This program is designed to prepare students for careers in the field of technical communication. Students learn to approach communication issues in a scholarly and professional manner, developing abilities in critical thinking, problem solving, and navigating effectively and ethically through our scientific and technological society.

The program is intended for students and communication professionals who want to develop abilities in

- Social media
- User-centered design
- Usability testing and knowledge management
- Advanced communication theory and research methods
- Technical editing
- Writing and speaking in teams, in a wide range of professional environments

**Masters of Science in Professional and Technical Communication**

Please see our web site [https://humanities.njit.edu/ms-professional-and-technical-communication](https://humanities.njit.edu/ms-professional-and-technical-communication) for updated information.

The Master of Science in Professional and Technical Communication (MSPTC) prepares students for careers in the rapidly growing field of technical communication. This degree enables students to acquire an understanding of information technologies and to approach communication issues with new problem-solving skills. Familiarity and technical proficiency with many different media tools and services will also be gained. Professional experts will provide strong theoretical foundations within a practical framework. The MSPTC is entirely and only available online (in distance learning format).

**Admission Requirements**

Students must have an undergraduate degree in any field with strong interest in science and technology and/or communication and media and must submit the following.

- a statement outlining how the degree will meet personal and professional objectives;
- a current resume;
- one letter of recommendation;
- a portfolio of work (Three samples of writing, web development, CD-ROM, or other appropriate media that demonstrate abilities for clear expression);
- Graduate admission application;
- Official transcripts of all prior work and certificate of graduation;
- GRE scores (These scores are required of all international applicants, all applicants who have earned their last degree outside of the United States, and students who wish to apply for merit-based financial support on individual basis; other applicants do not need GRE scores);
- TOEFL scores of 550 (pencil and paper) or 79 (IBT) are required of all international applicants.

**Graduate Certificate Programs:** Two 12-credit graduate certificates are available as a step toward this degree

- Technical Communication Essentials
- Social Media Essentials

Please see Graduate Certificates for further information. For more information about continuing and distance education, please contact the Division of Continuing Professional Education, 1-800-624-9850 or 973-596-3060; e-mail: cpe@njit.edu.

**NJIT Faculty**

**A**

Ascarelli, Miriam F., University Lecturer

**B**

Brooks, Charles, Professor of Practice

**C**

Castronova, Louise, Senior University Lecturer

Cohen, Maurie, Professor and Chair
Curley, Jonathan R., Senior University Lecturer

Deane, Johanna, University Lecturer

Edel, Gareth, University Lecturer

Egan, John A., Senior University Lecturer

Esche, John N., University Lecturer

Estrada, Daniel J., University Lecturer

Fleischer, Doris Z., Senior University Lecturer

Funkhouser, Christopher T., Professor

Gorelick, Risa, University Lecturer

Holbrook, J. Britt, Associate Professor

Hunt, Theresa A., Senior University Lecturer

Johnson, Carol S., Associate Professor

Khichi, Narendra-Neel, Senior University Lecturer

Kimmelman, Burt J., Professor

Klobucar, Philip Andrew, Associate Professor

Lipuma, James M., Senior University Lecturer

McRae, Calista A. Associate Professor

Paris, Jerome, Director

Rothenberg, David B., Distinguished Professor

Rutkoff, Rebekah, Assistant Professor

See, Adam, University Lecturer

Semizer, Yelda, Assistant Professor

Siemann, Catherine A., Senior University Lecturer

Slovis, Jake, University Lecturer

Steffen, Nancy L., Associate Professor

Tyrol, Katherine, University Lecturer
Programs


Humanities Courses

ENG 502. English for International Graduate Students. 3 credits, 3 contact hours.
Practice in writing to improve sentence structure, grammar, vocabulary, and organization. For technical writing, see ENG 541. Level: High Intermediate.

ENG 503. Public Speaking for International Teaching Assistants and Others. 3 credits, 3 contact hours.
Practice in public speaking for international TAs and others who want to improve their oral presentation skills. Includes teaching techniques, extemporaneous speaking, and pronunciation. Weekly video-recorded presentations.

ENG 505. English Pronunciation for International Graduate Students. 3 credits, 3 contact hours.
Offers practice and guidance in developing clear, accurate English pronunciation.

