COIMBATORE INSTITUTE OF TECHNOLOGY, Coimbatore - 14
DEPARTMENT OF MECHANICAL ENGINEERING
ONE CREDIT COURSE DETAILS

Name of the Industry : **Koso India Private Limited**
1/80, Telungalayam Road,
Pillayappampalayam, Annur,
Coimbatore – 641697
Tamil Nadu, India.

Name of the Course : One Credit Course on "Foundry Practice and Procedure"

Course Duration : 15 hours (**ONLINE Mode**)

Number of students per batch : 30

Period : February 2021 to April 2021

Department & Institute to which the course is offered : Department of Mechanical Engineering, Coimbatore Institute of Technology, Civil Aerodrome Post, Coimbatore - 641014.

Course Coordinators : **Koso India Private Limited:**
1. Mr.P.Sathiyamurthy (+91 94899 05681)
2. Mr.D.Sivakumar (+91 98941 09987)
3. Mr.S.SatheeshKumar

Coimbatore Institute of Technology:
1. Dr.A.S.Krishnan, (+91 94429 00190)
   Associate Professor, Department of Mechanical Engineering
2. Mr M Karthikeyan (+91 9790199975)
   Assistant Professor, Department of Mechanical Engineering

Course Module :
1. Gating system design for pattern design – Method calculation (4 hours)
2. Moulding process- Alpha set (1 hour)
3. Melting process – Carbon Steel and Stainless Steel (ASTM A216 and ASTM A351) (3 Hours)
4. Heat Treatment – for Carbon Steel and Stainless Steel (2 hours)
5. Quality –for Carbon Steel and Stainless Steel –Destructive testing, NDT, Final inspection (4 hours)
6. Recent developments in the casting processes (1 Hour)

Total : 15 Hours

For **Koso India Private Limited**

For **Coimbatore Institute of Technology**

Dr. K. MARIMUTHU, Ph.D.,
PROFESSOR AND HEAD OF MECHANICAL ENGINEERING
COIMBATORE INSTITUTE OF TECHNOLOGY
COIMBATORE - 641 014. INDIA

COIMBATORE INSTITUTE OF TECHNOLOGY

(AUTONOMOUS INSTITUTION)

COIMBATORE – 641 014.

DEPARTMENT OF HUMANITIES

CIRCULAR

17th February, 2021

Department of Humanities is conducting a one credit course, Communication Skills for Engineers – II (19HOC41), for the II year B.E / B.Tech Students. The classes will be conducted **offline from 17th February, 2021.** The schedule is as follows.

S.NO	BRANCH	SECTION / SERIAL NUMBER	RESOURCE PERSON	DAY AND TIMINGS	HALL NO.
1	CIVIL	I /1 1901001 – 1901032	MS. GEETHA	Monday 4.30 pm – 6.30 pm	IT 110
2	CIVIL	I/2 1901033– 1901055& 2001201 – 2001208	MS. LYNETTE	Monday 4.30 pm – 6.30 pm	IT 305
3	CIVIL	II/1 1901056 – 1901088, 1801094 & 1801099	MS. SEEMA	Monday 4.30 pm – 6.30 pm	IT 306
4	CIVIL	II/2 (29-56) 1901089 -1901111 & 1801073 & 2001209 - 2001218	MS.SANGEETHA	Monday 4.30 pm – 6.30 pm	IT 307
5	MECHANICAL	I/1 1902001 - 1902033	MS.LYNETTE	Wednesday 4.30 pm – 6.30 pm	L401
6	MECHANICAL	I/2 1902034 -1902056& 2002201- 2002210	MS.D.BEAULAH ANNAMANI	Wednesday 4.30 pm – 6.30 pm	L402
7	MECHANICAL	II/1 1902057 - 1902089	MS.SANGEETHA	Wednesday 4.30 pm – 6.30 pm	L403
8	MECHANICAL	II/2 1902090– 1902110& 2002211- 2002220	MR. JENSO PEETER	Wednesday 4.30 pm – 6.30 pm	L408
9	EEE	I/1 1903001- 1903032	MS.J.ASHA	Monday 4.30 pm – 6.30 pm	L409
10	EEE	I/2 1903033– 1903058& 2003201 – 2003205	MS.A. SANTHA DEVI	Monday 4.30 pm – 6.30 pm	L 410

