VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE
MATUNGA, MUMBAI 400 019

Minutes of

2nd

ACADEMIC & RESEARCH COMMITTEE (ARC) MEETING

Held on

Tuesday, 10th December, 2024 AT 11.00 AM at

Boardroom, VJTI Mumbai (In Hybrid mode),

Mumbai 400019

Minutes of 2nd ACADEMIC & RESEARCH COMMITTEE (ARC) MEETING

Second Academic & Research committee meeting was held on Tuesday, 10th December 2024 at 11.00 am at Boardroom , VJTI. Following members were present.

1.	Dr. Makarand Kulkarni , Chairman, ARC (Present in online mode)
2.	Dr. Sachin D. Kore, Director
3.	Dr. Arunkumar Sridharan
4.	Dr. P.C. Saroj (Present in online mode)
5.	Dr. Arvind Ankalikar (Present in online mode)
6.	Dr. R.N Awale, Dy. Director
7.	Dr. K. K. Sangle, Dean Academics
8.	Dr. S. P. Borkar, Dean Administration Faculty & Staff Development.
9.	Dr. A. V. Deshpande, Associate Dean (Academics)
10.	Dr. S.A. Mastud, Associate Dean (Research Development & Consultancy)
11.	Dr.V. M Phalle, Associate Dean (Educational Outreach)

Following members were given leave of absence

1.	Shri. Mukund Gadre
2.	Dr. Ravindra Kulkarni

The second Academic & Research committee meeting commenced with a warm welcome from the Director, who then reviewed key points from the previous meeting and provided updates on action taken. ARC members subsequently shared feedback on the previous meeting's agenda	
ItemNo.	**Item Description**
1.00	**Matters Related to Academic Affairs**
1.01	**Reporting Item: Technological University Status** a) In September 2023, the Board of Governors had constituted 3 committees as per the internal hierarchy of the institute, as well as involving external experts to mentor the work towards preparation of the draft of the proposed VJTI University Act. b) The draft prepared by these committees is majorly based on COEP Technological University Act, 2022, Institute of Chemical Technology Act, 2008 and Maharashtra Public University Act, 1994; modified as per the requirementsof VJTI to become an International University. c) The draft was circulated with the Heads of all the Departments, all teaching and non-teaching staff, external experts and was modified based on the suggestions received. d) Along with the Cover Letter from Shri. Anand Deshpande, Chairman, Board of Governors, VJTI Mumbai, Summary of Proposal with recommendations from the Committee Members, BoG resolutions at various intermediate stages, the draft is submitted to Hon. Shri. Chandrakant (Dada) Patil, Minister, Higher & Technical Education, Government of Maharashtra, forwarded through Shri. Vinod Mohitkar, Hon. Director, Technical Education (DTE), Government of Maharashtra, and Shri. Vikas Chandra Rastogi, Hon. Principal Secretary, Higher & Technical Education, Government of Maharashtra on October 29, 2024; We are studying the UGC Guidelines for Institutional Development Plan (IDP) for Higher Educational Institutes (HEIs), issued by UGC, and working on preparation of the Detailed Project Report (DPR) to be presented to the Hon. Ministry of Higher & Technical Education, Government of Maharashtra; which would give detailed plans of actions towards transforming the present Institute into University by following various paths to achieve the global excellence in academics, infrastructural development and financial self-sustainability for the proposed VJTI University.

