

LIBERAL LEARNING COURSES (LLC)

First and Second Year Engineering (Sem. I to Sem. IV)

REVISION: FRCRCE-1-24

Effective from Academic Year 2024-25
Board of Studies Approval: 08/03/2024 & 09/03/2024
Academic Council Approval: 16/03/2024



Jaho13

Dr. DEEPAK BHOIR
Dean Academics

DR. SURENDRA RATHOD
Principal



Fr. Conceicao Rodrigues College of Engineering

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Preamble:

Government of Maharashtra has directed Autonomous Colleges to revise their curriculum in line with National Education Policy (NEP) 2020 through Government Resolution dated 4th July 2023. As per this Government Resolution, 04 (Credit) Co-curricular Courses (CC) courses should be offered such as Health and Wellness, Yoga education, sports and fitness, Cultural Activities, NSS/NCC and Fine/ Applied/ Visual/Performing Arts etc.

NEP states that "Education thus, must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields. Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and, of course, enjoyable. The curriculum must include basic arts, crafts, humanities, games, sports and fitness, languages, literature, culture, and values, in addition to science and mathematics, to develop all aspects and capabilities of learners; and make education more well-rounded, useful, and fulfilling to the learner. Education must build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for gainful, fulfilling employment."

For effective implementation of UGC Regulations and NEP 2020 in its spirit, we have introduced several choice based Liberal Learning Courses (LLC) in the curriculum to make learning a joyful experience for students. We believe that this curriculum will raise the bar of academic standards with the active involvement and cooperation from students, academic and administrative units.



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Salient Features of Liberal Learning Courses (LLC):

- > Student must verify the life skill art course offered by the institute in a particular semester and the timing of the course before registration
- ➤ These courses will be offered on first cum first serve basis to the students. Once registrations for a particular liberal learning course is full then students will have to take course from the remaining available course from the list or it may be directly allotted by Dean Academics.
- Every LLC is of two hours duration in a week and of one credit
- ➤ There is only continuous evaluation for the course having only ISE component.
- > Preferably ISE marks to be allotted in following manner:
 - Assessment by Mentor=30 Marks
 - Attendance=10 Marks
 - Active Participation in activities/Observation by Mentor=05 Marks
 - Weekly reflections on course topics and personal experiences uploaded on the blog/portal created for the course=05 Marks
 - Total=50 Marks
- ➤ Marks to be entered in the Gazette as total ISE (50 Marks) and not as individual ISE1 & ISE2

Note:

There is no extra fees or payment for these courses. However, if any course is being offered by external professionals/agencies with cost associated with it, college will offer it to students as an optional course on payment basis. Fees for such courses will be decided mutually by external professionals/agencies and college management.



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Indicative List of Cocurricular Courses (CC):

- ✓ Min 15 to Max 20 students in each course; Except Social Activities
- ✓ Course will be offered based on student choice and availability of resources to conduct a course.
- ✓ College will offer any of the following courses at the start of Sem-I to Sem-IV.
- ✓ If any other course which is not listed can be offered with approval of Dean academics
- ✓ Syllabus for each course is designed to provide a comprehensive overview, but it can be adapted and expanded based on the specific needs & interests of the students and professional experience of the instructor.
- ✓ As each course is unique in its nature and content, course instructor can adopt their own teaching methodologies and there are no hard constraints from the college as far as expected learning outcomes delivered.

LLC01.	Culinary	Arts	Foundations	of	Cooking
LLCU1.	Cullilary	/ 11 to.	1 Oundanons	$\mathbf{o}_{\mathbf{I}}$	COOKING

LLC02. Indian Aesthetics

LLC03. Sketching

LLC04. Personality Development and People Management

LLC05. Work Life Balance

LLC06. Art of Living

LLC07. Yoga Vidya

LLC08. First Aid and Self Defence

LLC09. Fire Safety and Electronic Security

LLC010. Sports Technology

LLC011. Athletics

LLC012. Aerobics and Fitness

LLC013. Study of Dance Forms

LLC014. Introduction to Dramatics: Exploring Theatre Arts

LLC015. Fundamentals of Photography

LLC016. Cinematography

LLC017. Music Appreciation and Composition

LLC018. Script writing

LLC019. Vehicle maintenance and traffic rules

LLC020. Garden Design and Maintenance

LLC021. Managing Social Media

LLC022. Server and Network Maintenance

LLC023. Electrical Safety

LLC024. Mentoring of School Children

LLC025. Social Club Activities

LLC026. Cultural Club Activities

LLC027. Any other course approved by Dean Academics



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	Course Code	Course Name	To	Credits Assigned					
	Code		L	T	P	L	T	P	Total
	LCC01	Culinary Arts: Foundations of Cooking	-	-	2			1	1
			Examination Scheme						
			ISE						Total
			50						50

Cooking is the most important survival skill; therefore, it shouldn't be taken for granted. Many students are nervous about leaving their homes, yet the desire to pursue their degrees abroad keeps them on the move. Leaving behind family, friends, and especially, home-cooked meals is not an easy move. Homesickness and the absence of home-cooked meals are among the few emotions that don't go away quickly or in a day.

Cooking is a valuable life skill which is often linked with improved diet quality. By learning to cook, you are not only in control of your calorie intake, but you're also building healthier habits, and the healthier you eat, the more energy you'll have to keep cooking.

This course introduces students to the fundamentals of cooking, covering essential techniques, ingredients, and principles to develop culinary skills and creativity in the kitchen. Through handson cooking sessions, demonstrations, and tastings, students will gain practical experience and knowledge to create a variety of dishes.

Pre-requisite	Course	Codes
	CO1	Describe cooking process, follow the learned process of preparation,
Course Outcomes		safety, hygiene and prepare a food item
	CO2	Develop recipe for a given food item and use kitchen equipment's
Outcomes		effectively
	CO3	Prepare variety of food products and dishes

S.N.	Topics					
1	Introduction to Culinary Arts					
	 Overview of the culinary industry and career paths 					
	 Kitchen safety and sanitation 					
	 Knife skills: types of knives, grips, and basic cuts 					
2	Cooking Methods: Dry Heat					
	 Sautéing, pan-frying, and stir-frying 					
	 Grilling and broiling 					
	Roasting and baking					
3	Cooking Methods: Moist Heat					
	 Boiling, simmering, and poaching 					
	 Steaming and blanching 					
	Braising and stewing					
4	Stocks, Sauces, and Soups					
	 Principles of stock making 					
	 Mother sauces and their derivatives 					
	Classic soup techniques and recipes					
5	Culinary Techniques: Mise en Place and Flavor Development					
	 Importance of mise en place (preparation and organization) 					
	o Building flavor profiles: seasoning, layering flavors, and balancing taste					
	Deglazing, emulsifying, and other culinary techniques					



