exchange
Sweden	Jonkoping University School of Engineering and Business	Exchange
Taiwan	National Chiao Tung University	Exchange

GRADUATE		
China	Beijing University Taizhou University Soochow University	NJIT Degree NJIT Degree NJIT Degree
Germany	Karlsruhe University of Applied Sciences Universitat Passau	Exchange/Degree Joint
India	Siksha O Anusandhan University	Joint
Italy	Politecnico di Bari Universita degli Studi di Parma Universita di Parma Universita degli Studi di Salerno	Joint Joint Joint Joint PhD
Lebanon	Lebanese American University	Exchange

H. Major Research and Public Service Activities

R&D Expenditures: Fiscal Year 2020

Externally Funded R&D Expenditures	\$103,000,000
Total R&D Expenditures	\$156,000,000

NJIT Research Institutes, Centers and Laboratories



NJIT is proud of its status as an “R1” Very High Research Activity doctoral institution according to the Carnegie Classification of Institutions of Higher Education. NJIT is one of only three R1 institutions in the state of New Jersey, along with Princeton University and Rutgers University – New Brunswick. The R1 classification is the result of NJIT’s growth in research in five transdisciplinary areas: Bioscience and Bioengineering, Data Science and Management, Environment and Sustainability, Material Science and Engineering, and Robotics and Machine Intelligence.

BIOSCIENCE AND BIOENGINEERING

INSTITUTES

Institute for Brain and Neuroscience Research

Dr. Namas Chandra and Dr. Farzan Nadim, Co-Directors

The Institute for Brain and Neuroscience Research (IBNR) focuses on collaborative basic, applied and translational neuroscience research addressing critical challenges in the interdisciplinary areas of brain health, neural engineering, neural circuits and patterns, neurophysiology, and computational neurobiology.



CENTERS

BioSensor Materials for Advanced Research & Technology (BioSMART Center)

Dr. Omowunmi "Wunmi" Sadik, Director

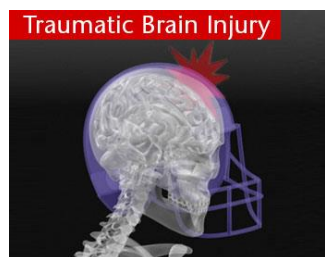
The mission of the BioSensor Materials for Advanced Research & Technology (BioSMART) Center is to understand how biological systems communicate with their surroundings by gathering data with sensors on their internal states and environments, measuring the information, and then using that knowledge to develop innovative sensing technologies that employ sustainable materials and greener environmental processes. BioSMART seeks to meet society’s need for fully autonomous, self-aware and resilient

intelligent chemical and biological sensor systems by learning – and designing – from nature. Biological systems, without exception, are SMART sensors. Their behavior is the result of a complex web of interactions between sensory inputs and physiological processes that implements cognitive functions to allow the organism to perform efficiently. The BioSMART team has developed innovative biosensors for ultrasensitive detection of Staphylococci Enterotoxin B, the microorganisms that compose biofilms, nucleic acid mutations, E. coli, Bacillus globigii and numerous environmental pollutants: chromium VI; lead; polychlorinated biphenyls; microcystins; organophosphates; nitrobenzenes; and endocrine disrupting chemicals. One of our technologies has been translated to a portable, fully autonomous, remotely operated sensing device known as an Ultra-Sensitive Portable Capillary Sensor, or U-PAC. Some of our earlier sensors have been used for the detection of trace uranium and vanadium. Current projects include environmental sensors for COVID-19, pain biosensors, sustainable nanomaterials, biodegradable polymers, and new diagnostic tools and detection devices for medical, environmental and military applications. The wide range of intelligent sensor systems that can become commercial realities through advances pioneered by BioSMART will benefit society in antibiotic resistance monitoring, environmental analysis, wireless sensor networks, robotic sensors, bioremediation and point-of-use ‘smart’ systems.

Center for Brain Imaging

Dr. Bharat Biswal, Director

The long-term goal of the Center for Brain Imaging is to better understand human brain function using integrative neuroimaging and statistical and computational modeling methods.



Center for Injury Biomechanics, Materials and Medicine

Dr. Namas Chandra, Director

The Center for Injury Biomechanics, Materials and Medicine (CIBM3) is a multi- and interdisciplinary research center focused on understanding, diagnosing, and treating brain injuries and concussions using experimental and computational methods.

