

21 世纪研究生英语系列教材

主编 易文  
沈金华



(教师用书)

# 工程硕士研究生 英语综合教程

*ENGLISH FOR GRADUATE STUDENTS*

中南大学出版社  
[www.csupress.com.cn](http://www.csupress.com.cn)

# 工程硕士研究生 英语综合教程

《工程硕士研究生综合》(教师用书)

主编 易文 沈金华

副主编 邱香玲 姚忠 刘喜荣

编委 张龙宽 骆莲莲 陈立娟

张春敏 唐媛

IV. Organization of the Text 主要介绍课文的篇章结构、段落划分及中心意思。

V. Writing Techniques 分析课文的写作方法及特点,以帮助学生提高写作能力。

VI. Key to the Exercises 为本单元的所有练习提供参考答案。

VII. Chinese Versions 提供本单元正课文及副课文的中文译本。

ISBN 978-7-81102-424-3  
定价:38.00元

中南大学出版社  
湖南长沙

730 x 960 1/16 印张 23.25 字数 409 千字  
2008年7月第1版 2008年7月第1次印刷  
ISBN 978-7-81102-424-3  
定价:38.00元

中南大学出版社

湖南长沙

# 工程硕士研究生英语综合教程

图书在版编目(CIP)数据

工程硕士研究生英语综合教程/易文,沈金华主编. —长沙:中南大学出版社,2008.7

ISBN 978-7-81105-624-2

I. 工... II. ①易...②沈... III. 英语—研究生—教材  
IV. H31

中国版本图书馆 CIP 数据核字(2008)第 012841 号

## 工程硕士研究生英语综合教程

(教师用书)

主编 易文 沈金华

责任编辑 谭晓萍

责任印制 文桂武

出版发行 中南大学出版社

社址:长沙市麓山南路

邮编:410083

发行科电话:0731-8876770

传真:0731-8710482

印 装 长沙市利君漾印刷厂

开 本 730×960 1/16 印张 23.25 字数 409 千字

版 次 2008 年 7 月第 1 版 2008 年 7 月第 1 次印刷

书 号 ISBN 978-7-81105-624-2

全套定价 39.00 元

图书出现印装问题,请与出版社调换

# CONTENTS

## 使用说明

《工程硕士研究生综合英语教程》(教师用书)既可作为教师备课与教学的参考资料,也可作为学生自学与复习的辅导材料。(17)

本书与学生用书配套共分为14个单元。每个单元都包括以下内容:(27)

I. Teaching Objectives 介绍本单元教学的主要任务和目的。(35)

II. Background Information 提供与正课文内容相关的背景知识和信息。(46)

III. Language Points 对课文中出现的长难句,习惯用法等语言难点进行了较为详细的分析和说明。基本采用比较通俗易懂的英语来作注解,以提高学生的英语理解能力。(68)

IV. Organization of the Text 主要介绍课文的篇章结构、段落化分及中心意思。(88)

V. Writing Techniques 分析课文的写作方法及特点,以帮助学生提高写作能力。(102)

VI. Key to the Exercises 为本单元的所有练习提供参考答案。(110)

VII. Chinese Versions 提供本单元正课文及副课文的中文译文,供教师和学生参考。(124)

# CONTENTS

Unit 1	(1)
Unit 2	(9)
Unit 3	(17)
Unit 4	(27)
Unit 5	(35)
Unit 6	(46)
Unit 7	(55)
Unit 8	(68)
Unit 9	(78)
Unit 10	(88)
Unit 11	(95)
Unit 12	(102)
Unit 13	(110)
Unit 14	(122)

# Unit 1

## Text A

### The Road to Success

#### I. Teaching Objectives

1. To get to know the road leading to success.
2. To have a deeper understanding of the meaning of life.
3. To learn more information about the author.

#### II. Background Information

1. Family background: Andrew Carnegie, the son of a handloom weaver, was born in Dunfermline, Scotland, on 25th November, 1835. The family had a long radical tradition and his father, William Carnegie, was an active Chartist. His material grandfather, Thomas Morrison, had worked with William Cobbett during his campaign for social reform.

2. From rags to riches: The economic depression of 1848 convinced the Carnegie family to emigrate to the United States. Andrew began work at 12 in a local cotton factory but continued his education by attending night school.

