Course code	Course Name	L-T-P- Credits	Year of Introduction
HS210	LIFE SKILLS	2-0-2	2016

Prerequisite: Nil

Course Objectives

- To develop communication competence in prospective engineers.
- To enable them to convey thoughts and ideas with clarity and focus.
- To develop report writing skills.
- To equip them to face interview & Group Discussion.
- To inculcate critical thinking process.
- To prepare them on problem solving skills.
- To provide symbolic, verbal, and graphical interpretations of statements in a problem description.
- To understand team dynamics & effectiveness.
- To create an awareness on Engineering Ethics and Human Values.
- To instill Moral and Social Values, Loyalty and also to learn to appreciate the rights of others.
- To learn leadership qualities and practice them.

Syllabus

Communication Skill: Introduction to Communication, The Process of Communication, Barriers to Communication, Listening Skills, Writing Skills, Technical Writing, Letter Writing, Job Application, Report Writing, Non-verbal Communication and Body Language, Interview Skills, Group Discussion, Presentation Skills, Technology-based Communication.

Critical Thinking & Problem Solving: Creativity, Lateral thinking, Critical thinking, Multiple Intelligence, Problem Solving, Six thinking hats, Mind Mapping & Analytical Thinking.

Teamwork: Groups, Teams, Group Vs Teams, Team formation process, Stages of Group, Group Dynamics, Managing Team Performance & Team Conflicts.

Ethics, Moral & Professional Values: Human Values, Civic Rights, Engineering Ethics, Engineering as Social Experimentation, Environmental Ethics, Global Issues, Code of Ethics like ASME, ASCE, IEEE.

Leadership Skills: Leadership, Levels of Leadership, Making of a leader, Types of leadership, Transactions Vs Transformational Leadership, VUCA Leaders, DART Leadership, Leadership Grid & leadership Formulation.

Expected outcome

The students will be able to

- Communicate effectively.
- Make effective presentations.
- Write different types of reports.
- Face interview & group discussion.
- Critically think on a particular problem.
- Solve problems.
- Work in Group & Teams
- Handle Engineering Ethics and Human Values.
- Become an effective leader.

Resource Book:

Life Skills for Engineers, Complied by ICT Academy of Kerala, McGraw Hill Education (India) Private Ltd., 2016

References:

- Barun K. Mitra; (2011), "Personality Development & Soft Skills", First Edition; Oxford Publishers.
- Kalyana; (2015) "Soft Skill for Managers"; First Edition; Wiley Publishing Ltd.
- Larry James (2016); "The First Book of Life Skills"; First Edition; Embassy Books.
- Shalini Verma (2014); "Development of Life Skills and Professional Practice"; First Edition; Sultan Chand (G/L) & Company
- John C. Maxwell (2014); "The 5 Levels of Leadership", Centre Street, A division of Hachette Book Group Inc.

Need for Effective Communication, Levels of communication; Flow of communication; Use of language in communication; Communication networks; Significance of technical communication, Types of barriers; Miscommunication; Noise; Overcoming measures, Listening as an active skill; Types of Listeners; Listening for general content; Listening to fill up information; Intensive Listening; Listening for specific information; Developing effective listening skills; Barriers to effective listening skills. Technical Writing: Differences between technical and literary style, Elements of style; Common Errors, Letter Writing: Formal, informal and demi-official letters; business letters, Job Application: Cover letter, Differences between bio-data, CV
Flow of communication; Use of language in communication; Communication networks; Significance of technical communication, Types of barriers; Miscommunication; Noise; Overcoming measures, Listening as an active skill; Types of Listeners; Listening for general content; Listening to fill up information; Intensive Listening; Listening for specific information; Developing effective listening skills; Barriers to effective listening skills. Technical Writing: Differences between technical and literary style, Elements of style; Common Errors, Letter Writing: Formal, informal and demi-official letters; business letters, Job Application: Cover letter, Differences between bio-data, CV
and Resume, Report Writing: Basics of Report Writing; Structure of a report; Types of reports. Non-verbal Communication and Body Language: Forms of non-verbal communication; Interpreting body-language cues; Kinesics; Proxemics; Chronemics; Effective use of body language Interview Skills: Types of Interviews; Ensuring success in job interviews; Appropriate use of non-verbal communication, Group Discussion: Differences between group discussion and

