New Brunswick/
Piscataway
Undergraduate
Catalog 2005~2007

Douglass College
Livingston College
Rutgers College
University College~New Brunswick
Cook College
Mason Gross School of the Arts
Ernest Mario School of Pharmacy
Rutgers Business School:
   Undergraduate~New Brunswick
School of Communication, Information
   and Library Studies
School of Engineering
Edward J. Bloustein School of Planning
   and Public Policy

Important Notice:
The university reserves the right for any reason to cancel
or modify any course or program listed herein. In addition,
individual course offerings and programs may vary from
year to year as circumstances dictate.
# Academic Calendars

Dates are subject to change.

### 2005–2006

#### September
- 1 Thursday: Fall term begins.
- 5 Monday: Labor Day—No classes.

#### November
- 22 Tuesday: Wednesday classes meet.
- 23 Wednesday: No classes.
- 24 Thursday: Thanksgiving recess begins.
- 27 Sunday: Thanksgiving recess ends.

#### December
- 13 Tuesday: Regular classes end.
- 14 Wednesday: Reading period.
- 15 Thursday: Reading period.
- 16 Friday: Fall exams begin.
- 23 Friday: Fall exams end.
- 24 Saturday: Winter recess begins.

#### January
- 16 Monday: Winter recess ends.
- 17 Tuesday: Spring term begins.

#### March
- 11 Saturday: Spring recess begins.
- 19 Sunday: Spring recess ends.

#### May
- 1 Monday: Regular classes end.
- 2 Tuesday: Reading period.
- 3 Wednesday: Reading period.
- 4 Thursday: Spring exams begin.
- 10 Wednesday: Spring exams end.
- 17 Wednesday: University commencement.
- 30 Tuesday: Summer session begins.

#### August
- 16 Wednesday: Summer session ends.

### 2006–2007

#### September
- 5 Tuesday: Fall term begins.

#### November
- 21 Tuesday: Thursday classes meet.
- 22 Wednesday: Friday classes meet.
- 23 Thursday: Thanksgiving recess begins.
- 26 Sunday: Thanksgiving recess ends.

#### December
- 13 Wednesday: Regular classes end.
- 14 Thursday: Reading period.
- 15 Friday: Fall exams begin.
- 22 Friday: Fall exams end.
- 23 Saturday: Winter recess begins.

#### January
- 16 Tuesday: Spring term begins.

#### March
- 10 Saturday: Spring recess begins.
- 18 Sunday: Spring recess ends.

#### April
- 30 Monday: Regular classes end.

#### May
- 1 Tuesday: Reading period.
- 2 Wednesday: Reading period.
- 3 Thursday: Spring exams begin.
- 9 Wednesday: Spring exams end.
- 16 Wednesday: University commencement.
- 29 Tuesday: Summer session begins.

#### August
- 15 Wednesday: Summer session ends.
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About the University

Rutgers, The State University of New Jersey, with more than 50,000 students on campuses in Camden, Newark, and New Brunswick/Piscataway, is one of the nation’s major state university systems. The university comprises 29 degree-granting divisions: 12 undergraduate colleges and schools, 11 graduate schools, and six schools offering both undergraduate and graduate degrees. Five are located in Camden, eight in Newark, and 16 in New Brunswick/Piscataway.

Rutgers has a unique history as a colonial college, a land-grant institution, and a state university. Chartered in 1766 as Queen’s College, it was the eighth institution of higher learning to be founded in the colonies. The school opened its doors in New Brunswick in 1771 with one instructor, one sophomore, and a handful of first-year students. During this early period, the college developed as a classical liberal arts institution. In 1825, the name of the college was changed to Rutgers to honor a former trustee and Revolutionary War veteran, Colonel Henry Rutgers. Rutgers College became the land-grant college of New Jersey in 1864, resulting in the establishment of the Rutgers Scientific School with departments of agriculture, engineering, and chemistry. Further expansion in the sciences came with the founding of the New Jersey Agricultural Experiment Station in 1880, the College of Engineering in 1914 (now the School of Engineering), and the College of Agriculture (now Cook College) in 1921. The precursors to several other Rutgers divisions also date from this period: the College of Pharmacy in 1892 (now the Ernest Mario School of Pharmacy), the New Jersey College for Women (now Douglass College) in 1918, and the School of Education (now a graduate school) in 1924.

