

# VEERMATA JIAJABAI TECHNOLOGICAL INSTITUTE, MUMBAI

Circular / Co-Curricular course / Semester II/ AY 2023-24

Date 6<sup>th</sup> February 2024

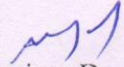
Course contents of Co-Curricular courses to be offered for II semester of the Academic Year 2023-24 are given below. Students are requested to give three choices for the Co-Curricular course of the semester II (from 6<sup>th</sup> February 2024 to 8<sup>th</sup> February 2024).

Once selected, the course will not be changed under any circumstances. Therefore students should be very careful while selecting the course.

- There are no pre-requisites for any course.
- Student should not select same co-curricular course twice. e.g. Textile students who have taken Photography in semester-I cannot opt for Photography in semester II.
- Photography and Art & Craft were offered to BTech (Textile ) students in semester –I and Integrated Personality Development Course (IPDC) was offered to MTech (Computer) students in semester-I.
- Classes of the Co-Curricular courses will begin from 12<sup>th</sup> February 2024. Classes may be held beyond college hours for few courses.
- Minimum 25 students are required for running a course.
- Each course has a limit for maximum number of students. If number of students opting for a course is higher than the limit, the course will be offered on first come first serve basis.

Link for Google form – <https://forms.gle/XABk7jEVQj4ba8eE7>



  
Associate Dean (AP)

## Co-Curricular course at Institute Level (B. Tech II Semester AY 2023-24)

Sr. No	Course Title	Sr. No	Course Title
1	Social Work	9	Art & Craft
2	Kathak	10	Marathi literature
3	Meditation	11	Engineering Motorsports and Electric Vehicles
4	Football	12	General Engineering
5	Robotics	13	Basketball
6	NCC	14	Volleyball
7	Integrated Personality Development Course (IPDC)	15	Introduction to Aeromodelling
8	Photography		

## Social Work

- **Method:** Lecture, Group Discussion and Field Visit
- **Medium of Instruction:** English and Marathi
- **Medium of Writing Papers:** English and Marathi
- **Assessment:** Assignments & Project

Sr.No	Title		Description
1	<b>Unit 01</b>	<b>Foundation Course I</b>	<ul style="list-style-type: none"> <li>• Understanding Society</li> <li>• Society</li> <li>• Community</li> <li>• Family System</li> </ul>
2	<b>Unit 02</b>	<b>Contemporary Problems in Social Work</b>	<ul style="list-style-type: none"> <li>• Professional and Voluntary Social Work in India</li> <li>• Understanding Social Problems</li> <li>• Road Safety</li> <li>• Police Administration</li> <li>• Women's and Child related issues</li> <li>• Field Visit and Project</li> <li>•</li> </ul>

## Kathak

I	<ul style="list-style-type: none"> <li>• Understanding the <b>basic terminologies</b> used in the Indian classical dance form Kathak.</li> <li>• Introduction to Taal : <b>Teentaal</b> (16 beats)               <ul style="list-style-type: none"> <li>○ Understanding and practicing <b>Rhythm</b> (Layaa) : Slow( Vilambit Layaa), Medium (Madhya Layaa) and Fast (Drut Layaa)</li> <li>○ <b>Recitation of Theka</b> (Ginti): Single (ekgun), Double (dugun) and Tihai (On Hand)</li> <li>○ <b>Practicing</b> the basic hand movements , foot works and spins (Chakkari)</li> </ul> </li> </ul>
II	<b>Learning and practicing</b> Tode – 2, Chakradhar Tode – 1, Paran – 1, Tihai – 1
III	<b>Foot work</b> (Tatkar ) to demonstrate kinds of Rhythm (Layaa)
IV	<b>Learning a Choreography (Abhinay)</b> on a Song / Shloka/ Bhajan / sound track
	<b>Orals</b>
	<ul style="list-style-type: none"> <li>• Defining some basic technical terms used in Kathak such as Taal, Sama, Rhythm (Layaa), Beats (Matra)</li> <li>• Understanding in brief seven major Indian classical dance forms and the names of the practitioners (Guru &amp; Disciples).</li> <li>• Exploring the instruments that support Kathak dancers during a performance.</li> </ul>

## Meditation

**Course Description:** This course covers the basic concepts, exercises and meditation of Falun Dafa ( Falun Gong), an ancient meditation and cultivation practice.

The students will systematically learn all five (5) sets of exercises of Falun Dafa including sitting meditation during the classes. They will also learn the importance of principles of Truthfulness, Compassion, and Tolerance in daily life and how they benefit us.

