

Section 3. Elective Courses in Communication: minimum 8 credits. Note that the sections below show courses within EPD, courses within the College of Engineering, and courses all across campus that can count as elective courses for this category.

Courses within EPD that can count:

- EPD 275 Technical Presentations, 2 cr.
- EPD 374 Intermediate Technical Japanese, 3 cr.
- EPD 690: Special Topics
The Wisconsin Engineer magazine, 1 cr. (up to 2 credits count toward elective courses in technical communication from EPD)

Language courses above the 200 level can also fulfill this requirement through a course substitution.

College of Engineering Courses that fulfill our Elective Courses in Communication Requirement:

M E 231: Introductory Engineering Graphics
2 credits

Prerequisites: Pre-admission to College of Engr. Open to Fr

Course Description: A freshman level course which provides the undergraduate engineering student with a background in descriptive geometry, orthographic projection, engineering drawing standards and annotation, and computer-aided engineering graphics. Point line and plane relationships in projection; multi-view engineering drawings; auxiliary and section views; basic dimensioning and annotation; engineering applications. (Fall/Spring)

I SY E 515: Engineering Management of Continuous Process Improvement
3 credits

Prerequisites: EPD 397 & Sr or Grad st, or cons inst

Course Description: This course addresses the role of the industrial engineer as a "manager" of continuous improvement in design and production processes. It provides modern tools and techniques for planning and managing team projects, integrating the concepts of total quality, data based decision making, and resource management. (Fall)

BSE 375: Special Topics
1-4 credits

Prerequisites: Cons inst

Course Description: Based on topic.

CBE 324: Transport Phenomena Lab
3 credits

Prerequisites: CBE 310 & 320, or con reg; Stat 324

Course Description: Determination of thermodynamic properties, transport properties, and transfer coefficients; study of related phenomena. (Fall/Spring)

CBE 424: Operations and Process Laboratory
5 credits

Prerequisites: CBE 324, 326, 426 & 430; or cons inst

Course Description: Experiments in unit operations, and supervised individual assignments selected from areas such as: fluid dynamics, analytical methods, reaction kinetics, plastics technology, and use of computers in data processing and simulation.

Other campus courses that fulfill our Elective Courses in Communication Requirement:

COM ARTS 260: Communication and Human Behavior
3 credits

Prerequisites: Open to Fr. Not open to Seniors

Course Description: Concepts and processes relevant to the study of communication and human behavior including approaches to communication inquiry, the dynamics of face-to-face interaction, and the pragmatic and artistic functions of public communication. (Fall/Spring)

COM ARTS 262: Theory and Practice of Argumentation and Debate
3 credits

Prerequisites: Open to Fr

Course Description: Practice in preparation and delivery of various types of argumentative speeches and debates. (Fall/Spring/Summer)

COM ARTS 263: Speech Composition
3 credits

Prerequisites: Com Arts 100 or 181 or cons inst

Course Description: Application of rhetorical theory to composition, study of model speeches, and writing of speeches.

COM ARTS 266: Theory and Practice of Group Discussion
3 credits

Prerequisites: Open to Fr.

Course Description: Structure and dynamics of small group decision-making. Critical and creative problems in group interaction processes. (Fall/Spring/Summer)

COM ARTS 272: Introduction to Interpersonal Communication
3 credits

Prerequisites: Open to Fr. Only one of the following crses may be taken for credit: Com Arts 272, 273.

Course Description: Survey of concepts, theories, and research concerning communication across all phases of interpersonal relationships, focusing on both theoretical and practical applications. (Fall/Spring/Summer)

COM ARTS 355: Introduction to Media Production
4 credits

Prerequisites: So st

Course Description: Theory and practice of media production and screenwriting. (Fall/Spring)

COM ARTS 368: Theory and Practice of Persuasion
3 credits

Prerequisites: So st

Course Description: A theory-based examination of the role of communication in attitude formation and planned social change. Analysis and creation of persuasive messages. (Fall/Spring)

COM ARTS 410: Miscommunication
3 credits

Prerequisites:

Course Description: Problematic aspects of miscommunication in the study of face-to-face interaction. Course helps explain why people often have so much difficulty understanding the intentions, interpretations, and meanings of other people's actions. (Fall/Spring)

COM ARTS 560: Communication Theory

3 credits

Prerequisites: Com Arts 260 or cons inst

Course Description: Introduction and survey of contributions of behavioral science and philosophy to a unified theory of communication. (Fall)

COM ARTS 562: Theories of Deliberation and Controversy

3 credits

Prerequisites: Jr st & Com Arts 262 or cons inst

Course Description: Examination of theories of deliberation and controversy. Application of theories to public controversies.