1.02	**Reporting Item: Implementation of NEP 2020 and Curriculum Revision for UG Programmes in the Institute** a) National Educational Policy (NEP) implementation began in Academic year2023-24 for BTech First Year students. b) It is being implemented for BTech Second Year students in the current Academic Year 2024-25. c) Scheme for all BTech Programs finalized in the academic council meeting. 1. Multiple Entry & Multiple Exit options introduced as per NEP 2. B. Tech. Honors and B. Tech. Double Minor introduced in curriculum 3. Program Electives: Increased number of core electives to 4 in each discipline 4. Open Electives: Introduced 2 open electives for all B.Tech. Students d) Introduction of 13 Multi-disciplinary minors in the emerging areas: 1. Innovation and Entrepreneurship 2. Contract Law, Arbitration, and Valuation 3. Sustainable Environment 4. Artificial Intelligence & Machine Learning (AIML) 5. Data Science 6. Cyber Security 7. Internet Of Things (IOT) 8. Signal and Image Processing 9. Electrical Vehicles 10. Robotics 11. Defence Technology 12. Aerospace Technology 13. Entrepreneurship and Start-up e) Several co-curricular courses introduced – Football, Volleyball, Basketball, NCC, Social Work, Meditation, Photography, Art & Craft, Integrated Personality Development Course, Student clubs – SAE, AEROVJTI, Robotics, Communityof Coders Several Modern languages introduced – Marathi, Hindi, Sanskrit, Gujarati, Kannada, Punjabi
Decision	**Overlap of syllabus among the MDM courses may be avoided. Industry feedback may be considered for framing the syllabus. Explore collaborations with private industry for the defense technology course. Course on defense technology may be highlighted on the website and social media**

	communication.
1.03	**Discussion item: 6-month internship semester for B.Tech. program**
Decision	**Internship may be kept in semester 6 for few years and its impact may be monitored for the following:** **1. Student academic performance (semester 6 and overall)** **2. Quality and relevance of final year projects to internship experience** **3. Student feedback on internship experience** **4. Placement success rate** **Conduct a pre-implementation survey to gauge student and faculty perspectives on the proposed change.**
1.04	**Discussion item: Introduction of Honours / Double Minor/Honours withResearch Degrees and rules regarding the same (Annexure – I)**
Decision	**The committee discussed the introduction of Honours, Double Minor, and Honours with Research Degrees programs to provide students with specialized knowledge and research opportunities.** **Key Decisions:** **1. Eligibility Criteria:** • **Honours/double minor: Students with a minimum CGPA of 8.0 will be eligible to pursue Honours programs.** • **Honours with Research: Students with a minimum CGPA of 8.5 will be eligible to pursue Honours with Research programs.** **Also proposed a stage-wise evaluation system, similar to M.Tech programs, will be implemented for Honours with Research programs.** **Stage 1: Coursework and qualifying examination** **Stage 2: Research proposal and literature review** **Stage 3: Research work and thesis submission**
1.05	**Discussion item Reporting Item: MoU with Academic Institutions** a) VJTI has signed MoUs with IIT Goa, NIT Warangal, and Ruia College for academiccollaboration. b) VJTI has received a proposal for collaboration with Binghamton University, New York for a 3.5+1.5 scheme where students taking admission to VJTI in this

	scheme would be able to complete 3.5 years of their degree in VJTI and can get an opportunity to join for 6 months internship in Binghamton in their 8th sem. The overlap of 6 months would help them to smoothly continue their MS in Binghamton (1.5 years instead of 2 years) helping them financially with assured entry for higher education. c) VJTI has received a proposal for collaboration with Northeastern University, Boston to provide VJTI undergraduate students progression to Master's degrees in Northeastern's high demand innovative programs, across the globalnetwork.
Decision	**Following points may be considered for the MoUs with Academic institutions:** • **Facilitate exchange programs for faculty members to engage in joint research, teaching, and curriculum development.** • **Establish student exchange programs to provide opportunities for students to study and conduct research at the partner institution.** • **Develop joint academic programs and courses to enhance student learning experiences.** **Collaborate on curriculum development and review to ensure alignment with industry standards and global best practices**
1.06	**Reporting Item: UG/PG/PhD/Working Professionals admissions** a) One MTech course in Computer Engineering Department, Network Infrastructure Management Systems renamed as Artificial Intelligence & Data Science b) Departments have suggested changes in names and course contents for the following courses: 1. M.Tech.(Production Engineering) to M.Tech. (Production & Industrial Engineering) 2. M.Tech. (Mechanical Engineering with specialization in Automobile Engineering) to M.Tech. (Electric Vehicle Technology) 3. M.Tech. (Mechanical Engineering with specialization in CAD/CAM & Automation) to M.Tech. (Mechanical Engineering with specialization in CAD/CAM Robotics) 4. M.Tech. (Mechanical Engineering with specialization in Thermal Engineering) to M.Tech. (Mechanical Engineering with specialization in Thermal Sciences and & Energy Systems) 5. M.Tech. (Electrical Engineering with specialization in Power Systems) to M.Tech. (Electrical Engineering with specialization in Integrated Power Systems) 6. M.Tech. (Electrical Engineering with specialization in Control Systems) to M.Tech. (Electrical Engineering with specialization in