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6	Culinary Staples: Grains, Legumes, and Pasta							
	 Cooking techniques for grains (rice, quinoa, couscous) 							
	 Preparation and cooking methods for legumes (beans, lentils) 							
	Making fresh pasta and cooking dried pasta							
7	Vegetable Cookery							
	 Selection, storage, and preparation of vegetables 							
	 Sautéing, steaming, roasting, and grilling vegetables 							
	 Creative vegetable dishes and garnishes 							
8	Protein Cookery: Meat, Poultry, and Seafood							
	 Selecting and handling meat, poultry, and seafood 							
	 Cooking methods for various cuts and types of protein 							
	 Temperature control and food safety considerations 							



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Course	Course Name	To	Credits Assigned					
Code		L	T	P	L	T	P	Total
	Indian Aesthetics	-	-	2			1	1
I CC02		Examination Scheme						
LCC02		ISE						Total
		50						50

This course is for the students who have an interest in art. Indian Aesthetics is an ambitious, five thousand-year sweep of the field that delves deep into art history, archaeology, architecture, anthropology, literature, philosophy and visual culture to build an aesthetic and critical methodology to unpack Indian art.

While this course will delve into the philosophical foundations of Indian aesthetic traditions from theoretical and practical aspects, it will also be strongly related to culture, history, society, language and literature. This course is interdisciplinary to suit the development of academic life in a complex twenty first century context. Moreover, this course aims at retaining the relationship between the ancient and contemporary, which is indispensable in any sustained study of art. It aims at inculcating sensitivity to diverse art traditions from an Indian point of view. Its goal is also to create a critical mental framework which will make it possible for students to engage in art criticism.

Pre-requisite	Course	Codes
	CO1	To trace, identify and develop the Indian aesthetics to correlate human
		creative practices
Course	CO2	Take a deep-rooted pride in Indian aesthetic knowledge and demonstrate
Outcomes		commitment to universal human right, well-being and sustainable
Outcomes		development.
	CO3	Display the importance of Indian aesthetics in individual realization of
		the truth arises by realizing the harmony within.

S.N.	Topics							
1	The Introduction to Indian Aesthetics. The nature of aesthetics, its relation to							
	philosophy and literature: Indian traditions.							
2	Ancient Music and Music Instruments. The concept of Rasa. The Concept of Dhvani.							
	Brief introduction to Indian musical instruments							
3	Contemporary Indian Aesthetics (a) Rabrindranath Tagore (b) Sri Aurobindo (c) R. D.							
	Ranade (d) Coomaraswami.							
4	Ancient Dance & Drama: Indian traditional and folk dances							
5	Ancient Art (Literature, Architecture, Sculpture, Painting) during Vedic, Buddhist,							
	Jaina, Rajput and Islamic period.							



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Course Code	Course Name	Т	Credits Assigned					
Code		L	T	P	L	T	P	Total
	Sketching	-	-	2			1	1
1.0002		Examination Scheme						
LCC03		ISE						Total
		50						

Sketching is about generating and communicating ideas. This course is intended for student who wishes to get better at sketching and recording information graphically. This course can teach student the fundamentals to developing sketching skills. This course focuses on using traditional materials, pencil and paper. This course is also a great starting point for other areas of visual thinking, like graphic facilitation or sketch noting. Students can self-practice and learn to sketch user interfaces, user flows, UI animations and storyboards. Improving your sketching skills is going to be a great addition to your workflow as a UX, UI or product designer.

Pre-requisite	Course	Codes
	CO1	Use sketching as a means of communication
Course	CO2	Demonstrate skills of traditional sketching techniques
Course	CO3	Demonstrate creativity while sketching
Outcomes	CO4	Apply knowledge of sketching for basic shapes required in product
		design

S.N.	Topics
1	Understanding Sketching: The Psychology of Sketching. Defining Sketching.
	Orientation. Registration. Form. Line. Exploring Forms in space and time.
2	Basics of Sketching: Drawing materials and skills, Perspective terminology, Perspective drawing technique, creating grids, Ellipses and rotations, working with volume, drawing environments, Drawing wheeled vehicles, Sketching styles and mediums.
3	Sketching Techniques: Side View Sketches, Perspective Drawing, Simplifying Shape, Elementary Geometrical Shapes
4	Sketching for Product Design: Special attention for Ellipses, Rounding, Cross Sections, Ideation, Explanatory drawings, Surface and Textures, Emitting Light, Context. Basics of Digital sketching

ISE: Assessment by Mentor=30 Marks, Attendance=10 Marks, Active Participation in activities/Observation by Mentor=05 Marks, Weekly reflections on course topics and personal experiences uploaded on the blog/portal created for the course=05 Marks

References:

- 1) Sketching: Drawing Techniques for Product Designers by Koos Eissen and Roselien Steur
- 2) Drawing for Product Designers (Portfolio Skills: Product Design) by Kevin Henry
- 3) How to Draw: Drawing and Sketching Objects and Environments by Scott Robertson
- 4) How to sketch: A Beginner's Guide to Sketching Techniques, Including Step By Step Exercises, Tips and Tricks by Liron Yanconsky



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Course Code	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
	Personality Development and People Management	-	-	2			1	1
1.0004		Examination Scheme						
LCC04		ISE						Total
				50				50

Personality development is an important aspect of human development. To be a more charismatic person, one has to develop your inner self as well as your outer self. The importance of personality development is undisputed in personal and professional life, as it helps candidates to gain a competitive edge during placement and job interviews. Every individual has unique skill sets and their potential is multi-faceted. The program focuses on individual personality development which will help them to enhance their capabilities and help them convert their dreams and aspirations into a reality.

This course is used to remove public speaking as one of their biggest fears of a student. Good public speaking is more than a performance. It is the result of: Critical thinking, Well-organized narrative, Reasoning, Research and Preparation. In this course, methods that help to reduce anxiety, build confidence, and customize a process which will results in successful speaking experiences shall be taught.

Pre-requisite Course Codes		Codes
	CO1	Demonstrate readiness to work on the weaknesses and transform them into
		strengths to make the right decisions wisely.
	CO2	Develop behavioural capabilities of managing self and people resulting in
Course		better outcome in personal and professional life
Outcomes	CO3	Prepare clear and impactful speech for various purposes, occasions and
		audiences
	CO4	Demonstrate a level of confidence and presence as a dynamic speaker
	CO5	Use tools and methods for controlling public speaking anxiety

S.N.	Topics
1	Develop Presentation Skills
2	SWOT Analysis (Strengths / Weaknesses / Opportunities / Threats)
3	Identifying and co-creating success oriented behavioural patterns
4	Learn to stay Self-Motivated
5	Develop Self Understanding
6	Assertiveness Skills
7	Positive Attitude Building
8	Leadership Skills
9	Optimism and Positive Thinking
10	Developing Agility
11	Self-Organization
12	Relationship Management
13	Presentation skills



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14	Crisis management & Decision making
15	Develop belief system
16	Develop Self Alignment



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Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
	Work Life Balance	-	-	2			1	1
I CC05		Examination Scheme						
LCC05		ISE						Total
				50				50

Establishing a balance at work and in our personal life can be challenging. Individuals who live lives out of this balance are at greater risk for burnouts, ill-health, and absenteeism. And those employees with better-balanced life live a happier, satisfied, and more productive life at work and in their families.