At 14 Carnegie became a messenger boy in the local Pittsburgh Telegraph Office. His abilities were noticed by Thomas A. Scott, the superintendent of the western division of the Pennsylvania Railroad. He made Carnegie his secretary. During the Civil War Scott was appointed assistant secretary of war and Carnegie went to Washington to work as his right-hand man.

After the war Carnegie succeeded Scott as superintendent of the western division of the Pennsylvania Railroad. In 1870 Carnegie erected his first blast furnace, others followed and by 1874 he opened his steel furnace at Braddock. In 1892 all productive units were integrated to form the Carnegie Steel Company. Valued at \$25 million it was now the largest steel company in the world.

3. "Man who dies rich dies disgraced" — Carnegie set up a trust fund "for the improvement of mankind." This included the building of 3,000 public libraries, the Carnegie Institute of Pittsburgh, the Carnegie Institute of Technology and the

Carnegie Institution of Washington for research into the natural and physical sciences. Carnegie also established the Endowment for International Peace in an effort to prevent future wars.

By the time Andrew Carnegie died in August, 1919, he had given away \$350,000,000. A further \$125 million was placed with the Carnegie Corporation to carry on his good works.

4. 安德鲁·卡内基(1835~1919),美国钢铁大王,幼时家贫,靠个人奋斗发迹,是“美国梦”的典型。晚年捐巨资兴办图书馆事业。本篇是他1885年6月23日在柯里商业学院对毕业生的讲话节录。

### III. Language Points

- The boy who has the genius of the future partner in him will not hesitate to try his hand at the broom.  
— The boy who keeps the thought of being the future partner in mind will not hesitate to sweep the room.
- Do not rest content for a moment in your thoughts as head clerk, or foreman, or general manager in any concern, no matter how extensive.  
— Now matter how extensive the position you occupy, like a head clerk, or foreman, or general manager, you should never be contented, you should keep on moving.
- No one can cheat you out of ultimate success but yourselves.  
— No one but you yourself would mislead you.
- Many of the leading businessmen of Pittsburgh had a serious responsibility thrust upon them at the very threshold of their career.  
— Many of the leading businessmen of Pittsburgh were thrust upon by a serious responsibility at the very beginning of their career.
- And our young men unfortunately miss that salutary branch of a business education.  
— And our young men unfortunately miss that beneficial part of a business education.
- He said no, he never had, and the mother was gratified beyond measure.  
— He said no, he had never seen it, and the mother was more than rejoiced.

### IV. Organization of the Text

Parts Paragraphs Main Ideas

Part One (Para. 1-2): Suggest that young men should aim high and take the

business of the company as their own at the very beginning of their work.

Part Two(Para. 3-4): Pointing out that the prime condition of success is to concentrate.

Part Three(Para. 5): Summarize that one should both aim high and concentrate on one business to achieve success.

## V. Writing Techniques

### How do you get your ideas?

Ideas are a dime a dozen, at their most expensive. The most common answer to “Where do you get all your ideas?” a question most prolific authors get all the time, is usually along the lines of “everywhere”, or for a humorous spin, “how do you ignore all the ideas around you?”

But ideas, while necessary to a story, are not sufficient. Developing the ideas that can be found anywhere into an interesting story, with plot and character and conflict and resolution, is the next step.

This article won't give you a fool-proof method for making an idea seed grow into a good story. It will, however, provide some suggestions on how to work with that initial idea and develop it into something more, using one of a few brainstorming techniques.

Brainstorming is often described as the process of writing down all ideas, and not thinking about how good they are, or their implications. The brainstorming processes described here are a little more focused, but still encourage writing down all ideas, and either worrying about their implications later or including what the implications might be in the brainstorming process.

You can brainstorm alone, with a partner, or in a group. Each type of brainstorming has subtly different techniques, and group brainstorming works best when it has a “director”. The director of a brainstorming session is a guide, and makes sure you stay more or less on topic, and also prompts more ideas by asking questions about ideas that have been brought up earlier. Partner brainstorming also works well when one of the pair takes the role of director.