11	EEE	II/1 1903059-1903089	MS.POONAM	Monday 4.30 pm – 6.30 pm	L109
12	EEE	II/2 1903090– 1903114& 2003206 - 2003210	MR. JENSO PEETER	Monday 4.30 pm – 6.30 pm	L 110
13	ECE	I/1 1904001 – 1904034	DR.V.ARTHY	Thursday 4.30 pm – 6.30 pm	L301
14	ECE	I/2 1904035– 1904062& 2004201 -2004205	MS.POONAM	Thursday 4.30 pm – 6.30 pm	L302
15	ECE	II/1 1904063 - 1904094	MS.LYNETTE	Thursday 4.30 pm – 6.30 pm	L309
16	ECE	II/2 190495– 1904122& 2004206 -2004209	MS.SANGEETHA	Thursday 4.30 pm – 6.30 pm	L310
17	CSE	I/1 1905001 -1905033	MS. A SANTHA DEVI	Tuesday 4.30 pm – 6.30 pm	L211
18	CSE	I/2 1905034– 1905062& 2005201 - 2005206	MS.GEETHA	Tuesday 4.30 pm – 6.30 pm	L212
19	CSE	II/1 1905063 - 1905096	MS.R.SUDHA	Tuesday 4.30 pm – 6.30 pm	IT208
20	CSE	II/2 1905097– 1905123& 2005207 - 2005212	MR.JENSO PEETER	Tuesday 4.30 pm – 6.30 pm	IT209
21	IT	I/1 1907001- 1907031	DR.V.ARTHY	Tuesday 4.30 pm – 6.30 pm	IT 201
22	IT	I/2 1907032- 1907059& 2007201 - 2007206	Ms. POONAM	Tuesday 4.30 pm – 6.30 pm	IT 206
23	CHEMICAL	1/1 1906001 - 1906033	MS.D.BEAULAH ANNAMANI	Thursday 4.30 pm – 6.30 pm	M-223
24	CHEMICAL	1/2 1906034-1906060& 2006201 - 2006206	MS.M.SEEMA	Thursday 4.30 pm – 6.30 pm	M-227

The students are informed to attend the classes regularly.

P. Santhi

HEAD OF THE DEPARTMENT

Dr. P. Santhi M.A., M.Phil., Ph.D.,
Associate Professor & HOD
Department of Humanities
Coimbatore Institute of Technology
Coimbatore - 641 014.

CBE
641 014

PRINCIPAL

Dr. V. SELLADURAI, ME., Ph.D
FIE., FIIE., Sr.M (ORSI) LM (SSI)
PRINCIPAL
COIMBATORE INSTITUTE OF TECHNOLOGY
COIMBATORE - 641 014 INDIA

19HSS01 - SCIENCE OF CREATIVITY AND PROFESSIONAL ETHICS

L	T	P	C
1	0	0	1

ASSESSMENT : THEORY

COURSE OUTCOMES

CO1 : Describe the principles of karma yoga and functioning of mind and consciousness.

CO2 : Hypothesize the evolution of Universe and living beings in a global and societal context

CO3 : Infer the principles of Yoga to practice it and know the value of health.

CO4 : Interpret the philosophy of introspection procedures for better living

CO5 : Assess, take personal responsibility and follow professional ethics for sustained growth in career and life.

LIFE FORCE, MIND AND CONCIOUSNESS

Science of Creativity and Personality Development - Objectives - Principles of Karma Yoga - Duty Consciousness – Communism and Capitalism - Law of Nature - Life Force - Origin - Potentiality of the Life Force - Premordial State - Wave Theory - Consciousness- PanchaThanmatras - Secret of Revelations - Mind - Biomagnetism - Physical Transformation of Biomagnetism.   **(7)**

EVOLUTION OF THE UNIVERSE AND LIVING BEINGS

Evolution of the Universe: Creation Theory - Evolution Theory - Theory of Permanence - Theory of Mithya - Evolution of Living Beings: Absolute Space and Force - Plants Experience Pain - Two Eyes and Two Ears - Seven Constituent Layers in the Body.   **(5)**