This course explores the concept of work-life balance and provides practical strategies for achieving harmony between professional responsibilities and personal well-being. Students will learn to identify sources of imbalance, develop time management skills, set boundaries, and cultivate habits that promote overall health and fulfilment.

Pre-requisite Course Codes		Codes
	CO1	Define work-life balance and explain its importance
Course	CO2	Create a healthy lifestyle that supports a good work-life balance
Outcomes	CO3	Manage their time effectively and prioritize their tasks.
	CO4	Develop a comprehensive work-life balance plan

~	T
S.N.	Topics
1	Understanding Work-Life Balance
	 Defining work-life balance and its importance
	 Historical context and changing dynamics in the modern workplace
	 Exploring the impact of imbalance on health, relationships, and productivity
2	Assessing Personal Priorities
	 Reflecting on personal values and goals
	o Identifying priorities in various life domains (career, family, health, leisure)
	 Assessing current levels of satisfaction and alignment with priorities
3	Time Management and Organization
	 Principles of effective time management
	 Tools and techniques for prioritizing tasks and managing deadlines
	 Strategies for minimizing time-wasting activities and increasing productivity
4	Setting Boundaries
	 Establishing boundaries between work and personal life
	o Communicating boundaries effectively with colleagues, supervisors, and family
	members
	 Handling requests and interruptions assertively
5	Stress Management and Self-Care
	 Understanding the relationship between stress and work-life balance
	 Stress management techniques (e.g., mindfulness, relaxation exercises)
	 Prioritizing self-care practices to maintain physical and emotional well-being
6	Flexible Work Arrangements
	o Exploring options for flexible work arrangements (e.g., telecommuting,
	flextime)



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	o Benefits and challenges of flexible work arrangements for employees and
	employers
	 Strategies for negotiating flexible work arrangements with employers
7	Nurturing Relationships
	 Balancing professional and personal relationships
	 Strategies for maintaining quality time with family and friends
	 Enhancing communication and connection in relationships
8	Creating a Sustainable Work-Life Balance Plan
	o Integrating course concepts into a personalized work-life balance plan
	 Setting SMART goals for achieving balance in various life domains
	o Implementing strategies for ongoing self-assessment and adjustment



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Course	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CCOC	Art of Living	Examination Scheme						
LCC06		ISE						Total
				50				50

This course explores the principles and practices of living a fulfilling life through the lenses of mindfulness, self-awareness, emotional intelligence, and positive psychology. Students will learn practical tools and techniques to enhance their overall well-being, manage stress, and cultivate meaningful relationships. This course is introduced with a vision to nourish a balanced lifestyle for individuals and in the process contribute to create a stress-free and violence-free society.

Pre-requisite	Cours	e Codes					
	CO1	Set her/his own goal for life with core values and start exploring concept					
		f happiness and well-being					
	CO2	Evaluate situations & problems and can act like a resilient with empathetic					
		and equitable way					
Course	CO3	Create empathy, broaden the conception of people, moral concern, a sense					
Outcomes		of honor and decency, and strengthen responses to unjust conditions.					
Outcomes	CO4	Make humanitarian qualities as the basic tools for enjoying the jour					
		from "I" to "We" to promote effective living in this precious world.					
	CO5	Achieve competency to cope with rapidly changing world considering					
		college as a place and platform to create knowledge and skills for their					
		meaningful survival					

S.N.	Topics					
1	Introduction to the Art of Living					
	 Understanding the concept of the Art of Living 					
	 Historical perspectives and cultural influences 					
	 Exploring the relationship between happiness and well-being 					
2	Mindfulness and Presence					
	 Introduction to mindfulness meditation 					
	 Cultivating present-moment awareness 					
	 Practicing mindfulness in daily life 					
3	Self-awareness and Emotional Intelligence					
	 Understanding emotions and their impact on well-being 					
	 Techniques for enhancing self-awareness 					
	 Developing emotional intelligence skills 					
4	Stress Management and Resilience					
	 Identifying sources of stress 					
	 Coping strategies for managing stress 					
	 Building resilience in the face of adversity 					
5	Finding Meaning and Purpose					
	 Exploring values and beliefs 					
	 Discovering personal strengths 					
	 Creating a sense of purpose and meaning in life 					



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6	Cultivating Positive Relationships				
	 Communication skills for building healthy relationships 				
	 Nurturing empathy and compassion 				
	 Resolving conflicts and fostering connection 				
7	Self-care and Well-being Practice				
	 The importance of self-care 				
	 Creating a personalized self-care plan 				
	 Integrating holistic well-being practices into daily life 				
8	Reflection and Integration				
	 Reflecting on personal growth and insights gained 				
	 Setting intentions for continued practice 				
	 Integration of course concepts into daily life 				



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Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	T	P	L	T	P	Total
	Yoga Vidya	-	-	2			1	1
I CC07		Examination Scheme						
LCC07		ISE						Total
				50				50

Through this course, students will get an all-round experience of how Yoga can benefit their body, breath, emotions along with relaxation techniques to maintain a calm and balanced state of mind.

Pre-requisite Course Codes		Codes			
	CO1	erform various techniques of Yoga			
Course	CO2	Follow healthy habits to improve immune system			
Outcomes	CO3	Describe the importance of Yoga in one's life			
	CO4	Make resolution to practice techniques of Yoga			

S.N.	Topics
1	What is Yoga, why Yoga?
	Techniques: warm up stretches for hands, legs, neck; Sukhasana, Padmasana
2	Introduction to Ashtanga Yoga
	Techniques: Talasana, Utkatasana, Konasana 2
3	Asana classification and importance of different types of Asanas
	Techniques: Sthita-prarthanasana, Ekpadasana, Garudasana
4	Yogendra rhythm- breathing pattern
	Techniques: Parvatasana, Yashtikasana
5	Forward bending and abdominal compression
	Techniques: Konasana 3, Yogamudra
6	ShuddhiKriyas- Prevention of diseases by improving immune system
	Techniques: Jalaneti, Kapalabhati
7	Yogic Aahar
	Techniques: Vajrasana, Pavanmuktasana
8	Relaxation and it's importance
	Techniques: Shavasana
9	Spine and it's importance in Yoga
	Techniques: Bhujangasana, Makarasana, Vakrasana
10	Pranayama
	Techniques: Basic techniques
11	Attitude training
	Techniques: connecting techniques to concepts.
12	Pranayama
	Techniques: Traditional Pranayama
13	Yogachara- The Yoga way of living
	Techniques: Games



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	Course	Course Name	To	Credits Assigned					
	Code		L	T	P	L	T	P	Total
	LCC08	First Aid and Self Defence	-	-	2			1	1
			Examination Scheme						
			ISE						Total
			50						50

This course is included with a mission to prevent loss of life and injury in the community. First Aid is the temporary help given to a sick or injured person before professional medical help can be provided. This timely assistance is most critical to victims, and in most cases, is life saving. A first-aiders immediate response in the first fifteen minutes after the incident is a determining factor of what will happen to the victim in the next one hour. A course is designed to teach students first aid procedures and lifesaving drills. This course will enable the student to recognize and avoid hazards within his/her environment; to intelligently assist in case of accident or illness; to develop skills necessary for immediate and temporary care of a victim.

