

# ATTENDANCE SHEET FOR 15<sup>TH</sup> MEETING OF PLANNING AND MONITORING ON 25.03.2022 AT 10.00 AM VENUE: VIDEO CONFERENCEING MODE

| S.No | Name   | Designation             | Signature  |  |
|------|--|-------------------------|--|--|
| 1    | Prof. Dr. S. Salivahanan,<br>Vice Chancellor,<br>Vel Tech  | Chairperson             | Participated in the<br>Online meeting  |  |
| 2    | Dr. S. Shanmugavel, Formerly Registrar, Anna University, Director, National Engineering College, Kovilpatti Contact No. 76677386392/ 9488702250 Email: director@nec.edu.in.                                      | External Member         | Participated in the<br>Online meeting  |  |
| 3    | Or. B. Ramamoorthy, Formerly Professor, IIT, Madras Advisor (Academic) PSG Institutions, Coimbatore Contract No. 6374276969 / 9444468293 / 98421 32605 Email:advisor.academic@psgtech.ac.ln, ramoo1955@gmail.com | External Member         | Participated in the<br>Online meeting  |  |
| 4    | Dr. Ligy Philip,<br>Professor, Dept. of Civit Engineering,<br>IIT, Madras, Chennai Contact No. 044-<br>22574274 Email: ligy@litm.ac.in   | External Member         | Participated in the<br>Online meeting  |  |
| 5    | Dr.A.T.Ravichendren,<br>The Dean (Academics),<br>Vel Tech.   | Internal Member         | Participated in the<br>Online meeting<br>Participated in the<br>Online meeting |  |
| 6    | Prof. R.S. Valarmathi,<br>Dean (Quality Assurance)<br>Vel Tech.  | Internal <b>M</b> ember |  |  |
| 7    | Prof. S. Irudayaraj,<br>Dean (SoMC),<br>Vel Tech.  | Internal Member         | Participated in the<br>Online meeting  |  |



| S.No | Name  | Designation     | Signature                             |  |
|------|---|-----------------|---------------------------------------|--|
| В    | Prof. M. Sivakumar.<br>Dean (FME),<br>Vel Tech.                 | Internal Member | Participated in the<br>Online meeting |  |
| 9    | Dr. P. Chandrakumar,<br>Dean (Industry Relations),<br>Vet Tech. | Internal Member | Participated in the<br>Online meeting |  |
| 10   | Dr. B. Nagalingeswara Raju,<br>Dean (Hostels),<br>Vet Tech.     | Internal Member | Participated in the<br>Online meeting |  |
| 11   | Prof. Dr. E. Kannan<br>Registrar,<br>Vel Tech.                  | Secretary       | Participated in the<br>Online meeting |  |

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> Prof. S. Salivahanan Vice Chancellor

Vel Tech
Hamparajan Dr. Sagundsala
HAD Institut of Science and Technology
Annual Conference in An Advice of the State State



# MINUTES OF THE 15th MEETING OF THE PLANNING AND MONITORING BOARD

on 25.03.2022 at 10.00 A.M. Mode: Video Conference

#### MEMBERS

 Prof. Dr. S. Salivahanan, Vice Chancellor, Vel Tech. Chairperson

Dr. S. Shanmagavel.
 Formerly Registrar of Anna University.
 Director of National Engineering College.
 Kovilpatti.

External Member

 Dr. B. Ramamouthy, Formetly Professor, HT, Madras Advisor (Academic)-PSG Institutions, Coimbatore. External Member

 Dr. Ligy Philip, Professor, Dept. of Civil Engineering, IIT, Madras, Chennai.

External Member

 Dr. A.T. Ravichandran, Dean (Academics), Vel Tech. Internal Member

Prof. R.S. Velarmathi,
 Dean (Quality Assurance).
 Vel Tech.

Internal Member



 Dr. S. Irudhyaraj, Dean (SoMC),
 Vel Tech. Internal Member

 Prof. M. Sivakumar, Dean (FME), Vel Tech.

Internal Member

 Dr. P. Chandrakumar, Dean (Industry Relations), Vel Tech. Internal Member

 Dr. B. Nagelingesware Raju, Dean (Hostels),
 Vel Tech. Internal Member

 Prof. Dr. E. Kannan, Registrar, Vel Tech.

