

# APS审核普通问题部分 常见问题总表

## 一般性问题 General issues

1. Could you take a few minutes to one brief introduction of yourself?
2. Is there any special meaning of your name?
3. What are the occupations of your parents?
4. Where are your parents live now?
5. Do you live with your parents?
6. Is there any Special Product in your hometown?
7. What are your interests in the spare time (off-hour) ?
8. How long have you learnt the English?
9. Which province is your hometown?
10. Do you have siblings? (brothers or sisters)
11. What is your impression of Germany?
12. Do you think you could adapt to the life in Germany?
13. Do you have any friend or relative in Germany could help you solve problems?
14. What is your understanding to Germany in fields of Political/Economic/Cultural/Geography?
15. How are you aware of the Germany information?

16.Do you think you could adapt to the German culture?

## 教育背景问题 Educational background

1.What is about your education in detail?

2.When and where do you take these educations?

3.How long have you studied in your college now?

5.What is your profession?

8.Have you take part in any internships/practice?

9.Which subject are you interested in firstly?

10.Do you think there is any help to your future by the profession subject now?

11.Could you make a brief introduction to your professional?

12.What is the main point in your professional?

19. Do you want to go to Germany after your finish your studying in China, or interrupt your studies in China and go to Germany immediately?

## 德国学业问题 German Academic Problems

1.Why you want to go to German for studying?

2.Where do you want to go in German and Why?

3.Who will fund your studies in German?(Financial Issues)

4. When you finish your education in Germany, do you want to still live in Germany?

5. If you have to work to maintain your studies, how could you ensure your graduate successfully?

6. Do you think you will find the works during the period of your studying in Germany?

7. What do you think about the relationship between the German students and yourself?

8. Have you ever understood the Germany's colleges and universities?

9. Do you have any idea to the university where you will go to study in future?

10. What is the direction of your professional in Germany?

11. What do you expect in Germany?

12. Could you speak other foreign language?

13. Which is your favorite city in Germany?

14. Which terms do you want to begin to study, the winter courses or the summer courses?

15. Why don't you think about other country for your studying?

16. How much do you know will be pay for your studying courses in one year?

## 私人问题

1. Have you married? Are you single or married?

2. How much money do you expect to pay for your normal fee for every month?

- 1.每门课都要有一些总结性的话（前言里都有），挑出一两句（数英政除外），然后你还得知道这门课学了什么，不用全知道，至少得知道一两个例子或定理，并能用英语说出来，最好能默出来。
- 2.专业词汇很重要，每门课准备 1-2个例子
- 3.先看大学的各科，然后每课总结半页纸左右（描述，资料），每门课想一下重点
- 4.不懂就说没学过
- 5.金工实习？想想自己的
- 6.微积分（高数）
- 7.个人情况：谁？来自哪里学习，生活去德国学什么，爱好是什么，姓名，年龄，大学，专业，专业重点，家乡，今后打算，从小学到大学的学习经历
- 8.主要研究/讲了。。。。，如。。。。，不要自己说的东西自己都不是很懂
- 9.科学分类词典
- 10.VB最基础的语法
- 11.自我介绍（self introduction）可以体现一些个性，吸引他们问一些你熟悉的专业知识
- 12.不会的词可以问他们
- 13.考的最高的科目，刚好及格的科目
- 14.说不出来，不要冷场，说点别的
- 15.这是我。。。。学的东西了，而且课程不重要，我希望能介绍一下主要学科
- 16.例子是法宝，不用多，但要能熟练解释
- 17.理工科画图，示例很重要，要不停的和他们说，不要不敢说，说错没关系
- 18.专业课，用比较简单的话能说明你学过什么就可以，然后准备你明白的 1.2 个例子，解释
- 19.考的具有学科代表性  
准备专业的时候：有侧重，有些需要详细点，有些大概就可以，还要准备几句常用的敷衍的话，尤其是那些你觉得名字都很奇怪的课，或者是你们学科很基础的课
- 20.专业单词，有中文，英文，而且都是短句，而且，在这些句子中画出重要的专业词汇，一句一句你会很快记住这些词的
- 21.心态：最好在前一天给自己定一个时间表，还有带东西的清单，英汉，汉英小词典
- 22.即使一个单词，也比在那冷场的好
- 23.笔试，休息调整一下再做
- 24.面试的时候要看着对方的眼睛，保持微笑
- 25.准备专业的时候，最好是按照自己的思路
- 26.能体现你口语的就是你背的滚瓜烂熟的自我介绍部分
- 27.与考官交流的最基本要素：那就是你要知道他在跟你说什么
- 28.用最简单的句型加单词
- 29.专业：自动化做到能讲的一两句，复习内容不宜过深
- 30.只需要准备自我介绍，每科一句概况（主要内容），和一些能画在纸上的内容
- 31.提前 1,2天到北京
- 32.审核要对一些最能说明概念，最能代表这些课程精华的公式明白其具体含义