COM ARTS 575: Communication in Complex Organizations

3 credits

Prerequisites: Any course in Com Arts with social studies or cons inst

Course Description: Theoretical perspectives and research literature in organizational science, with special attention to social interaction.

ENGLISH 201: Intermediate Composition

3 credits

Prerequisites: Com A. Not open to Fr or auditors

Course Description: Provides practice in persuasive writing in various modes, styles, and genres; develops an understanding of the different contexts of writing, both scholarly and public; provides opportunities for exploring the relation between writing and speaking; and provides critical tools for the rhetorical analysis of expository prose. (Fall/Spring/Summer)

ENGLISH 315: Advanced Composition

3 credits

Prerequisites: Completion of Com A and Com B; English 100, English 201, or English 203 recommended. Jr or Sr st

Course Description: Focuses on developing complex understandings of rhetorical, ethical, and literary strategies for writing. Practice in writing a range of nonfiction genres with attention to varieties of style, context, critical standards, and conventions. Designed for students with a strong interest in writing. May include multi-modal assignments. (Fall/Spring/Summer)

ENGLISH 317: Writing in Workplaces

3 credits

Prerequisites: Cons inst; Pref to seniors and English majors. Com A and Com B

Course Description: First in a two-course sequence for juniors and seniors who want to develop broader awareness of workplace writing in relation to personal literacy and rhetorical contexts. Practice in producing professional quality texts. Attention to digital writing situations, including writing for the web. Serves as a prerequisite for English 318. (Fall)

ENGLISH 318: Writing Internship

3 credits

Prerequisites: English 317 and cons inst

Course Description: Practical experience in a workplace setting that requires writing. Minimum 6-10 hours per week plus class meetings. Analysis of professional writing situations and conventions. A final report and reflection connects the internship to previous coursework. May involve multi-modal composition (e.g., digital storytelling). (Spring)

GEN BUS 300: Professional Communication

3-4 credits

Prerequisites: So or Jr st. Not open to grad students. This course should be taken within the first two semesters after admission to the School of Business

Course Description: Expository writing relative to written communications used in organizations: letters, factual memoranda, brief reports, technical research reports. Development of skills in oral and graphic communications; committee reports, staff presentations. (Fall/Spring/Summer)

GEN BUS 601: Systems Thinking and Sustainable Businesses

3 credits

Prerequisites: Admitted bus student with Jr or Sr st or enviro studies student

Course Description: Introduces students to the concept of systems thinking so as to allow them to use systems to bring about large scale social change, both within the business community and within our societal infrastructure. (Spring)

HIST SCI 201: The Origins of Scientific Thought

3 credits

Prerequisites: Open to Fr. Not open to students who have taken ILS 201 or Hist Sci 323, except by cons inst

Course Description: Emergence of scientific method and scientific modes of thought out of ancient philosophical and religious traditions; the impact of ancient science on medieval Christendom; the origins and development of the Copernican-Newtonian world view. (Fall/Spring)

HIST SCI 202: The Making of Modern Science

3 credits

Prerequisites: Not open to students who have had Hist of Sci 204. Open to Fr

Course Description: Major trends and developments in the sciences from the 17th century to the early 20th century. Emphasis on those with broad cultural and social implications. (Fall/Spring)

HIST SCI 203: Science in the Twentieth Century: A Historical Overview

3 credits

Prerequisites: Open to Fr

Course Description: Major themes in the physical, biological and environmental sciences from 1890 to the present, with attention to conceptual development, interaction of science and society, philosophical issues, and personalities in science. (Fall)

JOURN 419: Electronic News for Web and Broadcast

4 credits

Prerequisites: Journ 335

Course Description: News reporting, writing, and editing for the World Wide Web and for broadcast; includes interviewing, use of electronic equipment and presentation of webcasts, issues and problems in electronic news, production of webcasts. (Fall/Spring)

JOURN 447: Strategic Media Planning

4 credits

Prerequisites: Journ 345

Course Description: Introduction to media planning for students interested in careers in advertising, public relations, or other forms of strategic communication. (Fall/Spring)

JOURN 515: Public Information Campaigns and Programs

3 credits

Prerequisites: L Sc Com 111 or 130, Sr st & cons inst

Course Description: Design, production and evaluation of communication programs aimed at informing and educating publics about agricultural, environment, science, health and human ecology issues. (Fall/Spring)