Secretary

S. Salina

Prof. S. Salivahanan Vice Chancellor

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# A. Opening

The Chairperson, in his welcome address, conveyed thankfulness for all the members for attending the meeting. He highlighted certain important academic activities such as commencement of classes, conduct of end semester examinations, conduct of 11th convocation, award of degrees including Honorary degree to Dr. B. Venkataraman, Director, IGCAR, Kalpakkam, submission of SSR to the NAAC and SAR for NBA, He has also conveyed the messeage about the participation of a student of the School of Law Ms. Harini at the Republic Day ceremony at New Delhi, who is the only NCC cadet participated in the Republic Day rally on 26.01.2022 at New Delhi from the state of Tamil Nadu.

After the welcome address, the proceedings were started.

15.1 To record the notice of convening 15<sup>th</sup> Meeting of the Planning and Monitoring Board on March 25, 2022.

The meeting notice has been sent to all the members 16.09,2022 and a copy of the meeting notice is placed at Appendix-A.

A. 15th P&M Meeting Notice



# Appendix-A Click here

RESOLVED to record the Meeting Notice of the 15th meeting of the Planning and Manitoring Board

15.2 To consider the minutes of 14th Meeting of the Planning and Monitoring Board held on May 22, 2021.

The **min**utes of the 14th meeting of the Planning and Monitoring Board are placed at Appendix-B.

B. 14<sup>th</sup> P&M Meeting Minutes



# Appendix-B Click here

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RESOLVED to approve and record the minutes of the 14th meeting of the Planning and Monitoring Board.

15.3 To review the action taken on the decisions of the previous meeting of Planning and Monitoring Board held on May 22, 2021.

Table 1 Action Taken Report

| Item.No | Subject                  | Decision  | Action Taken  |
|---------|--------------------------|---|---|
| 14.5    | Approval of<br>Policies. | The board discussed in detail on the following policies.  1. Research Policy  2. Innovation and Start up Pollcy  3. Campus Infrastructure and Maintenance Policy  4. IT Policy                        |   |
| 14.7    | Approval of new courses. | The P&M Board accepted the proposal of starting H.Tech. programme in  1. Artificial Intelligence and Data Science.  2. Artificial Intelligence and Machine Learning.  3. Computer Science and Design. | P&M board have been incorporated  The proposal approved by the AICTE and it was implemented |

RESOLVED to record the action taken on the decisions of the previous meeting of Planning and Monitoring Board held on May 22, 2021.

15.4 To inform the board about the leave of absence of the members.

The Chairperson informed that Dr. Ligy Philip was absent for the meeting due to some unavoidable reasons.

RESOLVED to record the leave of absence of Dr. Ligy Philip due to unavoidable reasons.



# B. Items for Consideration and Approval

15.5 To consider and recommend the establishment of New building facilities / amenities.

Prof. Irudayara), Dean (SoMC) presented the status on the establishment of New building facilities / amounties, as follows:

Table 2: Completed Building / Construction work

| 8.No. | Planned in P&M 2020  | Building | Status as on |  |  |
|-------|--|----------|--------------|--|--|
|       |  | 5-qft    | 21.03.2022   |  |  |
| :     | Leaders Hestel C Block(C+3 Floors)   | 75320    | Completed    |  |  |
| 2     | Construction of Dining Hall in Lowlers Hostel  | 13395    | Completed    |  |  |
| 1     | Shifting the 230 KV Tower lines - 3 nos located between the towers 142 to 143 in the Institution | -        | Completed    |  |  |

Table 3: Propositi work

| S.Nu. | To be discussed in P&M 2021  | Bullding<br>Sqft | Status  |
|-------|--|------------------|---|
| 1     | Prince Hostel F-Block - First Ploor -14<br>Rooms to be Completed                         | 7322             | Work in Progress and it will be com-<br>pleted on ar before June 2022 |
| 2     | Civil Engineering Department - Struc-<br>fund Lab (Loading Prame) Construc-<br>tion Work | 1475             | Work in Progress and it will com-<br>pleted on an before June 2022    |

RESOLVED to record the status of establishment of New building facilities / amenities