The students will experience first-hand the health benefits of the practice and ways to improve attentiveness and moral character.

**Learning Objectives:** Upon completion of this course, students should be able to understand:

- The culture of cultivation and meditation
- What is Falun Dafa (Falun Gong)
- The teachings of Falun Dafa by Master Li Hongzhi
- The characteristics of Falun Dafa
- The health benefits and morality enhancement of practicing in Falun Dafa
- Why is Falun Dafa persecuted by the Communist regime in China and situation around the world
- The five sets of exercises of Falun Dafa
- How to practice cultivation and meditate on your own

### **Reference books:**

1. **Falun Gong** - An introductory book with illustrations of the exercises and explanation of the principles.
2. **Zhuan Falun** - Compilation of 9 lectures of Mr Li Hongzhi which reveals the truth of the universe, matter, space-time and the origins and evolution of human life.

Students can get above books from college library.

(Website: [www.Falundafa.org](http://www.Falundafa.org))

**Additional Requirement:** Students need to arrange a small mat for sitting meditation. It can be a square or round mat, a flat pillow, or any exercise mat.

**Assignments:** There will be three type of tests:

- 1) Exercise Performance Tests (to evaluate correct performance and duration of exercises.)
- 2) An individual paper at the end of each month.
- 3) Individual Experience Sharing Report: Each student is required to write an experience sharing report on meditation and cultivation in Falun Dafa. The report is to be 2-4 pages in length and will be presented at the experience sharing conference at the end of the course.

The students need to address the following three questions in their experience report:

1. What have you learned from the principles and teachings of Falun Dafa?
2. What benefits did you get from exercises and meditation of Falun Dafa?
3. How do you think, will Falun Dafa practice help you in your present and/or future life?

### **Discussion Leader and In-class Q&A**

Every student is going to be a discussion leader for one chapter/lecture, and he/she is responsible for leading the discussion and better understanding of the materials. The instructor will assign each and every student to a lecture and the assigned student needs to prepare a set of at least six (6) questions/quizzes for the class to discuss, digest, debate on, and answer.

### **Grading:**

Class attendance: 30%

Class discussion and participation: 20%

Exercise Performance Tests: 20%

Individual experience report (paper & presentation): 30%

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Total: 100%

**Attendance Policy:** Punctual attendance is expected of all students. You should miss a class only for an emergency. You are expected to be prepared for all classes and to participate in them as appropriate. When preparing for class, it is imperative you read the chapters before class. In order to obtain credit for the course, students must attend at least 75 percent of the classes.

**Canceled Classes:** All cancelled class period assignments and/or tests will be moved to the next class period.

**Miscellaneous:** Questions and Discussion sessions will be provided at the end of each class session. Please silence your cell phone during the class and meditation.

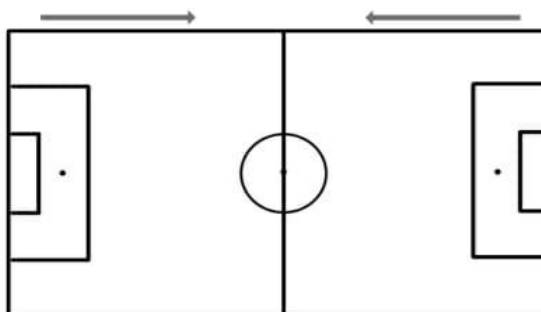
**Course Schedule (subject to change at instructor's discretion):**

**Week Date Lectures Topic**

<b>Sr.No</b>	<b>Title</b>	<b>Description</b>
1	Week 1:	Introduction, Description of syllabus, Role of discussion leader, Presentation – Introduction to Falun Dafa Exercise 1 <i>Buddha Stretching a Thousand Arms</i> Exercise 2 <i>Falun Standing Stance</i>
2	Week 2:	Falun Gong Lecture 1 Exercise 3 <i>Penetrating the Cosmic Extremes</i> Exercise 4 <i>Falun Cosmic Orbit</i> <i>Followed by discussion</i>
3	Week 3:	Falun Gong Lecture 2 <i>Followed by discussion.</i> Exercise 5 <i>Reinforcing Supernatural Powers</i>
4	Week 4:	Falun Gong Lecture 3 <i>Followed by discussion.</i> Practice Exercise 1 to 5 Monthly Test 1
5	Week 5:	Guest Speaker Practice Exercise 1 to 5
6	Week 6:	Falun Gong Lecture 4 <i>Followed by discussion.</i> Practice Exercise 1 to 5
7	Week 7:	Falun Gong Lecture 5 <i>Followed by discussion.</i> Practice Exercise 1 to 5
8	Week 8:	Movie-1 Screening and discussion Guest Speaker Monthly Test 2(exercise)
9	Week 9:	Introduction to Zhuan Falun(Discussion) Introduction to the Art of Truth, Compassion and Tolerance Practice Exercise 1 to 5

