


**Government of Karnataka**  
**Department of Technical Education**  
**Board of Technical Examinations, Bangalore**

	<b>Course Title: PROFESSIONAL PRACTICES (Computer Science)</b>		
	<b>Scheme (L:T:P) : 0:2:4</b>	<b>Total Contact Hours: 78</b>	<b>Course Code:15CS57P</b>
	<b>Type of Course: Assignment Group talk and Practice</b>	<b>Credit :03</b>	<b>Core/ Elective: Core(practice)</b>
<b>CIE- 25 Marks</b>		<b>SEE- 50 Marks</b>	

### PREREQUISITES

Enthusiasm to Explore New things by taking individual tasks and acquires skills from participating in group activities.

### COURSE OBJECTIVES

To meet the industrial requirements and practices, the course introduces the students to various personality development skills through communication, group discussions, listening and technical skills through guest lectures and Presentations.

### COURSE OUT COME

*On successful completion of the course, the students will be able to:*

Course Outcome		CL	Linked activity	Linked PO	Teaching Hrs
CO1	Recognize ethical responsibilities with respect to community, society, discipline and profession through oral communication skills	Analysis	1	2-10	15
CO2	Search the information related to topic, and acquire knowledge of contemporary issues related to advancements in Computer Science engineering.	Application/analysis	2	2-10	15
CO3	Discuss & disseminate about advancements in related profession including societal, environmental	Innovative/Analysis	3	2-10	15
CO4	Demonstrate the ability to analyse a problem and communicate competently in groups.	Application	4	2-10	18
CO5	Exposure to various industry environment practice and global, societal, economic, and/or environmental issues, by listening experts talks and interact with them and make a presentation	Analysis/Creation	5	2-10	15
				<b>Total</b>	<b>78</b>

## COURSE-PO ATTAINMENT MATRIX

Course	Programme Outcomes									
	1	2	3	4	5	6	7	8	9	10
<b>PROFESSIONAL PRACTICES</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<p><b>Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.</b>                      Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.                      If <math>\geq 40\%</math> of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3                      If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2                      If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1                      If <math>&lt; 5\%</math> of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.</p>										

### **I. Communication skills** **15 HRS**

#### Communication Today

- Introduction
- Significance of Communication
- GSC's 3M Model of Communication: A Simple Approach
- Vitality of the Communication Process
- Virtues of Listening
- Fundamentals of Good Listening
- Nature of Non-Verbal Communication
- Need for Intercultural Communication
- Communication in a Digital World

**Ref:** Soft Skills: An Integrated Approach to Maximize Personality, Gajendra Singh Chauhan, Sangeeta Sharma, Wiley India, ISBN: 9788126556397

#### **Method of achieving task: Practice in pairs through role play**

Suggested activities:

1. Telephonic conversation of a customer and supplier.
2. A computer product show room sales person and a customer.
3. Negotiation between marketing representative of a computer firm and a technical representative at a polytechnic

**Standards to be met:**

- Given a telephone number, a student must be able to call and gather information from the person, sustaining the conversation for about 3 min using proper etiquettes and report on the enquiry made about the product or service. [e.g., call a toll free number to ask details about a product or service]
- Given a situation, a student must be able to talk to a person face to face in simulation, gather information about a product, discuss about it and also negotiate with him in the specified time (here, time can be specified by the Course Coordinator as per the need).

## II. Information Search and Data collection:

15 HRS

Information search can be done through manufacturer's catalogue, websites, magazines; books etc. *Following topics are suggested.*

1. Network Storage Devices
2. High – end computing servers
3. Print server devices
4. Indoor Wireless access points
5. Outdoor Wireless access points
6. Indoor Antennas and amplifiers
7. Indoor Antennas and amplifiers
8. LCD Projectors
9. LED Projectors
10. Monitors for high end graphics
11. Graphics Cards
12. Mobile devices – Tablets, Mobile phones etc.
13. Operating systems – Window, Linux, Android, Mac
14. Laptops
15. Desktops
16. CRM software's and tools
17. ERP software's
18. Any other relevant technical topic.