15.6 To discuss and approve the Strategic Plan 2021-26 of this Institution.

Prof. E. Kaman presented various aspects of the Strategic Plan like Academics, Research and Industrial Relations and explained the set-out targets and goals with key indicators as in the draft copy of the Strategic Plan. He has also brought to the notice of the members regarding the previous strategic plan and achievement of proposed goals pertaining to the increase of students strength, increase in the International faculty members, creation of centres of excellence, introduction of new courses such as B.Arch., Media Studies and Law and the percentages of achievement. Prof. E. Kaman pointed out the proposed plans under various entegories for achievement during the Strategic Plan period 2021-26. He also requested all the members to go through the draft Strategic Plan and to offer their valuable inputs sooner or later for incorporating them appropriately.

Minutes of 15th Meeting of the Planning and Monitoring Board on 25-03-2022.

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S. Salivahanan

- Dr. P. Chandrakumar, Dean (Industry Relations explained the Industry oriented activities such as TBI, Business starts-ups. Creation of Nidhi Priyas centre, Funding Projects from DST, DBT and other funding agencies. He explained how the institution is planning to achieve the better results as proposed in the Strategic Plan with the help of graphical / diagrammatic charts in his presentation.
- Or. Balasubramanian, Dean (R&f) ) presented the glimpse of Research and Development activities under the heads Projects, research departments / research park, promoting industry related activities, improving publications, citations, increasing funding agencies, Academic colohoration research, patents etc. highlighting the achievements and proposed goals in the Strategic Plan period 2021-26. ) )
- Dr. P.Suresh, Dean (International Relations) explained the activities carried out in the office of the International Relations and the plan for increase the international faculty members, Student Exchange programme etc. as indicated in the Strategic Plan with future plans in improving the activities under different facets.

Prof. Shanmugavel, the external member pointed out that the progress of Faculty Exchange Programme and international collaboration appear to be moderate and emphasized the need for strengthening them. He added that focus should be given to get more active MoUs and to conduct more number of Semester abroad programmes. He appreciated that the other features mentioned in the Strategic Plan are in order.

The following are the suggestions given by Prof. Ramamurthy, the other External member:

- 1. Motivating the faculty members to acquire Ph.D. which should be made mandatury
- Improvement of faculty / students self learning capacity by sponsoring them to online courses through NPTEL, an Indian learning platform for university-level science, technology, engineering, and mathematics subjects and other platforms.
- Reimbursements of expenses incurred on sponsoring the faculty members by the institution itself to the maximum extent.
- 4. The percentage of placements should be calculated on the basis of admitted students as par the approved intake by AICTE and the selected students for placements and not on the basis of the participated students and selected students in the placement processes.
- Increase and improve the number of PG Courses and students actting admission to PC Courses in the thrust areas.
- 6. Conduct of more number of International Conferences on yearly basis
- 7. To monitor the Faculty members registered for Ph.D. whether are completing the programme within the stipulated period
- Tracking the students going for higher studies and to see how they are progressing.
- 9. To provide GATE coaching to the students
- Improvement of Learning Management systems, Increasing the number of ICT enabled classes
- 11. Improvement of Laboratories with required budgeting and support.
- 12. Tracking of Alumni whereabouts and conducting Alumni meetings periodically.



C. Strategic Plan 2021-26



# Appendix-C Click here

RESOLVED to approve and record the strategic plan 2021-26.

15.7 To discuss and approve the revised policies of the Institution.

Prof.E. Kannan presented different policies and procedures. Prof. E. Kannan explained as how the policies have been brought out keeping in mind, the mission and vission of this Institution and he gave a glimpse of the important policies and procedures relating to Campus Maintenance and infra structure development, Information Technology Policy, Scholarship Policy, Reservation Policy and other procedures involved in Semester registration, course registration, code of conduct, Faculty apprecial, promotions etc. as per the Appendix-D for discussion and approval.



# Appendix-D Click here

Dr. Balasubramanian, Doar. (R&D) has highlighted the features of IPR Cells, guidelines of patents while presenting the IPR Policy. Dr. Chandrakumar, Dean, (industry Relations-) presented the unique features of Consultancy Policy with the explanation as how the cool system surrounded by the Automobile companies in and around the institution is conducive for promoting industry related activities at this Institution. He explaned the details of the start-ups, the methodology, facilities given to the faculty members and students to motivate them to take up business start-ups in detail.