ENG 507. Advanced Conversation and American Culture. 3 credits, 3 contact hours.
Practice in conversation in English. The goal is to help students gain cultural knowledge and everyday speaking skills to increase participation in American life. Develops skill in using American idiomatic expressions.

ENG 521. Technical Written and Oral Communication. 3 credits, 3 contact hours.
Designed for Ph.D. students, but also open to Masters students who want to improve their writing and oral presentation skills in English. Focus on communication on a professional level. The approach is practical; course is taught in workshop format with special attention to journal articles, material for the job market, conference presentations and aspects of the dissertation. Students learn to write clear and grammatically correct documents and develop skills in technical speaking presentations. Native speakers of English may also take this course.

ENGL 603. Speaking English in Professional Situations. 3 credits, 3 contact hours.
This course includes practice in speaking at conferences, seminars, and job interviews, along with leading group discussions, speaking on video platforms, teaching, and giving dissertation defenses. Each class meeting includes practice in speaking in a specific professional situation, with clear, easily understandable English speech. The course is designed for Ph.D. students whose first language is not English and is also open to master’s students.

ENGL 621. Technical Writing for Graduate Students. 3 credits, 3 contact hours.
This course develops the English language skills needed to write a dissertation, journal articles, grant proposals, and related forms of professional technical writing. For some assignments, students may work on projects from courses in their own fields, a part of their dissertation-in-progress, or a projected article for publication. Special attention is given to producing writing that is clear, grammatically correct, in accord with professional stylistic guidelines, and effectively organized. The course is designed for PhD students whose first language is not English but is also open to master’s students and native English speakers who want to improve their writing.

PTC 601. Advanced Professional and Technical Communication. 3 credits, 3 contact hours.
Provides the foundation and direction for all Professional and Technical Communication coursework. This course introduces students to the profession and the academic discipline of technical/professional communication. Modules include usability analysis; visual information; ethics; global diversity, global communication; report writing; information literacy; communicating with new technologies; and technical writing style. Students begin development of the MSPTC ePortfolio.

PTC 603. Identity, Technology, and Communication. 3 credits, 3 contact hours.
Prerequisite or corequisite: PTC 601. Examines the complex ways in which technology constructs and is constructed by society, with emphasis on interrelationships between technology and communication. Discussions focus on how technological change is expressed in social and political movements, literature, art, architecture, and philosophy and how they, in turn, influence the future direction of technology. Design and updating of the MSPTC ePortfolio will be required in this seminar.

PTC 604. Communication Theory and Research. 3 credits, 3 contact hours.
Pre or Corequisite: PTC 601. Reviews the major theories of communication and provides strategies for research in the field of Professional and Technical Communication. The course focuses on these research methods: problem statement and hypothesis formulation derived from theory; research design and data generation; existing information sources and their acquisition; and analytic techniques. Students develop analytic methods necessary to create a well-considered thesis proposal. Design and updating of the MSPTC ePortfolio will be required in this seminar.

PTC 605. Elements of Visual Design. 3 credits, 3 contact hours.
Prerequisite or corequisite: PTC 601. Provides an understanding of and competency in the visual presentation of information. Course integrates theories of design, techniques of composition, and technologies of electronic and print publishing. Modules include both design principles and hands-on practice in visual literacy, layout and design, and graphic tools. Design and updating of the MSPTC ePortfolio will be required in this seminar.

PTC 606. Advanced Information Design. 3 credits, 3 contact hours.
Develops online visual communication strategies and community building. The course will cover the design and creation of multimedia objects, usability heuristics, navigation theory, contemporary design practices and online community building. Students will be required to create media-rich multidimensional online projects that encourage and facilitate interaction and team-building in the online environment. Design and updating of the MSPTC ePortfolio will be required for this seminar.
PTC 610. Research Methods for Information Design. 3 credits, 3 contact hours.
Introduces user research methods such as contextual inquiry, ethnographic field studies, card sorting, affinity diagramming, and usability testing that provide the foundation for user-centered interaction design.

PTC 612. Theory and Practice of Text Encoding. 3 credits, 3 contact hours.
Introduces user research methods such as contextual inquiry, ethnographic field studies, card sorting, affinity diagramming, and usability testing that provide the foundation for user-centered interaction design.

PTC 620. Proposal Writing. 3 credits, 3 contact hours.
Provides an understanding of and practice in proposal writing for corporations, foundations, and government agencies. Students build skills to create a range of persuasive documents including proposals for research grants, responses to requests for proposal, and government proposals.