LABORATORIES

- Advanced Biomaterials Translation Laboratory
- BioDynamics Laboratory
- Cardiovascular Tissue Engineering and Stem Cell Laboratory
- Circadian Clock Laboratory
- Computational Neuroanatomy and Neuroinformatics Lab
- Computational Orthopedics and Rehabilitation Lab
- Coppélia Research Laboratory
- Ecohydrology Lab
- Fluid Locomotion Laboratory
- Global Change and Urban Ecology Lab

- The Horax BioDatanamics Lab
- The Keck Laboratory for Topological Materials
- Laboratory of Evolutionary Pattern and Process
- Laboratory of Neuroethology of Locomotion
- Laboratory for Neurobiology and Behavior
- Neural Engineering for Speech and Hearing Laboratory
- Neural Prosthetics Laboratory
- Neuroecology of Unusual Animals Laboratory
- STG Lab
- Structural Ecology Lab
- Sensorimotor Quantification and Rehabilitation Laboratory
- Swarm Lab
- Vision and Neural Engineering Laboratory
- Zebrafish Neural Circuits and Behavior Laboratory

DATA SCIENCE AND MANAGEMENT

INSTITUTES

Henry J. and Erna D. Leir Research Institute for Business, Technology and Society

Dr. Yi Chen, Director

The Leir Research Institute for Business, Technology and Society has an integrated, dual mission of innovative business research and targeted outreach necessary to realize the Institute's overarching goal of helping business and industry to become more eco-efficient, resilient and sustainable.

Institute for Data Science

Dr. David Bader, Director

The Institute for Data Science initiates collaborative, inter-disciplinary research by bringing existing research centers in big data, medical informatics and cybersecurity together with new research centers in data analytics and artificial intelligence, cutting across all NJIT colleges and schools to conduct both basic and applied research.

New Jersey Innovation Institute

Simon Nynens, CEO

The New Jersey Innovation Institute (NJII) is an NJIT corporation focused on helping private enterprise meet the grand challenges shared across an entire sector while also helping individual companies innovate new product or market opportunities and develop new strategic business partnerships that embrace emerging technology. The five initial iLabs serving as the catalyst for collaboration among the academic, private, and public sectors are healthcare delivery systems, biotechnology and pharmaceutical production, civil infrastructure, defense and homeland security, and financial services.

CENTERS

Center for Applied Mathematics and Statistics

Dr. Lou Kondic, Director

The Center for Applied Mathematics and Statistics (CAMS) is an interdisciplinary research center dedicated to supporting research in the mathematical sciences focusing on modeling and simulations of the systems belonging to a general category of soft matter, including thin liquid films of nanoscale thickness, liquid crystals, granular matter and, more recently, colloids.

Center for AI Research

Dr. Guiling Wnag, Director

The Center for AI Research aims to provide an intellectual environment and primary home for AI research initiatives at NJIT. Its missions are listed as follows: (1) To promote cutting-edge and high-quality research activities and to cultivate faculty and student publications and patents in AI and machine learning. (2) To foster collaborations and interactions between professors in fundamental AI research and professors who leverage AI methods to solve domain problems and to develop synergies among research groups across different departments and colleges. (3) To train postdoctoral researchers, graduate students, and undergraduate students in fundamental AI research as well as applied AI and prepare them to be skilled and capable workforce in both academia and industry. (4) To improve the visibility of NJIT on AI research in the national and international levels. (5) To facilitate the collaboration between NJIT and other institutions in both academia and industry.

Center for Big Data

Dr. Chase Wu and Dr. Yi Chen, Co-Directors

The mission of the Center for Big Data is to synergize the strong expertise in various disciplines across the NJIT campus and build a unified platform that embodies a rich set of big data-enabling technologies and services with optimized performance to facilitate research collaboration and scientific discovery.

Center for Computational Heliophysics

Dr. Alexander Kosovichev, Director

The primary goal of the Center for Computational Heliophysics is to develop data analysis and modeling tools in the area of heliophysics – the study and prediction of the Sun’s magnetic activity – by combining expertise from computer scientists in the Ying Wu College of Computing and from physicists and mathematicians in the College of Science and Liberal Arts. The Center works in partnership with NASA’s Advanced Supercomputing Division at the NASA Ames Research Center.