		Outdoor activity Practice Exerciseteto 5 *Start writing experience sharing
10	Week 10:	Documentary Screening and discussion Practice Exercise 1 to 5
11	Week 11:	Conclusion and Q&A Experience Sharing Report of student

## Football



# 12 WEEK - COACHING CALENDAR

TIME DAY	Time	Time
MON	• Off	• Off
TUE	<ul style="list-style-type: none"> <li>• Topics – Dribbling</li> <li>• Warm Up - with Dynamic Stretching – 15min</li> <li>• Technical Ball mastering – 20 min</li> <li>• Tactical ball works and Co- ordination – 20 min</li> <li>• SSG (Small size of the Game) 20min</li> <li>• Deactivation – cooldown stretching communication- 10 min</li> </ul>	<ul style="list-style-type: none"> <li>• Topic – Dribbling</li> <li>• Warm Up - with Dynamic stretching – 15min</li> <li>• Technical Ball mastering – 20 min</li> <li>• Technical &amp; Tactical ball works and Co- ordination exercise – 20 min</li> <li>• SSG (small size of the game) 20min</li> <li>• Deactivation- cooldown stretching communication- 10 min</li> </ul>
WED	• Off	• Off
THU	<ul style="list-style-type: none"> <li>• Topics – Dribbling &amp; Passing</li> <li>• Warm Up - with Dynamic Stretching – 15min</li> <li>• Technical Ball mastering – 20 min</li> <li>• Technical &amp; Tactical ball works and Co- ordination – 20 min</li> <li>• SSG (Small size of the Game) 20min</li> <li>• Deactivation – cooldown stretching communication- 10 min</li> </ul>	<ul style="list-style-type: none"> <li>• Topics – Dribbling &amp; Passing</li> <li>• Warm Up - with Dynamic Stretching – 15min</li> <li>• Technical Ball mastering – 20 min</li> <li>• Technical &amp; Tactical ball works and Co- ordination – 20 min</li> <li>• SSG Small size of the Game) 20min</li> <li>• Deactivation – cooldown stretching communication- 10 min</li> </ul>
FRI		
SAT		
SUN	REST	REST

1a, Dribbling		1b, Passing & Receiving		1c, Finishing		2a, Protecting the Ball		3a, Set plays			4, Transition
Dribbling Basics	Dribbling Basics	Passing Basics	Passing & Receiving	Finishing Basics	Finishing Creating Space	Staying on the ball	Twisting & Turning	Corners Kicks	Free Kicks	All dead ball free kicks	Attack / Defense Press/Delay
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

## **Robotics**

### **Contents and Evaluation:**

There are three components of Course:

1. Attending a 20 hours workshop organized by SRA-VJTI and completing evaluation. Attendance monitoring and evaluating is done by Faculty. (30% weightage).
2. Working on mini-project during the semester (3 hours/week) at SRA-VJTI under the guidance of faculty and student mentor from SRA. (30% weightage). Attendance will be taken every week by faculty.
3. Final evaluation of the project in terms of exam/competition during last week of semester. (40% weightage). Faculty will conduct the final evaluation.

### **Details of 20-hours SRA- VJTI workshop:**

All the students who have opted for this course will attend 20 Hours workshop organized by Society of Robotics and Automation (SRA-VJTI) Team. The workshop is designed for beginners who want to learn how to build and control their own robots using ESP-32, and a custom SRA development board. All the students will prepare their own bot from scratch with their assigned mentor's assistance to perform tasks like Line Following and Self Balancing.

## **Introduction to Aeromodelling**

### **Contents and Evaluation:**

1. Lecture series on Basics of Aeromodelling, which includes basic concepts of Aeromodelling, electronic propulsion system and Aircraft structure. Attendance will be taken in each lecture. (Weightage: 10%)
2. Design workshop by AEROVJTI. Workshop will include teaching of different software for aeromodelling and assignments. Every student will be assigned mentor. Evaluation will be done on the basis of assignments. Attendance will be taken for each session. (Weightage: 50%)
3. Project in terms of problem statement will be given. Period: 1 month). Final evaluation of the project in terms of exam during last week of semester. (Weightage: 40%). Faculty will conduct the final evaluation.