This course also teach self-defence and this concept s introduced with the motto that 'you must accept responsibility for your own protection'. In this course student will be able to learn self defence, a new skill that will save his/her life. It is expected that the techniques demonstrated in each session is easy to understand and based on a reality-based scenario. There are many means of protecting yourself like hitting certain pressure points which will be demonstrated in the course.

Pre-requisite	Cours	e Codes						
	CO1	Demonstrate use of proper first aid techniques in case of life threatening						
		emergencies, injuries and medical emergencies						
	CO2	2 considerate that he she is trained to use this table to help someone						
		until medical professionals arrive						
Course	CO3	Demonstrate that he/she is trained to provide care to both children and						
		adults during times of crisis						
Outcomes	CO4	Use strategies and tactics after recognizing developing attack for self						
		defence						
	CO5	Demonstrate techniques of self defence to prevent someone from hurting						
		him/her						
	CO6	Use different ways that men and women tend to approach confrontations						

S.N.	Topics						
1	Responding to emergency, Where to get help, Before Giving Care, The Human Body,						
	Checking the Person						
2	Life Threatening Emergencies: Cardio Pulmonary Resuscitation (CPR), breathing						
	emergencies, bleeding, shock						
3	Injuries: Soft Tissue Injuries, Musculoskeletal Injuries, Injuries to the Extremities,						
	Injuries to the Head, Neck and Spine, Injuries to the Chest, Abdomen and Pelvis						
4	Medical Emergencies: Sudden Illnesses, Poisoning, Bites and Stings, Substance Abuse						
	and Misuse, Heat-Related Illnesses and Cold-Related Emergencies, Heat Burns and						
	Chemical Burns, Eye, Nose, Ear emergencies						
5	Special situations: Water-Related Emergencies, Pediatric, Older Adult and Special						
	Situations, Emergency Childbirth, Disaster, Remote and Wilderness Emergencies						



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6	Introduction, Purpose and Awareness.					
	Mental Attitude: What is self defence? Positive thinking and spotting trouble.					
7	Defense Moves for Beginners that You Must Know. Safe Distance, Verbal Parries, Pre-					
	attack Cues, Footwork, Movement, and Blocking.					
8	Chokes, Wrist/Arm Grabs, Clothing Grabs. How to Defend Against Grabs					
9	Punches, Grab and Punch, Kick Defence, Hair Grabs. How to Defend Against a Punch					
	and Grab					
10	Targets, Basic Strikes, Basic Kicks. How to Dodge Against Kicks					
11	How to Defend Against a Knife Attack. How to Execute Aggressive Counter Attack					
12	Selected Special Situations, Sexual Assaults and Unwanted Attention					

ISE: Assessment by Mentor=30 Marks, Attendance=10 Marks, Active Participation in activities/Observation by Mentor=05 Marks, Weekly reflections on course topics and personal experiences uploaded on the blog/portal created for the course=05 Marks

Reference:

1) Manual from American Red Cross 'Responding to Comprehensive First Aid/CPR/AED'.



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Course	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
LCC09	Fire Safety and Electronic Security	-	-	2			1	1
		Examination Scheme						
		ISE						Total
				50				50

Fire hazard prevention is an important life skill necessary for any human being. In this course students will learn causes of fire, methods to prevent fire, handling equipment's related to fire safety along with concepts of industrial safety. Course also deals with training on electronic safety equipment's.

Pre-requisite	Cours	e Codes
	CO1	Perform task with due consideration to safety rules
Course	CO2	Read and interpret technical parameters/ documents related to safety and
Course Outcomes		security
Outcomes	CO3	Demonstrate attitude of responsible citizen by active participation in
		activities related to safety and security

S.N.	Topics			
1	Fire and Safety Industry			
2	Chemistry of Combustion (Fire Triangle)			
3	Emergency Planning and First Aid			
4	Fire Prevention. Fire Extinguishers.			
5	Various equipment's and fittings			
6	Industrial and Construction Safety			
7	Electronic Security Systems			
8	Fire and Safety Standards			
9	Fire Drills and Demonstrations			
10	Emergency wards of hospitals			
11	Visit to Disaster Management Institute			



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	Course	Course Name	To	Credits Assigned					
	Code		L	T	P	L	T	P	Total
ĺ		Sports Technology	-	-	2			1	1
	I CC10		Examination Scheme						
	LCC10		ISE						Total
					50				50

This course delves into the intersection of sports and technology, examining how advancements in technology have revolutionized various aspects of sports performance, training, analysis, and fan engagement. Students will explore cutting-edge technologies, their practical applications in sports, and the implications for athletes, coaches, teams, and fans.

Pre-requisite	Cours	e Codes					
	CO1	Explain the key technological developments in sports industry					
	CO2	explain technologies used for monitoring health & performance of a					
Course		sportsperson, training, motion capture and fan & stadium engagement					
Outcomes	CO3	Describe principles of sports equipment design with ethical, social and					
		regulatory considerations					
	CO4	Prepare a project exploring a specific aspect of sports technology					

S.N.	Topics
1	Introduction to Sports Technology
	 Defining sports technology and its significance in modern sports
	 Historical overview of key technological developments in sports
	 Ethical considerations and challenges in the use of sports technology
2	Wearable Technology in Sports
	 Overview of wearable devices for athlete monitoring and performance analysis
	 Examples of wearable sensors, smart clothing, and biometric tracking devices
	o Applications in injury prevention, rehabilitation, and optimizing training
	regimes
3	Data Analytics and Sports Performance
	 Introduction to sports analytics and performance metrics
	o Data collection methods and analysis techniques (e.g., tracking systems, video
	analysis)
	o Using data analytics to enhance athlete performance and optimize team
	strategies
4	Virtual Reality and Simulation in Sports
	 Understanding virtual reality (VR) and augmented reality (AR) technologies
	o Applications of VR/AR in sports training, skill development, and game
	preparation
	o Immersive experiences for fans through VR/AR broadcasting and spectator
	engagement
5	Sports Biomechanics and Motion Analysis
	 Exploring biomechanical principles in sports performance
	 Motion capture technology and its role in biomechanical analysis
	o Case studies of motion analysis in sports training, technique refinement, and
	injury prevention