Prof. Ramamurthy, the External members suggested that it will be good if the Institution allocates sufficient grants for some important start-ups and motivate the entrepreneurs to take up more number of start-ups as it will add some colour. Secondly, he pointed out that Plagiarism mechanism should be used for all documents including M. Tech / B.Tech theses in addition to applying it in the cases of Ph.D. theses and project proposals.

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Thirdly Prof. Ramamurthy suggested that the Academic Auditing should be conducted with the help of renowned academicians designated at higher levels so as to get the desired quality and outcome. In answering to the queries of Prof. Ramamurthy, Dr. Balasubramanian, Dean (R&D) replied that the plaginrism is subjected to all the documents including theses / projects submitted by the students and researchers with the admissible mismatch up to 15%. The Dean (Industry Relations) confirmed allocation of grants for start-ups.

RESOLVED to approve and record the revised policies of the Institution.

15.8 To discuss and approve the new courses and facility to be established in the academic year 2021-22.

Prof.E.Kannan reported that the AICTE, the competent authority for the grant of approval for new programs and intake of students, suggested that the proposed new courses to be offered at the Institutions/deemed to be universities shall be from the emerging areas of various disciplines as specified in the AICTE approval Handbook.

On receipt of the AICTEs approval Process Handbook, the Institution would consider the feasibility of offering new courses under the emerging areas of importance.

The External members have suggested to offer for new course in thrust areas citing Cyber Security is one such area. They have specifically mentioned that the courses for which the admissions are less, may be closed down. The continuity of these courses would affect the NIRF Ranking. Prof. E. Kannan pointed out that there is extraordinary demand for some courses as in the case of M.Tech. Safety Engineering, which has been approved by the Govt- of Ternil Nadu- Prof. Snanmugavel suggested that the Institution may get any inputs for the advancement of course contents of M.Tech. Safety Engineering from Prof. Sankaranarayanan who was instrumental in introducing M.Tech. in Safety Engineering at REC, Trichy (now called NIT, Trichy). The Chairperson listed out the non-viable PG courses, closed down in the last academic year.

RESOLVED to approve and record approve note presented in connection with the starting of the new courses and facility in the academic year 2021-22.

# C. Items for Discussion and Decision.

15.9 To discuss the activities connected with Industry relations during the acodemic year 2021-22.

The Dean (Industry Relations) presents various activities connected with the Industrial Relations under different headings such as Credit Course during the summer somester of the Academic Year 2021-22, Industry Projects - 2021-22, MoU signed, Consultancy Projects and FDP as in the Appendix E.



E. Industry Relations

# Appendix-E Click here

Prof. Ramamurthy suggested that the industry experts handing one or two credit courses related to industries may be designated as Visiting Faculty members under the urgent faculty scheme in force in many institutions.

RESOLVED to record the activities connected with Industry relations during the academic year 2021-22.

# D. Items for Reporting

### 15.10 To record the status of submission of SSR to NAAC.

Dt.Rajeevkumar of Quality Assurance Cell reported that the Institutional Information for Quality Assessment (HQA) was submitted to the NAAC on 30.12.2021. After the initial verification, the HQA has been accepted by the NAAC on 25.01.2022 and given approval for Self Study Report (SSR) submission. Subsequently, the SSR of the same has been submitted to NAAC on 09.03.2022.

The Student Satisfactory Survey (SSS) and clarifications on DVV are under progress.

RESOLVED to record the status of submission of SSR to NAAC.

# 15.11 To record the ranking and recognition to our Institution.

Dr.Rajeev kumar of Quality Assurance cell reported the ranking by International and National agencies under various categories, as given below:

# 1. International Ranking.

Times Higher Education (THE):

Vel Tech is ranked in the band 801-1800 in Times Higher Education World Universities Rankings 2022 for the first time out of 1662 ranked institutions in the Globe. The institution stands at 18th position out of 71 ranked institutions from India. Times Higher Education is created to assess the Universities performance on the global stage and to provide a resource for readers to understand the different missions



and successes of Higher Education Institutions. THE rankings cover three main missions of Universities activities: Research, Teaching and Impact. The Times Higher Education World Universities Rankings 2022 include more than 1,600 Universities across 99 countries and territories, making them the largest and most diverse Universities rankings to date.