YOGA AND ITS BENEFITS

Simple and Safe Yoga - Upa Yoga Practices: Yoga for Peace - Yoga for Health - Yoga for Joy - Yoga for Love - Yoga for Wellbeing - Yoga for Success. Physical Exercise - Meditation - Seven Centers of Meditation - Benefits - Effect of Good Vibrations -Cause and Effect System -Food and Health.   **(6)**

INTROSPECTION

Attachment, Detachment and Moderation in Enjoyment - Imaginary Expectations - Harmony in Life: Self, Family, Society and Nature - Introspection: Analysis of Thought, Moralization of Desire, Neutralization of Anger, Eradication of Worries and Self Realization.   **(6)**

HUMAN VALUES

Morals, Values and Ethics - Integrity - Work Ethics - Service Learning - Virtues - Respect for Others - Living Peacefully – Caring - Sharing - Honesty - Courage - Valuing Time - Co-operation - Commitment - Empathy - Self Confidence - Challenges in Work Place - Impact of cyberspace on individuals. **(6)**

TOTAL : 30

TEXT BOOKS

1. YogirajVethathri Maharishi, "Karma Yoga - The Holistic Unity", Vethathri Publications, IV Edition, 2009. (Chapters 1-7, 10-12)

2. R.S.Naagarazan, "A Textbook on Professional Ethics and Human Values", New Age International Publishers, New Delhi, 2011.

REFERENCES

1. Sadhguru, "Body the Greatest Gadget and Mind is your Business", Diamond Pocket Books Pvt. Ltd, Isha Foundations, 2013.

2. Swami Vivekananda and Swami Nikhilananda, "Karma Yoga and Bhakti Yoga", II Edition, Ramakrishna Vivekananda Publications, 2008.

3. Henry Dreyfuss, "The Measure of Man and Woman: Human Factors in Design", John Wiley and Sons Publications, 2012.

4. Mike W. Martin and Roland Schinzinger,"Ethics in Engineering", IV Edition, McGraw Hill, NewYork, 2005.

5. M. Govindarajan, S. Natarajan, V.S. Senthilkumar, "Engineering Ethics", I Edition, Prentice Hall of India, 2009.

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

COIMBATORE - 641 014, TAMILNADU, INDIA

DEPARTMENT OF INFORMATION TECHNOLOGY
B.Tech. INFORMATION TECHNOLOGY
Curriculum and Syllabi
Under Choice Based Credit System

(For the students admitted during the academic year 2019 - 2020 and onwards)

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COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

VISION AND MISSION OF THE INSTITUTE

VISION

The Institute strives to inculcate a sound knowledge in Engineering along with realized social responsibilities to enable its students to combat the current and impending challenges faced by our country and to extend their expertise to the global arena.

MISSION

The Mission of the institute is to impart high quality education and training to its students to make them world-class Engineers with a foresight to the changes and problems and pioneers to offer innovative solutions to benefit the nation and the world at large.

DEPARTMENT OF INFORMATION TECHNOLOGY
COIMBATORE INSTITUTE OF TECHNOLOGY

VISION AND MISSION OF THE DEPARTMENT

VISION

To evolve as Centre of Excellence in teaching, learning, research and consultancy, integrating computer and information sciences with engineering concepts to develop products and services for the benefits of the industry and society at large.

MISSION

- To impart value based technical education and entrepreneurial skills to the graduates through state of art infrastructure.

- To educate graduates, towards the design and development of intelligent products and services meeting global demands and standards.

- To promote collaborative learning and research with industry, government and International organizations for continuous knowledge transfer and enhancement.

- To develop globally competent engineers capable of providing secure and "Out-of-the Box" computing and information technology solutions

- To enable the graduates to adapt to the rapidly changing technology with strong fundamentals

COIMBATORE INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1   Graduates will acquire sound knowledge in mathematical, scientific and engineering fundamentals and knowledge in Information and Communication Technology to analyze, formulate and solve the real-life problems.

PEO2   Graduates will encompass entrepreneurship skills and ability to develop, implement innovative, integrated and secure information technology solutions for meeting the global challenges and changing requirements.

PEO3   Graduates will possess professional and ethical attitude, leadership qualities, desire for lifelong learning, and ability to work in multidisciplinary teams in meeting the broader societal needs.