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6	Sports Engineering and Equipment Design
	 Overview of sports equipment design and engineering principles
	o Innovations in sports equipment technology (e.g., footwear, apparel, protective
	gear)
	 Performance testing, materials science, and sustainability in sports equipment
7	Fan Engagement and Stadium Technology
	 Enhancing the spectator experience through technology
	 Stadium infrastructure and amenities (e.g., scoreboards, lighting, seating)
	o Digital engagement platforms, social media integration, and interactive fan
	experiences
8	Future Trends and Implications
	 Emerging technologies shaping the future of sports
	 Ethical, social, and regulatory considerations in sports technology
	Opportunities and challenges for athletes, coaches, teams, and the sports
	industry



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Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CC11	Athletics	Examination Scheme						
LCC11				ISE				Total
				50				50

This course is introduced to create a sense of self discipline and importance of fitness in a person's life. Appropriate Athletics attire is required for all students. Course instructor is expected to continually observe athletic skills in student, assess their skills and give positive encouragement for improvement. This course teaches the student sports skills that are essential to a variety of other activities. It also provides the students with a means for self-expression and social interaction. Long term goal is that the student will acquire basic athletics skills, appropriate social behavior and functional knowledge of the rules necessary to participate successfully in athletics competitions. Students enrolled in this course are expected to participate in Fr CRCE organized Marathon kind of events.

Pre-requisite	Course	Codes				
	CO1	bemonstrate lifelong fitness skills that will help him or her lead a more				
Course		productive and independent life.				
Outcomes	CO2	emonstrate self-discipline in day to day life				
	CO3	Display ability to make independent decisions				

S.N.	Topics
1	Mental Preparation, Warm-Up, Walking, Running, Stretching, Cool-Down
	Upper Body, Low Back & Glutes and Lower Body
2	Basic Mechanics of Running: Sprinter and Distance Runner
3	Starts Skill Progression, Stand-up Start, Deep Start, Push-up start, Block start, Starts,
	Power Foot
4	Sprints Skill Progression, The Sprints, Start Phase, Accelerating Phase, Finish Phase
	andSprint Striding Techniques
5	Hurdles Skill Progression
6	Relays Skill Progression
7	Middle Distance Skill Progression
8	Long Distance Skill Progression
9	Marathon Skill Progression
10	Standing Long Jump Skill Progression
	Running Long Jump Skill Progression
11	High Jump Skill Progression
12	Race Walking Skill Progression
13	Wheelchair Racing Skills Progression
14	Softball Throw Skill Progression



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Course	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CC12	A	Examination Scheme						
LCC12	Aerobics and Fitness			ISE				Total
				50				50

This course is designed to offer the students a wide variety of cardiovascular fitness activities in order to physical wellness. Aerobics can be defined as group exercise to music, using large, continuous, rhythmic movements to elevate the heart rate and produce a training effect, enhancing cardiorespiratory endurance. This course will teach students knowledge of fundamental skills and techniques related to aerobics.

Pre-requisite	Course	Codes							
	CO1	Apply knowledge of aerobic and strength routines that will enhance							
		fetime fitness.							
	CO2	Demonstrate an understanding of the strategies, current research, safety							
Course		and etiquette associated with aerobics.							
Outcomes	CO3	Describe an understanding of the mental and physical health benefits to							
		be derived from aerobics.							
	CO4	dentify the significance of nutrition and components of Nutrient							
	CO5	Draft personal fitness plan							

S.N.	Topics						
1	Introduction:						
	1.1 Meaning and definition of fitness and wellness and its components.						
	1.2 Factor affecting physical fitness and values of physical fitness.						
	1.3 Means of fitness development - Aerobic and anaerobic exercise.						
	1.4 Warming up and cooling down – Methods, Duration & components of warming						
	up and calculate target heart rate zones for various aerobic exercise intensities.						
2	Contemporary Health Issues						
	2.1 All-Around best balanced diet plan						
	2.2 Food guide pyramids and food guide labels(Nutrition facts)						
	2.3 Weight Management: Factors influencing obesity, winning strategies for weight-						
	loss success,						
	2.4 Alcohol and other drugs of abuse.						
3	Stress maintenance guidelines						
4	Workout and physical activities						

ISE: Assessment by Mentor=30 Marks, Attendance=10 Marks, Active Participation in activities/Observation by Mentor=05 Marks, Weekly reflections on course topics and personal experiences uploaded on the blog/portal created for the course=05 Marks

Recommended Books:

- 1) Kravitz, Len "Anybody's Guide to Total Fitness", Kendall Hunt Publishing Co.10th Ed.
- 2) Kenneth H. Cooper, "The New Aerobics", M. Evans and Company



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Course	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CC12	Study of Dance Forms	Examination Scheme						
LCC13		ISE						Total
				50				50

This course provides study of various Indian dance forms, exploring their history, techniques, cultural significance, and contemporary practices. Through discussions, practical workshops, demonstrations, and performances, students will develop a comprehensive understanding and appreciation of Indian dance traditions.

Pre-requisite	Course	Codes
Солида	CO1	Explore various Indian dance forms
Course	Explain how dance forms are deeply rooted in Indian culture	
Outcomes	CO3	Participate in dance performances

S.N.	Topics						
1	Introduction to Indian Dance						
2	Classical Dance Forms: Bharatanatyam, Kathak, Odissi etc						
3	Folk Dance Traditions						
4	Contemporary Indian Dance						
5	Dance as Ritual and Performance						
	o Ritualistic aspects of Indian dance: temple traditions, religious ceremonies, and						
	festivals						
	o Performance contexts and venues for Indian dance (e.g., proscenium stage,						
	outdoor festivals, community events)						
6	Cultural Perspectives and Global Impact						
	o Exploring the representation of Indian dance in popular culture, cinema, and						
	media						
	 Cultural appropriation vs. cultural exchange in the context of Indian dance 						
	 Contemporary issues and challenges facing Indian dance practitioners and communities 						



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Course Code	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
	I-4	-	-	2			1	1
I CC14	Introduction to Dramatics: Exploring Theatre Arts	Examination Scheme						
LCC14		ISE						Total
				50				50

This course introduces students to the fundamentals of dramatics, covering various aspects of theatre arts including acting techniques, play analysis, performance styles, and stagecraft. Through practical exercises, readings, discussions, and performances, students will develop their understanding and appreciation of dramatic literature and theatrical production.

Pre-requisite	Course	Codes		
	CO1	Describe an Art of Theatre.		
Course	CO2	Express their thoughts.		
Outcomes	CO3	Create and visualize new ideas.		
	CO4	Perform impressively.		