JOURN 544: Introduction to Survey Research

3 credits

Prerequisites: Jr st

Course Description: Theory and practice of survey research; planning, sampling, questionnaire construction, interviewing, content analysis, machine tabulation, analysis of data; two hours lecture; two hours lab or field work. (Fall/Spring)

JOURN 559: Law of Mass Communication

4 credits

Prerequisites: Jr st

Course Description: Freedom of speech and press with particular emphasis on major legal issues confronting media practitioners; introduction to such areas of law as censorship, libel, invasion of privacy, access to information, regulation of electronic media and commercial speech. (Fall/Spring)

L I S 450: Information Agencies and Their Environment

3 credits

Prerequisites: Jr st & cons of dept

Course Description: Basic communication theories and models; information users as individuals and as members of groups; production and transmission of information; nature and roles of libraries and other information agencies; the profession of librarianship.

L I S 663: Introduction to Cyberlaw

3 credits

Prerequisites: Jr st & cons inst, or Grad st in SLIS

Course Description: This is an introductory course in the law of cyberspace. The emphasis is on critical thinking about a broad variety of legal and policy problems that arise because of ever-changing information and communication technologies.

L SC COM 320: Feature Writing

3 credits

Prerequisites: Ag Journ 111 or equiv. Jr st

Course Description: Advanced writing techniques and in-depth article development, emphasizing agriculture, environment, science, and health topics. (Fall)

L SC COM 350: Visualizing Science and Technology

3 credits

Prerequisites: Ag Journ 111 or Fam Com 130 or cons inst

Course Description: Introduction to the basic principles in the visual communication of science information. Principles of design, perception, cognition as well as the use of technologies in the representation of science in the mass media will be explored through illustrated lectures and written critique. (Fall/Spring)

L SC COM 515: Public Information Campaigns and Programs

3 credits

Prerequisites: L Sc Com 111 or 130, Sr st & cons inst

Course Description: Design, production and evaluation of communication programs aimed at informing and educating publics about agricultural, environment, science, health and human ecology issues. (Fall/Spring)

M H R 365: Contemporary Topics

1-3 credits

Prerequisites: So, Jr or Sr st; cons inst. Not open to grad students. Prerequisite varies by topic.

Course Description: A course for the exploration of subject areas possibly to be introduced into the business curriculum.

M H R 401: The Management of Teams

3 credits

Prerequisites: Jr or Sr st; MHR 300. Not open to grad students

Course Description: Examines components that comprise teams, highlights key factors that influence team effectiveness, develops skills in diagnosing opportunities and threats that face teams, and enhances teamwork expertise. (Fall/Spring)

PHILOS 210: Reason in Communication

3-4 credits

Prerequisites: Open to Fr

Course Description: Argument in familiar contexts; emphasis upon developing critical skills in comprehending, evaluating, and engaging in contemporary forms of reasoning, with special attention to the uses of argument in mass communication media. (Fall/Spring/Summer)

PHILOS 241: Introductory Ethics 3-

4 credits

Prerequisites: So st

Course Description: Nature of moral problems and of ethical theory, varieties of moral skepticism, practical ethics and the evaluation of social institutions. (Fall/Spring/Summer)

PHILOS 243: Ethics in Business

3-4 credits

Prerequisites: So st

Course Description: Case studies of moral issues in business; types or reasons appealed to for settlement.

PHILOS 441: Environmental Ethics

3-4 credits

Prerequisites: 3 cr philos or enviro studies, or Grad st in IES

Course Description: Adequacy of ethical theories in handling such wrongs as harm to the land, to posterity, to endangered species, and to the ecosystem itself. Exploration of the view that not all moral wrongs involve harm to humans. Inquiry into the notion of the quality of life and the ethics of the "lifeboat" situation. (Fall/Spring/Summer)

PSYCH 530: Introductory Social Psychology

3-4 credits

Prerequisites: So st and Psych 201 or 202 or 281 or Soc 210 or Anthro 100, Grad students must have cons inst

Course Description: The individual in a social context, including motivation, attitudes, conformity, communication, leadership, etc. (Fall/Spring/Summer)

PSYCH 652: Sociotechnical Systems

3 credits

Prerequisites: Grad st or IE 349

Course Description: Sociotechnical systems theory with applications to the design of organizations and jobs. Open systems and organizational environments. Analysis of the technical and social systems and techniques for "whole" system consideration. Organizational design strategy. Field site analyses by student teams. (Fall)

