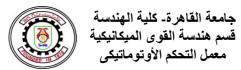
CAIRO UNIVERSITY – FACULTY OF ENGINEERING





Lecture Notes of the Course

GEN 1004

Communication, Presentation and Technical Writing Skills

مذكرة محاضرات مقررعام 1004 مهارات العرض والتواصل والكتابة الفنية

Compiled and prepared by

Dr. Mohsen Soliman

Mechanical Power Engineering Department
Manager of ACC Lab & ACC Web Site
Director of Automatic Control Diploma

for 1st Year Engineering Students

1st Term

Fall 2019/2020

Lecture # (1) Part-1

What is the Subject of this Course???

The Main Topics of this Lecture #1:

- Introducing the instructor & TA's.
- > Introducing the GEN 1004 Course
- What are 'Soft' vs. 'Hard' Skills?
- > The Course Specification file has:
- * The ILO's of the Course.
- The Teaching System is 2 methods: (Direct Lectures & Self Study/Reading)
- **Exams & Assessment System.**
- *References of the Course.
- -Note the Self-study part of the sheets which is based on these references.



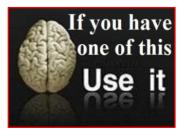




We study some types of Soft (Life) Skills that are essential for Engineers What are these Skills? And Why??

Introduction:

Most organizations require that those who work in them to have certain abilities that allow them to do their jobs effectively. These abilities are known as 'Hard or Technical Skills' and to learn them one usually enrolls in some sort of educational program i.e. where they receive classroom instructions and often do practical training as well.



However, to work in any occupation you also need what are referred to as 'Soft Skills' (often referred to as Life Skills). Soft skills as opposed to Hard/Technical Skills greatly impact personality development of all employees. Organisations today recognize that professional development of their employees are essential and plays an important part in maintaining relationships with their customers, clients, suppliers co-workers and in developing a successful business or work. Furthermore, it is found that 'Soft Skills' are not



replacement for 'Hard Skills'. In fact, they are comlementary to them and serve to unlock the potential of people equipped with 'Hard Skills'.

The sooner the relevant soft skills are learned and developed the better. The learning stage of theses skills must start at least at the gradute school level - if not earlier. Note that ,today most companies, while interviewing the job seekers, are not really very worried about the candidates' technical domain depths. Companies know that they can teach them the most exotic/hard technology effortlessly, but they also know that soft skills are the hardest to drive in Hence.



لايمكن حصرهم في عدد محدد متفق عليه كما لايمكن جمعهم في مقرر واحد

the right time to learn these essential skills is the time when you are preparing for your graduate program.

What Are Soft Skills?

Soft Skills are the personal character traits or qualities each of us has. They make us who we are, generally encompassing our attitudes, habits and how we interact with other people. Soft Skills refer to abilities that make people better employees and open doors for opportunities that are not directly related to the subject matter of their jobs. In other words, soft skills refer to person's ability to relate to others, to get him/her and others organized, to communicate in

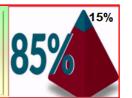
Soft skills have been defined by the World Health Organisation as follows:

"These are the abilities for adaptive and positive behaviour that enable individuals to deal with the demands and challenges of everyday life."

UNICEF defines these skills (called life skills) as:
"A behaviour change or behaviour development approach designed to address a balance of three areas: knowledge, attitude and skills."

Importance of Soft Skills

Many researches at (e.g., Harvard University, Stanford Research Center, and Carnegie Foundation) have concluded that 85% of job success comes from having well-developed soft/life/people skills. Same researches showed that only 15% of job success comes from technical or hard skills.



written, spoken or any nonverbal other forms.



أحياتاً نتحدث فقط عن جزء أو مجموعة محددة من المهارات الناعمة هي الأكثر أهمية وشهرة







كما تم تجميع عدد كبير جداً من الأقلام التعليمية المساعدة للتدريب على تثمية بعض من المهارات الناعمة الهامة This is for Self—Study part of the Course

يوجد كثير جداً من المواقع والأفلام على النت للتدريب على زيادة وتنمية بعض من المهارات الناعمة الهامة

ملاحظة هامة: الدراسة الذاتية بالمراجع والأفلام <u>تتضمن داخلياً تدريب على تنمية مهارات للتواصل مثل</u> القراءة وتقوية اللغة والإستماع الجيد والتفكير التحليلي والتواصل بدون كلام ضمن إلقاء الخطب والعروض...