33.不要孤立的复习每一门课，复习前仔细想想哪几门课中有交叉的部分，找出来后把这部分核心内容搞懂，条件允许就向各门课拓展一些。这样，既保证了每门课的复习，又能做到每门课都有至少一个例子，更重要的是能够把几门课联系在一起，理论知识，实际应用

34.他能一个问题从好几门课的角度进行阐述或由点及面，或由浅入深

35.xx问我：“。。。。xx学过么？”

我说：“学过，但不是在刚才我们谈起的 yy这门课，而是在 zz这门课学的。虽然如此，但是 xx和 yy这门课的 ww内容之间是有联系的”

36.边讲边在纸上画图，指着所画的高数老外是什么，为什么会这样？

37.能够在对课本或对前人正确的总结的理解的基础上用自己的话把一二三四表达出来

38.不怕你瞎说，就把你没得说

39.自我介绍，主要说关于学习方面的 3.20

40.这道题所涉及的课程，我没学过，但我会尽量做

41.做每件事，不一定会 100%的成功，胆子结束后，自己要能按着胸口恕我已经进了我的全力了，我没有遗憾，而现在我的手却怎么也放不到心口上。。。。

42.列好计划表，全面复习，以不变应万变

43.最能代表这门课的内容复习，将相似相近的放在一起总结，复习

44.google，外国网上有很多学习的网站，就是针对学习点介绍

45.复习到一定程度，在家里锤炼

46.关于去哪个学校，学什么专业，在什么州

47.this course taught us...?May I draw a diagram to explain?

48.复习要充分，选修亦要准备，但是没必要究其深入，能说出大概内容即可，基础课，专业课要能做题

49.自己想表达但资料撒谎能够的内容没有的自己可以上网查出来，高数一不定积分，线代一矩阵，现行方程组

50.主审一vorstellen

51.每门课用 5句话总结，加举一例

52.电机与拖动（原理）

53.模电，数电和电力电子的区别和联系

54.多背重点词汇表达，和专业课有关的，重点课程重点背

55.专业课抓重点，多转变一些图表

56.想想哪些地方考官有可能打断问你问题

57.多门课联系起来复习，最重要的就是一门课能联系多门课，做到一通百通

58.数字电路—微机原理电机—自控—电拖

59.专业名称与课程相似的课程

60.wikipedia所有专业课+专基

实验实践准备 1-2句

61.看教材，罗列一下都学了什么，最最基本就可以，不要背公式，但要记一些图和例子，还有这门学科简单介绍

62.电路，模电这种比较重要的看一天，专选 1-2小时搞定，所有的课都看过一遍后总结一下各门课之间的联系和专业的介绍。通俗点讲就是把专业课结合专业背景串讲一遍。比如我的专业：分强电，分弱电。强电：对电能的处理，基础：电力电子，应用：工厂供电，电拖。弱电：。。。。还要准备一些审核时要说的

话，比如自我介绍和常用问题

63.开始做毕设了没有？德国目的？经济来源？

64.控制里面一些概念太理论的东西你要知道含义，东西不要深，但要懂大意

65.考试前几天调整好自己的休息，睡眠

物理—单摆周期

66.以下知识是本课程介绍，在这方面的知识，课程的内容简述如下

67.抓问题关键词听

以下是本人精心收集的 APS 签证问题，最全的~一般不可能问得超出此范围~俺 APS 的时候准备这块的过于充分，倒答如流，搞的主考必须停下来等记录官记。。。囧  
首先是自我介绍啦，这个简洁明了就是了，无需废话。

下面是问题，最好对方问啥你答啥，言多必失~

1.为什么想去德国,而非一些英美国家?