### Method for conducting Graded activities

1. The student should individually select the topic, and search the information related to topic.
2. Comparisons related to make, model, configuration, speed, price etc.
3. The report is strictly hand written document to have knowledge of precise writing and report making based on data collection

## III. Guest Lecturers / Workshops: To be organized Minimum Two, preferably one technical and one General

15 HRS

Experts / Professionals from different fields/industries are invited to deliver lectures at least TWO sessions in a semester. The topics may be selected by the teacher /industry expert to develop required skills.

*Note: The ISTE student chapter/CCTEK/ Institute of engineers (Institute chapter)/ student clubs of polytechnic may be used as platform to conduct this activity.*

1. Cloud computing
2. Expert systems
3. Hadoop
4. Go Programming
5. Haskell programming
6. Big Data
7. Python
8. Raspberry PI
9. Pollution control and E-waste management
10. Fire Fighting / Safety Precautions and First aids.
11. Computer Networking and Security.
12. Career opportunities,

13. Yoga Meditation,
14. Aids awareness and health awareness.
15. Interview Techniques.
16. Road safety
17. Environmental pollution & control.
18. Nanotechnology
19. Rapid prototyping
20. Programmable logic controllers
21. TQM
22. Any other areas identified by the course co-ordinator

#### **Method for conducting Guest lectures**

1. The teacher/ISTE student chapter convener should fix up the date for guest lecture
2. The HOD of the department should chair the event
3. The students of class allowed to participate in the session
4. Watch the talk and make the brief hand written report on the guest lecture delivered by each student as a part of Term work.
5. Make Audio/visual record of the guest lecture by using any smart devices
6. Opportunity should be provided for students for live Interaction with experts and record it on any one smart device.

#### **IV. Group Discussion: (Four topics)**

**18 HRS**

- Introduction
- Ambience / Seating Arrangement for Group Discussion
- Importance of Group Discussions
- Difference between Group Discussion, Panel Discussion and Debate
- Traits Evaluated in Group Discussions
- Types of Group Discussions
- Topic-based Group Discussion
- Case-based Group Discussion
- Tips for Successful Participation in Group Discussion
- Individual Traits

**Ref:** Soft Skills: An Integrated Approach to Maximise Personality, Gajendra Singh Chauhan, Sangeeta Sharma, Wiley India, ISBN: 9788126556397

The students shall discuss in group of six students. Some of the suggested topics are. Minimum four topics to be discussed.

1. Polythene bags must be banned!
2. Do we really need smart cities?
3. E – Books or Printed books – what's your choice?
4. Is Face book for the attention – seeking and lazy people?
5. Globalization and its impact on Indian Culture.
6. Analytically evaluate the solutions to traffic problems
7. Global warming is caused more by developed countries
8. Rain forests help in maintaining the earth's ecosystem
9. Reservation for women would help the society

10. How to deal with terrorism
11. Water resources should be nationalized
12. Daughters are more caring than sons
13. NGOs - Do they serve people's interests?
14. Managers are born, not trained
15. Managerial skills learnt in the classroom
16. Women are good managers
17. India's growth rate is bridging gap between rich and poor.
18. Nuclear power is a safe source of energy
19. Electronic media vs. print media
20. Corruption is the price we pay for democracy
21. Multinational corporations: Are they devils in disguise?
22. Advertising is a waste of resources.
23. Privatization will lead to less corruption.
24. China market - a threat to Indian market
25. Technology Creates Income Disparities
26. India should be reorganized into smaller states.
27. Rising petrol prices - Govt. can control?
28. Smaller businesses and start-ups have more scope
29. Developing countries need trade, not aid.
30. Business and Ethics do not go together
31. Performance based bonuses for government employees should be welcomed
32. Depreciation of Indian Rupee has only negative impact on the economy
33. Gold: Best investment or a bursting bubble?
34. Freedom of press should exist
35. India needs a strong dictator
36. Media is a mixed blessing/How ethical is media?
37. Computer viruses are good
38. India should practice "Swadeshi"
39. The government should stop funding IIT's and IIM's
40. Food Bill - Is it really something India needs?
41. Will India really be the superpower of 21st century?
42. Quality is a myth in India.
43. China - A threat to India?
44. Indian villages - our strength or our weakness?
45. Mobile phones - requirement of the day.
46. Cursing the weather is bad farming
47. If you want peace, prepare for war
48. Education is a progressive way of discovering your ignorance.
49. Beauty contests degrade womanhood
50. Examinations - has it killed education?
51. The medium of teaching in schools should be English
52. A room without books is like a body without soul.
53. Educated Indians lack national commitment.
54. E-Learning is good for the education system and society
55. Any relevant topic