Rutgers College became a university in 1924. The legislature passed laws in 1945 and 1956 designating all divisions of Rutgers as the state university of New Jersey. During these years, the university expanded dramatically. An evening division, University College, opened in 1934. The University of Newark joined the system in 1946, and the College of South Jersey at Camden was added in 1950. Since the 1950s, Rutgers has continued to expand, especially in graduate education. The Graduate School–New Brunswick, the Graduate School–Newark, and the Graduate School–Camden serve their respective campuses. In addition, the university has established professional schools in applied and professional psychology; communication, information, and library studies; criminal justice; the fine arts; management; and social work. Several of these schools offer undergraduate programs as well. In 1969, the university founded Livingston College to provide undergraduate degrees to a diverse community of students.

Today, Rutgers continues to grow, both in its facilities and in the variety and depth of its educational and research programs. The university’s goals for the future include the continued provision of the highest quality undergraduate and graduate education along with increased support for outstanding research to meet the needs of society and to fulfill Rutgers’ role as the state university of New Jersey.

Institutional and Specialized Accreditation

Rutgers, The State University of New Jersey, is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools (http://www.msache.org), 3624 Market Street, Philadelphia, PA 19104-2680 (267/284-5000). The Commission on Higher Education of the Middle States Association of Colleges and Schools is an institutional accrediting agency recognized by the U.S. secretary of education and the Council for Higher Education Accreditation. That accreditation was reaffirmed in 2003. Documents describing the institution’s accreditation may be downloaded from the university’s web site at http://oirap.rutgers.edu/reports/MSAPRR.pdf. They may be reviewed during regular office hours by contacting the Office of Institutional Research and Academic Planning, Rutgers, The State University of New Jersey, 85 Somerset Street, New Brunswick, NJ 08901-1281 (732/932-7956).

Certain undergraduate programs on the Camden, Newark, and New Brunswick/Piscataway campuses of Rutgers are subject to specialized accreditation. For further information about specialized accreditation, including the names of associations that accredit university programs, contact the Office of Institutional Research and Academic Planning.

Licensure

Rutgers, The State University of New Jersey, is licensed by the New Jersey Commission on Higher Education. For more information, contact its Office of Academic Affairs at 609/984-2699.
Undergraduate Education in New Brunswick/Piscataway

Undergraduate students in New Brunswick/Piscataway enroll in one of 12 degree-granting undergraduate colleges or schools. Four are liberal arts colleges: Douglass College, Livingston College, Rutgers College, and University College–New Brunswick; and 8 are professional schools: Cook College, Mason Gross School of the Arts, Ernest Mario School of Pharmacy, Rutgers Business School; Undergraduate–New Brunswick, School of Communication, Information and Library Studies, School of Engineering, the Edward J. Bloustein School of Planning and Public Policy, and the School of Management and Labor Relations.

While all of the colleges are dedicated to providing the highest quality education, each college establishes its own admission, scholastic standing, and graduation requirements and each offers specific academic programs that reflect the college’s particular mission and philosophy. Students are urged to consult each college section both for a general description of the college and for a list of the academic programs that each offers.

In addition to the undergraduate colleges in New Brunswick/Piscataway, there is a large faculty unit, the Faculty of Arts and Sciences, that offers most of the academic programs available to students at the four liberal arts colleges. The Faculty of Arts and Sciences encompasses more than 1,000 faculty members and offers more than 40 major programs, as well as numerous minor programs and other specializations.

The degree-granting professional schools in New Brunswick/Piscataway, both undergraduate and graduate, each have their own separate faculty. Taken together, the Rutgers faculty in New Brunswick/Piscataway comprises a distinguished teaching and research staff of nearly 2,000 faculty members.