COIMBATORE INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF INFORMATION TECHNOLOGY

B.Tech. INFORMATION TECHNOLOGY

PROGRAM OUTCOMES

PO1 : **Engineering knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 : **Problem analysis :** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 : **Design/development of solutions :** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4 : **Conduct investigations of complex problems :** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5 : **Modern tool usage :** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6 : **The engineer and society :** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7 : **Environment and sustainability :** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 : **Ethics :** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 : **Individual and team work :** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 : **Communication :** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 : **Project management and finance :** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 : **Life-long learning :** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

COIMBATORE INSTITUTE OF TECHNOLOGY

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B.Tech. INFORMATION TECHNOLOGY

CHOICE BASED CREDIT SYSTEM

Curriculum from the academic year 2019-2020 onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	Category
19CIM31	Linear Algebra, Complex Variables and Transform Techniques	3	1	0	4	BS
19CI31	Data Structures and Algorithms - I	3	1	0	4	PC
19CI32	Digital Design	3	0	0	3	ES
19IT31	Discrete Mathematics And Automata Theory	3	0	0	3	PC
19CI33	Object Oriented Programming and Java	3	0	0	3	PC
19HSS01	Science Of Creativity and Professional Ethics	1	0	0	1	HS
19CIL34	Digital Design Laboratory	0	0	3	1.5	ES
19CIL35	Object Oriented Programming Laboratory	0	0	3	1.5	PC
	One Credit Course	0	0	2	1	OCC
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	TOTAL CREDITS				**23**	

Semester IV

Course Code	Course Name	L	T	P	C	Category
19CI41	Data Structures and Algorithms II	3	0	0	3	PC
19CI42	Database Management Systems	3	0	0	3	PC
19CI43	Computer Architecture	3	0	0	3	PC
19CI44	Operating Systems	3	0	0	3	PC
19CI45	Software Engineering	2	1	0	3	PC
19CIL46	Database Management Systems Laboratory	0	0	3	1.5	PC
19CIL47	Data Structures and Algorithms Laboratory	0	0	3	1.5	PC
19CIL48	Operating Systems Laboratory	0	0	2	1	PC
	One Credit Course	0	0	2	1	OCC
19HOC41	Communication Skills for Engineers -II*	0	0	2	1	EEC
	TOTAL CREDITS				**21**	

* Not to be counted for GPA. Pass is required.

Semester V

Course Code	Course Name	L	T	P	C	Category
19CI51	Computer Networks	3	0	0	3	PC
19CI52	Data Warehousing and Data Mining	3	0	0	3	PC
19CI53	Embedded Systems	3	0	0	3	PC
19IT51	Economics for Engineers	2	0	0	2	HS
	Elective-I	3	0	0	3	PE/OE
	Elective-II	3	0	0	3	PE/OE
19ITL52	Embedded Systems Laboratory	0	0	2	1	PC
19CIL54	Computer Networks Laboratory	0	0	2	1	PC
	One Credit Course	0	0	2	1	OCC
19HOC51	Employability and Personality Development Skills - I*	0	0	2	1	EEC
19IT65	Mini Project	0	0	3	-	EEC
19INT51	Internship-I	0	0	0	1	EEC
	TOTAL CREDITS				**22**	

Semester VI

Course Code	Course Name	L	T	P	C	Category
19CI61	Artificial Intelligence	3	0	0	3	PC
19IT61	Mobile Computing	3	0	0	3	PC
19IT62	Internet Technology	3	0	0	3	PC
	Elective-III	3	0	0	3	PE/OE
	Elective-IV	3	0	0	3	PE/OE
19ITL63	Data Analytics and Artificial Intelligence Laboratory	0	0	3	1.5	PC
19ITL64	Internet Technology & Software Engineering Laboratory	0	0	3	1.5	PC
	One Credit Course	0	0	2	1	OCC
19HOC61	Employability and Personality Development Skills - II*	0	0	2	1	EEC
19IT65	Mini Project	0	0	3	3	EEC
19INT61	Internship -II	0	0	0	1	EEC
	TOTAL CREDITS				**24**	

• Internship/Project to be completed during 4th and 5th semester vacation

* Not to be counted for GPA. Pass is required.

