# Bansilal Ramnath Agarwal Charitable Trust's VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY Department of Mechanical Engineering

## ACADEMIC AUDIT REPORT – (Academic year – 2019-20)

## (Date of Audit – 15/12/2020)

The Academic Audit for the academic year 2019-20 was conducted on 15/12/2020 (Tuesday) at 10:00 am onwards. Dr. Rakesh G. Mote, Associate Professor, Mechanical Engineering Department, IIT, Bombay have worked as an Expert for the audit. The academic audit was addressed by Dr. Dinesh N. Kamble, Head, Mechanical Engineering Department. The following points were covered by Head of the Department during Academic audit.

# Points addressed by Head of the Department

- 1. Vision and Mission of the department explained by Head of the department
- 2. Highlights of the department which includes NBA Accreditation status, ISO 9001:2015 process, qualification and experience of the faculty members, Faculty research publications, PG and PhD Research center, Industry connect, SUPRA Team ranking at National level, Computing facilitates at the department, TSDP and co-curricular activities at the department.
- 3. History of the department which includes Commencement of the UG program, increase in intake, commencement of PG and Ph D Research center.
- 4. Department staff details which includes numbers of faculties with Ph D and pursing Ph D, Numbers of Professors, Associate professors and assistant professors and numbers of non-teaching staff.
- 5. Curriculum aspects which includes curriculum planning and implementation, use of ICT tolls, Project based learning, flipped classroom, value added courses, internships, industrial visits, MOU with industries.
- 6. Feedback evaluation system which includes student faculty feedback, parent feedback, Alumni feedback and employer's feedback etc.
- Teaching and learning evaluation which includes faculty details, ICT tools, curruculam coverage, Attendance record and lesson plan, CO-PO mapping, result analysis and evaluation process.

- 8. Research innovations and extension which includes VSRPS (Vishwakarma student research proposal scheme), VRPS (Vishwakarma research proposal scheme), Research funded projects (Applied and sanctioned), FDP/Workshops organized, CATIA training for faculties, faculties publications, patents and copyrights Student activities which includes MESA, SUPRA, awards and recognition received by students at State/National/International levels.
- 9. Infrastructure and learning resources which includes numbers of classrooms and laboratories, computing facilities, software, and internet speed.
- 10. Faculty empowerment strategies which includes faculty training program, faculty participation in FDP/Workshops/STTP, faculty achievements.
- 11. Various boards and committees such as IAB (Industry advisor board), DAB (Department advisory board), BOS (Board of studies) etc.
- 12. Student support and progression such as induction program, earn and learn scheme, batch guardian scheme, entrepreneurship development cell, competitive examination cell, mock placement drive, off campus placement.

## **Inputs/Suggestions from Academic Expert**

- 1. Inputs from stakeholders and Alumni were taken for design of curriculum. Student feedback on structure and curriculum should be taken.
- 2. Contents of the curriculum were made available on VOLP, You tube channel for students and also academic records were well maintained in VIERP.
- 3. Demonstration of In-house E Learning modules (VIERP and VOLP) of Vishwakarma group for academic implementation purpose has been given and appreciated by expert.
- 4. Distribution of In-houses and Industry projects has been in proper place.
- 5. Student and parent feedback analysis has been found in proper place.
- 6. T2 exam was conducted online and MCQ based and sufficient time gap was maintained between T1 and T2
- 7. Recorded video lectures should be shared in advance if possible for some topics and question answer session on it should be conducted to make session more interactive.
- 8. Mentoring and assessment of students doing internship for six months
- 9. Number of supervisors for proctoring of ISE and ESE should be increased.
- 10. Research by aspiring faculty under CSR Funding of Industry should be more.

- 11. Encouragement of open in-house presentations by faculty/students who had attended conferences/FDPs outside.
- 12. Students should participate in interdisciplinary activities conducted by other departments
- 13. Industry funding under CSR activity for aspiring faculty.

#### **SWOC analysis by Academic Expert**

#### **Strength:**

- 1. Qualified faculty.
- 2. Organized administrative activities.
- 3. Good industry interactions

#### Weakness:

- 1. Research funding.
- 2. Quality time for the faculty members for self-development.
- 3. Student involvement in research activities.
- 4. Interdisciplinary interactions.

### **Opportunities:**

- 1. Location and connectivity (Proximity to industry hubs, core and IT.
- 2. Aspiring students, faculty members.
- 3. New industry demands on machine learning, AI, automation, etc.

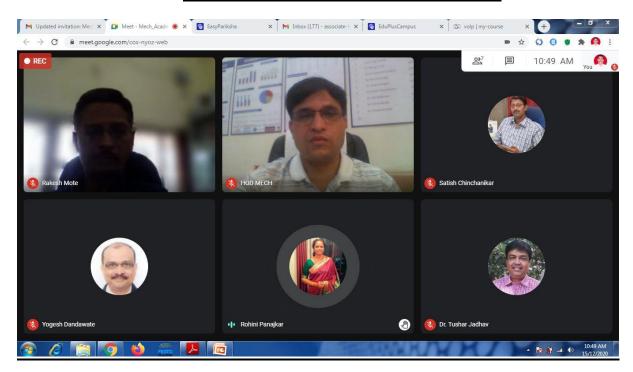
#### **Challenges:**

- 1. Competition from other institutes
- 2. Coping up with modern core infrastructure needs, particularly for core activities

#### **Best Practice (s) / Innovations of the Department:**

- 1. Student project exhibitions and connect with the course activities (last year visit)
- 2. Systematic course mapping and use of course management tools both for faculty and students
- 3. Well streamlined, transparent, centralized examination conducting activities like paper setting and evaluation.

# Photograph of Academic Audit dated 15/12/2020



## **Members of Staff Present:**

- 1. Dr. D. N. Kamble
- 2. Dr. S.S.Chinchanikar
- 3. Dr. A. D. Kale
- 4. Dr. A.P.Kulkarni
- 5. Dr. A.R.Mache
- 6. Dr. S.S.Kore
- 7. Dr. P. P. Hujare
- 8. Mrs. S.V.Dravid
- 9. Mr. D. B. Nalawade
- 10. Mr. A.V.Salve
- 11. Mr. N.H.Ambhore
- 12. Mr. M.N.Jagdale
- 13. Mr. P.R.Anerao
- 14. Mr. M.G.Gadge
- 15. Mr. A.R.Dhumal
- 16. Mrs. H. Y. Kolekar
- 17. Dr. B.S.Rathod
- 18. Mr. S.C.Shamkuvar

Sd/-

Mr. Dattatraya. B. Nalawade Associate Head Mechanical Engineering Sd/Dr. Dinesh. N. Kamble
Head
Mechanical Engineering