最好回答学习方面的因素。

2.想去德国哪个城市，哪所学校，为什么？

3.你知道那儿的生活水平吗？一个月大约会用到多少钱？

4.你准备了多少钱？钱的来源是？

推荐说 10 万 RMB 一年。

5.什么时候去，去读什么，准备读几年？

6.你在哪儿学的德语，从什么时候学的，学了多久？

7.你打算考 daf 还是 dsh？为什么？（如果还没考的会问神马时候考）

8.你在德国有认识的人吗，打算一个人去德国还是跟人一起？

推荐回答： Niemand Allein

9.你结婚了吗？有小孩吗？

一句话秒掉： Ich bin ledig.

10.你有兄弟姐妹吗？（很少问）

11.到了德国准备住哪儿？

12.介绍一下你的本科学校。

13.读完了有什么打算（很少问）

Ps: 如果问到是否打工神马的（很少问），最好一概不打，多一事不如少一事。

- 1) Which schools to apply for ?
- 2) study plan?
- 3) apply their own or through an intermediary
- 4) Why not to go after graduation?
- 5) Who is the burden of the cost
- 6) how much you will cost for 1 year
- 7) Do you get married
- 8) where,when,which you go to Germany
- 9) where you live in Germany
- 10)why not go to USA

答1: I wanna study in .....

Beacause there is right for me,no matter the costen or the living atmosphere.

答2: At first,I must be adapt to the Germany language environment,lay a good foundation for language.

Secondly,I would like to arrange a reasonable study time,ensure the learning efficiency.

答3: I will apply their by myself.beacause I think don't need to rely on intermediaries at all.

答4: I have already graduated.

答5: My parents is the burden of the cost,They have enough economic strength to pay all my expenses in Germany.

答6: I will cost about from 8000 to 10000 euros one year.

答7: I did not get married.

答8: If all goes well I will go to Germany from Beijing as a students in march next year.

答9: I will live in college dormitories.

答10: .....



哎

9. Haben Sie Deutsch gelernt? Wo? Wie lange? Wie viel Stunden haben Sie gelernt?

>> Did you learn german? Where? How long? How many hours did you learn?

19. An welcher Universitaet und in welcher Stadt wollen Sie studieren?

>> At what university in which city do you want to study?

21. - 22. Was fuer eine Fachrichtung wollen Sie waehlen? Warum?

>> What special interest do you want to choose? Why?

Ist dies Fachrichtung gleich? Gibt es Unterschied zwischen alten und neuen Fachrichtungen?

>> Is this special interest the same? Are there differences between the old and the new special interest?

23. - 25. Wie lange werden Sie in Deutschland studieren? Wie viel Jahre?

How long will you study in germany? How many years?

Welche Promotion wollen Sie erwerben?

>> Which graduation do you want to get?

26. - 27. Haben Sie schon einen Plan fuer Ihr Studium in Deutschland?

>> Do you already have a plan for your studies in germany?

28. - 29. Was haben Sie vor, wenn Ihr Studium fertig ist?

>> What do you want to do, when your studies are finished?

30. - 31. Wollen Sie nach China zurueck?

>> Do you want to go back to china?

32. Von wem bekommen Sie die finanzielle Unterstuetzung beim Studium?

>> By whom do you get financial support for your studies?