quantitative reasoning expressed in written form, Numeric, symbolic, and graphic reasoning, Solving application problems. Introduction to Groups and Teams, Team Composition, Managing Team Performance, Importance of Group, Stages of Group, Group Cycle, Group thinking, getting acquainted, Clarifying expectations. Group Problem Solving, Achieving Group Consensus. Group Dynamics techniques, Group vs Team, Team Dynamics, Teams for enhancing productivity, Building & Managing Successful Virtual Teams. Managing Team Performance & Managing Conflict in Teams. Working Together in Teams, Team Decision-Making, Team Culture & Power, Team Leader Development. Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue, Respect for Others, Living Peacefully. Caring, Sharing, Honesty, Courage, Valuing Time, Cooperation, Commitment, Empathy, Self-Confidence, Character Spirituality, Senses of 'Engineering Ethics', variety of moral issued, Types of inquiry, moral dilemmas, moral autonomy, Kohlberg's theory, Gilligan's theory, Consensus and controversy, Models of Professional Roles, Theories about right action, Self-interest, customs and religion, application of ethical theories. Engineering as experimentation, engineers as responsible experimenters, Codes of ethics, Balanced outlook on. 3	II	Need for Creativity in the 21 st century, Imagination, Intuition, Experience, Sources of Creativity, Lateral Thinking, Myths of creativity Critical thinking Vs Creative thinking, Functions of Left Brain & Right brain, Convergent & Divergent Thinking, Critical reading & Multiple Intelligence. Steps in problem solving, Problem Solving Techniques, Problem Solving through Six Thinking Hats, Mind Mapping, Forced Connections. Problem Solving strategies, Analytical Thinking and	2	2	
Managing Team Performance, Importance of Group, Stages of Group, Group Cycle, Group thinking, getting acquainted, Clarifying expectations. Group Problem Solving, Achieving Group Consensus. Group Dynamics techniques, Group vs Team, Team Dynamics, Teams for enhancing productivity, Building & Managing Successful Virtual Teams. Managing Team Performance & Managing Conflict in Teams. Working Together in Teams, Team Decision-Making, Team Culture & Power, Team Leader Development. Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue, Respect for Others, Living Peacefully. Caring, Sharing, Honesty, Courage, Valuing Time, Cooperation, Commitment, Empathy, Self-Confidence, Character Spirituality, Senses of 'Engineering Ethics', variety of moral issued, Types of inquiry, moral dilemmas, moral autonomy, Kohlberg's theory, Gilligan's theory, Consensus and controversy, Models of Professional Roles, Theories about right action, Self-interest, customs and religion, application of ethical theories. Engineering as experimentation, engineers as responsible experimenters, Codes of ethics, Balanced outlook on. 3		quantitative reasoning expressed in written form, Numeric, symbolic, and graphic reasoning, Solving application		2	
Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue, Respect for Others, Living Peacefully. Caring, Sharing, Honesty, Courage, Valuing Time, Cooperation, Commitment, Empathy, Self-Confidence, Character Spirituality, Senses of 'Engineering Ethics', variety of moral issued, Types of inquiry, moral dilemmas, moral autonomy, Kohlberg's theory, Gilligan's theory, Consensus and controversy, Models of Professional Roles, Theories about right action, Self-interest, customs and religion, application of ethical theories. Engineering as experimentation, engineers as responsible experimenters, Codes of ethics, Balanced outlook on. 3	III	Managing Team Performance, Importance of Group, Stages of Group, Group Cycle, Group thinking, getting acquainted, Clarifying expectations. Group Problem Solving, Achieving Group Consensus. Group Dynamics techniques, Group vs Team, Team Dynamics, Teams for enhancing productivity, Building & Managing Successful Virtual Teams. Managing Team Performance & Managing Conflict in Teams.			
Environmental ethics, computer ethics,	IV	Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue, Respect for Others, Living Peacefully. Caring, Sharing, Honesty, Courage, Valuing Time, Cooperation, Commitment, Empathy, Self-Confidence, Character Spirituality, Senses of 'Engineering Ethics', variety of moral issued, Types of inquiry, moral dilemmas, moral autonomy, Kohlberg's theory, Gilligan's theory, Consensus and controversy, Models of Professional Roles, Theories about right action, Self-interest, customs and religion, application of ethical theories. Engineering as experimentation, engineers as responsible experimenters, Codes of ethics, Balanced outlook on. The challenger case study, Multinational corporations,	3		