PSYCH 653: Organization and Job Design

3 credits

Prerequisites: Grad st or IE 349

Course Description: Design of productive organizations and people's roles within them. Issues including boundary location, organizational decision levels, autonomous work groups, implementation and diffusion. Roles of the union. Case studies. (Fall/Spring)

SOC 250: Organizations and Society 3-

4 credits

Prerequisites: So st

Course Description: Role of organizations, including industrial, governmental, and educational ones, in American society. Topics: impact of organizations on members and clients, the internal dynamics of organizations, and the interchange between organizations and their environment, including the society as a whole. (Fall/Spring)

SOC 535: Language and Social Interaction

3 credits

Prerequisites: Jr st or cons inst

Course Description: Focus on the systematic observation and analysis of face-to-face interaction. Sociological approaches to naturally occurring interaction--i.e., human talk and behavior that has been observed, audiorecorded, or videorecorded--will be explored. The approaches include ethnomethodology, conversational analysis, and Goffmanian sociology. (Fall/Spring)

Courses that cannot be taken as electives towards the TCC (because these are for graduate students):

- o EPD 654: Teaching Science and Engineering
- o EPD 690: Core Competency in Sustainability
- o EPD 690: ATE Powertrain
- o EPD 690: Essential Skills for Engineering Productivity

Section 4. Courses with Communication Emphasis in Your Major Field: 3 credits. (Typically Senior Design or Capstone Course.)

Most engineering students will have a senior design course required in their field, and that design course should count here. If your program's design course is not listed, contact us for adding it to the list.

Non-engineering students should find a senior-level course in their major field that has a substantial communication element to it, and propose that it be added to our list (or propose that we count it).

B M E 400: Capstone Design Course in Biomedical Engineering
3 credits

Prerequisites: BME 301, 310, 315, 430, Sr st in biomed engr or cons inst

Course Description: This capstone course applies classroom study to solve a directed client-based biomedical engineering design project. (Fall)

CIV ENGR 578: Senior Capstone Design
4 credits

Prerequisites: Completion of at least 1 crse which carries 3 cr of design

Course Description: The application of theoretically and academically acquired knowledge to a civil and environmental engineering problem in as near "real-world" as possible. (Fall/Spring)

GLE 479: Senior Capstone Design, 3 credits. **Course Description:** The application of theoretically and academically acquired knowledge to a geological engineering problem in as near "real-world" as possible. (Fall/Spring)

E M A 469: Design Problems in Engineering
3 credits

Prerequisites: EMA 221, 307; ECE 376; ME 363, 361; MS&E 350; or cons inst

Course Description: The design philosophy is presented. Students will be required to apply their knowledge of elementary mechanics, engineering and basic science to arrive at acceptable solutions to a variety of design problems. (Fall)

I S Y E 476: Industrial Engineering Projects
3 credits

Prerequisites: I S Y E 320, 321, 349; EPD 397; or cons inst

Course Description: Complete design of an industrial engineering system in a real world setting, e.g., manufacturing, hospital, communications, food processing, distribution, transportation, etc. (Fall/Spring)

M E 349: Engineering Design Projects
3 credits

Prerequisites: ME 314, 342 & 364

Course Description: Applied engineering design projects. Emphasis on design of practical mechanical engineering systems, devices and/or components. Two 2-hr labs and one lecture per week. Lecture focuses on the design process, creativity, patents, and other applications to practical problems. (Fall/Spring/Summer)

ME 351: Interdisciplinary Experiential Design Projects I

3 credits

Prerequisites: Sr st in ME or cons inst

Course Description: First of a two-course sequence in which students design and fabricate systems and devices, typically having an interdisciplinary aspect. In the first course, emphasis will be on project planning, team dynamics, problem identification, and conceptual design and evaluation. (Fall/Spring)

ME 352: Interdisciplinary Experiential Design Projects II

3 credits

Prerequisites: ME 351 & Sr st in ME or cons inst

Course Description: Second of a two-course sequence in which students design and fabricate systems and devices, typically having an interdisciplinary aspect. In the second course, emphasis will be on detailed design, fabrication, testing, and modification of concepts developed in the previous course. (Fall/Spring)

MSE 470/471: Senior Capstone Design. (1/3 credits)

NE 413: Nuclear Reactor Design. 5 credits. Reactor design projects, reactor hazards, economics.

NE 571: Economic and Environmental Aspects of Nuclear Energy

3 credits

Prerequisites: NEEP 405 & NEEP 411

Course Description: Economics of the nuclear fuel cycle. Economic and environmental impact the nuclear fuel cycle. Impact on design, plant siting and regulation. (Spring)