UNIVERSITY OF MINNESOTA
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Twin Cities Campus

Technical Writing and Communication B.S.

Writing Studies Department

College of Liberal Arts

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2018
- Required credits to graduate with this degree: 120
- Required credits within the major: 50
- Degree: Bachelor of Science

The Department of Writing Studies offers a bachelor of science in technical writing and communication (TWC). This degree offers a unique combination of written, digital, oral and visual communication theory and practice as it relates to interdisciplinary areas of science and technology. Core WRIT courses address writing and editing, rhetorical theory, visual rhetoric and document design, usability, and technical communication practices. Students combine core WRIT courses with one of four sub-plan areas in technology or science: information technology and design, biological and health sciences, legal discourse and public policy, and environmental science. For major advising, contact the Assistant Director of the Technical Writing and Communication Program in the Department of Writing Studies in 202 Nolte Center.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the liberal education requirements.Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

Program Requirements

Equivalent transfer courses are accepted in all course groups except Core Courses.

Other courses may be allowed to count towards the sub-plan requirements; see department advisor for final consent.

At least 22 upper division credits in the major must be taken at the University of Minnesota - Twin Cities campus.

Students may earn a BS, a minor, or a certificate in technical writing and communication, but none of these may be combined.

All incoming CLA freshmen must complete the First-Year Experience course sequence.

Core Courses

Take exactly 7 course(s) totaling exactly 22 credit(s) from the following:

- WRIT 1001 - The Art of Explaining Things: Introduction to Technical Writing and Communication (3.0 cr)
- WRIT 3221W - Communication Modes and Methods [WI] (3.0 cr)
- WRIT 3441 - Editing, Critique, and Style (3.0 cr)
- WRIT 3671 - Visual Rhetoric and Document Design (3.0 cr)
- WRIT 3701W - Rhetorical Theory for Writing Studies [WI] (3.0 cr)
- WRIT 3562W - Technical and Professional Writing [WI] (4.0 cr)
  or WRIT 3562V - Honors: Technical and Professional Writing [WI] (4.0 cr)
- WRIT 4501 - Usability and Human Factors in Technical Communication (3.0 cr)
  or WRIT 4662W - Writing With Digital Technologies [WI] (3.0 cr)

Electives

Note: Any 3xxx or 4xxx-level WRIT course can be taken in conjunction with WRIT 4995 to fulfill the senior project.

Take 12 or more credit(s) from the following:

Oral, Written, Visual, and Digital Communication

Elective credit can only be received for WRIT 4662W if the course has not already fulfilled the core course requirement.

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Take 6 or more credit(s) from the following:
- WRIT 3029W - Business and Professional Writing [WI] (3.0 cr)
- WRIT 3101W - Writing Arguments [WI] (3.0 cr)
- WRIT 3102W - Public Writing [CIV, WI] (3.0 cr)
- WRIT 3244W - Critical Literacies: How Words Change the World [AH, DSJ, WI] (3.0 cr)
- WRIT 3257 - Technical and Professional Presentations (3.0 cr)
- WRIT 3672W - Project Design and Development [WI] (3.0 cr)
- WRIT 3751W - Seminar: Theory and Practice of Writing Consultancy [WI] (3.0 cr)
- WRIT 3896 - Internship in Technical Writing and Communication (3.0 cr)
- WRIT 4573W - Writing Proposals and Grant Management [WI] (3.0 cr)
- WRIT 4662W - Writing With Digital Technologies [WI] (3.0 cr)

•Science, Technology, and Society

Elective credit can only be received for WRIT 4501 if the course has not already fulfilled the core course requirement.
Take 6 or more credit(s) from the following:
- WRIT 3152W - Writing on Issues of Science and Technology [WI] (3.0 cr)
- WRIT 3315 - Writing on Issues of Land and the Environment [AH, DSJ] (3.0 cr)
- WRIT 3361 *{Inactive}*[LITR, CIV] (3.0 cr)
- WRIT 3371W - Technology, Self, and Society [TS, WI] (3.0 cr)
- WRIT 3381W - Writing and Modern Cultural Movements [AH, WI] (3.0 cr)
- WRIT 3405W - Humanistic Healthcare and Communication [AH, WI] (3.0 cr)
- WRIT 3577W - Rhetoric, Technology, and the Internet [TS, WI] (3.0 cr)
- WRIT 4431W - Science, Technology, and the Law [CIV, WI] (3.0 cr)
- WRIT 4501 - Usability and Human Factors in Technical Communication (3.0 cr)
- WRIT 4562 - International Professional Communication (3.0 cr)
- WRIT 4664W - Science, Medical, and Health Writing [WI] (3.0 cr)