	Weapons development, engineers as managers, consulting engineers, engineers as expert witnesses and advisors, moral leadership, sample code of Ethics like ASME, ASCE, IEEE, Institution of Engineers(India), Indian Institute of Materials Management, Institution of electronics and telecommunication	3		
	engineers(IETE), India, etc.			
	Introduction, a framework for considering leadership,	4		
	entrepreneurial and moral leadership, vision, people selection and development, cultural dimensions of leadership, style, followers, crises.	V		
${f v}$	Growing as a leader, turnaround leadership, gaining control, trust, managing diverse stakeholders, crisis management	L	2	
	Implications of national culture and multicultural leadership	2		
	Types of Leadership, Leadership Traits. Leadership Styles, VUCA Leadership, DART Leadership,			
	Transactional vs Transformational Leaders, Leadership Grid,		2	
	Effective Leaders, making of a Leader, Formulate Leadership			
END SEMESTER EXAM				



EVALUATION SCHEME

Internal Evaluation

(Conducted by the College)

Total Marks: 100

Part - A

(To be started after completion of Module 1 and to be completed by 30th working day of the semester)

- 1. Group Discussion Create groups of about 10 students each and engage them on a GD on a suitable topic for about 20 minutes. Parameters to be used for evaluation is as follows;
- (i) Communication Skills 10 marks
- (ii) Subject Clarity 10 marks
- (iii) Group Dynamics 10 marks
- (iv) Behaviors & Mannerisms 10 marks

(Marks: 40)

Part - B

(To be started from 31st working day and to be completed before 60th working day of the semester)

- 2. Presentation Skills Identify a suitable topic and ask the students to prepare a presentation (preferably a power point presentation) for about 10 minutes. Parameters to be used for evaluation is as follows;
- (i) Communication Skills* 10 marks (ii) Platform Skills** - 10 marks
- (iii) Subject Clarity/Knowledge 10 marks

(Marks: 30)

Part - C

(To be conducted before the termination of semester)

- 3. Sample Letter writing or report writing following the guidelines and procedures. Parameters to be used for evaluation is as follows;
 - (i) Usage of English & Grammar 10 marks
 (ii) Following the format 10 marks
 - (iii) Content clarity 10 marks

(Marks: 30)

External Evaluation

(Conducted by the University)

Total Marks: 50 Time: 2 hrs.

Part - A

Short Answer questions

There will be one question from each area (five questions in total). Each question should be written in about maximum of 400 words. Parameters to be used for evaluation are as follows;

- (i) Content Clarity/Subject Knowledge
- (ii) Presentation style
- (iii) Organization of content

^{*} Language fluency, auditability, voice modulation, rate of speech, listening, summarizes key learnings etc.

^{**} Postures/Gestures, Smiles/Expressions, Movements, usage of floor area etc.

(*Marks*: $5 \times 6 = 30$)

Part - B

Case Study

The students will be given a case study with questions at the end the students have to analyze the case and answer the question at the end. Parameters to be used for evaluation are as follows;

- (i) Analyze the case situation
- (ii) Key players/characters of the case
- (iii) Identification of the problem (both major & minor if exists)
- (iv) Bring out alternatives
- (v) Analyze each alternative against the problem
- (vi) Choose the best alternative
- (vii) Implement as solution
- (viii) Conclusion
- (ix) Answer the question at the end of the case

This were the question at the clud of the case $(Marks: 1 \times 20 = 20)$