你为什么去德国

在德国你想要住在哪里

你有朋友 女朋友 亲戚在德国吗

考 daf 还是 dsh

你会在德国打工吗

你准备去国际课程吗 英语授课还是德语授课

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**vicxxl**

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问题分类	备选问题
自我介绍	<ul style="list-style-type: none"> <li>● My name is <b>***</b>, 21years old, and from <b>**</b> Province. I'm studying <b>_____</b>, my major direction is <b>_____</b> I have a plan to go to Germany for my Master's study, so im here.</li> </ul>
想去的学校, 学校对语言的要求	<ul style="list-style-type: none"> <li>● Which university do you want to go? Uni. <b>***</b>. As I know, <b>***</b> is located in the <b>....</b> of Germany and it is the capital city of <b>.....</b>. It is an <b>.....</b> city which has many high-technology companies like <b>.....</b> ...These make the city more active and developed. Apart from this, I think that <b>.....</b> deserve our attention, and the Master of <b>.....</b> technology in <b>...</b> is excellent. So I want to go to Uni. <b>***</b> to study Master of <b>.....</b>, from which I can attain enough necessary knowledge, and maybe this is what china needs and I could do <b>sth.</b> In this field when I am back.</li> <li>● What is the language requirement of this University? In <b>TestDaF</b>, 4 score is required in all the four sections.</li> </ul>
语言计划	<ul style="list-style-type: none"> <li>● How long have you been learn German? I began to learn German 2y ago</li> <li>● When will you take the language exam? I have taken the language exam last year, but got only 3 in the listening part. So I will continue to learn Germany and I will apply for the language course and pass the exam within half a year.</li> <li>● What is your plan of learning German?</li> </ul>
留德动机	<ul style="list-style-type: none"> <li>● Why do you want to study in Germany? Germany is famous for its strict and high-quality education, which attracts me the most. And Germany is located in the center in the Europe, and the international cultural atmosphere is good for me to feel another world with a completely different cultural background, to broaden my horizon, see more things, meet more people...</li> <li>● And why not study in Japan or U.S.A?</li> </ul>
学习计划	<ul style="list-style-type: none"> <li>● What is your study plan in German? I will apply for the language courses and pass it within half a year and then begin my master degree's studying. Or How you manage your study in German?</li> </ul>
是否有亲戚朋友	<ul style="list-style-type: none"> <li>● Do you have <b>Friedens</b> or relatives in German? <b>NO</b></li> <li>● And where your <b>Friedens</b> study?</li> </ul>
经济支持	<ul style="list-style-type: none"> <li>● Who will offer your money? <b>Of course my parents</b></li> <li>● How many money will you get every month in German? <b>About 800 Euro per month, 400 for accommodation and 600 for other living cost.</b></li> </ul>

你可以简短的自我介绍一下吗？  
introduction of yourself?

Could you take a few minutes to one brief

My name is zou hanhai ,in Chinese it means self-restraint and self-cultivation .I was born in a small town in Jiangxi province. My father is a public official, and my mother is doctor in a small clinic. My grandfather is a farmer, so back 20 years, my family 's financial situation isn' t very good. But through 20years' s hard work of my parents, now my family has enough money to support my study. And this 20 year' s hard work of my parents also let me know that when someone is willing to get something, and put the focus and pay the time on it, it will come true. This is my confidence to get to Germany, and finish my study.

2、你的名字有特殊含义吗？ Is there any special meaning of your name?

3、你的父母是从事什么职业的？ What are the occupations of your parents?

4、你的父母住在哪里？ Where are your parents living now?

5、你跟父母一起住吗？ Do you live with your parents?

6、你的家乡有什么特产？ Is there any Special Product in your hometown?

There are many Bamboos in my hometown, it can be make pens and variety kinds of presents.

7、你业余时间喜欢做什么？ What are your interests in the spare time (off-hour)?

I am a fan to drama, I have joined an organization of drama when I was in the college. During the time in the college, I have played kinds of different drama, like the Hamlet writing by William Shakespeare and Faust writing by Goethe, and some play made by Chinese writers .

8、你学德语学多长时间了？ How long have you leant the German?

9、你的家乡在哪个省？ Which province is your hometown?

10、你有兄弟姐妹吗？ Do you have siblings? (brothers or sisters ? )

No . I always want a sister when I was young. But you know the policy in china , it is not possible.

11、你对德国有什么印象？ What is your impression of Germany?

Fine weather , not too hot. I am a fat boy, afraid of hot temperature , especially in summer . and the people there are kind. But most important is that, the education there in Germany is very good upon the world.

12、你觉得你能适应在德国的生活吗？ Do you think you could adapt to the life in Germany?

I think I certainly can adapt the life in Germany, because of I was lodge and study away from my parents when I was 13.

13、你有旧交、朋友、亲戚在德国可以帮助你解决问题吗？ Do you have any friend or relative in Germany could help you solve the problems?

No, I have not any relative in Germany, but there is a professor of mine is in the Physikalisch-Technische Bundesanstalt (PTB) , he may help me when it is a serious problem. And he the professor who teach me the course of sensor technology is the reason I started the mind to study in Germany.

12、你对德国有什么了解?(政治、经济、文化、地理) What is your understanding to Germany in fields of Political\Economic\Cultural\Geography?

I know it is the country, which now sustain the hole economic of EU ,because of the

big amount of real businesses industry .

13、你了解过德国的信息？从哪里了解？ How are you aware of the Germany information?

Through the internet most.

14、你觉得你能适应德国的文化吗？ Do you think you could adapt to the German culture?

关于教育背景问题 Educational Background

1、你受过哪些教育？ What are your education in detail?

I was studied prime school middle school high school in my hometown. And studied university in Zhejiang province. China jiliang university.

