The Technical Communication Certificate (TCC) has established itself as a program that meets industry and government agencies’ demands for students with skills as communicators and for communication specialists. Because employers value well-developed communication skills, TCC courses will enhance success in co-op/intern positions and post-graduation careers. TCC graduates overwhelmingly confirm not only that the certificate gave them an edge over other candidates during the recruitment process, but also that the communication knowledge, skills, and attitudes they acquired while in the program helped them succeed in their jobs and helped prepare them for the diverse communication and management tasks in today’s multifunctional team environments.

The Technical Communication Certificate, offered by the Department of Engineering Professional Development (EPD), complements all undergraduate degrees, but is especially designed to fit in well with an engineering degree. TCC students gain experience in career-applicable skills by

- Receiving education in principles and processes for communicating about technical subjects (including problem solving methods, audience analysis, rhetorical analysis, conventions of format, and usability testing).
- Gaining education in the fundamentals of written, oral, and visual communication (including organization, structure, style, mechanics, format, and delivery).
- Learning effective interpersonal communication and management skills (including teamwork, interviewing, leading and facilitating groups, project management, and international communication).
- Gaining opportunities to research and think analytically about contemporary issues and to consider ethical issues.
- Using current technology to encourage effective communication in a variety of environments (including use of the web, distance communication, electronic publishing, group software, and layout and presentation software).

While the certificate is designed especially for engineering students, students from other fields sometimes seek out the program to enhance their career options. Students who complete the certificate will have the notation "Technical Communication Certificate" added to their transcripts.

Aside from the relevant courses offered in the TCC, students especially value the close contact with faculty through advising and development of a TC Certificate Portfolio. Students in the program often take on leadership roles in other college or campus student organizations and projects, further developing their communication, team, and management skills.

**HOW TO GET IN**

Undergraduates who and would like to enroll in the Technical Communication Certificate may download the TCC Application form (PDF) (http://tc.engr.wisc.edu/wp-uploads/2012/05/TCCApplication2016.pdf) or pick one up from Suite 2107 in the Mechanical Engineering Building. Please include a current transcript or DARS report with the application form. Graduate students and non-degree-seeking students cannot enroll in the TCC.

**PREREQUISITES FOR ADMISSION TO THE TCC PROGRAM**

- A grade of at least B in Communication A or equivalent course or AP English credits (score of at least 4 out of 5).
- Four courses (12-credit minimum) in science and/or engineering, including at least one intermediate-level (minimum 200-level) course.
- Three courses (9-credit minimum) in humanities, social sciences, and/or foreign language.
- Overall GPA of at least 2.5.

Applications are accepted throughout the semester, though students are encouraged to submit applications as early as possible so they have ample time to plan their coursework. Please drop completed applications off at Suite 2107, Mechanical Engineering, or email completed pdf applications to Dr. Laura Grossenbacher at lgrossenbac@wisc.edu. The program will notify all new admissions via email.

**REQUIREMENTS**

To graduate with the certificate in technical communication, students must complete at least 24 credits, with a minimum of 9 credits in technical proficiency courses and a minimum of 15 credits in both technical and non-technical communication courses.

In addition to course requirements, students must achieve at least a B in the required Technical Communication (E P D 397) and the Technical Communications Internship (E P D 398). All students must complete the program within five years from their application date. Students must meet regularly with their assigned certificate advisor and must compile and submit a portfolio of their work for the internship course. Students cannot count courses completed on a pass/fail basis toward the certificate.

Substitution of courses substantively equivalent to those listed will be considered by the Technical Communication Curriculum Committee. Students must submit requests for substitution with supporting material before beginning the course.

**PREREQUISITES**

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<thead>
<tr>
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<th>Credits</th>
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<tr>
<td>A grade of at least B in Communication A or equivalent course or AP English credits (score of at least 4 or 5)</td>
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<tr>
<td>Select four courses (12-credit minimum) in science and/or engineering, including at least one intermediate-level (minimum 200-level) course</td>
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<tr>
<td>Select three courses (9-credit minimum) in humanities, social sciences, and/or foreign language</td>
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<td>Overall GPA of at least 2.5</td>
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**TECHNICAL PROFICIENCY**

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<tr>
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<td>Code</td>
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### Mathematics/Statistics

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<td></td>
<td><strong>Mathematics or Statistics courses (200-level or above)</strong></td>
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<td>COM ARTS 361</td>
<td>Introduction to Quantitative Research in Communication</td>
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<tr>
<td>GEN BUS 303</td>
<td>Business Statistics</td>
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<td>PSYCH 210</td>
<td>Basic Statistics for Psychology</td>
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<td>SOC/C&amp;E SOC 357</td>
<td>Methods of Sociological Inquiry</td>
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<td>SOC/C&amp;E SOC 360</td>
<td>Statistics for Sociologists I</td>
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### Computer Science

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<tr>
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<td>Introduction to Chemical Process Modeling</td>
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<tr>
<td>COMP SCI 302</td>
<td>Introduction to Programming</td>
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<tr>
<td>COMP SCI 310</td>
<td>Problem Solving Using Computers</td>
<td>3</td>
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<td>COMP SCI/ INFO SYS 371</td>
<td>Technology of Computer-Based Business Systems</td>
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<tr>
<td>LSC 532</td>
<td>Web Design for the Sciences</td>
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### Management/Economics/Business