When recording the ideas generated by brainstorming, my personal preference is a spider diagram, which some people call “clustering”. Spiders allow you to see the relationship between ideas easily and promote on-topic thought by having all new recorded ideas related to something already there, while still leaving you plenty of room to be creative and take your ideas in new directions. A spider is started by



writing the main idea you want to explore in the centre of a piece of paper, and circling it. From there, you write related ideas, questions, 5 - 10 word character descriptions, possible answers, and anything else relevant around the central idea, connecting the new ideas with lines. Every additional recorded idea, or node, can have more ideas linked to it, and ideas can be linked to several other, initially unrelated nodes. All nodes must be linked, through however many degrees of separation, to the central node — this ensures you stay on-topic. Spiders are frequently lopsided, with some nodes spawning an enormous number of other nodes several levels deep, while other nodes are left alone and have nothing attached.

When brainstorming, always ask “what if?” and “why?” — and especially ask what would change if an idea in one of the nodes were completely reversed. When alone, make sure to pause every so often, look back at existing nodes, and ask that, then fill in the answer ideas you think up around the node that prompted the question. When in a pair or a group, the director would focus on the questions.

Brainstorming can be used not only at the beginning of a story, but at any time in the course of the story. It's especially useful when you get writer's block and have no idea where to go next, and really doesn't take long.

## VI. Key to the Exercises

### Vocabulary

#### Section A:

1. subordinate
2. threshold
3. janitor
4. salutory
5. gratify
6. figs
7. scatter
8. speculate
9. expenditure
10. revenues

#### Section B:

1. gratified
2. salutory
3. threshold
4. scattered
5. endorsed
6. speculate
7. expenditure
8. revenue
9. summarize
10. adopted

### Cloze

- 1 - 5 ABACD 6 - 10 DBCAA 11 - 15 BABCC 16 - 20 DBDAC

### Translation

#### Section A:

这就是通往成功之路的一个基本条件和一大秘诀：把你的精力、思想和资本全部集中于你所从事的事业上。一些公司的失败，就在于其资金的分散，以及因此而导致的精力的分散。他们这也投资，那也投资，到处投资。“不要把

所有的鸡蛋放在同一个篮子里”这句话是完全错误的。我要告诉你们的是：“把所有的鸡蛋都放在同一个篮子里，然后看紧它。”看管和携带一个篮子是很简单的。一次携带三个篮子的人，就得把一个篮子顶在头上，这个篮子就容易掉下来把他绊倒。

#### Section B:

1. Our task is not only to win the battle but to win the war.
2. After this battle in France abates its force, there will come the battle for our Island — for all that Britain is, and all that Britain means.
3. The restaurant patrons were so ill-behaved this evening that I could hardly tolerate it.
4. In that supreme emergency we shall not hesitate to take every step, even the most drastic, to call forth from our people the last ounce and the last inch of effort of which they are capable.
5. Nowadays, it is universally acknowledged that language is not only a tool of communication but also a kind of art.

#### Writing (略)

#### VII. Chinese Version

### Text A

#### 成功之路

安德鲁·卡内基

年轻人应该从头开始，从底层做起，这是很好的一件事情。匹兹堡许多出类拔萃的企业家在刚入行时，都承担过一个重要的职责：他们手持扫帚，在清扫办公室中开始了他们的创业生涯。我注意到，现在的办公室都配置了工友，我们的年轻人很不幸地失去了企业教育中有益的一环。但是，如果某一天早上，专职的清洁工偶尔没来，那么具有未来合伙人潜质的小伙子就会毫不犹豫地拿起扫帚。有一次，密歇根一位溺爱孩子并且非常时髦的母亲问一个年轻人，是否见过有哪位年轻女士像她的普里茜拉那样潇洒地在屋子里扫地。年轻人回答说从来没有见过，那位母亲高兴极了。可是他停了一下又说：“我想见到的是她爱在屋子外头打扫。”必要时，让新来的员工在办公室外扫扫地对他们并没有坏处。我自己就曾经是那些扫地人中的一员。

当确定你获得录用并有了一个公平的起点时，我的忠告是：“确定远大的目标。”对于那些还未把自己看成是大公司未来的合伙人或者老板的人们，我是无话可说的。不管公司有多大，永远把自己看成这家公司的首席雇员、领班或