Semester VII

Course Code	Course Name	L	T	P	C	Category
19CI71	Cryptography and Network Security	3	1	0	4	PC
19IT71	Distributed Systems	3	0	0	3	PC
19IT72	Internet of Things	3	1	0	4	PC
	Elective-V	3	0	0	3	PE/OE
	Elective-VI	3	0	0	3	PE/OE
19ITL73	Internet of Things Laboratory	0	0	3	1.5	PC
19ITL74	Mobile Application Development Laboratory	0	0	3	1.5	PC
19IT75	Project Phase-I	0	0	6	3	EEC
	TOTAL CREDITS				**23**	

Semester VIII

Course Code	Course Name	L	T	P	C	Category
	Elective-VII	3	0	0	3	PE/OE
	Elective-VIII	3	0	0	3	PE/OE
19IT81	Project Phase-II	0	0	10	5	EEC
	TOTAL CREDITS				**11**	

Total Credits : 164 (4 years B.Tech (IT))

Total Credits : 126 (Lateral B.Tech (IT))

122* Credits for Laterals + 4 Credits - Bridge

Course (Engineering Mathematics - 2 Credits & Physical - Sciences - 2 Credits)

LIST OF PROFESSIONAL ELECTIVES (PE)

Course Code	Course Name	L	T	P	C
19ITE01	Advanced Algorithms	3	0	0	3
19CIE01	Ad-hoc Networks	3	0	0	3
19ITE02	Advanced Computer Architecture	3	0	0	3
19ITE03	Advanced Operating Systems	3	0	0	3
19CIE02	Big Data Analytics	3	0	0	3
19CIE03	Bioinformatics	3	0	0	3
19CIE04	Block Chain Technology	3	0	0	3
19CIE05	Cloud and Virtualization	3	0	0	3
19ITE04	Customer Relationship Management	3	0	0	3
19ITE05	Cyber Security	3	0	0	3
19ITE06	Data Communications	3	0	0	3
19CIE06	Digital Forensics	3	0	0	3
19ITE07	Digital Image Processing	3	0	0	3
19CIE07	Entrepreneurship Skill Development	3	0	0	3
19CIE08	Graph Theory	3	0	0	3
19CIE09	Graphics and Multimedia Systems	3	0	0	3
19ITE08	Human Computer Interaction	3	0	0	3
19ITE09	Information Retrieval	3	0	0	3
19CIE10	Information Security	3	0	0	3
19CIE11	Information Storage Management	3	0	0	3
19CIE12	Information Theory and coding	3	0	0	3
19CS62	Machine Learning	3	0	0	3
19ITE10	Multi-Agent Intelligent System	3	0	0	3
19CIE13	Neural Networks and Deep Learning	3	0	0	3
19CIE14	Object Oriented Analysis and Design	3	0	0	3
19CIE15	Open Source Systems	3	0	0	3
19CS71	Principles of Compiler Design	3	0	0	3
19CIE16	Parallel Architecture and Programming	3	0	0	3
19ITE11	Real Time Systems	3	0	0	3
19CIE17	Resource Management Techniques	3	0	0	3
19ITE12	Semantic Web	3	0	0	3
19CIE18	Service Oriented Architecture and Web Services	3	0	0	3
19ITE13	Soft Computing	3	0	0	3
19ITE14	Software Agents	3	0	0	3
19CIE19	Software Metrics and Measurement	3	0	0	3
19CIE20	Software Testing and Quality Assurance	3	0	0	3
19CIE21	Wireless Sensor Networks	3	0	0	3
19CS51	UNIX internals	3	0	0	3
19ITE15	Full Stack Development	3	0	0	3
19ITE16	Virtual and Augumented Reality	3	0	0	3

HUMANITIES AND SOCIAL SCIENCES (HS)

Course Code	Course Name	L	T	P	C	Semester
19FYE11	Technical English	2	0	1	2	I
19FYE21	Language Elective	2	0	1	2	II
19FYC21	Environmental Science and Engineering	3	0	0	1	II
19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	III
19IT51	Economics for Engineers	2	0	0	2	V

BASIC SCIENCES(BS)