Cybersecurity Research Center

Dr. Kurt Rohloff and Dr. Reza Curtmola, Co-Directors

The Cybersecurity Research Center seeks to address ongoing and long-term future cybersecurity needs for protection and further economic development across the State of New Jersey, nationally, and internationally by developing new methods for understanding how modern cyber systems can be compromised and fail, how to design cyber systems so they are secure, and how to improve or fix the cyber infrastructure that has already been deployed.

Leir Center for Financial Bubble Research

Dr. William Rapp, Director

The Leir Center for Financial Bubble Research seeks to understand through quantitative and qualitative research how a financial bubble can be identified, including its stages of development, and what policies can best manage its impacts.

New Jersey Innovation Acceleration Center

Dr. Michael Ehrlich, Director

The New Jersey Innovation Acceleration Center (NJIAC) is a collaborative resource for entrepreneurs with a focus on helping ventures accelerate their development, achieving more rapid time to market and time to profitability milestones. Another goal of the center is to intensify the connections between the academic and entrepreneurial communities.

NSF iCorps Program Center

Dr. Michael Ehrlich, Director

The I-Corps Sites Program offers specialized training and mini-grants to teams with interest in exploring the commercial viability of their ideas for products and businesses that are based on their own inventions, University intellectual property, or any STEM-related technology. Grantees will embark on commercialization of new technologies, products and processes that arise from the institution. Develop formal, active, local innovation ecosystems that contribute to a large, national network of mentors, researchers, entrepreneurs and investors and encourages collaboration between academia and industry.

Paul Profeta Real Estate Technology, Design and Innovation Center (RETDIC)

Dr. Zhipeng Yan, Director

The Paul Profeta Real Estate Technology, Design and Innovation Center serves as the locus of research, teaching and training related to disruptive technologies innovations and novel design, service, management techniques that are actively transforming the real estate field. Housed in NJIT's Martin Tuchman School of Management, and drawing on the expertise, experience and interests of faculty members from Tuchman School of Management as well as the Hillier College of Architecture and Design, Ying Wu College of Computing and the Newark College of Engineering, the center offers new academic

programs in Real Estate Technology, provides executive education, organizes conferences, symposia, and workshops related to cutting edge research in the changing ways in which real estate is traded, used and managed. The center's transdisciplinary research activities focus on the use of technology and innovation, new ways of design and innovative business models with a special focus on the application of information technology and platform economics to real estate markets, also known as property technology, or PropTech.

Structural Analysis of Biomedical Ontologies Center

Dr. Yehoshua Perl and Dr. James Geller, Co-Directors

The Structural Analysis of Biomedical Ontologies Center (SABOC) is an interdisciplinary research center linking computer science and medicine, dealing specifically with medical terminologies and ontologies, a subject of study that is a sub-field of Medical Informatics.

The Elisha Yegal Bar-Ness Center for Wireless Information Processing

Dr. Alexander Haimovich, Director

The Elisha Yegal Bar-Ness Center for Wireless Information Processing (CWIP) researches diverse areas of communications, signal processing, and radar including cloud radio-access networks, cooperative networks, distributed radar, and acoustics communications.

VentureLink

Simon Nynens, Executive Director

VentureLink is a community hub for technology companies at all stages of development, providing companies with weekly programming, workspace, and expert mentorship.

LABORATORIES

- Advanced Communication And Signal Processing (aCASP) Research Lab
- Advanced Networking Laboratory
- Big Data Analytics Lab
- Design Computation Lab
- FinTech Lab
- Gidget Lab - (G)ender - (I)nclusive (D)esign, (G)ame, and (E)ducational (T)echnology Lab
- Geriatric Engineering Technology Lab
- The GIScience & Remote Sensing Lab
- High Performance Computing Laboratory
- Media Interface and Network Design Lab
- Networked Controls and Intelligent Diagnostics (NCID) Laboratory
- Networking Research Laboratory
- Laboratory for Discrete Event Systems
- Laboratory for High Performance DSP & Data Engineering Research (HPDER)

- Operations Management Laboratory
- Optimized Networking Laboratory
- Social Interaction Laboratory
- Systems Optimization and Analytics Lab

ENVIRONMENT AND SUSTAINABILITY

INSTITUTES

Institute for Space Weather Sciences

Dr. Haimin Wang, Director

The Institute for Space Weather Sciences (ISWS) combines the strengths of three NJIT research centers: Center for Solar-Terrestrial Research, Center for Computational Heliophysics, and Center for Big Data to understand and predict the physics of solar activities and their effects on space weather. ISWS integrates state-of-the-art observations, modeling, and big data analytics.