	Embedded Control Systems) c) 3 UG courses (Civil, Electrical, Computer) and 2 PG courses (Structural, Computer) introduced for working professionals from academic year 2024-25 d) Institute funded Teaching assistantship introduced for PhD students. Rs. 35000/- stipend will be paid to about 15 PhD students from academic year 2024-25. Industry Funded full time Ph.D. Students
Decision	**The ARC committee approved the revisions to the proposed course name changes and suggested to change course descriptions will be incorporated into the program brochure and other official documents.**
1.07	**Reporting Item: Information on present status of Accreditation (NBA & NAAC)** a) 2 PG programs, Structural Engineering and Computer Engineering were accredited by the NBA b) 2 UG programs, Production Engineering and Textile Technology have applied for NBA. Visit of NBA team is expected in January/February 2025. c) 2 UG programs, Electrical Engineering and Computer Engineering have to file compliance report for extension of accreditation for 3 years from May 2025
Decision	**NAAC accreditation may be expedited.**
2.00	***Matters Related to Research, Development and Consultancy (RDC) Activities:***
2.01	***Information Agenda:*** a) ***Establishment of Central Testing Facility:*** Mechanical Engineering, Structural Engineering, Chemical Engineering and Civil Engineering department submitted proposals for equipment's /facilities to be included in the Central Testing Facility (CTF). After reviewing through committee, equipment's worth Rs. 4.99 Cr have been recommended for procurement in Phase-1. Procurement through GeM/ Mahatender has been initiated. Following facilities will be created through Central Testing Facility (Phase-1): - Scanning Electron Microscope (SEM) with a provision with EDS, - Micro Hardness Testers - Surface Profilometer - Modal Analysis Testing Setup - 3D White light Scanners - ATR-FTIR - HPLC - Osmometer - Ion Chromatography - UNIVERSAL TESTING MACHINE-SERVO CONTROLLED & HYDRAULIC GRIPS – 600 KN