هناك علاقة قوية بين المهارات الناعمة وعادات وصفات من ينجح ويسعد في حياته



Positive vs. Negative Personality

الشخصية الإيجابية جزء من متطلبات النجاح. كن إيجابياً. فيما يلي مقارنة ذكية وواقعية تبين الفرق بين أفعال الشخص الإيجابي والشخص السلبي. وهي تحليل منطقي لشخصية كل منهما. فإحرص على أن تعدل شخصيتك لتكون إيجابيا. (ملاحظة: في الجزءالثاني من المقررسيكون مطلوب ترجمة هذه المقارنة للصفات للغة الإنجليزية).

- و الإيجابي لديه أحلام يحققها. و السلبي لديه أو هام و أضغاث أحلام ببددها.
- و الإيجابي (عامل الناس كما تحب أن يعاملوك). عي والسلبي (هلجم الناس قبل أن يهاجموك).
 - و الإيجابي يرى في العمل أمل. 😖 واسلبي يرى في العمل الم.
- و الإيجابي ينظر إلى المستقبل ويتطلع إلى ما هو ممكن.
- ى واسلبى ينظر إلى الماضى ويتطلع إلى ما هو مستحيل ك الإيجابي يناقش بقوة وبلغة لطيفة.
 - و السلبي يذاقش بضعف وبلغة فظة.
 - 😉 الإيجابي يتمسك بالقيم وينتازل عن الصغائر
 - 👥 واسلبي يدقق و يتشبث بالصىغائر وينتازل عن القيم و الإيجابي يصنع الأحداث.
 - و السلبي تصنعه الأحداث
 - و الإيجابي دائماً يشكر. و اسلبي دانماً بشتكي
 - الإيجابي يعتبر الإنجاز التزاما يلبيه والسلبي لايرى في الإنجاز أكثر من وعد يـ
 - و الإيجابي الحل صعب لكنه ممكن. و السلبي الحل ممكن لكنة صبعب.

- و الإيجابي يفكر في الحل. حي والسلبي يفكر في المشكلة.
- 🕶 الإيجابي لا تتضب أفكاره. و اسلبي لا تنضب اعذاره.
- و الإيجابي يهتم بإيجابيات الأخرين و مزاياهم. والسلبي تشظه عيوب الناس وسلبياتهم.
- الإيجابي يتذكر ويحفظ للأخرين أعمالهم الطيبه.
- والسلبي يتذكر ويحفظ للأخرين إسأناتهم فقطر
- الإيجابي يعطى للأخرين أعذارهم عند حصول خطأ م حهم و لا يلومهم
- والسلبى يعتقد أنهم أسأؤا عمدا وبنية سينه ويحقد عليهم.
- 😋 الإيجابي يسار ع إلى الاعتذار للأخرين عند حصول خطأ منه ي يتلفر في الاعتذار وقد لا يعتذر اعتقادا منه أن
 - في ذلك تتقيصا من شخ و الإيجابي دائم الإبتسامه.
 - والسلبي دائم العيوس
 - الإيجابي يساعد الأخرين.
 - والسلبي يتوقع المساعدة من الأخرين.
 - الإيجابي يرى حلا لكل مشكلة. و اسلبي يرى مشكلة في كل حل.

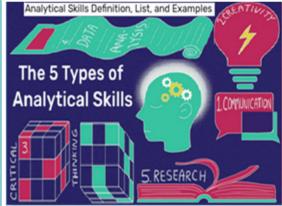
Types of Soft Skills:

Soft skills include psycho-social abilities and interpersonal skills that help people take decisions, solve problems, think critically, communicate effectively, build health relationships, demonstrate qualities of leadership and team building, manage time effectively, and cope with the stress and strain of life in a healthy, positive, and productive manner.

Essentially, there are two kinds of soft skills- those related to thinking called 'Thinking Skills' and skills related to dealing with others called 'Social Skills'. While thinking skills relate to the personal level, the social skills include interpersonal skills. It is the combination of these two types of skills that are needed for achieving behaviour change and negotiating effectively.

<u>Examples of 'Thinking Soft Skills'</u>: All types of analytical skills (communication: reading, listening, writing, speaking) critical thinking; data analysis; research; presentation; problem solving; creativity; commitment; time management; initiative; assertiveness, self awareness; interpersonal skills, flexibility; integrity; diplomacy; organization; personal grooming; risk taking; stress management; ability to work under pressure; briefing; etc..
<u>Examples of 'Social Soft Skills'</u>: Team work; team building; leadership; meeting management; negotiation skills; conflict resolution; coaching; work ethics; work etiquette; arguing; public speaking; job interview; etc..