## Art and Craft

- 3D pen rendering
- Soap carving installation
- Glass painting
- Water colour and oil Painting
- Acrylic painting
- Cold ceramic
- Seforex carving
- Mosaic
- Calligraphy
- Charcoal
- Portraits
- Print making
- Surface Development
- Paper quiling
- Human anatomy Sketching
- Perspective & view rendering
- Art & Craft
- Pen & Ink

## **Integrated Personality Development Course (IPDC)**

Elevate Your Journey with IPDC!

Designed for future leaders, the Integrated Personality Development Course (IPDC) by BAPS Swaminarayan Sanstha is a transformative journey tailored for university students for seamlessly integrating holistic development with your academic path.

The course is designed to be the passport to success by paving the way for a stellar professional future.

What and how? Here's your answer key -

### 1. Seamless Integration

IPDC isn't just another course; it's your sidekick for academic excellence and professional prowess. It effortlessly syncs with your university studies, enhancing your skills for the challenges that lie ahead.



## 2. Beyond Academics

In sync with the New Education Policy (NEP), IPDC prioritizes globally coveted real-world skills, ensuring you possess the qualities that make you stand out to employers worldwide and excel in the competitive job market!

## 3. Unleash Your Potential

IPDC goes beyond rote learning; it's about transforming obstacles into opportunities, promoting unity in diverse teams. Spanning across 7 modules, it empowers you to redefine yourself, enhance connections, tackle challenges, make a meaningful impact on society, and draw inspiration from legends to unveil your true purpose. Craft yourself into a leader equipped with impactful habits and a distinctive skill set.

## 4. Your Professional Toolkit

This isn't just a syllabus supplement; it's your complete toolkit for professional growth. Strengthen familial bonds, become a considerate citizen, and gain a competitive edge that propels you to success.

Ready to transform education into your career catalyst? Don't miss out! IPDC is your bridge if you are ready to embark on a path to a brighter, more fulfilling professional future.

Embrace the journey, embrace success!

## **General Engineering**

Contents and Evaluation:

There are three components of Course:

1. Attending a 20 hours workshop organized by IEEE VJTI student's chapter and completing evaluation. Attendance monitoring and evaluation is done by Faculty. (30% weightage).
2. Working on mini-project during the semester (3 hours/week) at IEEE VJTI student's chapter under the guidance of faculty and student mentor from VJTI. (30% weightage). Attendance will be taken every week by faculty.
3. Final evaluation of the project in terms of exam/competition during last week of semester. (40% weightage). Faculty will conduct the final evaluation.

Details of 20-hours IEEE VJTI Students chapter:

All the students who have opted for this course will attend 20 Hours workshop organized by IEEE VJTI student's chapter team. The workshop is designed for beginners who want to learn or enhance skills required for multidisciplinary approach of engineering. They can make electrical circuits, logic circuits, PCB design and coding. They will be also taught how to write conference paper using IEEE standard practices. The student has to choose the application of multidisciplinary approach relevant to the societal needs. This can be done as group activity also.

### **ENGINEERING MOTORSPORTS AND ELECTRIC VEHICLES**

Module 1: Basics of Computer Aided Design, around 3-4 hours of lecture series on Solidworks. Students will be introduced to basics CAD commands (20% weightage)

Module 2: Learning about basic automobile components and their manufacturing. Additive and subtractive manufacturing basics.

Students are expected to learn about 3D printing technology. (20% weightage)

At the end of Module 2, students are expected to design their own automobile components, 3D print it and learn about the different material properties of 3D printed components.

Module 3: Use of power tools; Welding, Profiling, Drilling, Grinding.(20% weightage)

Module 4: Workshop practice, Students are expected to manufacture some automobile components, like inserts for suspensions, tie rods, and shafts on their own. (20% weightage) Students are expected to compare the material properties of components manufactured through additive and subtractive manufacturing.

Module 5: Basics of electronic circuit board, PCBs, Breadboard printing, basics of soldering practice.(10 % weightage) Develop a code to program BMS of battery pack, optimizing the mechanical design of battery pack.(10% weightage)

Students will be able to customize their own battery pack that can be used for electric vehicles and will be able to understand how to make a circuit.

Evaluation Scheme:

- Students will be evaluated based on their active participation in all modules.
- Each module has a submission towards the end, either in the form of a component that they made in the workshop or an online submission. They will be evaluated on that basis.
- We have divided the modules in such a way that they benefit students from all branches.