PTC 622. Working in Teams: Collaborative and Interpersonal Communications. 3 credits, 3 contact hours.
Introduces interpersonal and collaborative communication topics relating to face-to-face and virtual teams. Covers communication and documentation functions in agile project environments. Examines mobile workplace communication strategies.

PTC 624. Professional and Technical Editing. 3 credits, 3 contact hours.
Prerequisite or corequisite: PTC 601. Presents the theory and practice of editing professional and technical writing. Topics include correctness and conciseness, hard copy and on-line editing, editing graphics, document management, editor-author relationships, and ethical considerations in editing. Students edit writing samples from a variety of technical fields.

PTC 626. Communication Media Design Studio. 3 credits, 3 contact hours.
This course integrates language and media in a studio approach to multimodal communication projects. Students work with instructor to design individual projects using current media applications.

PTC 628. Analyzing Social Networks. 3 credits, 3 contact hours.
Prerequisite: PTC 601 for MSPTC students; approval of instructor for non-MSPTC students. This course will provide students with an overview of social networks by introducing them to the unique terminology of social networks (centrality, boundary spanners, directional ties, etc.) Positive and negative characteristics of social networks will be discussed, followed by visualizations and analyses of those characteristics. Students will read selected journal articles explaining how social networks relate to communication and the flow of information within organizations. The culmination of the course will be a project in which students will create and analyze their own social network, most likely drawing their data from the popular social media site Facebook and using ORA, a freeware social network analysis application created by Carnegie Mellon University.

PTC 629. Theory and Practice of Social Media. 3 credits, 3 contact hours.
Introduces social media strategies for reading and writing in today's multi-cultural, screen-oriented, networked culture. Students study relationship between mediated communication and human community and gain hands-on experience with chatting, blogging, tagging, wiki writing, tweeting and social media presentation. Students strategize, plan, design and produce social media projects of their own.

PTC 631. Communication and Environmental Problem Solving. 3 credits, 3 contact hours.
Prerequisite or corequisite: PTC 601. Develops critical thinking on ecological issues for problem solving by integrating technical information, human values, and communication with environmental change. Students combine theory, research and models, case studies, visual thinking, and scientific inquiry for application in individual decision-making course project.

PTC 632. Content Management and Information Architecture. 3 credits, 3 contact hours.
Prerequisite or Corequisite: PTC 601. Today’s complex systems often produce complex information needs that require new technical communication methods and tools. This course will focus on the use of Information Architecture methodologies (such as, DITA or DocBook) to develop a structure for presenting technical information and on Content Management tools for creating a single source repository for this information. Students will also use theory and practical applications to design and develop a structured online Help module.

PTC 640. Health Communications. 3 credits, 3 contact hours.
This course will focus on the use of communication strategies to inform and influence individual and community decisions regarding health. The course will cover: the multidimensional nature of health communication, research in health communication, behavioral theories in health communication, rhetorical theories in health communication, legal and ethical concerns in health communication, the communication of risk and uncertainty, and the design of health campaigns. Students will be required to (a) research and prepare a health communication strategy for use in a specific context and (b) to design an accompanying print or hypertext document to be used in that context.

PTC 642. Corporate Media and Communication. 3 credits, 3 contact hours.
Introduces the dynamics of communication within complex organizations. Develops communication skills for contemporary global corporate and business markets. Focuses on the efforts of businesses and organizations to communicate and persuade in target audiences. Covers translation issues in developing corporate media.

PTC 644. Communication in Technology Transfer and Innovation. 3 credits, 0 contact hours.
Examines roles of communication in innovation development and technology transfer. Students review models of communication in technology transfer in global contexts. Issues such as audience analysis, user experience, participatory design, and knowledge transfer will be investigated.

PTC 650. eLearning Design for Mobile. 3 credits, 3 contact hours.
Designing eLearning for mobile platforms is a critical skill for today’s technical communicator. Specific skills and tools are required to ensure a successful implementation. Based on proven user-centered design concepts, this course provides the student with the skills necessary to create effective mobile training programs.
PTC 660. Medical Ethics. 3 credits, 3 contact hours.
This course is an examination of the ethical problems and moral foundations of medicine. Among the issues explored are the changing nature of the doctor/patient relationship, increased patient autonomy, advance directives, the rationing of care, doctor-assisted suicide, and “the right to die.”