The Need for Soft Skills:

Soft skills allow us to use, effectively and efficiently, our technical skills and knowledge. They improve the way we interact with our bosses, co-workers, friends, family and customers/clients. Soft skills permit us to get work done on time. They influence how we feel about our jobs and how others perceive us. Consequently, the demand for and reliance on soft skills is on increase due to constant change in work and social environment, customer-driven market, information-based technology and



globalization. The development of effective soft skills in this new market is important as there is intense completion for many available positions. The ability to develop and use soft skills can make the difference between the achiever person and the non-achiever one.

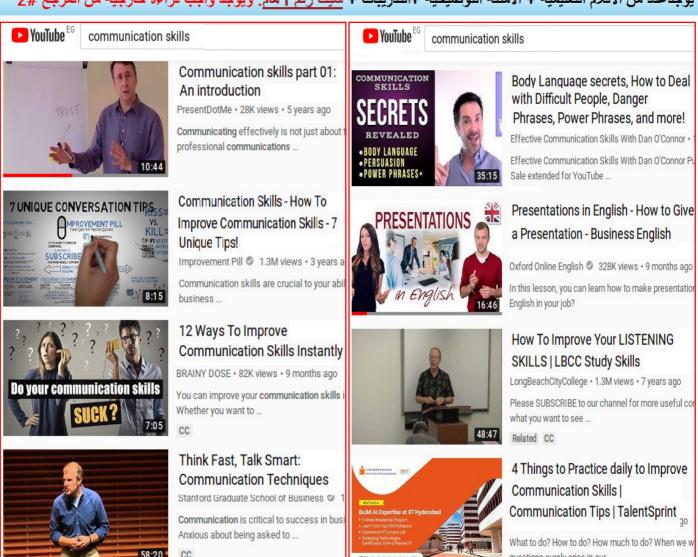
Many years ago, the focus of management was on 'hard' skills. The emphasis was on the technical skills necessary to perform the job effectively. The hard skills tended to be more closely related to the actual task being performed. But now every occupation you can think of demands also that you have specific character traits. Moreover, an important thing to note is that soft skills are also *transferable* between occupations. While you have to go back to school to learn new technical skills if you change careers, you can always take your soft skills with you since they are valued in a variety of fields.

Today, employers want people with efficient soft skills. These are key skills to effective performance across all job categories. As the world has changed, and the nature of work has changed, the skill set required of managers and other executives has also changed. Today's business is all about people. It is about communication, relationships and about presenting yourself, your company and your ideas in the most positive and impactful way. Many business

people like to think that success is based on logical, rational thoughts and acts, but it is also to be remembered that the human element is an important as the skills mentioned above. That is why an effective strong soft skills is considered to be very important.



يوجدعدد من الأفلام التعليمية + الأمثلة التوضيحية +التدريبات + شيت رقم 1هام: ويوجد واجب قراءة خارجية من المرجع #2



Next part is the Full Course Specification File of GEN 1004

> The Contents of GEN 1004 Course Specification file:

تنبيه: هذا ليس مقرر لتدريس قوا عداللغة الإنجليزية ولكنه لتحسين استخدام مفردات وقوا عد اللغة الإنجليزية للتحسين المناقق الجزءالثاني عن المعاودة عالية. (خاصة في الجزءالثاني عن مهارات الكتابة الفنية). المحاضرات المراجع تضم كثير جداً من التدريبات + الأمثلة المحلولة

ملاحظة مهمة إضافية (التعلم الذاتي Self–Study & Self–Reading يختلف عن التعلم فقط بهدف النجاح في الإمتحان)! ا

بعض أجزاء المراجع نشير إلى صفحاتهافي المحاضرات/الشيتات. باقى الأجزاء لايسمح الوقت المتاح بتدريسها في المحاضرات لذلك هذه الأجزاء هي ضمن التعلم الذاتي ومطلوب القراءة الشخصية لتحقيق بعض مخرجات التعلم (ربما لا تدخل في الإمتحان)

لمراجع والأفلام والملفات الموجودة على موقع معمل التحكم أوالمادة العلمية التي يتم إرسالها للطالب تعتبر جزء من المنهج والدراسة الذاتية