Course Code	Course Name	L	T	P	C	Semester
19FYM14	Matrices and Calculus	3	1	0	4	I
19FYP13	Engineering Physics	3	0	0	3	I
19FYC11	Engineering Chemistry	3	0	0	3	I
19PL11	Physics Laboratory-I	0	0	2	0.5	I
19CL11	Chemistry Laboratory-I	0	0	2	0.5	I
19MEL12	Engineering Practices Laboratory	0	0	2	1	I
19FYM24	Fourier Series and Partial Differential Equation	3	1	0	4	II
19PL21	Physics Laboratory-II	0	0	2	0.5	II
19CL21	Chemistry Laboratory-II	0	0	2	0.5	II
19CIM31	Linear Algebra, Complex Variables and Transform Techniques	3	1	0	4	III

ENGINEERING SCIENCES (ES)

Course Code	Course Name	L	T	P	C	Semester
19CSL12	Python Programming	1	0	4	3	I
19FYP24	Introduction to Electronic Devices	3	0	0	3	II
19CS21	C Programming	3	1	0	4	II
19CSL11	C Programming Laboratory	0	0	4	2	II
19MEL11	Engineering Graphics	1	0	4	3	II
19CI32	Digital Design	3	0	0	3	III
19CIL34	Digital Design Laboratory	0	0	3	1.5	III

PROFESSIONAL CORE (PC)

Course Code	Course Name	L	T	P	C	Semester
19CI31	Data Structures and algorithms-I	3	1	0	4	III
19IT31	Discrete Mathematics and Automata Theory	3	0	0	3	III
19CI33	Object Oriented Programming and Java	3	0	0	3	III
19CIL35	Object Oriented Programming Laboratory	0	0	3	1.5	III
19CI41	Data Structures and Algorithms II	3	0	0	3	IV
19CI42	Database Management Systems	3	0	0	3	IV
19CI43	Computer Architecture	3	0	0	3	IV
19CI44	Operating Systems	3	0	0	3	IV
19CI45	Software Engineering	2	1	0	3	IV
19CIL46	Database Management Systems Laboratory	0	0	3	1.5	IV
19CIL47	Data Structures and Algorithms Laboratory	0	0	3	1.5	IV
19CIL48	Operating Systems Laboratory	0	0	2	1	IV
19CI51	Computer Networks	3	0	0	3	V
19CI52	Data Warehousing and Data Mining	3	0	0	3	V
19CI53	Embedded Systems	3	0	0	3	V
19ITL52	Embedded Systems Laboratory	0	0	2	1	V
19CIL54	Computer Networks Laboratory	0	0	2	1	V
19CI61	Artificial Intelligence	3	0	0	3	VI
19IT61	Mobile Computing	3	0	0	3	VI
19IT62	Internet Technology	3	0	0	3	VI
19ITL63	Data Analytics and Artificial Intelligence Laboratory	0	0	3	1.5	VI
19ITL64	Internet Technology and Software Engineering Laboratory	0	0	3	1.5	VI
19CI71	Cryptography and Network Security	3	1	0	4	VII
19IT71	Distributed Systems	3	0	0	3	VII
19IT72	Internet of Things	3	1	0	4	VII
19ITL73	Internet of Things Laboratory	0	0	3	1.5	VII
19ITL74	Mobile Application Development Laboratory	0	0	3	1.5	VII

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

Course Code	Course Name	L	T	P	C	Semester
19FYEL11	Employability Skills	0	0	2	1	I
19FYEL21	English for Employability	0	0	2	1	II
19HOC31	Communication Skills for Engineers - I	1	0	0	1	III
19HOC41	Communication Skills for Engineers -II	1	0	0	1	IV
19HOC51	Employability and Personality Development Skills-I	0	0	2	1	V
19IT65	Mini Project	0	0	3	-	V
19INT51	Internship-I	0	0	0	1	V
19IT65	Mini Project	0	0	3	3	VI
19HOC61	Employability and Personality Development Skills-II	0	0	2	1	VI
19INT61	Internship-II	0	0	0	1	VI
19IT75	Project Phase-I	0	0	6	3	VII
19IT81	Project Phase-II	0	0	10	5	VIII

ONE CREDIT COURSES (OCC)

