FOCUS ON ELECTRICAL ENGINEERING IN ESP


Miloš D. Đurić

Faculty of Electrical Engineering, University of Belgrade, Serbia
Telephone: +381 13218366, E-Mail: djuric@etf.bg.ac.rs, djuric@etf.rs, milos.djuric@etf.rs

The textbook *English for Electrical Engineering in Higher Education Studies – Course Book* contains twelve topic-based units covering themes from electric power generation to signal processing, telecommunications, electric cars, computers and microelectromechanical systems. This splendidly and originally conceived textbook is ideal for self-study and classroom use as an easy-to-teach ESP course for young adults who want to acquire quickly and confidently English for Electrical Engineering. All units contain specialist vocabulary and grammar practice for all potential readers, future electrical engineers and engineering specialists who need to effectively use English electrical engineering register. It is particularly suitable for students who have achieved upper intermediate level of English and are currently making a great effort to reach proficiency level.

The textbook’s material focuses on common problem areas in the field of English for Electrical Engineering. Moreover, the carefully selected and graded material trains electrical engineering students to avoid typical mistakes. The textbook *English for Electrical Engineering*, as a meticulously prepared skill-based course, is intended for students of Electrical Engineering who wish to enter English-medium tertiary studies. The author, as an experienced ESP and ELT practitioner, combines the proven ESP methodology with innovative, fresh and novel features, thus making teaching and learning more effective.

Perhaps the most pertinent feature of the present textbook lies in the fact that it teaches future engineers the English language they will need outside the classroom, or, more specifically, the language they are expected to use in their engineering world. The course book opens with the “Introduction” (p. 3), accompanied by extremely informative “Book Map” (p. 4-5) providing topics, vocabulary focus and skill-based activities. The textbook consists of the following twelve units: “What is electrical engineering?” (p. 6-13), “The history of electrical and electronic engineering” (p. 14-21), “Electric and magnetic circuits” (p. 22-29), “The computer” (p. 30-37), “The television – from CRT to LCD and 3D” (p. 38-45), “Control systems” (p. 46-53), “Electric power generation, transmission and distribution” (p. 54-61), “Telecommunications” (p. 62-69), “Signal processing” (p. 70-77), “Electric cars” (p. 78-85), “Microelectromechanical systems” (p. 86-93) and “Lighting engineering” (p. 94-101). The textbook also includes “Symbols and abbreviation for notes” (p. 102), and “Additional material” (103-107). It also contains...
fully-referenced “Wordlist” (p. 108-111) that provides items necessary for core and challenging vocabulary from the units. Since the textbook is accompanied by two CDs (the first one covering Units 1, 3 and 5, whilst the second one including Units 7, 9 and 11), it is praiseworthy that full transcripts of all listening activities (p. 112-132) are also included.

The textbook is packed with exciting, inspiring and stimulating new ideas in the domain of ESP and EAP offering a refreshing approach to learning English for Electrical Engineering purposes as it is actually written and spoken in the world of engineers. At the same time, the textbook equips students with specialist language they need to participate successfully within an Electrical Engineering faculty. In addition to this, listening material is authentic, and is presented in the form of Electrical Engineering lectures. Even though it is not uncommon to include spontaneous discourse into ESP and EAP courses, students can profit both professionally and academically from the authentic material presented in this course. In addition to this, Roger H. C. Smith places special emphasis on teaching key electrical-engineering related vocabulary and EAP vocabulary-learning strategies thereby providing an abundance of ideas for personalised, student-centred interaction.

Carefully graded practice and progression are provided for key academic skills that future electrical engineers need. More specifically, special emphasis is placed on speaking in seminars and listening to lectures. Additionally, listening includes also taking effective notes on extended lectures, following an argument and identifying the speaker’s point of view. Considerable emphasis is also given to ESP/EAP speaking, which improves the way of participating effectively in a variety of realistic situations ranging from seminars to academic presentations. The result is the obvious ESP skills development that helps future electrical engineers to communicate both naturally and effectively.

The textbook English for Electrical Engineering in Higher Education Studies – Course Book is written in a clear and accessible style by an experienced teacher and ESP/EAP practitioner. Not surprisingly, this textbook helps engineering students to develop and learn to apply a wide range of ESP/EAP skills. One should also mention meticulously prepared self-assessment activities, exam-style questions, accompanied by full-colour images and screenshots. An important ingredient is student-friendly colour-coded design, which is impeccable. Since this textbook aims at all-round skills improvement, in the part that follows we shall analyse the aims of language skills promoted in this textbook.

Writing is aimed at finding out the ways of producing coherent and well-structured assignments. In this beautifully written course book, writing skills include, but are not limited to: writing topic sentences, summarising an academic text, reporting on research findings, reporting findings from diverse resources, paraphrasing, writing complex sentences, expanding notes into complex sentences, recognising different essay types and written discourse types, writing heterogeneous essays (e.g. argumentative, descriptive, analytical, comparison, evaluation essays, etc.), writing essay plans and writing short essays, writing situation-problem-solution-evaluation essays, employing direct quotations, compiling a bibliography or a reference list, deciding whether to use direct quotation or paraphrase, incorporating quotations, writing research reports, and ultimately, writing effective introduction and persuasive conclusion.

Reading is focussed on the following: using topic sentences to obtain an overview of the electrical engineering text, using research questions to focus on relevant information in a text, identifying topic development within a paragraph, using the Internet effectively, evaluating the Internet research results, locating key information in complex sentences,
understanding dependent clauses containing the passive voice, recognising the author’s stance and level of confidence or tentativeness, inferring implicit ideas, and finally, understanding how ideas in a specific text are linked.

Listening, which is another relevant academic skill, is aimed at: preparing for an academic lecture, predicting lecture content from the introduction, understanding lecture organisation, choosing an appropriate form of notes, making lecture notes, preparing for a lecture, predicting academic lecture content, utilising different information sources from the spoken discourse, understanding ‘signpost language’ in lectures, using symbols and abbreviations in note-taking, understanding speaker emphasis, using the Cornell note-taking system, recognising digressions in lectures, writing up notes in full, and lastly, recognising the speaker’s stance.

Generally speaking, the real importance of speaking skills lies in the communicative process itself. Bearing that in mind, the author has provided speaking practice activities intended for students at English-medium tertiary level studies. In this textbook, speaking is aimed at: reporting on research findings, speaking from notes, formulating questions, making effective contribution to a seminar, asking for clarification, responding to queries and requests for clarification, referring to other people’s ideas in a seminar, building an argument in a specifically designed electrical engineering seminar, agreeing and disagreeing.

On a final note, I would like to point out that the textbook English for Electrical Engineering in Higher Education Studies – Course Book provides many rewarding language insights into the realities of the electrical engineering world in a wide range of electrical engineering contexts thereby providing students (i.e. future engineers) with advice on key points of electrical engineering discourse principles. However, at the same time, this lovely textbook focuses on problem solving without neglecting critical thinking. As well as giving students a solid and thorough grounding in the areas of Academic English and English for Electrical Engineering, the author provides plenty of marvellous opportunities for students to analyse and evaluate electrical engineering texts and lectures, analyse numerical and graphical information whilst developing and enhancing an extensive range of ESP academic skills typical of electrical engineering context (e.g. data handling, reasoning, to name just a few). Ultimately, this professionally equipped and beautifully designed textbook will be of intense interest to students of Electrical Engineering, ESP and EAP teachers and practitioners, faculty lecturers who teach at electrical engineering faculties, discourse analysts, and linguists interested in English electrical engineering written and spoken discourse.