Cairo University Faculty of Engineering



Course Specifications					
Programs on which this course is given:	B. Sc. of Mechanical Power Engineering B. Sc. of Mechanical Design & Production Engineering B. Sc. of Civil Engineering B. Sc. of Aerospace Engineering B. Sc. of Electrical Power Engineering B. Sc. of Petroleum Engineering B. Sc. of Metallurgical Engineering				
Departments offering the program:	Department of Mechanical Power Engineering Department of Mechanical Design & Production Engineering Department of Civil Engineering Department of Aerospace Engineering Department of Electrical Power Engineering Department of Petroleum Engineering Department of Metallurgical Engineering				
Department offering the course:	Department of Mechanical Power Engineering Department of Civil Engineering Department of Aerospace Engineering Department of Electrical Power Engineering Department of Petroleum Engineering Department of Metallurgical Engineering				
Academic Level:	1 st Year				
Date of specification approval:	Date of Bylaws approval: 12 th July 2018 (2 semester system)				
Semester (based on final exam timing)	V ☐ Fall (Except for Metallurgical Eng. Dept. V ☐ Spring)				

A- Basic	Informati	on							
1. Title: Pre	sentation , Com	munication a	nd Tec	hnical Wr	iting Skills	(1+3+0)	Code	: GE	N 1004
2. Units/Cred	it hrs per week:	Lectures: 1	hr/wk	Tutorial:	3 hrs/wk	Practical	s: 0	Fotal:	4 hrs/wk
B- Professional Information									
1. Course description:	Overall Aims of C Part-1: Presenta oral Communica objectives - Ide confidence duri skills of moving the end of the p Part-2: Technica How to write th - Article and S keywords, head	tion & Commation - How to entify types of ing presentation from topic to resentation. Il Writing Skill e summary ar cientific Rese	unication of analysic of speed of topic - of topic - ls: How and resul earch -	on Skills: Ty ze the back ches and esign of ef Dealing w to write in ts for long Biography	ypes of Soft kground of presentation fective visual with the para deas and di research - y -Writing	t Skills vs. listeners- ons - Ove ual accom t of quest ssertation Writing o	Hard Selection of the service of the	ion of si e stress ent too nd answ inning t etters a	ubject and and build ols-Use the vers part at he article - nd reports

ILO's of the Course (Intended Learning Outcomes).

ومنطلبات معابير ضمان الجودة والاعتماد (الأهداف التغيمية المرجوة أوالمخرجات التعليمية الم

2. Intended

Learning

Outcomes

of Course

(ILOs):

- جات المعرفة والفهم للمعلومات (لا توجد في اللائحة) a) Knowledge and Understanding: Having successfully completed this course, the student should be able to demonstrate both
- knowledge and understanding of: 1. Meaning and main Differences between "Soft or Life Skills" and "Hard or Technical skills".
- 2. The main components of Soft Skills (i.e., Personality development; Communication Skills; Interpersonal relationships; Team building, Leadership; Time management; Presentation Skills; Managing Stress; Thinking Skills; Problem Solving; Decision Making; Employment Communication; Work Place Etiquette; and Technical Writing Skills).
- 3. Methods to have and improve both types of "Soft or Life Skills" and "Hard or Technical skills".
- 4. Essential facts and concepts relevant to various types of background of listeners.
- 5. Different types of Speechs and Presentations.
- 6. Types of Essential Presentation & Communication Tools for various Engineering areas/fields.
- 7. Different Types of Articles, Official Letters, Technical Reports and Dissertations.
- 8. The role and importance of Biography.
- Different Types of References.
- 10. The role and importance of Keywords.
- 11. The form and methodology of Writing Headings and Subheadings tools to get/achieve
- 12. Different Types of Reviews.

Remember: elf-learning (b Self-Study & Reading all types of the ILO's

b) Intellectual Skills:

Having successfully completed this course, the student should have the ability to:

- 1. Recognize the differences between "Soft or Life Skills" and "Hard or Technical Skills"
- 2. Identify main components of Soft Skills &Identify the role of Soft Skills in building Personality.
- 3. Recognize the importance of Presentation, Communication and Technical Writing Skills for having a successful Engineering career.