1. DEPARTMENT BASED

Course Code	Course Name	L	T	P	C
19CIOC01	C++ Programming	0	0	2	1
19CIOC02	R Programming	0	0	2	1
19CIOC03	Applications of Probability	0	0	2	1
19CIOC04	User Interface Design	0	0	2	1
19CIOC05	Open-Source Tools for Network Analysis	0	0	2	1
19CIOC06	Comprehensive Exam Training	0	0	2	1
19ITOC01	Aptitude Training	0	0	2	1

2. INDUSTRY BASED

Course Code	Course Name	L	T	P	C
19ITOC02	Data Visualization Tools	0	0	2	1
19ITOC03	Data Science Tools	0	0	2	1
19ITOC04	Cloud Computing Applications	0	0	2	1
19ITOC05	Agile Software Development	0	0	2	1
19ITOC06	Software Testing Tool	0	0	2	1

3. NPTEL Offered (4 weeks courses not part of the curriculum)

4. Institute Based

19HOC31 - COMMUNICATION SKILLS FOR ENGINEERS - I

L	T	P	C
0	0	2	1

ASSESSMENT : PRACTICAL

COURSE OUTCOMES

CO1 : *Gain confidence, enhance Personality and develop positive attitude in their work and life.*

CO2 : *Effectively communicate and present opinions using appropriate functional expressions for a given situation.*

CO3 : *Compose Emails, Reports for a given business scenario using appropriate sentence construction and in the prescribed format.*

CO4 : *Generate ideas and speak on a given topic in a competitive scenario like Debate, Group Discussion, and Public Speaking.*

PERSONALITY DEVELOPMENT

Motivation and Self Confidence, SCOT Analysis - Personality Development - What is Personality, Developing Positive Attitude towards work and life, Building Relationship with others - Personality Development - Paradigms of Human Interaction, Fear Management. **(4)**

VERBAL COMMUNICATION

English Conversation - Asking and Giving Opinions - English Conversation -Thanking People, Asking and Giving Suggestions - English Conversation - Asking for Direction, Agreeing and Disagreeing - Role Play-Business. **(5)**

BUSINESS COMMUNICATION

Email Writing - Format, Etiquettes and Tips - Report Writing -Introduction, elements and tips - Drafting a report - Error Identification - Rules, Common Mistakes and Exercises - Sentence Completion Filler (fill in the blanks using apt words). **(5)**

PUBLIC SPEAKING

How to start and sustain a conversation - Debate - Extempore - Group Discussion - Importance and Process - Public Speaking - Introduction, Tips - Drafting a Public Speech - Interview - Types, Dos and Don'ts - Mock Press. **(6)**

TOTAL : 20

REFERENCES

1. *https://nptel.ac.in/content/storage2/courses/109104030/references/references.pdf (online resource)*

2. *John Seelay, Oxford Guide to Effective Writing and Speaking, 2nd Edition, Kindle Edition by Oxford University Press, 2007.*

3. *Sabina Pillai, Agna Fernandez, Soft Skills and Employability Skills - Published by Cambridge University Press, 2017.*

19HOC41 - COMMUNICATION SKILLS FOR ENGINEERS - II

L	T	P	C
0	0	2	1

ASSESSMENT : PRACTICAL

COURSE OUTCOMES

Students will be able to

CO1 : *Solve objective questions on analogy, Statement and Argument, Statement and Conclusion, Data Sufficiency and Sentence improvement within a given time.*

CO2 : *Construct grammatically correct sentences.*

CO3 : *Speak confidently to describe a process, present information on the specified topic and disseminate information in a professional manner.*

SELF EVALUATION

Self belief and self Esteem - Activities based on Current Events **(2)**

VERBAL AND LOGICAL REASONING

Analogy - Introduction, Types and Exercises - Statement and Argument - Statement and Conclusion - Data Sufficiency - Sentence Improvement - Critical Reasoning / Theme Detection **(5)**

GRAMMAR

Basic Grammar- Subject Verb Agreement - One word substitute - Preposition- Cause and Effect - Basic level questions and Moderate level questions. **(4)**

PRESENTATION TECHNIQUES

Describing a Process - Presentation Skills - Introduction, Planning and Preparation - Presentation on a Topic - Group Discussion - Dos and Don'ts - Functional Expressions used in Group Discussion - Interview Skills - Ideal Grooming for an interview, Preparing for the Interview **(9)**