CENTERS

Center for Community Systems

Dr. Colette Santasieri, Director

The Center for Community Systems is a resource and conduit for creating thriving, sustainable and resilient communities. It is a strategic platform that connects innovative planners, engineers, environmental scientists, social scientists, architects and economists with government, industry and community organizations in order to solve complex problems. Communities exist within the context of varying and ever-evolving social, economic, political and cultural conditions. The pressures they experience include: increasing or decreasing populations; aging infrastructure, fiscal constraints, climate change, contaminated lands and natural and human-made disasters. These complexities and constraints may hinder a community's ability to grow and prosper in a sustainable and resilient manner. The Center for Community Systems engages in cross-disciplinary collaborations designed to stimulate intellectual curiosity and foster innovative solutions to the challenges communities face. The center's multi-disciplinary staff of professionals design, develop and deploy technical assistance and tools, resources, such as infographics on state regulatory rules, howto videos and case studies on brownfields redevelopment, and educational and engagement programs to communities to improve environmental conditions, spur economic development and advance social equity. The Center's focus areas include: brownfields redevelopment; community revitalization; transportation planning; land use planning; transit-oriented development; port-city relationships; and natural resources.

Center for Energy Efficiency, Resilience and Innovation (CEERI)

Dr. Haim Grebel, Director

The Center for Energy Efficiency, Resilience and Innovation (CEERI) conducts research and development, provides technical and educational assistance for the deployment of sustainable technologies and applications to manage energy and water resources, and promotes public awareness of energy resources. The activities of CEERI are interdisciplinary. With support from state, federal and business partners, CEERI's main focus is identifying and implementing cost-effective measures that reduce operating costs, environmental impacts in the deployment of sustainable technologies, and applications related to energy and water. The Center is a collaboration between industry and NJIT.

Center for Ethics and Responsible Research

Dr. Brit Holbrook, Director

The Center for Ethics and Responsible Research helps advance knowledge of how to ensure ethical and responsible research at a STEM-focused institute. NJIT serves as a test bed for tools and methods developed by the National Ethics Project (NEP). Through its partnership with NEP, NJIT transforms its approach to Ethical and Responsible Research (ER2) from its current state to a model for other institutions to emulate.



Center for Solar-Terrestrial Research

Dr. Andrew Gerrard, Director

The Center for Solar-Terrestrial Research (CSTR) is an international leader in ground- and space-based solar and terrestrial physics, with a particular interest in understanding the effects of the Sun on the geospace environment. CSTR is one of the principal investigators in NASA's Van Allen Probes mission that explores the radiation and plasma environment around Earth, and

houses the Space Weather Research Laboratory that conducts scientific research in the area of space weather with the mission to understand and forecast the magnetic activity of the Sun and its impact on Earth.

Center for Solar-Terrestrial Research – Big Bear Solar Observatory

Dr. Wenda Cao, Director

The Center for Solar-Terrestrial Research (CSTR) operates Big Bear Solar Observatory (BBSO) in California, which houses the highest-resolution solar optical telescope in the world at 1.6 meters. With its state-of-the-art adaptive optics and scientific instrumentation, the telescope obtains high-resolution views of the Sun's surface features such as sunspots, filaments, faculae, granulation, spicules and jets.

Center for Solar-Terrestrial Research – Expanded Owens Valley Solar Array

Dr. Dale Gary, Director

The Center for Solar-Terrestrial Research (CSTR) operates the Expanded Owens Valley Solar Array in California, an array that consists of 15 antennae used to image solar flares at hundreds of frequencies within one second.

Otto H. York Center for Environmental Engineering and Science

Dr. Somenath Mitra, Director

The Otto H. York Center for Environmental Engineering and Science offers core and shared research laboratory facilities as a resource for many interdisciplinary research programs and initiatives including research projects in nanotechnology, drug delivery systems, particle engineering, microfluidics, membrane science, environmental science and engineering, and biomedical engineering.



Polar Engineering Development Center (PEDC)

Dr. Andrew Gerrard, Director

The Polar Engineering Development Center (PEDC), housed within NJIT's Center for Solar-Terrestrial Research (CSTR), focuses on instrument and hardware design for deployment at high latitudes and Polar regions. Originally founded in the 1980s as part of the National Science Foundation-supported Automatic Geophysical Observatory (AGO) program, today the PEDC serves the broader astrophysical and geospace scientific communities conducting research in Polar environments, managing instruments at South Pole Station, McMurdo Station, Palmer Station and across the Antarctic ice shelf.