In addition, the institution has also been ranked in the following categories which are announced by THE.

THE Impact Ranking 2021: Vel Tech has been ranked under the following Sustainable Development Goals (SDGs)

- SDG 6: Clean Water and Sanitation 201 to 300 band in the World
- SDG 9: Industry, Innovation and Infrastructure + 201 300 band in the World
- SDG 10: Reduced Inequalities 401 600 band in the world
- SDG 17: Partnership for the goals 801 1000 band in the world

### THE World University Rankings 2022 by Subjects

- Engineering Band 601-800
- THE Emerging Economics University Rankings 2022 Band 301-351
- THE Young University Rankings 2022 Band 251-300 Quacquarelli Symonds (QS)
  - QS Asia University Rankings 2022 Band 601-650

### 2. National Ranking.

National Institutional Ranking Framework (NIRF) India Rankings 2021: Vel Tech is ranked in top 100 with 93<sup>rd</sup> position under Engineering Category, 101-150 band under Universities Category and 151-200 band under Overall Category by NIRF India Rankings 2021. The number of institutions participated in NIRF India Rankings for 2021 under Overall Category and Engineering Category are 1657 and 1143 respectively. This framework outlines a methodology to rank institutions across the country. The mothodology draws from the overall recommendations and broad understanding arrived at by a Core Committee set up by MoU, to identify the broad parameters for ranking various universities and institutions. The parameters broadly cover Teaching, Learning and Resources, Research and Professional Practices, Graduation Outcomes, Outcoch and Inclusivity and Perception.

Ata) Ranking of Institutions on Innovation Achievements (ARIIA) Ranking 2021.

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Recognized in the hand "EXCELLENT" under the category "University & Deemed to be University (Private/Sch Financod) (Technical)"

### Dataquest Top T-School in India 2021

- Top 100 T-Schools (Overall) Government and Private sector 15th
   Rank
- Top T-Schools in India 2021 (Private) 6th Rank
- Top T-Schools in India 2021 (South Zone) 5th Rank

# digitalLEARNING Top Engineering Institutes Ranking 2021

- Tamil Nadu AAAAA
- · 12th Rank in India

RESOLVED to record the Ranking and Recognition secured by Vel Tech. in the recent past.

# E. Conclusion

15.12 Any other items with the permission of Chairperson.

No items other than those discussed in the Agenda of the 15th Meeting of the P&M has been taken up for discussion.

15.13 To fix the date for holding the next meeting of the Planning and Moultoring Board.

It has been decided to hold the 16th meeting of P&M in the month of March 2023

### VOTE OF THANKS

Prof. E. Kannan conveyed his immense pleasure and thankfulness to the members, especially the external members for taking part in the virtual meting and offering suggestions and inputs on different agenda items. Prof. E. Kannan requested for the suggestions and inputs, of any from the members on the draft Strategic Plan 2021-26 so as to incorporate them appropriately. Prof. E. Kannan thanked all the members for active participation in the discussions and continued support all these years.

With the Vote of thanks, the meeting came to a close.





Date:

Ref. No. VT/R/MN/P&M/21-22/01

16-03-2022

To

All Members of P&M Board

Sir/Madam,

Sub: 15th meeting of the Planning and Monitoring Board to be held on 25.03.2022 - Invitation for attending the meeting - Reg.

I am, by direction, to inform you that according to the decision taken at 14th meeting of the Planning and Monitoring, the Vice Chancellor is pleased to convene 15th meeting of the Planning and Monitoring on 25.03.2022 at 10.00 a.m.

It has been decided to hold the meeting through online Video Conferencing mode with the aid of Microsoft Team application (Which can be downloadable from Google Play Store). The meeting ID and Password will be provided to the Members for joining and participating in the deliberations one day before the commencement of the meeting.

I am, therefore by direction, to request you to kindly make it convenient to participate in the virtual meeting of the Planning and Monitoring Board and offer your valuable suggestions.