2. Intended Learning Outcomes of Course (ILOs):

2. Intended Learning

Outcomes

of Course

(ILOs):

- 4. Identify various tools and select appropriate method for building & developing Presentation, Communication and Technical Writing Skills for different Engineers.
- Analyze background of listeners or audients of a specific presentation or a speech.
- 6. Analyze background of recipients of a specific Report, Official Letter, Technical Report, etc...
- 7. Select and identify the subject and main objectives of each specific Presentation or a Report.
- 8. Plan&organize different ideas& elements relevant to the presentation/report subject or area.
- 9. Think in a creative & innovative way to perform a high quality presentation/technical Report.
- 10. Select effective and appropriate methods to manage presentation time, to move smoothly from topic to topic, to overcome stress, and to build confidence during presentation.
- 11. Analyze the range and scope of questions and answers part at the end of the presentation.
- 12. Use available visual and audio accompaniment tools to improve the presentation quality.
- Create & follow organized scientific methodology to produce a high quality technical report.

c) Professional and Practical Skills:

مهارات تطبيقية وتقتية أو مهنية

المهارات الذهنية والعقلية

Having successfully completed this course, the student should have the ability to:

- 1. Apply the available effective and practical tools and methods to produce an interesting and successful presentation, an official Letter, a technical report and an engineering Dissertation.
- 2. Design a specific attractive presentation or a high quality technical report based on some given requirements relevant to time, subject, recourses, data, budget, etc... 3. Practice using various tools & techniques including pertinent software, IT, Multimedia effects,
- & relevant hardware devices to produce & perform an eng. Presentation or a Technical Report.
- 4. Search for information related to the subject of the presentation or Technical report problem.
- 5. Exchange knowledge with various engineering community.
- Prepare and present informative and neat technical reports.
- Demonstrate overall control of information/data relevant to subject of presentation or Report.
- 8. Display professional and ethical responsibilities; and contextual understanding of the subject of the presentation or the Technical Report.

d) General and Transferable Skills:

مهارات عامة يمكن تناقلها مع اي مقرر

Having successfully completed this course, the student should have the ability to do:

- 1. Work in stressful environment and within specific constraints.
- Communicate effectively.
- 3. Demonstrate efficient IT capabilities to prepare Report assignments.
- 4. Effectively manage tasks and resources.
- 5. Search for information and adopt life-long self learning.
- 6. Refer to relevant literature
- 7. Work effectively within multi-disciplinary teams.
- 8. Engage in self -and life-long learning.

عناوين المحاضرات الأسبوعية (للجزء الأول من المقررحتي الميد ترم)

3-	a Contents:		
Weel #	Topic	Lectures 1 hr/week	Tutorial/Practical 3 hrs. each week
1	<u>Part-1</u> : Introduction to Soft vs. Hard Skills, Course specification file, ILO's, Teaching, Assessment, Exams, and References 1 & 2	P1-Lecture 1	tutorials/assignments Sheet#1 on Lecture 1
2	Defining&tools of communication skills, Basic&importantissues in Communication	P1-Lecture 2	tutorials/assignments Sheet#2 on Lecture 2
3	Effective listening skills&Reading Skills-Writing Skills (How to keep it simple)	P1-Lecture 3	tutorials/assignments Sheet#3 on Lecture 3
4	Arguing & Discussion in Communication- Effective speakingskills (effective speech)	P1-Lecture 4	tutorials/assignments Sheet#4 on Lecture 4
5	Presentation skills-Power Point Tools-Oneto one Interviews-ManagingMeetings-Within Your Organization (FECU)	P1-Lecture 5	tutorials/assignments Sheet#5 on Lecture 5
6	Briefing Skills (the effective speaking in briefings & Briefing checklist- Coaching and Communication	P1-Lecture 6	tutorials/assignments Sheet#6 on Lecture 6
7	General summary of Oral Communication and Presentation Skills	P1-Lecture 7	tutorials/assignments Sheet#7 on Lecture 7
8	Mid-Term Exam (on Part-1 only)	On-Paper midter	rm exam (on Part-1 only)

المحاضرات الأسبوعية (للجزء الثاني من المقرر بعد الميد ترم) Part-2: Technical Writing Skills