LABORATORIES

- Advanced Energy Systems and Microdevices Laboratory
- Atmospheric Chemistry Laboratory
- Building Dynamics Lab
- Building Energy and Built Environment (BE2) Lab
- Digital Spatial History Lab
- Energy and Environmental Nanotechnology Laboratory
- Environmental Systems Lab
- Geo-Resources and Geotechnical Laboratory
- Laboratory of Applied Biogeochemistry for Environmental Sustainability
- Laboratory of Environmental Microbiology and Biotechnology
- Newark Design Collaborative

MATERIAL SCIENCE AND ENGINEERING

CENTERS

Center for Building Knowledge

Deane Evans, Director

The Center for Building Knowledge (CBK) is dedicated to generating new knowledge to improve the built environment and enhance the planning, design, construction and operation of facilities, helping individuals and communities make better-informed decisions about the performance, sustainability, and resilience of buildings nationwide.

Center for Membrane Technologies

Dr. Kamalesh K. Sirkar, Director

The Center for Membrane Technologies investigates problems across multiple sectors that use membrane technologies to separate and purify water, air, industrial-fluid streams, solvents, pharmaceuticals, proteins, biopharmaceuticals, cells, particles, and nanoparticles.

Center for Natural Resources

Dr. Michel Boufadel, Director

The Center for Natural Resources investigates practical and efficient approaches to environmental and energy resource utilization, including assessment and remediation studies of pollution in natural settings and the evaluation of natural resources for the potential production of energy, especially renewable energy.

Center for Resilient Design

Deane Evans, Director

The Center for Resilient Design was established in the aftermath of Super Storm Sandy and has become a research, technical assistance, and training institution focused on improving the resilience of buildings and communities in the face of natural disasters and other stresses to inform and support disaster-resilience initiatives in other jurisdictions across the US and beyond.

Center for Structured Organic Particulate Systems (C-SOPS)

Dr. Rajesh Davé, Director

The Center for Structured Organic Particulate Systems (C-SOPS) brings together a cross-disciplinary team of researchers from major universities to work closely with industry leaders and regulatory authorities to improve the way pharmaceuticals, foods and agriculture products are manufactured.



Center of Materials for Advanced Energetics

Dr. Edward L. Dreyzin, Director

Powders of metals are better fuels than hydrocarbons based on their volumetric and gravimetric combustion energy. They are used primarily in propellants, explosives and pyrotechnics. In this center, new metal-based reactive materials are developed, characterized and tested. Correlations between material synthesis processes and the powder characteristics are established and their reaction mechanisms are elucidated. The center includes laboratories for mechanochemistry and metal combustion and a state-of-the-art thermo-analytical facility. The center also conducts research in materials characterization facilities in York Center. Our work is supported by the Office of Naval Research, the Defense Threat Reduction Agency and the U.S. Army, among other sponsors. We invite students with backgrounds in chemical and mechanical engineering, physics, and materials science and engineering to explore research opportunities with us.

Electronic Imaging Center

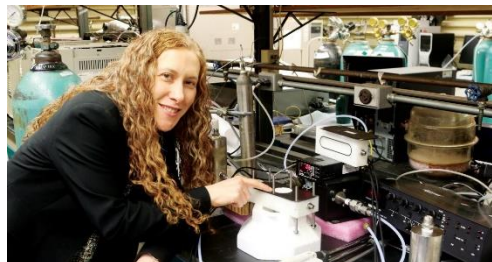
Dr. Haim Grebel, Director

The Electronic Imaging Center is an interdisciplinary center focused on nanotechnology, spectral analysis with sub-wavelength structures, and energy.

Membrane Science, Engineering and Technology (MAST) Center

Dr. Kamallesh K. Sirkar, Director

The Membrane Science, Engineering and Technology Center, a National Science Foundation Industry/University Cooperative Research Center (I/UCRC), conducts basic research and related development on innovative materials and processes that facilitate the use of membrane technology.



New Energy Materials Research Center

Dr. Ken Chin, Director

The New Energy Materials Research Center is a public US corporation that recently awarded NJIT a three-year, \$1.5M grant to establish a CdTe solar energy research center focused on improving the applications of CdTe semiconductor materials for use in thin-film solar modules.