Rutgers’ campus at New Brunswick/Piscataway is made up of five campuses located on both sides of the Raritan River. The campuses are connected by a free, campuswide bus system. Four of the undergraduate colleges are residential colleges, offering a variety of living accommodations on the campuses. With the exception of students enrolled at University College–New Brunswick, who are commuters, students at the other schools affiliate with one of the residential colleges for housing and/or student services.

The university’s extensive facilities and extracurricular activities are described in the Student Life and Services chapter.

MAJOR PROGRAMS OF STUDY

A wide variety of academic programs are offered at the 12 undergraduate colleges in New Brunswick/Piscataway. The following list summarizes the major programs available at one or more of the colleges. Students should consult the individual college sections for a list of majors offered at each school.

In addition, academic departments offer numerous options and specialized programs of study within these general fields, as well as opportunities for interdisciplinary work. Several dual-degree programs also are available, and in some subjects both liberal arts and professional programs are offered. Thus, the list of majors merely serves to suggest the breadth of academic programs for undergraduate students.

Accounting  
African Studies  
Agricultural Science  
American Studies  
Animal Science  
Anthropology  
Applied Sciences in Engineering  
Art History  
Astrophysics  
Biochemistry  
Biological Sciences  
Biometrics  
Biomedical Engineering  
Bioresource Engineering  
Biotechnology  
Cell and Molecular Biology  
Neuroscience  
Ceramic Engineering  
Chemical Engineering  
Chemistry  
Chinese  
Civil and Environmental Engineering  
Clay  
Classics  
Communication  
Comparative Literature  
Computer Science  
Criminal Justice  
Dance  
East Asian Languages and Area Studies  
Ecology and Natural Resources  
Economics  
Electrical and Computer Engineering  
English  
Environmental and Business Economics  
Environmental Planning and Design  
Environmental Policy, Institutions, and Behavior  
Environmental Sciences  
European Studies  
Evolutionary Anthropology  
Exercise Science and Sport Studies  
Finance  
Food Science  
French  
Genetics  
Geography  
Geological Sciences  
German  
History  
History/French  
History/Political Science  
Independent/Individualized Major  
Industrial Engineering  
Information Technology and Informatics  
Italian  
Jewish Studies  
Journalism and Media Studies  
Labor Studies and Employment Relations  
Latin American Studies  
Linguistics  
Management  
Management Science and Information Systems  
Marine Sciences  
Marketing  
Mathematics  
Mechanical Engineering  
Medical Technology  
Medieval Studies  
Meteorology  
Microbiology  
Middle Eastern Studies  
Molecular Biology and Biochemistry  
Music  
Nursing  
Nutritional Sciences  
Pharmacy  
Philosophy  
Physics  
Planning and Public Policy  
Plant Science  
Political Science  
Portuguese  
Psychology  
Public Health
Puerto Rican and Hispanic Caribbean Studies
Religion
Russian
Social Work
Sociology
Spanish
Statistics
Statistics/Mathematics
Theater Arts
Visual Arts
Women’s and Gender Studies

MINOR PROGRAMS OF STUDY

The minors listed below are offered by various disciplines and are available to students attending Douglass College, Livingston College, Rutgers College, and University College—New Brunswick. Students at the other colleges should consult their advisers concerning the availability of minors.