Capstone

Take WRIT 4995 (1 cr.) in conjunction with a 3xxx- or 4xxx-level WRIT course. The following WRIT courses are recommended: WRIT 3102W, WRIT 3221W, WRIT 3244W, WRIT 3361, WRIT 3381W, WRIT 3441, WRIT 3577W, WRIT 3671, WRIT 3701W, Writ 4431, WRIT 4501, WRIT 4562, WRIT 4662W, and WRIT 4664W. Instructor consent is required prior to registration.
Take exactly 1 course(s) totaling exactly 1 credit(s) from the following:
Students who double major and choose to complete the capstone requirement in their other major may waive the Technical Writing and Communication BS capstone, and they do not need to replace the 1 credit.
- WRIT 4995 - Technical Writing and Communication Capstone (1.0 cr)

or WRIT 4995H *{Inactive}*(1.0 cr)

Upper Division Writing Intensive within the major

Students are required to take one upper division writing intensive course within the major. If that requirement has not been satisfied within the core major requirements, students must choose one course from the following list. Some of these courses may also fulfill other major requirements.
Take 0 - 1 course(s) from the following:
- WRIT 3029W - Business and Professional Writing [WI] (3.0 cr)
- WRIT 3101W - Writing Arguments [WI] (3.0 cr)
- WRIT 3102W - Public Writing [CIV, WI] (3.0 cr)
- WRIT 3152W - Writing on Issues of Science and Technology [WI] (3.0 cr)
- WRIT 3221W - Communication Modes and Methods [WI] (3.0 cr)
- WRIT 3244W - Critical Literacies: How Words Change the World [AH, DSJ, WI] (3.0 cr)
- WRIT 3371W - Technology, Self, and Society [TS, WI] (3.0 cr)
- WRIT 3381W - Writing and Modern Cultural Movements [AH, WI] (3.0 cr)
- WRIT 3405W - Humanistic Healthcare and Communication [AH, WI] (3.0 cr)
- WRIT 3577W - Rhetoric, Technology, and the Internet [TS, WI] (3.0 cr)
- WRIT 3672W - Project Design and Development [WI] (3.0 cr)
- WRIT 3701W - Rhetorical Theory for Writing Studies [WI] (3.0 cr)
- WRIT 3751W - Seminar: Theory and Practice of Writing Consultancy [WI] (3.0 cr)
- WRIT 4431W - Science, Technology, and the Law [CIV, WI] (3.0 cr)
- WRIT 4573W - Writing Proposals and Grant Management [WI] (3.0 cr)
- WRIT 4662W - Writing With Digital Technologies [WI] (3.0 cr)
- WRIT 4664W - Science, Medical, and Health Writing [WI] (3.0 cr)
- WRIT 3562W - Technical and Professional Writing [WI] (4.0 cr)

or WRIT 3562V - Honors: Technical and Professional Writing [WI] (4.0 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans.

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Information Technology and Design

Students completing this sub-plan are encouraged to take WRIT 3577W as one of their required electives for the major. WRIT 3577W does not count toward the required 15 credits in the sub-plan.

Required Courses

Take 15 or more credit(s) from the following:

Lower Division

Take at most 9 credit(s) from the following:

- CSCI 1001 *{Inactive}*[MATH, TS] (4.0 cr)
- CSCI 1103 - Introduction to Computer Programming in Java (4.0 cr)
- CSCI 1113 - Introduction to C/C++ Programming for Scientists and Engineers (4.0 cr)
- DES 2101 - Design and Visual Presentation (3.0 cr)
- GDES 2342 - Web Design (3.0 cr)
- GDES 2361 - Design Process: Photography (3.0 cr)
- DES 1101W - Introduction to Design Thinking [AH, WI] (4.0 cr)
  or DES 1101V - Honors: Introduction to Design Thinking [AH, WI] (4.0 cr)
- CSCI 1133 - Introduction to Computing and Programming Concepts (4.0 cr)
  or CSCI 1133H - Honors Introduction to Computing and Programming Concepts (4.0 cr)
- CSCI 2011 - Discrete Structures of Computer Science (4.0 cr)
  or CSCI 2011H - Honors Discrete Structures of Computer Science (4.0 cr)

Upper Division

Take 6 or more credit(s) from the following:

- COMM 3201 - Introduction to Electronic Media Production (4.0 cr)
- COMM 3204 - Advanced Electronic Media Production (4.0 cr)
- COMM 3211 - Introduction to Media Studies (3.0 cr)
- COMM 3645W - How Pictures Persuade [WI] (3.0 cr)
- COMM 4291 - New Telecommunication Media (3.0 cr)
- CSCI 3921W - Social, Legal, and Ethical Issues in Computing [CIV, WI] (3.0 cr)
- DES 3131 - User Experience in Design (4.0 cr)
- DES 3141 - Technology, Design, and Society [TS] (3.0 cr)
- DES 3311 - Travels in Typography (3.0 cr)
- GDES 4131W - History of Graphic Design [WI] (4.0 cr)
- IDSC 3101 - Introduction to Programming (2.0 cr)
- IDSC 3102 - Intermediate Programming (2.0 cr)
- JOUR 3006 - Visual Communication (3.0 cr)
- JOUR 3614 - History of Media Communication [HIS, TS] (3.0 cr)
- JOUR 3751 - Digital Media and Culture [AH, TS] (3.0 cr)
- UC 3201 *{Inactive}*(4.0 cr)
- HSCI 3331 - Technology and American Culture [HIS, TS] (3.0 cr)
  or HSCI 5331 - Technology and American Culture (3.0 cr)
- HSCI 3401 - Ethics in Science and Technology [HIS, CIV] (3.0 cr)
  or HSCI 5401 - Ethics in Science and Technology (3.0 cr)
- HSCI 4321 - History of Computing [TS, HIS] (3.0 cr)
  or CSCI 4921 - History of Computing [TS, HIS] (3.0 cr)
- KIN 3505 - Intro to Human-Centered Design (3.0 cr)
  or KIN 5505 - Human-Centered Design - Principles and Applications (3.0 cr)
- HUMF 5001 - Foundations of Human Factors/Ergonomics (3.0 cr)
  or KIN 5001 - Foundations of Human Factors/Ergonomics (3.0 cr)

Biological and Health Sciences

Students are strongly encouraged to take BIOL 1009 and ANAT 3001 within this sub-plan to facilitate a stronger knowledge base for other required courses.

Required Courses

Take 15 or more credit(s) from the following:

Lower Division

Take at most 9 credit(s) from the following:

- BIOC 1010 - Human Health and Disease (3.0 cr)
- BIOL 1101 - Genetics and Society [CIV] (3.0 cr)
- BIOL 1012 - Human Biology: Concepts and Current Ethical Issues [BIOL, CIV] (4.0 cr)
- NSCI 1001 - Fundamental Neuroscience: Understanding Ourselves [TS] (3.0 cr)
- NSCI 2101 - Human Neuroanatomy [BIOL] (4.0 cr)
- PHAR 1002 - Medical Terminology (2.0 cr)
- PHAR 1004 - Common Prescription Drugs and Diseases (2.0 cr)
- PHIL 1005 - Scientific Reasoning (4.0 cr)
  or PHIL 1005H *{Inactive}*(4.0 cr)

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- BIOL 1009 - General Biology [BIOL] (4.0 cr)
  or BIOL 1009H - Honors: General Biology [BIOL] (4.0 cr)
- CHEM 1015 - Introductory Chemistry: Lecture [PHYS] (3.0 cr)
  with CHEM 1017 - Introductory Chemistry: Laboratory [PHYS] (1.0 cr)
  CHEM 1061 - Chemical Principles I [PHYS] (3.0 cr)
    with CHEM 1065 - Chemical Principles I Laboratory [PHYS] (1.0 cr)
  or CHEM 1071H - Honors Chemistry I [PHYS] (3.0 cr)
    with CHEM 1075H - Honors Chemistry I Laboratory [PHYS] (1.0 cr)
  CHEM 1062 - Chemical Principles II [PHYS] (3.0 cr)
    with CHEM 1066 - Chemical Principles II Laboratory [PHYS] (1.0 cr)
  or CHEM 1072H - Honors Chemistry II [PHYS] (3.0 cr)
    with CHEM 1076H - Honors Chemistry II Laboratory [PHYS] (1.0 cr)
- CHEM 2301 - Organic Chemistry I (3.0 cr)
  or CHEM 2331H - Honors Elementary Organic Chemistry I (3.0 cr)
- CHEM 2302 - Organic Chemistry II (3.0 cr)
  or CHEM 2332H - Honors Elementary Organic Chemistry II (3.0 cr)