S.N.	Topics					
1	Introduction to Theatre					
	 The role of theatre in society and culture 					
	 Introduction to key concepts: playwright, director, actor, audience 					
2	Acting Fundamentals					
	 Physical and vocal warm-up exercises 					
	 Exploring character development and motivation 					
	 Techniques for script analysis and interpretation 					
3	Theatrical Genres					
	 Exploring different genres of dramatic literature (comedy, tragedy, drama) 					
	 Analyzing plays from various periods and cultures 					
	 Understanding conventions and characteristics of each genre 					
4	Performance Styles					
	o Introduction to various performance styles (realism, naturalism, expressionism,					
	etc.)					
	 Exploring non-realistic techniques and experimental forms 					
	 Discussion of the influence of performance styles on interpretation and staging 					
5	Stagecraft and Technical Theatre					
	 Introduction to stagecraft: set design, lighting, sound, and costumes 					
	 Understanding the roles of technical crew members 					
	 Hands-on activities and demonstrations in technical theatre 					
6	Directing and Play Production					
	 The role of the director in shaping a theatrical production 					
	 Principles of stage blocking and movement 					
	 Collaborative process: working with actors, designers, and crew 					
7	Rehearsal Process					
	 Overview of the rehearsal process from casting to performance 					
	 Techniques for character development and ensemble building 					
	 Rehearsal strategies and exercises 					



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8	Performance and Critique						
	 Final performances of scenes or one-act plays 						
	 Peer critique and feedback sessions 						
	 Reflection on the rehearsal and performance process 						



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Course	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
	Fundamentals of Photography	-	-	2			1	1
I CC15		Examination Scheme						
LCC15		ISE						Total
				50				50

This course is for students who want to have a first approach to the world of digital photography, both indoors and outdoors, starting with the basics of photographic technique. The various photographic genres will be addressed by the portrait in studio and in a "household" - considering the use of tools and equipment available to the students - and the landscape, intended as a research of expression through special technical languages. Moreover, reportage and a specific focus on street photography, bird, nature and wildlife photography. Approach would be to build possible photographic service, through exercises "in the field" and the introduction to topics of photo editing. The course shall end with a good story social media story created through clicked and edited photographs.

Pre-requisite	Course	Codes						
	CO1	Create pictures through photography for impactful visual storytelling						
	CO2	Demonstrate from the basics of how camera works to the correct						
Course		techniques of setting in a typical mode.						
Outcomes	CO3	Demonstrate what makes photos come out brighter or darker and carr						
Outcomes	out field study to improve photographic skills							
	CO4	Optimize the image with photo editing tools and use these images						
		correctly to create engaging stories across social media platforms.						

S.N.	Topics
1	Introduction to Photography, Theory of Technique, The Camera, Picture Building,
	Lighting, Advanced Composition, Photographic Style, Photojournalism
2	Understanding how your digital camera works, Your Camera's Automatic and Assisted
	Settings, Your Camera's Manual Settings, Composition and Technique, Editing Images
	in Post
3	Reportage: shooting technique, street photography, planning and executing of the
	reportage, critical reading of the images, guided exercises outdoors
4	Field study through Nature and Landscape photos, Bird Photography and Wildlife
	Photography
5	Photo editing: introductory elements of photo editing, early approaches to the
	principles of image selection and construction of the photographic story, digital
	imaging and archiving
6	Photography for Social Media: Whether you're managing your personal or brand's
	online presence, using the right images is an essential part of telling your story through
	social media. While many of us these days carry around a camera, our phones, in our
	pockets every day, how many of us really know how to use it to create and share images
	that make an impact with social media audiences?
	This chapter would cover basics of digital marketing and would provide answers to
	following questions.



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What impact the images/style you use has on your brand's identity?

How to create visual assets for social media that truly represent you/your brand?

What you need to create engaging and impactful images: from iPhones to DSLRs?

Lighting, focus and composition: from food to product to lifestyle images?

How to optimise your images for social media?

Editing software: explore available options and price points for improving the appearance of your photographs?

How to develop a visual strategy for social media channels: explore the major social networks and how to best use them?



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Course	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	T	P	L	T	P	Total
	Cinematography	-	-	2			1	1
I CC16		Examination Scheme						
LCC16		ISE						Total
				50				50

This course explores the principles, techniques, and aesthetics of cinematography, focusing on the visual language of film and the role of the cinematographer in storytelling. Through lectures, screenings, discussions, and hands-on exercises, students will develop a comprehensive understanding of the technical and creative aspects of cinematography.

Pre-requisite Course Codes		Codes
	CO1	Analyse the foundations of film making
Course	CO2	Reflect upon camera basics, lighting fundamentals, composition &
Outcomes		framing, color theory and cinematography styles
Outcomes	CO3	Appreciate that collaboration and effective communication is essential
		element of cinematography

S.N.	Topics					
1	Introduction to Cinematography					
	 History and evolution of cinematography 					
	 Roles and responsibilities of the cinematographer 					
	 Elements of visual storytelling: composition, framing, and movement 					
2	Camera Basics and Operations					
	 Camera anatomy and functionality 					
	 Understanding camera sensors, lenses, and focal lengths 					
	 Exposure control: aperture, shutter speed, and ISO 					
3	Lighting Fundamentals					
	 Principles of light: quality, direction, and color temperature 					
	 Lighting equipment and accessories 					
	 Techniques for shaping and controlling light 					
4	Composition and Framing					
	 Rule of thirds and other compositional guidelines 					
	 Framing techniques: shot sizes, angles, and perspectives 					
	 Visual storytelling through composition 					
5	Movement and Cinematic Language					
	 Camera movement techniques: dolly, pan, tilt, zoom, and handheld 					
	 Understanding the expressive potential of camera movement 					
	 Analyzing the use of movement in classic and contemporary films 					
6	Color Theory and Grading					
	 Fundamentals of color theory and psychology 					
	 Color temperature, white balance, and color correction 					
	Creative color grading techniques and aesthetics					
7	Cinematography Styles and Genres					
	 Exploring different cinematographic styles and approaches 					



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	Case studies in genre-specific cinematography (e.g., film noir, horror, documentary)							
	Analyzing the visual language of influential cinematographers							
8	Collaborating with the Director and Crew							
	 Working relationship between the director and cinematographer 							
	o Collaboration with other departments: production design, costume, and makeup							
	 Effective communication and leadership on set 							



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Course	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
	Music Appreciation and Composition	-	-	2			1	1
I CC17		Examination Scheme						
LCC17		ISE						Total
		50						50

Music appreciation and composition is a basic course aimed at the enhancement of the student's capacity to enjoy music, and to the building of listening and analytical skills as well. This course will take students through the technical nuances of journey of music composition.

Pre-requisite Course Codes						
Course	CO1	Appre	Appreciate various processes of Music composition			
Outcomes	CO2	Appre	Appreciate the role of engineers in sound recording			

S.N.	Topics
1	Introduction to audio and digital audio
2	Types of Mics and Speakers
3	Introduction to instruments
4	Introduction to Audio Console
5	Audio Production Process
6	Effects
7	Mixing aesthetics
8	Make your song



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Course Code	Course Name	Teaching Scheme (Hrs/week) Credi					s Assi	gned
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CC10	Carint remities	Examination Scheme						
LCC18	Script writing	ISE					Total	
		50					50	

The most complex of all the arts is giving birth to an imaginary character. This course is introduced to build the foundations of script writing. This course shall provide students with a supportive environment that allows their natural story-telling talent to shine through. The course has an interactive and proactive narrative approach rather than focusing on theory. Students' own ideas and skills as a writer will be encouraged in a fun environment as part of the course.