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<tr>
<td>A A E/INTL ST 374</td>
<td>The Growth and Development of Nations in the Global Economy</td>
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<td>CIV ENGR/BSE 491</td>
<td>Legal Aspects of Engineering</td>
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<td>CIV ENGR 492</td>
<td>Integrated Project Estimating and Scheduling</td>
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<td>CIV ENGR 494</td>
<td>Civil and Environmental Engineering Decision Making</td>
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<td>CIV ENGR 498</td>
<td>Construction Project Management</td>
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<td>CIV ENGR 570</td>
<td>Environmental Impact of Transportation Systems</td>
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<td>ECON 301</td>
<td>Intermediate Microeconomic Theory</td>
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<td>ECON 302</td>
<td>Intermediate Macroeconomic Theory</td>
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<td>3-4</td>
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<td>ECON 467</td>
<td>International Industrial Organizations</td>
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<tr>
<td>ECON 590</td>
<td>Tutorial in Research Project Design</td>
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<td>GEN BUS 302</td>
<td>Business Organizations and Negotiable Instruments</td>
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<tr>
<td>GEN BUS 365</td>
<td>Contemporary Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>GEN BUS/ ENVIR ST 601</td>
<td>Systems Thinking and Sustainable Businesses</td>
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<td>Intercultural Communication in Business</td>
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<td>I SY E 313</td>
<td>Engineering Economic Analysis</td>
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<td>I SY E/PSYCH 349</td>
<td>Introduction to Human Factors</td>
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<td>I SY E 476</td>
<td>Industrial Engineering Projects</td>
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<td>I SY E 515</td>
<td>Engineering Management of Continuous Process Improvement</td>
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<tr>
<td>I SY E 575</td>
<td>Introduction to Quality Engineering</td>
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<td>Sociotechnical Systems</td>
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<td>MARKETNG/ INTL BUS 420</td>
<td>Global Marketing Strategy</td>
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### TECHNICAL COMMUNICATION REQUIRED COURSES

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<tr>
<td>E P D 397</td>
<td>Technical Communication</td>
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<tr>
<td>E P D 398</td>
<td>Technical Communications Internship (Required. This course, completed in conjunction with the Technical Communication Internship, can be repeated for an additional credit, which will count toward elective courses in technical communication from EPD. Also, this course can be substituted with a special project completed as an Independent Study course.)</td>
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<tr>
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### TECHNICAL COMMUNICATION ELECTIVES

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### Elective Courses in Communication

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<td>E P D 275</td>
<td>Technical Presentations</td>
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<tr>
<td>E P D/E ASIAN 374</td>
<td>Intermediate Technical Japanese I</td>
<td>3</td>
</tr>
<tr>
<td>E P D 690</td>
<td>Special Topics in Engineering Professional Development (The Wisconsin Engineer Magazine - up to 2 semesters may count)</td>
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<td>M E 231</td>
<td>Introductory Engineering Graphics</td>
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<td>I SY E 515</td>
<td>Engineering Management of Continuous Process Improvement</td>
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<td>BSE 375</td>
<td>Special Topics</td>
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<tr>
<td>CBE 324</td>
<td>Transport Phenomena Lab</td>
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<td>CBE 424</td>
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<tr>
<td>COM ARTS 260</td>
<td>Communication and Human Behavior</td>
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<td>COM ARTS 262</td>
<td>Theory and Practice of Argumentation and Debate</td>
<td>3</td>
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<td>COM ARTS 263</td>
<td>Speech Composition</td>
<td>3</td>
</tr>
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<td>COM ARTS 266</td>
<td>Theory and Practice of Group Discussion</td>
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<td>COM ARTS 272</td>
<td>Introduction to Interpersonal Communication</td>
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<td>COM ARTS 275</td>
<td>Communication Theory</td>
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<td>COM ARTS 277</td>
<td>Introduction to Media Production</td>
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<td>COM ART 278</td>
<td>Theory and Practice of Persuasion</td>
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<td>COM ARTS 280</td>
<td>Communication Theory</td>
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<td>COM ARTS 282</td>
<td>Theories of Deliberation and Controversy</td>
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<td>COM ARTS 285</td>
<td>Communication in Complex Organizations</td>
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<td>Intermediate Composition</td>
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<td>ENGL 315</td>
<td>English Phonology</td>
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<td>ENGL 500</td>
<td>Writing in Workplaces</td>
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<tr>
<td>ENGL 318</td>
<td>Second Language Acquisition</td>
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<td>Systems Thinking and Sustainable Businesses</td>
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<td>HIST SCI 201</td>
<td>The Origins of Scientific Thought</td>
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<td>HIST SCI 202</td>
<td>The Making of Modern Science</td>
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<td>HIST SCI 203</td>
<td>Science in the Twentieth Century: A Historical Overview</td>
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Independent Study courses by instructor approval only

Note: These EPD courses do NOT count toward the TCC:
- E P D 654 Teaching in Science and Engineering
- E P D 690 Core Competency in Sustainability
- E P D 690 ATE Powertrain
- E P D 690 Essential Skills for Engineering Productivity

Special credits in Technical Communication include E P D 299 Sophomore Independent Study, E P D 399 Junior Independent Study and E P D 499 Senior Independent Study.

**SENIOR DESIGN OR CAPSTONE**

Code | Title                                               | Credits |
-----|-----------------------------------------------------|---------|
B M E 400 | Capstone Design Course in Biomedical Engineering | 3       |
CIV ENGR 578 | Senior Capstone Design                  |         |
G L E 479 | Geological Engineering Design             |         |
E M A 469 | Design Problems in Engineering           |         |
I SY E 476 | Industrial Engineering Projects          |         |
M E 349   | Engineering Design Projects              |         |
M E 351   | Interdisciplinary Experiential Design Projects I |         |
M E 352   | Interdisciplinary Experiential Design Projects II |        |
M S & E 470 | Capstone Project I                      |         |
M S & E 471 | Capstone Project II                     |         |
N E 571   | Economic and Environmental Aspects of Nuclear Energy |    |

Total Credits | 3       |

Select one of the following:

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Total Credits | 3       |