PTC 672. Design Instruction Assess Meth. 3 credits, 3 contact hours.
Prerequisite: Students must have a graduate standing and should be enrolled in MSPTC program or the Instructional Design and Educational Assessment certificate. Student must meet these requirements, approval of instructor is required. Examines planning and implementation of instruction to facilitate learning and analysis of methods of data gathering on learner progress and mastery, lessons and learning objects so appropriate instructional strategies with associated methods of formative and summative assessments that can yield data for learner assessment and course evaluation can be selected or develop to suit the instructional style, learner needs, and instructional situations.

PTC 681. Tech in Class & Learning Envir. 3 credits, 3 contact hours.
Prerequisite: Students must have a graduate standing and should be enrolled in MSPTC program or the Instructional Design and Educational Assessment certificate. Student must meet these requirements, approval of instructor is required. This course examines the various types of technology necessary to develop, use, and process the results of assessments as well as facilitate and augment instructional design. This course examines the integration of present and likely future technology into instruction to foster community, collaboration, conceptual development, and exceptional academic performance as well as a more effective and well-understood assessment system.

PTC 691. ePortfolio Capstone Seminar. 0 credits, 0 contact hours.
This course is taken in the student's final semester before graduation. Students complete final revisions of the ePortfolio of work completed in MSPTC seminars (may also include professional and service projects). Student ePortfolios must successfully demonstrate MSPTC core competencies and be presented in an oral presentation for faculty and other students.

PTC 698. Selected Topics in Professional and Technical Communication. 3 credits, 3 contact hours.
Prerequisite or corequisite: PTC 601 This is a Special Topics course (does not require CGE approval). It was presented to CGE in an effort to attract more students. Students will learn approaches to understanding and producing the forms of writing central to academic research. They will review literature, peer-review the work of others, prepare conference material, and produce a submission-quality journal or conference paper in their field of study. The current plan is to run the course every Spring.

PTC 700B. Master's Project. 3 credits, 3 contact hours.
Prerequisites: Approval of graduate advisor, and completion of core courses. Requires demonstration of student's ability to conceive and execute an extended writing project with professional graphics and to make an oral and visual presentation of the work. Based on experiential research (internship, co-op, work experience) student submits a proposal, develops a project (e.g., guidebook, manual, online documentation, website, video, podcast) and completes a paper describing the theory and methodology supporting the project application. Submission of the MSPTC ePortfolio demonstrating proficiency is required for graduation. Master's students registering for the first time in Master's Project must take simultaneously the INTD 799 (Responsible Contact of Research) course.

PTC 701B. Master’s Thesis. 3 credits, 3 contact hours.
Prerequisite: approval of graduate advisor; completion of core courses. Demonstrates ability to conceive and execute an extended writing project with professional graphics and to make an oral and visual presentation of the work. The completed written thesis should warrant publication in a technical journal. Thesis Committee consists of program-approved faculty advisor, one other faculty member, and external reviewer. A student must register continuously for a minimum of 3 credits per semester until thesis is completed. Total will be limited to 6 credits. Master’s students registering for the first time in Master’s Thesis must take simultaneously the INTD 799 (Responsible Contact of Research) course.

PTC 701C. Master’s Thesis. 6 credits, 3 contact hours.
Prerequisite: approval of graduate advisor; completion of core courses. Demonstrates ability to conceive and execute an extended writing project with professional graphics and to make an oral and visual presentation of the work. The completed written thesis should warrant publication in a technical journal. Thesis Committee consists of program-approved faculty advisor, one other faculty member, and external reviewer. A student must register continuously for a minimum of 3 credits per semester until thesis is completed. Total will be limited to 6 credits. Master’s students registering for the first time in Master’s Thesis must take simultaneously the INTD 799 (Responsible Contact of Research) course.

PTC 725. Independent Study in Professional and Technical Communication. 3 credits, 3 contact hours.
Prerequisite: approval of graduate advisor and supervising faculty. Allows development of areas of specialization for Master's Project or for areas of study in communication in which one or more students may be interested but which are not of sufficiently broad interest to warrant a regular course offering.

PTC 726. Independent Study II. 3 credits, 3 contact hours.