This course will focus on how to brainstorm and develop your story. The students learn how to develop the story further using different tools of plotting, understanding the importance of structure, and focusing on how scenes are created and how they come together to function as one organic whole.

Pre-requisite	Course	Codes	
	CO1 Use correct script formats and layouts		
Course	CO2	Demonstrate creativity with writing exercises	
Outcomes	CO3	nonstrate their story telling skill through script	
	CO4	Write a script with confidence	

S.N.	Topics
1	Introduction to script writing
2	Understanding and using 3 Act Structure
3	Developing Character
4	Plotting Structure, Scene and Its Functions
5	Structure, Scene and Its Functions
6	Step Outline
7	Dialogue Writing
8	The Conventional Format and Scriptwriting Software
9	Drafting a professional script



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Course Code	Course Name	T		g Scheme week)	C	Credits Assign				
Code		L	T	P	L	T	P	Total		
		-	-	2			1	1		
I CC10	Vehicle Maintenance and			Examination	n Sch	eme				
LCC19	Traffic Rules			ISE				Total		
				50				50		

This course teaches students how to keep their vehicles running smoothly and obey traffic rules. This course includes lecture and hands-on sessions where students work on their own vehicles, learning where things are located and the basics of correcting problems.

Pre-requisite	Course	Codes
Course	CO1	Gain experience in conducting basic tune-ups, checking the vehicle's minor and major systems, including the electrical and cooling systems
Outcomes	CO2	Become better, safer and more socially responsible road user

S.N.	Topics
1	Fundamental of Vehicle Maintenance: Categories of vehicles. Lights and reflectors,
	checking oil, air-pressure in Tyres, changing tires, and conducting other simple tasks
	that keep vehicle functioning.
2	Safety and Tools: Overview of the tools that are used in the automotive field and the
	safety to be observed while using them as well.
3	Cooling System Overview: Working principle, Components of a Cooling System,
	Cooling System Maintenance and Repair, difference between Air conditioning and
	Engine coolants.
4	The driving test and Driving License: Categories of driving licenses, Basic
	information on how apply for your driving test, learner and full driving licenses,
	renewing your license, basic legal documents. The driving test.
5	Good driving practices: Safety belts, Other safety responsibilities, Overtaking,
	Changing traffic lanes, Reversing, U-turns, Driving at night and Using a horn.
	Traffic Signs and Road Marks, Traffic lights and signals, Speed Limits, Junctions and
	Roundabouts, Parking, Motorways and Tunnels, Factors that affect safe driving,
	Correct behavior at the scene of an accident, Penalty points, fixed charges and driving
	bans, Rules for motorcyclists, Respecting other road users.

ISE: Assessment by Mentor=30 Marks, Attendance=10 Marks, Active Participation in activities/Observation by Mentor=05 Marks, Weekly reflections on course topics and personal experiences uploaded on the blog/portal created for the course=05 Marks

References:

- 1) The Maharashtra Motor Vehicles Rules, 1989
- 2) Motor Vehicle Department Maharashtra State, Learners License Test Question Bank
- 3) http://www.trafficsigns.co.in/
- 4) https://www.carparts.com/classroom/coolingsystem.htm



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Course	Course Name	Teaching Scheme (Hrs/week) Credits Assig						gned		
Code		L	T	P	L	L T P				
LCC20		-	-	2			1	1		
	Garden Design and		Examination Scheme							
	Maintenance			ISE				Total		
		50						50		

This course offers knowledge of the basics of gardening, how to design a garden and how to care for different types of plants. This course provides you an opportunity to design your own garden. Topics ranging from understanding soil types, selection of plants to caring for various flowers e.g. rose cultivation, are covered. Uses of fertilizers, the compositions of compounds that different types of plants require are taught in the course. The course largely benefits those in an urban setting as it also teaches indoor gardening as well as managing outdoor gardening. This course also teaches care for plants in greenhouses as well as the basics of the Nursery business, which included financial planning and production of flowers. In an age of inorganic farming where organic products are becoming costlier day by day, the course also teaches managing plants yielding vegetables, fruits and herbs. With this basic knowledge, in future, you can turn your hobby and passion into a money-making opportunity by starting your own gardening company.

Students can be taken to Nursery, Farm or Green house for demonstration purpose.

Students are expected to complete their exercises in the campus and work towards making campus greener.

Pre-requisite	Course	odes			
	CO1	emonstrate an understanding of garden site			
Course	CO2	Gain some proficiency in basic garden design principles			
Outcomes	CO3	yout a rough site plan overview of your garden design			
	CO4	Demonstrate sensitivity towards environment by his or her actions	3		

S.N.	Topics
1	How plants work? Gardening Basics.
2	Garden Design Process, Site assessment, Designing Your Garden: Effective use of
	space, finalizing garden layout plan, creating a planting plan, choosing & buying
	plants
3	Secrets of Great Soil, Plant Selection & Care and Plant Knowledge
4	Low Maintenance Gardens/Planting, Vegetable and Herb Gardens
5	Sustainability, Garden Maintenance, Equipment, Pest Control
6	Running your own Gardening Business, Marketing and Social Media, Health and
	Safety, Insurance, Tax and Record Keeping
7	Put Up Garden Fencing, Turf a garden / lay a lawn and Laying artificial grass areas



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Course Code	Course Name	To	Teaching Scheme (Hrs/week)		C	redit	s Assi	gned		
Code		L	T	P	L	L T P T				
LCC21		-	-	2			1	1		
	Managing Social Modia		ion Scheme							
	Managing Social Media		ISE			Total				
				50				50		

Social media is an effective instrument for students to study and share their thoughts. Social media platforms make it easier to connect with experts and thought leaders in various fields. This course aims to help students create and curate content for Social media for the college. It is introduced to give students real life experience of curating social media contents by volunteering for college social media team. Fr CRCE has presence on many social media platforms. Students enrolled in this course will have an opportunity to collaborate with various departments, clubs and committees to create an impactful social media content.

Pre-requisite Course Codes		Codes		
Course	CO1	Curate	Curate social media contents	
Outcomes	CO2	Manag	anage social media of the college	

S.N.	Topics
1	Social media introduction
2	Creating graphics using various tools
3	Creating videos using various tools
4	Creating and writing blog posts
5	Social media strategies
6	Building community through social media for the college
7	Impactfully managing social media of the college



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Course	Course Name	Т	Credits Assigned					
Code		L	T	P	L	T	P	Total
LCC22	Server and Network Maintenance	-	-	2			1	1
		Examination Scheme						
		ISE						Total
		50						50

Today's businesses rely heavily on IT infrastructure to operate efficiently and deliver services to their clients. Therefore, the importance of server and network maintenance cannot be overstated. Proper server maintenance can prevent downtime, enhance security, and extend the lifespan of equipment. College has a dedicated server room and large IT infrastructure across the campus. This course is introduced to give real life experience and learning opportunity to students by managing server and network of the college.