New Jersey Center for Engineered Particulates (NJCEP)

Dr. Rajesh Davé, Director

Creation of advanced particulate materials and products through the engineering of particles is a major research focus of the New Jersey Center for Engineered Particulates (NJCEP).

LABORATORIES

- Additive Manufacturing Lab
- Applied Electrohydrodynamics Laboratory
- Biophotonics and Bioimaging Laboratory
- Biophotonics Sensing and Imaging Laboratory
- Complex Flows and Soft Matter Group
- Computational Biophysics Laboratory
- Computer Assisted Tissue Engineering and Blood System Biology Laboratory
- Computational Laboratory for Porous Materials
- Computational Nanomechanics and Materials Science Laboratory
- Heat and Fluid Transport Engineering Research Laboratory
- High Performance Concrete and Structures Laboratory
- Instructive Biomaterials & Additive Manufacturing Laboratory (IBAM-Lab)
- Laboratory for the Mechanics of Advanced materials
- Laboratory for Numerical Turbulence
- Laboratory of Nanomedicine and Healthcare Biomaterials
- Material Analysis in Biological Systems Laboratory
- Material Dynamics Lab
- Materials and Structures Laboratory
- Mixing Laboratory
- Mass Spectrometry Research Laboratory
- Nanoelectronics and Energy Conversion Laboratory
- Nanomaterials for Energy and Environment Labs (NEEL)
- Nano-Optoelectronic Materials and Devices Laboratory
- Opto and Microfluidics Laboratory
- Organic Reactions and Mechanisms Laboratory
- Particle Engineering and Pharmaceutical Nanotechnology Laboratory
- Soft Matter Research Laboratory
- Sustainable Environmental Nanotechnology and Nanointerfaces Laboratory
- Terahertz Spectroscopy, Imaging, and Wireless Communications Lab
- Tissue Engineering and Applied Biomaterials Laboratory
- Tissue Innervation and Muscle Mimetics Laboratory

ROBOTICS AND MACHINE INTELLIGENCE

CENTERS

Center for Rehabilitation Robotics

Dr. Sergei Adamovich, Director

NJIT and the Kessler Foundation are collaborators in the Rehabilitation Engineering Research Center (RERC), working on wearable robots for independent mobility and manipulation for individuals who have experienced spinal cord injuries, suffer from muscular dystrophy, or have suffered a stroke.

Intelligent Transportation Systems Resource Center

Dr. Lazar Spasovic, Director

The Intelligent Transportation Systems (ITS) Resource Center utilizes roadside sensing, information and communication technologies and integrates them into traffic-engineering and management practices with the goals of reducing congestion and improving the mobility, safety, and efficiency of the transportation system in support of sustainable regional growth and economic development.



LABORATORIES

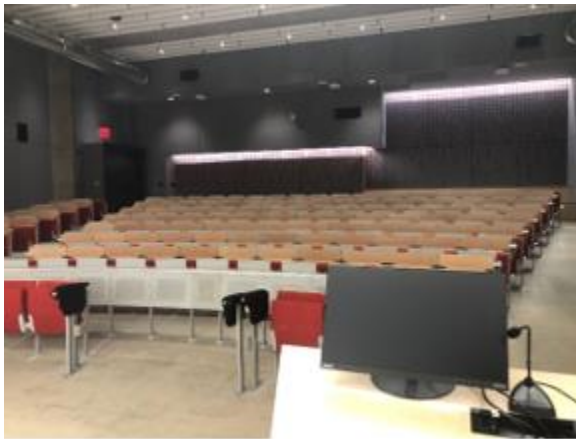
- The Assistive and Intelligent Robotics Lab
- AI for Social Good Lab
- Controls, Automation, and Robotics Laboratory
- Face Recognition & Video Processing Laboratory
- Information Ecosystems Lab (InfEco)
- Intelligent Transportation Systems Laboratory
- Intelligible Information Visualization Lab
- Interactive Cross-Reality Lab
- The Lab of Interesting Agents
- Robotics and Data Lab
- Visual computing, Graphics, and Artificial intelligence (VGA) Lab
- Virtual Technology Applications Lab for Human Simulation (ViTALHS)

I. Major Capital Projects Completed in Fiscal Year 2020-2021



Cullimore Lecture Hall - Total Project Budget \$1.3M

A complete renovation of the Cullimore Lecture Hall will be completed in late September 2021. The project included upgraded finishes, and new furniture, a new audiovisual system, additional power and high-capacity wireless connectivity will provide students a modern learning environment.