#### **Methodology for conducting Group discussion/Seminar**

1. The teacher will allot a topic for a group of six students
2. The teacher should give an introductory talk on Ways and rules to carry out group discussion

3. The students should ask to show interest with others and work effectively with them to meet common objective. The teacher should provide tips to accept feedback in a constructive and considerate way and how to handle frustrations in group, while discussion.
4. The placement officer and any other senior faculty of the institute/ HOD of other department should be invited and they should act as observing members, apart from teacher
5. The teacher should fix up the time duration for initiating and conducting the activity
6. Documentation to be produced for validation
  - Hand written document on minutes of discussion, description of the topic discussed
  - Record the few minutes of discussion by smart device

## V. Professional Presentation 15 HRS

- Nature of Oral Presentation
- Planning a Presentation
- Preparing the Presentation
- Delivering the Presentation

**Ref:** Soft Skills: An Integrated Approach to Maximize Personality, Gajendra Singh Chauhan, Sangeeta Sharma, Wiley India, ISBN: 9788126556397

- *Carry out the presentation in activity No. 2 i.e Information search and Data Collection. Student should carry out the presentation individually.*

### Course Delivery:

The course will be delivered through discussions and activities

### Course Assessment and Evaluation Scheme:

	What		To whom	When/Where (Frequency in the course)	Max Marks	Evidence collected	Course outcomes
Direct Assessment method	CIE	IA	Students	Each activities @5 marks each	25	Assessment report for each activity.	1,2,3,4,5
				End of the course	50	Answer scripts at BTE	1,2,3,4,5
Indirect Assessment	Student Feedback on course		Students	Middle of the course		Feedback forms	1,2,3 Delivery of course
	End of Course Survey			End of the course		Questionnaires	1,2,3, Effectiveness of Delivery of instructions & Assessment Methods

**Note to IA verifier:** *The following documents to be verified by CIE verifier at the end of semester*

1. Student activities report for 25 marks.
2. Student feedback on course regarding Effectiveness of Delivery of instructions & Assessment Methods.

## Scheme of Valuation for End Examination

SN	Description	Marks
1	One oral practices exercise on Communication skills	10
2	Report and Presentation on Information Search and Data Collection	20
3	Report on guest lecturers/Seminars conducted	10
4	One oral practices exercise on Group Discussion	10
<b>Total</b>		<b>50</b>

**Note:**

1. The records of the activities should be preserved in the department for minimum three years.
2. The examiner should verify these records to prevent duplication of the activity.

### MODEL OF RUBRICS /CRITERIA FOR ASSESSING STUDENT ACTIVITY

RUBRICS FOR ACTIVITY						
Dimension	Unsatisfactory	Developing	Satisfactory	Good	Exemplary	Student Score
	1	2	3	4	5	
<b>Collection of data</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collect much information; but very limited relate to the topic	Collects some basic information; most refer to the topic	Collects a great deal of information; all refer to the topic	Ex: 4
<b>Fulfil team's roles &amp; duties</b>	Does not perform any duties assigned to the team role	Performs very little duties but unreliable.	Performs very little duties	Performs nearly all duties	Performs all duties of assigned team roles	5
<b>Shares work equally</b>	Always relies on others to do the work	Rarely does the assigned work; often needs reminding	Usually does the assigned work; rarely needs reminding	Normally does the assigned work	Always does the assigned work without having to be reminded.	3
<b>Listen to other Team mates</b>	Is always talking; never allows anyone else to speak	Usually does most of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fair amount	2
<b>Average / Total marks=(4+5+3+2)/4=14/4=3.5=4</b>						

**Note:** This is only an example. Appropriate rubrics/criteria may be devised by the concerned Course Coordinator for assessing the given activity