



Technical English for Engineering, ENGG 1305

Course Description:	This course is intended for the first year Engineering students with the aims of: introducing the concept of Engineering, providing written articles on engineering topics, providing listening activities on technical topics, providing situations for speaking activities, supplying relevant vocabulary presented and practiced in professional contexts, motivating students to read and research attractive topics and articles , and developing studying habits to read, write, take notes, and communicate in English.
Course aims:	<ul style="list-style-type: none">• Provide students with opportunities to improve their English communication skills in the context of their own interests, disciplines and/or future career aspirations.• Give students further opportunities to explore how to use English as a tool for inquiry, learning, thinking and communicating within their chosen fields or areas of interest.• Help students to explore and master the conventions associated with communicating in English in their particular fields or areas of interest, both amongst each other and in presenting technical information to non-subject specialists.• Promote students' critical and evaluative thinking in developing solutions to engineering problems within their disciplines .• Develop students' capacity to become self-directed English language learners within the context of their chosen fields or areas of interest.• Help students to understand the role of English communication in the development of professional identities and membership in disciplinary communities or interest groups, including the communication with clients who are less familiar or completely unfamiliar with engineering-related issues.
Textbook:	Cambridge Professional English in Use for Engineering, Mark Ibbotson, Cambridge University Press 2009.
Course outcomes:	<ul style="list-style-type: none">• Develop language skills for greater accuracy and precision,• Learn how to persuade audience,• Deliver presentations and receive constructive feedback,• Participate in discussions and debates,• Produce clear technical documents,• Expand your vocabulary by reading thematically relevant text,• Practice writing, using relevant professional formats,• Enhance your confidence in using English in various engineering contexts.
Grading Policy:	Mid-term Exam 30 Class participation and homework 20 Final Exam 50

[Type here]

[Type here]

[Type here]

Course Outline

	Skills	Time
Unit 1 Design	Chapters 1-3: Drawing, Design Development, design solutions	4 lectures
Unit 2 Measurement	Chapters 4-7, 9-10: Horizontal and vertical Measurements, Locating and setting out, Dimensions of circles, Dimensional accuracy, Area, size and mass, Measurable parameters	6 lectures
Unit 3 Material Technology	Chapters 11-19: Material types, Steel, Non-ferrous metals, Polymers, Minerals and ceramics, Concrete, Wood, Material properties 1, Material properties 2, Forming, working and heat-treating metal	10 lectures
Unit 4 Manufacturing and Assembly	Chapters 22-29: 3D component features, Machining, Interconnection, Mechanical fasteners, Non-mechanical joints	8 lectures
Unit 5 Static And Dynamic Principles	Chapters 30, 32-33: Load, stress and strain, Structural mechanics, Motion and simple machines	3 lectures
Unit 6 Energy & temperature	Chapters 36-37: Energy, Heat & temperature	2 lectures
Unit 7 Mechanisms	Chapters 40-41: Engines and motors, Transmission	2 lectures
Unit 8 Electricity	Chapters 43-45: Current, voltage and resistance, Electrical supply, Circuits and components	4 lectures