TOTAL : 20

REFERENCES

1. *Sanjay Kumar, Pushp Lata, Communication Skills Second Edition, published by Oxford University Press, New Delhi, India, 2015.*

2. *Anthony Manning, Chris Sowton and Craig Thaine, Cambridge Academic English, published by Cambridge University Press, U P, India, 2012.*

19HOC51 - EMPLOYABILITY AND PERSONALITY DEVELOPMENT SKILLS - I

L	T	P	C
0	0	2	1

ASSESSMENT : PRACTICAL

COURSE OUTCOMES

CO1 : Solve objective questions on Syllogisms, Data Interpretation, Critical Reasoning, Theme Detection, Sentence Completion and Business Vocabulary

CO2 : Develop appropriate responses for business phone calls and negotiate effectively.

CO3 : Speak with appropriate body language for a technical speaking task.

CO4 : Project the appropriate grooming and the right etiquettes, for interview and group discussion task.

VERBAL APTITUDE

Syllogisms-Paragraph Comprehension -Data Interpretation -Critical Reasoning/Theme Detection - Grammar -Sentence Completion Filler - Business Vocabulary- Foreign phrases used in English **(3)**

PROFESSIONAL COMMUNICATION

Telephonic Conversation Skills - Telephonic Interview -Etiquettes - Professional, Dining & Telephone - Employability skills - Importance and Employability level of present Y and Z Generation - Interpersonal Skills - Negotiation Skills - Types, Expressions used in formal and informal negotiations, Stages of Negotiation - Time Management - Pareto principle, Prioritizing tasks, Barriers to time management **(7)**

THE ART OF SPEAKING

Types of Speaking - Barriers to Speaking - Presentation on a Technical Topic - Speaking on Current Trends in the Industry **(5)**

NON-VERBAL COMMUNICATION

Interview Skills -Non Verbal Communication - Smiling, Posture, Handshake, Tone of Voice and Eye Contact - GD tips & techniques and Mock GD- Body Language - Grooming. **(5)**

TOTAL : 20

REFERENCES

1. Kamin, Maxine. Soft Skills Revolution: A Guide for Connecting with Compassion for Trainers, Teams, and Leaders. Washington, DC: Pfeiffer & Company, 2013.

2. Petes S. J., Francis. Soft Skills and Professional Communication. New Delhi: Tata McGraw-Hill Education, 2011.

3. John Hayes. Interpersonal Skills at Work. Second Edition, Routledge Publication, 2005

19HOC61 - EMPLOYABILITY AND PERSONALITY DEVELOPMENT SKILLS - II

L	T	P	C
0	0	2	1

ASSESSMENT :PRACTICAL

COURSE OUTCOMES

CO1 : *Exhibit Corporate Etiquettes with assertiveness and personal effectiveness.*

CO2 : *Build teams and solve problems at workplace.*

CO3 : *Manage conflicts in a professional manner*

CO4 : *Simulate an actual Job Interview scenario to prepare a candidate for a real Interview*

CORPORATE ETIQUETTE

Corporate Etiquette: Dos and Don'ts, - Conversational dos and don'ts - Creating elusive first impression- Assertiveness-Personal Effectiveness **(4)**

LEADERSHIP AND TEAM MANAGEMENT

Leadership Skills - Understanding Traits and Styles - Team Building: Bonding, Development and Delegation - Adaptability and Work Ethics - Handling Team Dynamics- Giving and Receiving Feedback- Problem Solving Skills **(5)**

STRESS AND CONFLICT MANAGEMENT

Emotional Intelligence: Recognition, Understanding and Managing - Stress Management: Techniques and Benefits - Conflict Management: Introduction - Handling Conflicts - Conflicts settlement **(6)**

GROUP DISCUSSION AND INTERVIEW SKILLS

Mock GD - Interview Skills - Answering challenging questions - Common Interview Questions **(5)**

TOTAL : 20

REFERENCES

1   *Barun K Mitra., Personality Development and Soft Skills. Second Edition, Oxford University Press, 2016*

2   *N.Krishnaswamy & Lalitha Krishnaswamy - Mastering Communication Skills and Soft Skills, New Delhi, Bloomsburry, 2015*

3   *Stein, Steven J. & Howard E. Book. The EQ Edge: Emotional Intelligence and Your Success,Canada: Wiley & Sons, 2006.*