者总经理。告诉自己：“我的位置在最高层。”在你的梦想中，你应该是一流的。

通往成功之路的基本条件和重大秘密是：把你的精力、思想和资本全部集中于你所从事的事业上。投身于哪一行业，就得决心在这一行业奋斗到底，在这一行居领先地位，采纳每一点好的建议，采用最好的设备，尽力精通专业知识。

一些公司的失败，就在于其资金的分散，以及因此而导致的精力的分散。他们这也投资，那也投资，到处投资。“不要把所有的鸡蛋放在同一个篮子里”这句话是大错特错的。我要告诉你们的是：“把所有的鸡蛋都放在同一个篮子里，然后看紧它。”观察周围并仔细留神，做到了这一点，你就不会失败。照管和携带一个篮子是很简单的。就是因为人们总是试图提很多的篮子，从而打破了这个国家大部分的鸡蛋。一次提着三个篮子的人，就得把一个篮子顶在头上，这个篮子很容易掉下来并把他绊倒。美国商人的一个缺点就是做事不够专注。

我所说的话总结起来就是：要目标远大；不要涉足酒吧；不要喝酒，或者仅在用餐时喝一点；不要做投机买卖；不要签署支付超过储备的现金利润的款项；把公司的利益看成是你自己的；只有基于帮助货主的目的才能取消订单；要专注；要把所有的鸡蛋放在同一个篮子里，并且照管好它；消费永远小于收入；最后，要保持耐心，因为正如爱默生所说：“只有你们自己，才能销蚀你们本来能够达到的最终的成功。”

## Text B

### The Strenuous life

#### 1. Background information about the author

西奥多·罗斯福(1858~1919)，共和党人，曾任美国总统，毕业于哈佛大学。曾组织志愿骑兵团参加美西战争，1900年任副总统，次年麦金利总统遇刺身亡，继任总统，时年42岁。任期内推出多项改革，以“改革家”面貌治国，对外则实行“大棒”政策。本文是他在1899年4月10日发表于芝加哥的一次著名演说节录。19世纪末美国骄奢淫逸、贪图享乐之风盛行，罗斯福特意对共和党俱乐部成员发表了《勤奋的生活》这一演说，旨在遏制当时的腐败之风。

#### 2. Chinese Version

##### 勤奋的生活

西奥多·罗斯福

先生们：在向你们——西部最大城市的公民，为国家培育了林肯和格兰特的国家的公民，最能体现美国精神的公民讲话时，我想谈的不是贪图安逸的人生哲学，

而是要向你们宣讲勤奋生活论——即过勤奋苦干的生活，过忙碌奋斗的生活。我想说，成功的最高境界不属于满足于安逸的人们，而是属于那些在艰难险阻面前从不畏惧，终获辉煌的人们。

凡怯懦、懒惰、不相信祖国的人，谨小慎微丧失坚强斗志的“文明过头”的人，混沌无知的人，思想僵化的人，不能像刚毅有抱负的人那样被鼓舞振奋的人——总之，当看到国家有新的责任要承担，当看到祖国正在建立足以应付需要的海、陆军，当看到英勇的士兵和水手在美丽的热带岛屿上驱逐西班牙势力，承担起应尽的世界责任，恢复当地秩序——当看到这一切时，所有这些人都退缩了。就是这样一些人，他们害怕过勤奋的生活，害怕过真正值得过的国民的生活。他们喜欢与世隔绝的生活，任由这种生活在侵蚀他们个人吃苦耐劳品德的同时，也侵蚀了一个民族的吃苦耐劳精神。若不然，他们就沉迷于唯利是图、贪得无厌的卑污泥潭而不能自拔，认为国家应一切以商业利益为根本。但他们却不明白，商业利益固然是不可或缺的因素，然而毕竟只是造就真正伟大国家的许多因素之一。诚然，如果一个国家不是深深扎根于其工业活动领域的艰苦努力所带来的繁荣的物质基础之中，那么这个国家也不可能长久地生存下去。但是，如果仅仅依赖于物质财富，任何国家也永远不会成为真正伟大的国家。我们应该向那些创造了物质财富的人们致敬，向那些创建了工厂和铁路的实业巨头们致敬，向那些用勤劳和智慧换取财富的强者们致敬，国家很感激他们以及和他们一样的人。但是，我们更感激另外一些人，他们的最佳楷模就是林肯那样的政治家和格兰特那样的军人。他们的生活轨迹表明，他们清楚工作和斗争的法则，他们含辛茹苦，使自己和依赖他们生活的人们过上了富足的生活，但他们懂得还有更崇高的责任——对国家和民族的责任。