Africana Studies
Agroecology *
American Studies
Animal Science *
Anthropology
Art History
Astronomy
Biochemistry *
Biological Sciences
Chemistry
Chinese
Classical Humanities
Comparative Literature
Computer Science
Ecology and Evolution *
Economics
English
Entomology *
Environmental and Business Economics *
Environmental Policy, Institutions, and Behavior *
Environmental Sciences *
Equine Science *
Food Science *
French
Geography
Geological Sciences
German
Greek (Ancient)
Greek (Modern)
History
Human Ecology *
Hungarian
Italian
Japanese
Jewish Studies
Korean
Labor Studies and Employment Relations
Latin
Linguistics
Marine Sciences *
Mathematics
Medieval Studies
Meteorology *
Music
Natural Resource Management *
Nutrition *
Philosophy
Physics
Planning and Public Policy
Plant Science *
Political Science
Portuguese
Psychology
Puerto Rican and Hispanic Caribbean Studies
Religion
Russian Language and Literature
Sociology
Spanish
Statistics
Teacher Education *
Theater Arts
Women’s and Gender Studies

CERTIFICATE PROGRAMS

Certificate programs are available in a number of fields and are open to all undergraduate students in New Brunswick/Piscataway, regardless of college.

The certificate programs are designed to allow students to complement their major program with study in either a broad, but well-defined, area or a specialized field. Since the certificate programs are intended to enhance a major program, a certificate may be awarded only in conjunction with the awarding of a baccalaureate degree in a major field.

Behavioral Pharmacology
Cartography
Criminology
Eagleton Undergraduate Associates (American Politics and Public Policy)
Environmental Geomatics *
Environmental Planning *
Fisher Science *
Food Systems Education and Administration *
Foreign Language Proficiency (French, German, Hungarian, Italian, and Russian)
Global Politics
Historic Preservation
Horticultural Therapy *
Housing and Community Development
International Agriculture/Environment *
International Geographic Perspectives

HONORS PROGRAMS

As part of its ongoing commitment to academic excellence, Rutgers University offers numerous honors programs that provide outstanding students with challenges beyond those found in regular course work.

Many of the undergraduate colleges offer specially designed honors programs which involve introductory seminars for well-prepared first-year students. Selection into a college honors program is based on SAT or ACT scores and high school record, and is at the invitation of each college. Students conclude their college honors programs by taking the honors courses offered by their majors.

In addition, exceptional upper-class students who are not in college honors programs may be selected to participate in honors seminars offered by the department of their major. Information on college honors programs may be found in the college sections of this catalog; departmental honors programs are described under each major.

Students who participate in honors programs receive a high degree of individual attention from faculty. Seminars, tutorials, lectures, discussions, and independent research

* Available through Cook College.
† The Graduate School of Education administers teacher certification programs in numerous areas. See Education in the Programs of Study for Liberal Arts Students section.
afford an opportunity for sophisticated scholarship and growth in self-understanding and also may assist Rutgers students in pursuing their special interests and professional ambitions after graduation.

PRIZES AND AWARDS

Many academic departments offer prizes and awards for outstanding achievement. In some cases, eligibility is based on achievement in specific courses. Information about these awards should be obtained from the departments so that students are aware in advance of the criteria for selection.

ORGANIZATION OF THE CATALOG

This catalog includes all undergraduate education at Rutgers’ campus at New Brunswick/Piscataway.

The catalog begins with the Programs of Study for Liberal Arts Students section, a large A to Z listing of undergraduate programs and courses offered by several faculties, principally to students at the four liberal arts colleges. Since not all major programs are available at all schools, it is important for the student to consult the individual liberal arts college sections that follow to determine which majors are offered at each school. Each liberal arts college section also includes important information about the college’s specific aims, policies, academic programs, and degree requirements.

The professional school sections include similar college information and also include detailed programs of study and course listing chapters covering the academic programs offered by each of their faculties. Professional students also should refer to the large introductory A to Z listing both for courses required in their curriculum that are taught by other faculties and for elective courses in the arts and sciences.

In general, individual undergraduate courses offered at Rutgers in New Brunswick/Piscataway are open to students at all the undergraduate colleges, subject to prerequisite restrictions and space limitations.

The General Information chapters at the back of the catalog are relevant for students at all the undergraduate colleges in New Brunswick/Piscataway. It is important for students to familiarize themselves with these chapters as well as with their own particular college’s section.

Some courses are cross-listed in more than one department. Students should note that a cross-listed course is the same course listed under two or more subject indexes.