

Engineering in English

*An ESP Course
For
Students of Engineering*

*M. T. Monshi Toussi Ph.D
K. Motallebzadeh Ph.D*

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An ESP Course for Students of Engineering

دکتر محمد تقی منشی طوسی

دکتر خلیل مطلب زاده

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Foreword

The present book, *Engineering in English*, is indeed an answer to the need for a new blood in the vessels of the ESP texts and courses in the field of engineering in Iranian universities. It is in fact the first book from a series planned to be written and published for students studying in different fields at the university, that is, engineering, science, agriculture, literature, medicine, accounting, management, etc. The need is now surely felt after almost 25 years from the first publication of the ESP books by the organization for developing university textbooks in the humanities (SAMT), under the supervision of Dr. T. Saffarzadeh. Unfortunately, SAMT ESP books have been repeatedly reprinted and published with no revision or any changes in the content since they were first published in mid 1980s (1360s Iranian calendar). Needless to say, writing and publishing new books containing new findings and methods in the field of language teaching as well as in the subject areas were inevitable.

The book is basically intended to be used for general English courses in different engineering branches at the university. Though the passages consist of a variety of topics, all are related to engineering, as a broad field of knowledge rather than specific specialties. This makes the book suitable and useful for all engineering students studying in different fields of specialty, including traditional as well as recent and modern ones.

As recommended, the main objective of teaching English at the university level is to enable students to read skillfully and get information from the original text. The book, therefore, aims at developing reading and comprehension ability in the first place, and vocabulary in the second. However, speaking and writing skills have not been fully ignored, and there are some exercises furnished in this regard. Since grammar is thoroughly dealt with in remedial and basic courses prior to general English courses at the university, it does not have much room in the present book either. Different sections in each lesson, i.e. skill development, part of speech, and vocabulary building and all the related exercises as well as the list of prefixes, suffixes and roots in the appendixes at the back of the book have been planned to help students learn to develop their reading as well as vocabulary proficiency. Students will surely need these, both at the undergraduate and graduate levels

while studying at the university as well as on the job after they leave school.

The book is mainly an introduction to the field of engineering. It is divided into three parts, consisting of four lessons plus a round up in each. The first generally deals with the field of engineering. Issues discussed in this section include the history, nature of the field, engineering education, and job outlook. The second presents all different engineering branches to date. It introduces a large array of different specialties in engineering, from the most traditional branches like civil, mechanical, and electrical to more modern and recent ones such as environmental, health and safety, marine and naval architecture, ocean and biomedical engineering, etc. The third section is concerned with topics such as satellites, lasers, nanotechnology, and robotics. They are considered both the product and at the same time tools in the process of manufacturing engineering products. Therefore a knowledge of them will be both of interest and benefit to engineering students and graduates.

The reading passages in the three sections are all authentic. They have all been first taken from the Internet. Then, they have been meticulously modified, simplified, combined, and to some extent graded to suit the purpose of the book as well as the level of the students. Though not always possible, attempts have also been made to arrange the lessons, and the related exercises in a progressive manner in terms of topic and the level of difficulty.

It would be a great pleasure to hear and receive comments and suggestions from our dear colleagues as well as students to make the present book more suitable in the next editions and use them in the other books being prepared in this series. Please email us at:

Paz_comments@yahoo.co.uk

M. T. Monshi Toussi
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In His Name