2、你什么时候在哪里上的这些学校？ When and where do you take these education?

3、你上大学上了多长时间？ How long have you studied in your college\university now?

4、你已经毕业了吗？ Have you graduated now?

Yes,

5、你是什么专业？ What is your profession?

Measurement technology and instrument is my major.

6、你为什么想中断在中国的学业？ Why do you wanna interrupt your studying course in China?

7、你给我讲述下你在中国职业经历？ Can you explain your occupation experience in China?

After I graduated from the university, I was immediately enter a laboratory named GRGT, it's a company that help different factory or company to calibrate the instruments annually ,and help them to exam the dependability and safety of their products, just like the Tuv (Technischer überwachungs Verein) in Germany. My job is Customer Service Engineer, aim to help customer to set a plan to manage the instrument in their factory, set the plan of quality management, like iso9001.

8、你参加过实习吗？ Have you taken part in any internships\practice?

9、你对什么最感兴趣?科目 Which subject are you interested in firstly?

Actually I was a fan of robot in high school , that is the reason I choose my major. So in my college time the most fascinating subject for me is the sensor technology. Because the sensors give the robot feelings , and the all kinds of feelings is the most fundamental thing for the robots.

10、你认为你学的这些学业对你将来有帮助吗？ Do you think there is any help to your future by the profession subjects now?

Yes definitely , during my two years of working time, this subjects helps me a lot. Though I was a service engineer in my work, the most hard work is finished by some senior engineer, but in the communication with clients , the convincing level of expertise is very important.

11、能简短介绍下你所学的专业吗？ Could you make a brief introduction to your professional?

My professional is a cross disciplinary major. In the 4 years of college time, I have

learnt subjects of mechanology subject of electrical science, optical science and computer science.

12、你所学专业的重点是什么？ What is the main point in your professional?

The main point of my professional is that make the way to measure the all kinds of data from different kinds of machineries or instruments, transform them to digital signals, display them to the controller, finally to output the control signals to impact the industrial processes.

13、你在这个专业学到什么？ What do you learn from your professional?

I learned that measurement and control are the most important in the industrial processes, no matter what instruments in the processes.

14、你在中国已经有工作了，为什么还去德国？ You already have one occupation in China, why do you wanna go to Germany?

I found that my level of expertise isn't enough for my work, and I want to improve that. And for the instrument industrial in the world, Germany is the most advanced one.

15、你的毕业论文题目是什么？ What is the topic of your graduated thesis?

The topic of my graduated thesis is Applications of Optical Measurement in the Researching of Biochip.

16、你给我介绍下你的毕业论文、设计？ Could you make a introduction

My thesis is focus on the biochips, which is based on several different professions, like physics, biology, chemistry, micro-electronics, and computer sciences. In my thesis I put the focus on the part of hole process, the biochips detecting system, which is system how we measure the biochips, gather the data of it, and how we deal with the data from the system.

17、你的毕业设计的框架是什么？ What is the framework in your graduated design?

Because of the molecular probes of the biochips is selective for different samples (such as DNA, RNA or protein), when the biochip hybridization with the biological samples after fluorescence labeling. One part of the samples has specific reaction with the Molecular probes of biological chip, it will have the fluorescent marker, and for the other one there is no fluorescent marker. For example there are healthy cell with green fluorescent and cancer cell with red fluorescent, after the biochip and molecular probe being hybridization, we use two different excitation light to shot the biochip and gather the data of the emitted light, we can know the genetic difference of this two cells. So we use scanning device to analyze the fluorescence intensity and distribution. In these devices, the optical measurement system is important.

18、你为什么选择这个题目作为你的毕业设计？ Why you chose this issue as your graduated design?

19、你想在中国的学习结束后，还是想中断中国的学业立即去德国？

Do you wanna go to Germany after you finish your studying in China, or interrupt your studies in China and go to Germany immediately?

