

General Education Requirements

Philosophy

The New Jersey Institute of Technology (NJIT) is dedicated to producing graduates who have the knowledge, skills, and motivation necessary to advance the state-of-the-art knowledge in their respective fields in addition to possessing a devotion to lifelong personal development as well as intellectual discovery beyond their discipline. Graduates must possess outstanding communication skills and understand the complexities of contemporary society and the ethical and societal issues involved in the professional pursuit of their discipline. Graduates must also possess a deep understanding of and appreciation for science and technology. The NJIT General Education Requirements (GER) are designed to be the dynamic yet minimal foundational curriculum encompassing the necessary preconditions for success in undergraduate disciplines as well as the breadth of knowledge demanded by contemporary society. Each college or department may set additional requirements that exceed the GER. In a larger sense, the GER are intended to provide an educational grounding for our students, a set of educational experiences harmoniously attuned to the mission of NJIT and its responsibilities to its constituents. In essence, the completion of the GER is a necessary step in the fulfillment of the implicit intellectual and social contract that NJIT has with its students and its local, national, and global communities. The maintenance and updating of the GER, including the list of courses fulfilling these requirements, are the responsibility of the Faculty Senate through its Committee on Undergraduate Education.

Computing Literacy

An understanding of the nature of computing, its impact on society and the driving forces behind its pervasive deployment is integral to effective functioning as a professional and as a citizen. Each student should learn to use software and computing systems and to access, store, process, and analyze information as an essential aspect of critical thinking and problem solving. Students should also develop an ability to design algorithms, to write programs, and to use software tools as appropriate to their discipline. Each student must complete a minimum of 3 credits in an introductory computing course covering the foundations of computational thinking.

Code	Title	Credits
	Computer Literacy GER Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/computer-science-ger/)	

Cultural Literacy

Cultural literacy provides students with proficiency in oral and written English, while encouraging students to analyze culture and society using the perspectives of history and the humanities. The ability to communicate ideas effectively is an essential characteristic of educated individuals. All educated individuals are also expected to understand and appreciate history and the world's cultures. Cultural literacy courses allow students to develop their capacity for critical thinking while cultivating an interest in one or more areas of the humanities, including: communications; ethics; history; literature; philosophy; politics; religion, and the performing and visual arts.

Each student must complete a minimum of 18 credits of history and humanities courses which form a natural progression of intellectual development. First year students must complete 6 credits of introductory communication courses (ENGL 101 and ENGL 102).

Then, students must complete 3 credits of History and Humanities courses at the 200 level.

Code	Title	Credits
	History and Humanities GER 200 level Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)	

This is followed by 6 credits of History and Humanities courses at the 300 level.

Code	Title	Credits
	History and Humanities GER 300+ level Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)	

Finally, students must complete 3 credits of an HSS senior seminar.

Code	Title	Credits
	HSS Senior Seminar Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/)	

Quantitative Reasoning/Mathematics Literacy

The ability to reason qualitatively and quantitatively, to understand probability and statistics, and to apply mathematical models to a variety of circumstances is fundamental to making informed decisions in the modern world. Depending on the discipline, the student should also be able to apply appropriate mathematical concepts and methods to the solution of problems in their professional domain. Each student must complete a minimum of 6 credits in introductory courses in quantitative reasoning with one course having content in probability and statistics.

Code	Title	Credits
	Quantitative Reasoning GER Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/math-ger/)	

Scientific Literacy

Natural science provides the basis for our knowledge of the physical universe and for technological progress. All students are expected to develop a thorough understanding of at least one laboratory science. Each student must complete a minimum of 7 credits in natural science courses including a laboratory experience.

Code	Title	Credits
	Scientific Literacy GER Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/)	

Social Science Literacy

An understanding of the social sciences is essential in order to understand the economic, social, and political forces at work in our world, both in an organizational setting and in society at large. Each student must complete a minimum of 3 credits in an appropriate social science or management-related course.

Code	Title	Credits
	Social Science Literacy GER Course List (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/social-science-ger/)	

First Year Seminar

All first-time, full-time freshman students are required to attend a first year seminar. The goal of the first year seminar is to assist students in adjusting to university life and to introduce them to their academic programs.