# Marathi Literature

साहित्याचा रसास्वाद : प्रमाणपत्र अभ्यासक्रम

मराठी साहित्याच्या विशाल प्रांगणाची संपूर्ण माहिती होणे कठीण असले तरी काही ठळक साहित्यप्रकार आणि साहित्यप्रवाहांची नोंद घेत त्याची रसपूर्ण अशी तोंडओळख करून घेता येऊ शकते. प्राचीन मराठी ते आधुनिक मराठी असा साधारण साडेसातशे वर्षांहून अधिक काळाचा हा पल्ला काही ठळक साहित्यकृतींचा आस्वादाची खुमारी चाखवत जर त्या त्या साहित्यप्रकारांना जर स्पर्श करता झाला तर विविध मैलाचे दगड ठरलेल्या साहित्यकृती आणि महत्वाच्या साहित्यिकांचे योगदान विद्यार्थ्यांना माहिती होईल.

यात प्रामुख्याने पुढील विभाग असतील :

1. कथेचा रसास्वाद :  
मराठीतील नामवंत कथाकारांची ओळख करून देणे त्याचसोबत विविध कथाप्रकारांचा परिचय करून देणे.  
उदा : रूपककथा, गूढकथा, विनोदी कथा, दलित कथा, ग्रामीण कथा, इ.
2. कादंबऱ्यांचा रसास्वाद :  
मराठीतील नामवंत कादंबरीकारांची ओळख करून देतानाच विविध साहित्यप्रवाहातील ठळक कलाकृतींचा आस्वाद कसा घेता येईल ते पाहणे.  
उदा : पत्रात्मक कादंबरी, पौराणिक कादंबरी, ऐतिहासिक कादंबरी, ग्रामीण कादंबरी, इ.
3. कवितांचा आस्वाद :  
मराठी कवितेच्या प्रांतातील काही प्राचीन कवींचा तर काही आधुनिक कवी-कवयित्रींचा त्यांच्या ठळक कवितांच्या आस्वादासह परिचय करून देणे.
4. आत्मकथनाचा रसास्वाद :  
आधुनिक मराठी साहित्यात गाजलेल्या काही महत्वाच्या आत्मचरित्रांचा परिचय करून देऊन स्व-कथनपर लेखनास प्रवृत्त करण्यासोबतच जीवनसंघर्षास विद्यार्थ्यांना सक्षम करणे.
5. ललितलेखनाचा रसास्वाद :  
अनेक गाजलेल्या लेखकांचे ललितलेख वाचून त्यावर चर्चा घडवून आणणे आणि त्याद्वारे उत्तम अभिरुची घडवून जीवनाकडे पाहण्याचा सकारात्मक दृष्टिकोण निर्माण करणे.  
यात विद्यार्थ्यांसोबत चर्चा करून आणखी काही सकारात्मक बदल करणे शक्य आहे.
6. नाट्य/चित्र परीक्षण रसास्वाद :  
मराठीतील अनेक गाजलेल्या नाटकांचे / चित्रपटांचे परीक्षण समजून घेऊन त्याद्वारे प्रेक्षकांची सुजाण अभिरुची घडवणे.

एकूणच हा प्रमाणपत्र अभ्यासक्रम लवचिक ठेवून विद्यार्थ्यांसोबत होणाऱ्या चर्चा आणि त्यांच्या प्रतिक्रिया यानुसार निवडीला स्वातंत्र्य देणारा अभ्यासक्रम ठेवल्यास सर्व विद्यार्थी त्यात आनंदाने सहभागी होतील. त्याद्वारे मराठी साहित्य-संस्कृतीचा सहज परिचय घडेल. विद्यार्थ्यांच्या मनावर विविध मानवी मूल्यांचे संस्कार नकळत घडतील आणि त्यांच्यात आयुष्याकडे बघण्याचा सकारात्मक दृष्टिकोण निर्माण करता येईल. त्यांच्यातील लेखनगुणांना उत्तेजन देऊन विविध कलाप्रकार ते स्वतः हाताळू शकतील याचा त्यांना आत्मविश्वास मिळेल. अनेक छोटे - छोटे प्रकल्प यातून यशस्वीरीत्या राबवता येतील. आणि एकूणच नवीन शैक्षणिक धोरणात अभिप्रेत असणाऱ्या अनेक गोष्टींची पूर्तता या अभ्यासक्रमाद्वारे करून घेता येईल.