	- Cyclic Triaxial Automated System b) ***Seed Funding of Rs. 5 lakhs per newly joined faculty member is approved:*** **Following faculty members will be benefited through this scheme. It will result in the initiation of research activities targeted at proposal submissions of higher grant value to various funding agencies.** [Prof. Sagar Suraj Lachure, Prof. Vitthalrao Kashid, Prof. Kavita Y. Fasate, Prof. Vishwadeep C. Handikherkar, Prof. Srinath Gudur, Prof. Neha Mishra, Prof. Niteshkumar Agrawal, Prof. Rahul Ingle, Prof. Ayush Saxena, Prof. Sreyashrao Suryarao Surapreddi, Prof. Chandrashekhar Wagh, Prof. Ninad Nityendra Oke] c) **Establishment of Centre of Excellence through Institute Seed Grant:** Institute committee took a presentation on the various proposals submitted under Centre of Excellence. Institute has approved following six proposals. Rs. 5 lakhs initial grant is given to each of the proposal to initiate the work and scale it. Following are Six number of Center of Excellence (CoE): 1. CoE in Precision Agriculture using ICT (Department: Comp. & IT Engg.) 2. CoE in Digital Twin for Sustainable Manufacturing (Production Engineering Department) 3. CoE for Environmental Surveillance and Monitoring (Civil & Environmental Engineering Department) 4. CoE in Advance Materials and Manufacturing 5. CoE in Membrane Science and Technology 6. CoE in Textile Filters d) **Discussion on for phase-2 implementation and extension of CTF** e) **Guidelines for undertaking Testing and Consultancy Activities in Institute** With the recent events discussed on social media and news channels, Office of Dean (Research and Development) has provided advisory stating guidelines for undertaking testing and consultancy work from outside agencies. Office of Dean (RDC) will draft a detailed handbook and map the administrative process for accepting any testing/consultancy assignments from outside agencies. Discussions and recommendations are requested in this regard. (Refer: Annexure:Testing and Consultancy Advisory). f) **MoU with WeGo for filing patents free of cost:** Institute has singed MoU with a WeGo Library for free of cost filing of patents. Still number of patents filled during previous year is very minimal. Guidance by ARC is requested to increase IPR outcomes in the institute.
Decision	**Progress on ongoing R&D activities and projects was presented by the Hon. Director and Dean of the RDC. Seed funding, the Central Testing Facility, and CoE are some of the areas under which the institute is supporting the enhancement of research. ARC expressed proposals submitted by depts/PIs should be shared with the ARC committee members for informational purposes. ARC also suggested aligning research projects with Govt. Missions such as 'Jal Shakti' and 'Gati Shakti,' which could help secure additional**

funding from research labs. Prof. Kulkarni emphasized that the institute should clearly state the desired outcomes for all research promotion schemes it is implementing.

2.02

Policy for Promotion of Research:

Office of Dean (Research and Development) is drafting a policy decision for promotion of research in the institute. It involves making efforts to motivate faculty members to write quality publications and file patents. It will contain a long term vision of the institute.

Suggestions and recommendations for directly/indirectly motivating faculty members/PG students for publications. Suggestions on following points is requested:

1. There is existing policy of allocating part of project overheads to Professional Development Fund (20% in case the PI is receiving remuneration and 50% in case the PI is not receiving any remuneration). This scheme will be extended for next 05 years (December-2029).

2. **Creation of 'Chair Professor' Positions:**

Sr. No.	Position Title	Funded by	Eligibility	Brief Emolument
01	Institute Chair Professor	Institute (VJTI)	Internal faculty members holding 'Associate Professor and Professor' positions	In addition to the regular salary, selected faculty member will get top up salary of Rs. 10000/- per month for a duration of 03 years + Rs. 10 Lakhs research funding
02	Alumni Chair Professor	Alumni Association	Internal (VJTI)	For Internal Faculty: Existing salary of Internal Faculty + Rs. 10000/- per month + Rs. 10 Lakhs Research Fund. For External Candidates: Salary of Level 14 + Research Fund of Rs. 10 Lakhs
03	Industry Chair Professor	Industry		

Institute plan to create following 3-types of 'Chair Professor' positions namely 'Industry Chair Professor', 'Alumni Chair Professor' and 'Institute Chair Professor'. Chair professor designation will be given for a period of 03 years. It is expected that Chair Professor will be involved in active Research Activities in addition to academic activities. Quality publications are expected at the end of the tenure. Following is proposed outline of the Chair Professor Positions, details

