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 http://humanities.njit.edu/academics/graduate/ms-ptc.php 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
Bodner, Janet, Associate Director

C
Castronova, Louise, Senior University Lecturer
Cohen, Maurie, Professor
Curley, Jonathan R., Senior University Lecturer

E
Edel, Gareth
Egan, John A., University Lecturer
Esche, John N., University Lecturer
Estrada, Daniel J., University Lecturer

F
Fleischer, Doris Z., Senior University Lecturer
Funkhouser, Christopher T., Professor

G
Gorelick, Risa, University Lecturer

H
Henry, Rolanne, Senior University Lecturer
Holbrook, J. Britt, Assistant Professor
Hunt, Theresa A., University Lecturer

J
Johnson, Carol S., Associate Professor

K
Katz, Eric, Professor and Chair
Kerley, Michael, Associate Director
Khichi, Narendra-Neel, University Lecturer
Kimmelman, Burt J., Professor
Klobucar, Philip Andrew, Associate Professor
Kmiec, David M., University Lecturer

L
Lipuma, James M., Senior University Lecturer
Longo, Bernadette C., Associate Professor

M
McRae, Calista A. Assistant Professor

O
O’Neill, Megan E., Assistant Professor
O’Sullivan, William, University Lecturer

P
Pardi, Nina L., Senior University Lecturer
Paris, Jerome, Director
R
Rittenhouse, Michele R., Director
Rothenberg, David B., Distinguished Professor
Rutkoff, Rebekah, Assistant Professor

S
Siemann, Catherine A., University Lecturer
Steffen, Nancy L., Associate Professor

W
Waltz-Cummings, Anika E., University Lecturer
Wells, Louis A., University Lecturer

• Professional and Technical Communication - M.S. (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/professional-technical-communication-ms)

Programs

• Applied Science (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/applied-science-cert)
• Digital Marketing Design Essentials (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/digital-marketing-design-essentials-cert)
• Financial Mathematics (http://catalog.njit.edu/graduate/science-liberal-arts/mathematical-sciences/financial-mathematics-cert)
• Instructional Design, Evaluation and Assessment (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/instructional-design-evaluation-assessment-cert)
• Social Media Essentials (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/social-media-essentials-cert)
• Technical Communication Essentials (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/technical-communication-essentials-cert)
• User Experience Essentials (http://catalog.njit.edu/graduate/science-liberal-arts/humanities/user-experience-essentials-cert)

Humanities Courses

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.
Prerequisite 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 the use of Text Encoding standards such as TEI and DITA. Students learn to identify text encoding tools and methodologies and apply best practices in the design and development of text encoding solutions. Topics include text encoding tools, markup languages, document analysis, and workflow design for text delivery. After taking this class, students should be able to analyze processes and technologies that support the collection, management, and publishing of content in a variety of forms and media.

PTC 620. Proposal Writing. 3 credits, 3 contact hours.
Provides an understanding of proposal writing. Students will learn to identify considerations and methods for effective proposal writing. Topics covered will include text encoding tools, markup languages, document analysis, and workflow design for text delivery. After taking this class, students should be able to analyze processes and technologies that support the collection, management, and publishing of content in a variety of forms and media.

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. E-Learning 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 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 700. Master'S Project. 0 credits, 0 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.

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.

PTC 701. Master'S Thesis. 0 credits, 0 contact hours.
Prerequisites: 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 in completed. Total will be limited to 6 credits.

PTC 701B. Master'S Thesis. 3 credits, 3 contact hours.
Prerequisites: 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 in completed. Total will be limited to 6 credits.

PTC 701C. Master'S Thesis. 6 credits, 3 contact hours.
Prerequisites: 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 in completed. Total will be limited to 6 credits.

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.