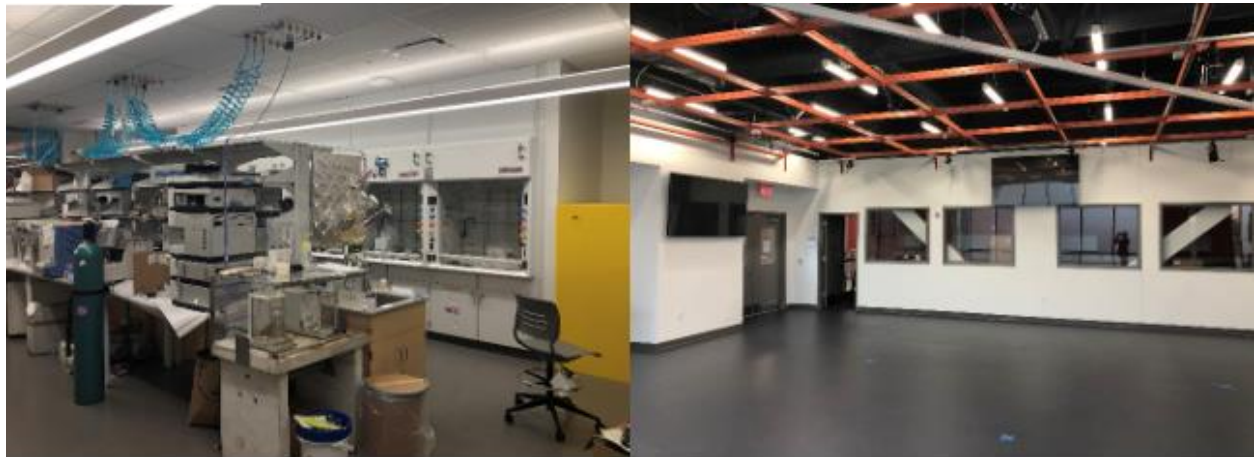
Weston Lecture Hall 1 & 2 - Total Project Budget - \$2.65M

A complete renovation of the Weston Lecture Halls was completed in January 2021. The project included upgraded finishes, and new furniture, a new audiovisual system, additional power and high-capacity wireless connectivity will provide students a modern learning environment.



MEC 221 Lecture Hall - Total Project Budget - \$750K

A complete renovation of the MEC 221 Lecture Hall was completed in Fall 2020. The project included upgraded finishes, and new furniture, a new audiovisual system, additional power and high-capacity wireless connectivity will provide students a modern learning environment.



Life Sciences and Engineering Center (LSEC), 3rd Floor Lab Renovations - Total Project Budget - \$1.5M

Fit-out of the 3rd floor of LSEC consists of the Motion Capture Lab, Wet Lab and Computational Lab was completed in August 2020. The project included new casework, fume hoods, AV equipment, and furniture.

SECTION III – OTHER INSTITUTIONAL INFORMATION

The New Jersey Institute of Technology has exceptional faculty who educate top students for rewarding careers. In FY2020-2021, NJIT conferred 2,932 degrees and certificates, listed in Section A. Highlights of faculty efforts, including patents, publications and awards are provided in Section B.

A. Degrees Awarded

Bachelors	Degrees Awarded
BA	150
Biology	90
Communication	1
Computer Science	4
Digital Design	20
History	5
Information Systems	10
Interior Design	8
Law, Technology, & Culture	9
Theater Arts and Technology	3
BAR	68
Architecture	68
BET	241
Computer Technology	24
Concrete Industry Management	1
Construction Engineering Technology	24
Construction Management Technology	10
Electrical & Computer Engineering Technology	68
Mechanical Engineering Technology	78
Medical Informatics Technology	10
Surveying Engineering Technology	12
Technology Education	0
BGS	3
General Studies	3
BS	1,352
Applied Physics	9
Architecture	10
Biochemistry	16
Bioinformatics	1
Biology	19

Biomedical Engineering	77
Biophysics	0
Business	95
Business & Information Systems	20
Chemical Engineering	70
Chemistry	8
Civil Engineering	173
Communication	4
Computer Engineering	68
Computer Science	177
Computing & Business	9
Concrete Industry Management	6
Electrical Engineering	93
Engineering Science	0
Environmental Science	4
General Engineering	4
Human Computer Interaction	7
Industrial Design	15
Industrial Engineering	32
Information Technology	199
Mathematical Sciences	26
Mechanical Engineering	196
Science, Technology & Society	7
Web & Information Systems	7
Grand Total	1,814