9	Paer-2: Introduction to Written Communication Skills, Effective Writing, Characteristics of Technical Writing, References of Part-2	P2-Lecture 1	tutorials/assignments Sheet #A on P2-Lecture 1
10	Technical Writing Process- Ethics of Writing - Usage of resources- Plagiarism- Computer Check Tools- How to Avoid Plagiarism?	P2-Lecture 2	tutorials/assignments Sheet #B on P2-Lecture 2
11	Non effective Writing- Types of grammar & modifiers errors in Technical Writing- Style & Parallelism – Abbreviations-Punctuation	P2-Lecture 3	tutorials/assignments Sheet #C on P2-Lecture 3
12	Consistency in Style in Technical Writing-Effective Writing Process- Effective sentences & Paragraphs- Self Study Readings	P2-Lecture 4	tutorials/assignments Sheet #D on P2-Lecture 4
13	Using graphics, charts & tables in Technical Writing- Effective arguing & Discussion skills in written communication- Self study readings	P2-Lecture 5	tutorials/assignments Sheet #E on P2-Lecture 5
14	Term Final Exam on Part-1 & Part-2	On-Paper Term	Final Exam on Part-1 & Part-2

1-نظام التدريس (محاضرات /تدريبك/سكاشن) +<u>واجبقراءة ذاتية</u> 2-نظام التقييم ووضع الدرجك (تقارير/حل تمارين/كشكول سكشن) +ميد ترم + إمتحان نهاية الترم

4. Teaching and	Lectures (√)	Practical Training/ Laboratory (√)	Seminar/Workshop (√)
Learning Methods	Class Activity (√)	Case Study/Reports (√)	Projects ()
Learning Methods	E-learning (√)	Assignments /Homework (√)	Other: √

Also for Teaching and Learning:

- Lectures and problem solving in tutorial classes.
- Information collection from text material, class notes and the Internet sites.
- Reports and research assignments. Number of assignment Sheets (1 to 7 on Part-1 & A to E on P-2)
- Group discussions in lectures and tutorial classes.
- Hand-outs materials.

5. Student Assessment Methods:

- Test/quiz/Report(1) to assess understanding Topics (weeks 1 to 7) and solving Sheets #1-7 on ILO's of Part-1
- Test/quiz/Report(2) to assess understanding Topics (weeks 8-13) and solving Sheet #A-E on ILO's of Part-2
- -Mid-term exam to assess understanding topics of weeks 1 to 7 and Sheets #1 to 7 on ILO's of Part-1
- Final Term Exam to assess gains of all completed topics and all of the course ILO's.

-	-		
Assessment Schedule	Week		
-Assessment 1; Test (1) & Report (1)	End of Week # 4.		
-Assessment 2; Test (2) & Report (2)	End of Week #7.		
-Assessment; Test (3) & Report (3)	End of Week #10.		
Mid-term Exam	In Week 8		
Final Term Exam	End of Term		
Weighting of Assessments			
Tests 1, 2, assignments & class perform	mance 10 %		
Reports 1, 2,	10 %		
Mid-term Exam	20 %		
Final-term Examination	60 %		
-Total	100 %		

6-a List of References

- Essential Books (Text Books all available in pdf format):
- 1-For Part1-Contents as per Reference #(1): The Concise Adair on Communication and Presentation Skills, By John Adair & Neil Thomas, ©John Adair 2003, Pub. by Thotogood (pub. division of Acorn Magazines Ltd
- 2- For Part1- Reference #(2): Oral Communication, Skills, Choices, and Consequences. 3rd Edition, 2012 By Kathryn Sue Young & Howard Paul Travis. WAVELAND Press, INC, Long Grove, IL.
- 3-For Part2-Reference#(3):"Where You May Get it Wrong When Writing English, A Practical Guide for Students, Teachers and Professionals" by LEON BARHO, 1st ed., 2016, Free eBooks at bookboon.com.
- 4- For Part2-Reference#(4):"Technical Communication Process and Product", by Sharon J. Gerson & Steven M. Gerson, 7th Ed., Published by Prentice Hall. 2012 by Pearson Education, Inc.

Recommended Books [Reference # (5) - available in pdf format]: "Soft Skills" 1st ed. ©2017 by Manmohan Joshi & bookboon.com

Other Reading & Teaching Materials:

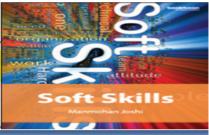
- Course Notes: Compiled Notes corresponding to the different course Topics +Training & applied practical Videos from the Net.
- Hand-outs and Web Sites information,... etc

7. Facilities Required for Teaching and Learning

- Data Show, white Screen, new reference in library
- Internet for Enhancing the ability to think for students in Engineering Schools







Reference #(2)

Reference #(5)





***** End of Lecture # 1 of Part (1) *****