所以，同胞们，我要讲的是，我们的国家要求我们不能好逸恶劳，而只能过刻苦勤奋的生活。迫在眉睫的 20 世纪将决定许多国家的命运。假如我们只是一味地袖手旁观，贪图享乐，苟且偷生，假如我们面临激烈的竞争考验时不是冒着牺牲个人生命和失去亲人的危险去赢得胜利，而是落荒而逃的话，那么，更勇敢坚强的民族就会超越我们，得以统领世界。因此，让我们勇敢地面对充满斗争考验的生活，下定决心卓越而果断地履行我们的职责；下定决心无论在语言还是行动上都坚持正义；下定决心诚实勇敢地以切实可行的方法为崇高的理想服务。更重要的是，无论是精神还是物质的斗争，无论是国内还是国外的斗争，只要我们确定正义在手，我们就绝不能逃避退缩。因为只有通过斗争，通过艰辛和充满危险的努力，我们才能最终达到目标——成为真正伟大的国家。

## Grammar

## 一致 (Concord)

1. 在下列句子中填入谓语动词的正确形式。

- (1) is (2) are (3) has (4) have (5) is  
 (6) is (7) are (8) am (9) seems (10) is  
 (11) says (12) are (13) was (14) are (15) looks

2. 在下列句子中填入正确的代词

- (1) him (2) its (3) his (4) their (5) its

## Unit 2

### Text A

## Health Giant Step toward Wellness

### I. Teaching Objectives

1. To acquire the information or knowledge of how moderate and regular exercise benefits people.
2. To develop and promote the habit of doing exercise properly.
3. To learn the writing techniques of expository essay; the use of quotation and comparison.

### II. Background Information

1. aerobics a system of physical conditioning designed to enhance circulatory and respiratory efficiency that involves vigorous, sustained exercise, such as jogging, swimming, or cycling, thereby improving the body's utilization of oxygen 有氧健身法: 旨在增强循环和呼吸功效的生理调节体系, 包括有力的、持久的锻炼, 例如慢跑、游泳或骑自行车, 从而提高肌体对氧气的利用。

2. resistance exercise also called strength training — increases muscle strength and mass, bone strength and your body's metabolism. It can also help you maintain or lose weight and improve your body image and self-esteem. Methods for resistance training include free weights (such as dumbbells or barbells), own body weight (such as sit-ups), weight machines and calisthenics. 抗阻(力)训练也称为强度训练, 它能增加肌肉力量和质量, 骨强度和你的代谢。它也可以帮助你保持或减轻体重和改善你的体形与自我感觉。抗阻(力)训练的方法, 包括自由重量(比如哑铃和杠铃)、身体重量(比如仰卧起坐)、机器重量和柔软体操。

### III. Language Points

1. ... to stay active; to be active in exercise

2. Research has proven that. . .

similar structures;

Studies have shown that. . .

Statistics have shown that. . .

Research shows that. . .

The report says that. . .

3. It's no accident that. . . ; It happens or occurs naturally that. . .

4. your immune system is in fighting shape:

your immune system is ready to defend your health against the attack of disease.

5. It's no accident that. . . ; It happens or occurs naturally that. . .

6. . . . , while also stimulating their circulation, filling their lungs. . . :

Here "stimulating" and "filling" are present participles used as adverbials.

7. . . . is any activity done at a comfortable pace that is intense enough to. . .

but mild enough to. . . :

"done" is used as an attributive modifying "activity", "that is intense enough to. . . but mild enough to. . ." is a long attributive clause modifying "pace".

#### IV. Organization of the Text

Part One (Para. 1-4): Introduction  
Exercise best enhances people's health and wellness.

Part Two (Para. 5-7): Detailed facts  
Exercise immediately lightens the workload of the immune system and speeds up the elimination of germs and other threats.

Part Three (Para. 8-11): Detailed facts  
Exercise benefits everyone: people who smoke or suffer from hypertension, college graduates, post-menopausal women and very old people, etc.