## 德国学业问题

## German Academic Problems

- 1、你为什么想去德国学习？ Why you wanna go to German for studying?  
The meticulous working attitude and the developed industrial level make me want to go to German for study.
- 2、你想去德国哪个地方？为什么？ Where do you wanna go in German and Why?  
I want go to Baden-Württemberg, because there have many factory to let me study the industrial processing.
- 3、你在德国的学业谁来资助？ Who will fund your studies in German? (Financial Issues)  
I have saved some money in my 2years work, and my parents will support me partially.
- 4、你学业在德国完成后，想继续留在德国吗？ When you finish your education in German, do you wanna still live in Germany?
- 5、如果你必须打工来维持学业，你怎样保证毕业？ If you have to wage to maintain your studies, how could you ensure your will graduate successfully ?
- 6、你认为你在德国能找到工作么？（上学期间） Do you think you will find the works during the period of your studying in Germany?
- 7、你怎么看待你自己和德国学生的关系的？ What do you think about the relationship between the German students and yourself?
- 8、你对德国的高校了解过么？ Have you ever understood the Germany' s colleges and universities?
- 9、你对你未来想就读的学校有哪些了解？ Do you have any idea to the university where you will go to study in future?
- 10、你在德国的学业有哪些方向？ What is the direction of your professional in German?
- 11、你在德国有什么期望？ What do you expect in German?
- 12、你还会别的外语么？ Could you speak other foreign language?
- 13、哪个德国城市最合你胃口？ Which is your favorite city in Germany?
- 14、为什么你在德国要选择英语授课？ Why would you like to choose the courses by English language in German?
- 15、你想从冬季还是夏季开始读？ Which terms do you wanna begin to study, the winter courses or the summer courses?

16、你为什么不想去别的国家继续学习？      Why don't you think about other country for your studying?

17、你知道在德国读书的话 1 年要花多少钱吗？      How much do you know will be pay for your studying courses in one years?

私人问题：

1、你结婚了吗？      Have you married?      Are you single or married?

2、你打算在德国每个月花费多少钱？      How much money do you expect to pay for your normal fee for every month?

套话

1.For this question is not focus in our course.our focus is…… could I talk about it?

2.For this question I'm really not study yet.

3.I learned this course is two years ago,I can't remember very clear,so could I introduce some recent courses?

4. I've learned a lot from this course, but the most impressive..

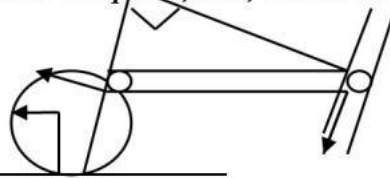


## 理论力学 Theoretical Mechanics

**Introduction:** introduce basic conceptions, laws, theories about static and dynamic mechanics, and kinematics. Example:

$$\Omega_o = V_o / OA \quad V_b = AB \Omega_o$$

$$\Omega = V_b / BE \quad V_c = \Omega CE$$



1. Fundamental Conceptions and Principles of Static Mechanic
  - a. Static Mechanic: it is the Science studying and exploring the universe Laws, Conforming to which, the Object, which is acted on by a set of forces, reaches to the state of Equilibrium.
  - b. The practical application of Equilibrium of forces  
When designing components for a building, or engineering Structures, or machinery Parts, which moving at a constant velocity, the first step is to analyze the forces that acting on them, then according the requirements to reach Equilibrium, work out the Force that is unknown.
  - c. Rigid Body: it is the body that when acted on by forces, the distance between any two its points remain the same.
2. Plane special force set 平面特殊力系
  - a. Plane intersecting force set: all forces act at the same plane.
  - b. Plane symmetrical mate force set: consisting of two forces, which points to opposite direction, but with the same amount of force
3. Plane random force set
  - a. The theorem of Planar move of force: the forces acting on Rigid Body could be moved from the point it acting on to any other one, under the condition a relative Mate added, which is equal to the Moment the force generates, relative to the point moving to.
4. Friction  
Friction angle and the application of Self-lock ( $\mu = \tan \alpha$ )
5. Spatial force set (forces that lay on different planes, a special case of Plane force set)
6. Kinetic of Points 点的运动学
7. The basic moves of Rigid body (include Parallel and rotate move)
8. The complex move of points
  - a. Absolute movement
  - b. Relative movement
  - c. The move that generated by the relative movement between the moving and static coordinate
9. The planar move of Rigid body (temporary point, angle velocity, angle acceleration)
10. The basic principle of dynamic.  
It is a science that studies and explores the interrelationships between object's machinery move and its Mass, and the force acting on it.
11. Momentum Axiom 动量定理
12. The Axiom of Momentum moment 动量矩定理  
Momentum moment =  $r * m * v$     moment of inertia  $J = 1/3 M * L * L$      $J = 2/5 M * R * R$
13. The Axiom of Kinetic energy  
The Kinetic energy of Rigid body =  $1/2 M * v * v$