Masters	Degrees Awarded
MAR	11
Architecture	11
MBA	76
Business Administration	76
MS	832
Applied Mathematics	4
Applied Physics	1
Applied Statistics	6
Architecture	3
Bioinformatics	3
Biology	1
Biomedical Engineering	28
Biopharmaceutical Engineering	0
Biostatistics	4
Business & Information Systems	37

Chemical Engineering	22
Chemistry	6
Civil Engineering	85
Computer Engineering	10
Computer Science	163
Computing & Business	3
Critical Infrastructure	1
Cyber Security & Privacy	20
Data Science	68
Electrical Engineering	58
Emergency Management & Business Continuity	0
Engineering Management	63
Engineering Science	0
Environmental Engineering	4
Environmental Science	6
Healthcare Systems Management	0
Industrial Engineering	21
Information Systems	40
Infrastructure Planning	4
Internet Engineering	0
IT Administration & Security	28
Management	31
Manufacturing Systems Engineering	4
Materials Science & Engineering	4
Mathematical & Computational Finance	0
Mechanical Engineering	53
Occupational Safety & Health Engineering	1
Pharmaceutical Chemistry	6
Pharmaceutical Engineering	8
Pharmaceutical Systems Management	0
Power and Energy Systems	5
Professional & Technical Communication	5
Software Engineering	12
Telecommunications	5
Transportation	9
Grand Total	919

Doctoral	Degrees Awarded
Applied Physics	2
Biology	3
Biomedical Engineering	8
Business Data Science	3
Chemical Engineering	8
Chemistry	3
Civil Engineering	7
Computer Engineering	2
Computer Science	15
Electrical Engineering	11
Environmental Engineering	1
Environmental Science	3
Industrial Engineering	2
Information Systems	2
Materials Science & Engineering	3
Mathematical Sciences	8
Mechanical Engineering	4
Transportation	3
Urban Systems	5
Grand Total	93

Post Baccalaureate Certificates	Degrees Awarded
Applied Statistical Methods	2
Big Data Essentials	10
Biomedical Device Development	1
Biostatistics Essentials	0
Business Analytics	3
Business and Information Systems Implementation	3
Construction Management	15
Data Mining	15
Data Science Statistics Track	1
Data Visualization	1
Environmental Science	1
Finance for Managers	1
Financial Technology	1
Information Security	1
Instructional Design, Evaluation & Assessment	0
IT Administration	0
Management Essentials	1
Management of Technology	7

Network Security and Information Assurance	1
Pharmaceutical Management	2
Pharmaceutical Manufacturing	0
Power Systems Engineering	3
Project Management	22
Social Media Essentials	0
Software Engineering Analysis/Design	0
Supply Chain Engineering	15
Technical Communication Essentials	0
Transportation Studies	0
Web Systems Development	0
Grand Total	106

B. Faculty

Faculty of the New Jersey Institute of Technology are productive in developing intellectual property, conducting research, and publishing and presenting scholarly research. Faculty receiving prestigious awards in 2020 and 2021 are listed below.

III.B.1 Faculty & Administrator Awards 2020-2021

M. Adams	Richard P. Nathan Public Policy Fellow
D. Bader	IEEE Computer Society Distinguished Visitor
S. Basu Roy	NSF CAREER
S. Basuray	IEEE Senior Member
Z. Celik	Fellow of American Society of Architectural Historians
R. Dave'	NAI Fellow
R. Dent	John C. Burnham Early Career Award
P. Goode	AAS Fellow
G. Gor	NSF CAREER
H. Kim	Distinguished Service Award by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
J. Kliewer	Fulbright
L. Lanzerotti	AIAA James Van Allen Space Environments Award
T. Narahara	2020 Human Communication Award from the Institute of Electronics, Information, and Communication Engineers (IEICE) Japan
H. Nguyen	IEEE Senior Member
H. Nguyen	NSF CAREER
E. Soo Lee	NAI Senior Member
C. Wang	NSF CAREER
C. Yaramothu	Fellow American Academy of Optometry
M. Zhou	NAI Fellow
M. Zhou	Edison Patent Award