•Upper Division

Take 6 or more credit(s) from the following:

- ANAT 3001 - Human Anatomy (3.0 cr)
- BIOC 3021 - Biochemistry (3.0 cr)
- NSCI 3001W - Neuroscience and Society [CIV, WI] (4.0 cr)
- NSCI 3505W - Mind and Brain [WI] (4.0 cr)
- PHAR 3206 - Foundations of Health Literacy (3.0 cr)
- PHAR 3601 *{Inactive}*(3.0 cr)
- PHAR 4204W - Drugs and the U.S. Healthcare System [CIV, WI] (3.0 cr)
- PHAR 5201 - Applied Medical Terminology (2.0 cr)
- PHCL 3100 - Pharmacology for Pre-Med and Life Science Students (2.0 cr)
- PHIL 3601W - Scientific Thought [WI] (4.0 cr)
- PHSL 3051 - Human Physiology (4.0 cr)
- PUBH 3004 *{Inactive}*(4.0 cr)
- PUBH 3106 - Making Sense of Health Studies (2.0 cr)
- PUBH 3351 - Epidemiology: People, Places, and Disease (2.0 cr)
- PUBH 3415 - Introduction to Clinical Trials - Online (3.0 cr)
- PUBH 3905 *{Inactive}*(2.0 cr)
- STAT 3011 - Introduction to Statistical Analysis [MATH] (4.0 cr)
- MICB 3301 - Biology of Microorganisms (5.0 cr)
  or MICB 3303 - Biology of Microorganisms (without laboratory) (3.0 cr)
- BIOL 4003 - Genetics (3.0 cr)
  or GCD 3022 - Genetics (3.0 cr)
- BIOL 4004 - Cell Biology (3.0 cr)
  or GCD 4005W - Cell Biology-Writing Intensive [WI] (4.0 cr)

Legal Discourse and Public Policy

Students completing this sub-plan are encouraged to take WRIT 3577W and WRIT 4431 as two of their required electives for the major. WRIT 3577W and WRIT 4431 do not count toward the required 15 credits in the sub-plan.

Required Courses

Take 15 or more credit(s) from the following:

Lower Division

Take at most 9 credit(s) from the following:

- PHIL 1001 - Introduction to Logic [MATH] (4.0 cr)
- PHIL 1004W - Introduction to Political Philosophy [AH, CIV, WI] (4.0 cr)
- POL 1201 - Political Ideas [HIS, CIV] (3.0 cr)
- POL 1001 - American Democracy in a Changing World [SOCS] (3.0 cr)
  or POL 1001H *{Inactive}*[SOCS] (3.0 cr)

•Upper Division

Take 6 or more credit(s) from the following:

- COMM 3631 - Freedom of Speech [CIV] (3.0 cr)
- CSCI 3921W - Social, Legal, and Ethical Issues in Computing [CIV, WI] (3.0 cr)
- GWSS 3415 - Feminist Perspectives on Domestic Violence and Sexual Assault [DSJ] (3.0 cr)
- HIST 3835 - Law in American Life: 1865 to Present (3.0 cr)
- JOUR 3775 - Strategic Communication Law [CIV] (3.0 cr)
- JOUR 5552 - Law of Internet Communication (3.0 cr)
- LAW 3000 - Introduction to American Law and Legal Reasoning (3.0 cr)
- PHIL 4321W - Theories of Justice [WI] (3.0 cr)
- POL 3225 - American Political Thought [CIV] (3.0 cr)

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•POL 3308 - Congressional Politics and Institutions [SOCS] (3.0 cr)
•POL 3309 - U.S. Supreme Court Decision-Making, Process, and Politics (3.0 cr)
•POL 4403W - Constitutions, Democracy, and Rights: Comparative Perspectives [GP, WI] (3.0 cr)
•POL 4485 *{Inactive}*[CIV] (3.0 cr)
•POL 4501W - The Supreme Court and Constitutional Interpretation [CIV, WI] (3.0 cr)
•POL 4502W - The Supreme Court, Civil Liberties, and Civil Rights [CIV, WI] (3.0 cr)
•SOC 4161 - Criminal Law in American Society (3.0 cr)
•SOC 4162 - Criminal Procedure in American Society (3.0 cr)
•SOC 3101 - Sociological Perspectives on the Criminal Justice System [CIV] (3.0 cr)
or SOC 3101H - Honors: Sociological Perspectives on the Criminal Justice System [CIV] (3.0 cr)
•AAS 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
or AFRO 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
or AMIN 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans, & Chicanos in the U.S. (3.0 cr)
or CHIC 4231 - Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S. (3.0 cr)
•JOUR 3776 - Media Law (3.0 cr)
or JOUR 3776H - Media Law (3.0 cr)
•SOC 4101W - Sociology of Law [WI] (3.0 cr)
or SOC 4101V - Honors: Sociology of Law [WI] (3.0 cr)
•SOC 4171 - Sociology of International Law: Human Rights & Trafficking [GP] (3.0 cr)
or GLOS 4406 *{Inactive}*[GP] (3.0 cr)