Part Four (Para. 12-14): Detailed facts  
Aerobic exercise and resistance training, as two main kinds of exercise, can be done properly under the guidance of doctors to boost people' health.

Part Five (Para. 15): Restatement  
Any exercise is better than none and all exercise does good to people.

## V. Writing Techniques

1. This is an expository essay. An expository paper explains or explores something to make the readers understand. The purpose of exposition is to inform.
2. Use of quotation — the indirect quotations of medical researches or studies make the exposition or explanation informative and understandable.
3. Use of comparison — the comparison between the exercise-active people and the less active ones helps readers realize exercise does improve the health and wellness.
4. Use of simple words and structures — to make the passage approachable.

## VI. Key to Exercises

### Comprehension

1. T 2. T 3. F 4. F 5. T

### Vocabulary

#### Section A

1. am immune to 2. likely 3. awkward 4. enhances 5. were banished  
6. eliminate 7. decade 8. Gauging 9. Vigorous 10. prospect

#### Section B

1. approach 2. housebound 3. vital 4. sedentary 5. being nurtured  
6. favors 7. beat 8. strengthened 9. boost 10. routine

### Cloze

- 1 - 5 BCCCD 6 - 10 BCACA 11 - 15 BBCBD 16 - 20 ABCDB

### Translation

#### Section A

吃喝必须有节制, 必须明智地选择清淡、有益健康的简单食物。数以千计的人死于暴饮暴食, 而数以万计的人死于烈酒。年轻时, 我们必须保证充足的睡眠, 睡眠是“精力良好的天然恢复剂”。不要试图蜡烛两头点, 过分消耗体力。我们必须尽可能多地在户外生活, 保持室内通风良好。我们必须有足够而规律的体育锻炼, 并保持身体清洁。我们还必须像躲避魔鬼一样, 避免恶习和阴谋犯罪, 保持身心纯洁。我们的努力目标就是一定要达到——身心皆健康。

#### Section B

1. Mankind is likely to cure AIDS in the near future.
2. The successful launch of Chang'e-I satellite has stimulated more interest in space exploration.



3. The newly-built sports facilities for Olympic Games will benefit the whole town.
4. The age of the overseas students ranges from 25 to 30.
5. The research shows exercise can immediately lighten the workload of the immune system.

Writing(略)

## VII. Chinese Version

### Text A

#### 健康——迈向幸福的一大步

海伦·诺曼

体育锻炼有助于我们保持好的气色,这是毫无疑问的。但是活动身体最好的理由是每天都感觉好。研究证明,有规律的锻炼是拥有强健的免疫系统的一个关键所在,而强健的免疫系统对我们短期及长期的健康都至关重要。

没有什么能比起身作一下简单的运动更可能给你整体健康的感觉并且改善你身体的机能了。健身爱好者患病的日子比那些习惯久坐不运动的同龄人要少得多,这绝非偶然。当你享受运动并且能轻松运动时,你的免疫系统正处于战斗状态而且你抵抗疾病的能力也处于最佳状态。

现在就花片刻时间检验一下你的身体吧。它感觉如何?你正以好的姿势舒舒服服地坐着,还是无精打采的迫使你的肌肉和器官处于难受的姿势?你的身体是在告诉你,“我感觉营养充足,很放松和健康”,还是在说,“我痛”,“我的肌肉很紧张”或者“我已经到极限”?

如果你的身体很有活力,那么恭喜你。继续阅读本文了解一些进一步增强你的健康和免疫力的新的锻炼方法。但如果你的身体在说它不舒服,那也还有希望。研究已经一再证实,无论何时,通过锻炼增强体质都为时未晚。

让身体动起来。两融强因后要不。能最快让你感觉体力充沛的办法是锻炼,而且其效果立竿见影。简简单单一次十分钟步行将使你在随后的数小时内减轻紧张状态、消除疲劳和增强大脑的敏锐性。让这种步行成为每天的例行活动,不久,你将会肌肉匀称,心脏功能增强,身体大部分器官和系统的功能改善。

锻炼能马上减轻免疫系统的负担,加速消除病菌及其他威胁。更具体来说,锻炼:

- 刺激循环,这有助于免疫细胞更快地在体内循环,在入侵者危害身体之