Pre-requisite	Course	Codes				
Course	CO1	Perfor	Perform tasks related to server maintenance			
Outcomes	CO2	Perfor	m tasks related to network maintenance			

S.N.	Following are the activities students are expected to do in the course
1	Study of servers available in the campus
2	Study of networking infrastructure available in the campus
3	Keeping a server software updated and running smoothly so that a computer network
	function properly and avoid downtime or loss of data.
4	Study server maintenance steps. Perform tasks like reviewing the server's performance,
	ensuring that automated system monitoring utilities are properly installed and
	configured, identifying potential security risks and backing up data at regular intervals.
5	Assist network administrator in maintain the computer networks in the campus
6	Study network maintenance steps. Perform hardware checks, troubleshooting,
	compliance checks, pre-emptive repairs, configurations, upgrades and network
	documentation.



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Course	Course Name	To	Credits Assigned					
Code		L	T	P	L	T	P	Total
LCC23	Electrical Safety	-	-	2			1	1
		Examination Scheme						
		ISE						Total
		50						50

This course is introduced to help students in building up knowledge and skill on electrical safety. Students will learn importance of earthing and guidelines for providing earthing arrangements, Protection of the electrical equipment for safe use of electricity, Important electricity rules related to safety etc. This course will also give students opportunity to interact with experts from electrical safety industry.

Pre-requisite Course Codes		Codes					
Course	CO1	Recog	Recognize electrical hazards				
Outcomes	CO2	Follov	v best practices to create an electrically safe working environment				

S.N.	Topics
1	Elementary Electrical - Basics of Electricity
2	Risks and electrical hazards
3	Electrical testing. Exposure to general tools and tackle.
4	Electrical protection. Earthing
5	Important electricity rules and safety standards
6	Electrical accident prevention and first aid
7	Metering devices. Safety while doing electrical work
8	Study of electrical network in the campus



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Course Code	Course Name	T	Credits Assigned					
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
LCC24	Mentoring of School	Examination Scheme						
	Children	ISE						Total
		50						50

Fr CRCE students are regularly involved in mentoring school children through IIC or other social activities/clubs. This course is created to streamline school connect programs and appreciating students involved in such programs by giving them due credits. A student in a college mentors a student of school on a subject or topic which of relevance for the school student. The objective is to make peer to peer learning easy and effective. Through the mentoring of young children, college students can acquire valuable knowledge and social skills. Connecting science, technology and innovation with societal outcomes through such courses, will drive strong economic and social progress for India.

Pre-requisite	Course	Codes
	CO1	Collaborate with schools and engage school children by conducting
		various activities for them
Course	CO2	Build a bond with a community of children, work with them to drive
Outcomes		them to their potential, provide incessant guidance and motivation and nurture their creativity and innovative spirit.
	CO3	Develop a vision to give back to the country, and play a significant role
		in building a new India

S.N.	Students are expected to get involved in the following indicative activities with schools on regular basis; however they can work with schools on their specific needs
1	Get involved in Institution's Innovation Council (IIC) school connect programs and
	ATAL labs set-up across various schools. Collaborate regularly with Fr. Agnel School
	or any other school and plan for activities with the school. Students will have to
	dedicate time on a regular basis. These students are expected to spend 1 - 2 hours per
	week during / after school hours (based on mutual availability).
2	Help in regular teaching learning to the school or conducting activities or setting-up
	laboratories or practice future skills such as design thinking at school
3	Be instrumental in engaging students by joining in experimenting, innovating, and
	bringing their knowledge to practice.
4	Creating models, animations, films, storyboards and creative games for children
5	Identify various competitions and motivate/prepare/teach/guide school child to
	participate in competitions and showcase their innovations at prestigious platforms
6	Provide support, review specific student-projects and give constructive feedback to
	school management or individual student to allow further improvement.
7	Support the school in reaching out to communities in neighbouring areas.



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Course	Course Name	To	Credits Assigned					
Code		L	T	P	L	T	P	Total
		-	-	2			1	1
I CC25	Social Clark Activities			Examination	n Sch	eme		
LCC25	Social Club Activities	ISE						Total
		50						50

Fr CRCE students take part actively in various social activities through clubs like NSS and Rotaract. Through this course students actively engaged in social activities through NSS/Rotaract will be awarded with due credits.

Pre-requisite Course Codes		Codes
	CO1	Uphold the value system of Indian society and develop right attitude
Course	CO2	Identify major social, cultural and environmental challenges
Outcomes	CO3	Develop empathy towards societal issues and demonstrate courage to
Outcomes		solve them
	CO4	Collaborate and communicate effectively with identified stakeholders

S.N.	Few identified social activities to get credits through this course are:
1	Actively participate in National Service Scheme (NSS) camp
2	Actively participate in survey activities carried out for benefit of society like Safety
	during festivals, Implementation of Govt. schemes
3	Active participation as a volunteer in organising Mount Merry Fair, Independence Day
	celebrations and/or Republic day celebrations.
4	Celebrate national level events in the college by organising talks, workshops etc.
5	Participation in club specific events (except fun events)
6	Actively engage and sensitise other students of the college in social activities
7	Collaborate with NGOs, communities, public sector departments and govt departments
	like police, traffic etc.



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Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
LCC26	Cultural Club Activities	-	-	2			1	1
		Examination Scheme						
		ISE						Total
		50						50

Fr CRCE students take part actively in various cultural activities of the college through student council. This course is introduced to recognise their participation and leadership skills in organising various cultural events in the college. Cultural club is a unique platform for the students to come together and to express their cultural talents. It is expected that students actively engaged in cultural activities will work towards spreading awareness of rich Indian culture among students.

Participation in cultural activities results in enhancement of the personal skills and experiences like confidence; self-presentation; teamwork and collaboration; time management and organizational skills; self-awareness; self-discipline; open mindedness to move beyond boundaries and experiment with different ideas; communication skills; the ability to cope with criticism and learn from them resulting in a whole new developed, changed and an improved person.

Pre-requisite Course Codes		se Codes		
Course Outcomes	CO1	Participate in performing arts and cultural activities		
	CO2	Demonstrate leadership skills by successfully organising cultural events		
	CO3	Demonstrate respect towards cultural diversity		

S.N.	Few identified activities to get credits through this course are:			
1	Actively participate in university/state/national/international level cultural festivals			
2	Assist teachers in regular courses by organising events/workshops/contest etc.			
3	Actively participate in cultural events organised by the college			