Environmental Science

Required Courses

Take 15 or more credit(s) from the following:

Lower Division

Take at most 9 credit(s) from the following:

•ESCI 1001 - Earth and Its Environments [PHYS, ENV] (4.0 cr)
•ESCI 2202 - Earth History (4.0 cr)
•ESPM 1011 - Issues in the Environment [ENV] (3.0 cr)
•BIOL 1052 - Environmental Biology: Science and Solutions [ENV] (3.0 cr)
or BIOL 1055 - Environmental Biology: Science and Solutions with Laboratory [BIOL, ENV] (4.0 cr)
•GEOG 1403 - Biogeography of the Global Garden [BIOL, ENV] (4.0 cr)
or GEOG 1403H - Honors: Biogeography of the Global Garden [BIOL, ENV] (4.0 cr)
•ESPM 1425 - Introduction to Weather and Climate [PHYS, ENV] (4.0 cr)
or GEOG 1425 - Introduction to Weather and Climate [PHYS, ENV] (4.0 cr)

•Upper Division

Take 6 or more credit(s) from the following:

•BBE 4733 - Renewable Energy Technologies [TS] (3.0 cr)
•CEGE 3501 - Introduction to Environmental Engineering [ENV] (3.0 cr)
•CEGE 3541 - Environmental Engineering Laboratory (3.0 cr)
•COMM 4251 - Environmental Communication [ENV] (3.0 cr)
•ENGL 3501 - Public Discourse: Coming to Terms with the Environment [LITR, ENV] (3.0 cr)
•ESCI 3005 - Earth Resources (3.0 cr)
•ESPM 3011W - Ethics in Natural Resources [CIV, WI] (3.0 cr)
•ESPM 3607 - Natural Resources Consumption and Sustainability [GP] (3.0 cr)
•ESPM 3612W - Soil and Environmental Biology [WI] (4.0 cr)
•ESPM 4021W - Problem Solving: Environmental Review [WI] (4.0 cr)
•FW 4102 - Principles of Conservation Biology [ENV] (3.0 cr)
•GEOG 3401W - Geography of Environmental Systems and Global Change [ENV, WI] (3.0 cr)
•GEOG 4002W - Environmental Thought and Practice [WI] (3.0 cr)
•LA 3501 - Environmental Design and Its Biological and Physical Context [ENV] (3.0 cr)
•PHIL 3301 - Environmental Ethics [ENV] (4.0 cr)
•SUST 3003 - Sustainable People, Sustainable Planet [ENV] (3.0 cr)
•URBS 3751 - Understanding the Urban Environment [ENV] (3.0 cr)
•AGRO 3203W - Environment, Global Food Production, and the Citizen [GP, WI] (3.0 cr)
or ANSC 3203W - Environment, Global Food Production, and the Citizen [GP, WI] (3.0 cr)
•ESCI 3002 - Climate Change and Human History [ENV] (3.0 cr)
or ESCI 5102 - Climate Change and Human History (3.0 cr)
•GEOG 3379 - Environment and Development in the Third World [SOCS, ENV] (3.0 cr)
or GLOS 3303 *{Inactive}*[SOCS, ENV] (3.0 cr)
•ESCI 3402 - Science and Politics of Global Warming [ENV] (3.0 cr)
or ESCI 5402 - Science and Politics of Global Warming (3.0 cr)
•HSG 3482 *{Inactive}*[TS] (3.0 cr)
or ESPM 3601 - Sustainable Housing--Community, Environment, and Technology [TS] (3.0 cr)
•GLOS 4305 *{Inactive}*[ENV] (3.0 cr)
or SOC 4305 - Environment & Society: An Enduring Conflict [ENV] (3.0 cr)

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•HSCI 3244 - Nature's History: Science, Humans, and the Environment [HIS, ENV] (3.0 cr)
or HSCI 5244 - Nature's History: Science, Humans, and the Environment (3.0 cr)

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