	guidelines will be decided in due course of time. 3. Sum of Rs. 25,000/- will be deposited in professional development fund of the faculty member (regular as well as tenure) for publishing 2 or more than 02 SCI papers with VJTI affiliation in an academic year (1st July to 30th June of the next year). Also, sum of Rs. 25,000/- will be deposited in the professional development fund of the faculty member (regular as well as tenure) for grant of at least one patent for the work carried out at VJTI in an academic year (1stJuly to 30th June of the next year). 4. A funding of maximum Rs. 1 lakh for paper presentation with VJTI affiliation in a reputed international conference endorsed by department can be extended to tenure faculty members at the end of 2nd year of continuous service at the institute (once during the tenure of 3 years). 5. A funding of maximum Rs. 25,000 for paper presentation with VJTI affiliation in a reputed National conference endorsed by the department can be given to Adhoc faculty members 6. Funding of Maximum Rs. 20,000/- per paper for B.Tech and M.Tech students for paper presentation with VJTI affiliation in a national/international conference endorsed by department in top 100 NIRF ranked institutes. Fund can be utilized for registration fee, travel by 2-AC Railway and accommodation. 7. One time maximum funding of Rs. 25000/- and Rs. 1 lac to full time Ph.D candidates to attend reputed conference in India and abroad, respectively. 8. Empanelment of Patent Attorney at Institute for filling patents. Students/faculty members need not to bear any expenses. This will help to enhance NIRF rankof institute.
Decision	**2.02.1 ARC recommended to extend BoG approved existing policy till December-2029 to allocate part of project overheads to Professional Development Fund: 20% in case the PI is receiving remuneration and 50% in case the PI is not receiving any remuneration from the project.** **2.02.2 ARC agreed to establish Chair professor positions.** **2.02.3 ARC agreed for support of Rs. 25,000/- to be deposited in professional development fund of the faculty member (regular as well as tenure) for publishing 2 or more than 02 SCI papers with VJTI affiliation in an academic year (1st July to 30th June of the next year). Also, sum of Rs. 25,000/- will be deposited in the professional development fund of the faculty member (regular as well as tenure) for grant of at least one patent for the work carried out at VJTI in an academic year (1st July to 30th June of the next year). Details policies and guidelines will be**

	prepared by Dean (RDC). **2.02.4 A funding of maximum Rs. 1 lakh for paper presentation with VJTI affiliation in a reputed international conference endorsed by department can be extended to tenure faculty members at the end of 2nd year of continuous service at the institute (once during the tenure of 3 years).** **2.02.5 ARC agreed to support ad-hoc faculty members with a one time funding of Rs. 25,000/- for attending international conferences in India hosted by reputed institutes (preferably institutes of under 100 NIRF ranking)** **2.02.6 ARC agreed to encourage B.Tech and M.Tech students for conference publication by supporting them with the fund of Rs. 20,000/- per paper in top 100 NIRF ranked institutes. Fund can be utilized for registration fee, travel by 2-AC Railway and accommodation.** **2.02.7 Rs. 1 lac can be given to full time non-sponsored Ph.D candidates to attend reputed conference in India and abroad, respectively.** **2.02.8 Empanelment of Patent Attorney at Institute for filling patents. Students/faculty members need not to bear any expenses. This will help to enhance NIRF rankof institute.**
2.03	**Plan of RDC Activities:** • Dedicated RDC Section with appointment of Assistant Registrar (M.Tech/ MBAqualification), accountant and 02 support staffs. • In order to encourage faculty members for active research, one time Seed funding of Rs.5 Lakhs will be extended to all regular faculty of the institute. Estimated budget of Rs. 5 Cr. • One day workshop at IIT Bombay for regular faculty members, all newly joinedfaculty members and tenure faculty members. Actively participation in a 'Faculty Internship' program at various IIT's during winter/summer vacations.
Decision	**ARC members agreed to on the need to establish a 'RDC Section' with the support staff in line with the IRCC Section of the IIT Bombay. This section will be aimed at enhancing the IPR outcome of institute. ARC agreed to extend the seed funding scheme to all the faculty members of the institute which is presently implemented for newly joined faculty members. ARC recommended active participation of the faculty members in the 'faculty internship' programs in the elite institutes.**
2.04	**Discussion and update on the 'Professor of Practice' positions**

	(Refer Annexure: a) DTE Guidelines, b) UGC Guidelines)
Decision	**ARC recommends filling the Professor of Practice positions. It is also suggested by present members that clear guidelines and roles of the faculty appointed in professor of practice position must be set before appointments.**
3.00	**Any other matter with the permission of chair.**

Prof. Makrand Kulkarni
Chairman, ARC

Prof. Sachin D. Kore
Director