Thanking you,

Yours sincerely,

REGISTRAR

E. Kannan Prof. Dr

Encl: Agenda of the 15th meeting of the Planning and Monitoring Board.

No.42, Avadi-Vel Tech Road, Vel Nagar, Avadi, Chennai - 600 062, Tamil Nadu, India.

Landline: +91 44 2684 0262 / 2684 0605

Toll Free: 1800 212 7669 Email: registrar@veltech.edu.in Website: www.veltech.edu.in



# MINUTES OF THE 14<sup>th</sup> MEETING OF THE PLANNING AND MONITORING BOARD

on 22.05.2021 at 10.30 A.M Mode: Video Conference

### **MEMBERS**

 Prof. Dr. S. Salivahanan, Vice Chancellor, Vel Tech. Chairperson

Dr. S. Shanmugavel,
 Formerly Registrar of Anna University,
 Director of National Engineering College,
 Kovilpatti.

External Member

Dr. B. Ramamoorthy,
 Formerly Professor, IIT, Madras
 Advisor (Academic)-PSG Institutions,
 Coimbatore.

External Member

Dr. Ligy Philip,
 Professor, Dept. of Civil Engineering,
 IIT, Madras, Chennai.

External Member

 Dr. A.T. Ravichandran, Dean (Academics), Vel Tech.

Internal Member

Prof. R.S. Valarmathi,
 Dean (Quality Assurance),
 Vel Tech.

Internal Member

Dr. S. Irudhyaraj,
 Dean (SoMC),
 Vel Tech.

Internal Member

8. Prof. M. Sivakumar, Dean (FME), Vel Tech.

Internal Member

Dr. P. Chandrakumar,
 Dean (Industry Relations),
 Vel Tech.

Internal Member

10. Dr. B. Nagalingeswara Raju, Dean (Hostels),Vel Tech. Internal Member

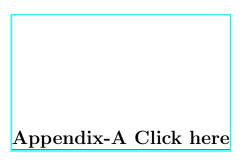
11. Prof. Dr. E. Kannan, Registrar, Vel Tech. Secretary

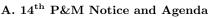
# A. Opening

The Chairperson, in his welcome address, conveyed thankfulness for all the members for attending the meeting. He highlighted certain important academic activities took place recently. He has highlighted the safety and preventing measures taken during the COVID 19 pandemic in detail. The proceeding started after the welcome address of the Chairperson. After the welcome address, the proceedings were started.

14.1 To record the notice of convening 14<sup>th</sup> Meeting of the Planning and Monitoring Board on May 22, 2021.

The meeting notice has been sent to all the members 14.05.2021 with the agenda and a copy of the meeting notice is placed at Appendix-A.



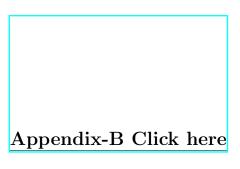




**RESOLVED** to record the Meeting Notice and the Agenda of the 14<sup>th</sup> meeting of the Planning and Monitoring Board.

14.2 To consider the minutes of 13<sup>th</sup> Meeting of the Planning and Monitoring Board held on September 19, 2020.

The minutes of the  $13^{\rm th}$  meeting of the Planning and Monitoring Board are placed at Appendix-B.



B. 13<sup>th</sup> P&M Meeting Minutes



**RESOLVED** to approve and record the minutes of the 13<sup>th</sup> meeting of the Planning and Monitoring Board.

| Table 1: | Action | ${\bf Taken}$ | Report |
|----------|--------|---------------|--------|
|----------|--------|---------------|--------|

| Item.No | Subject                     | Decision                                 | Action Taken                               |  |  |
|---------|-----------------------------|--|--|--|--|
| 13.5    | Conduct of 10 <sup>th</sup> | The conduct of 10 <sup>th</sup> convoca- | 10 <sup>th</sup> Convocation was conducted |  |  |
|         | convocation.                | tion through online mode has             | through online mode.                       |  |  |
|         |                             | been approved due to the present         |  |  |  |
|         |                             | COVID-19 Pandemic.                       |  |  |  |
| 13.11   | Constitution                | Planning and Monitoring                  | The COVID-19 Grievance                     |  |  |
|         | of COVID-                   | Board approved constitution of           | Cell started functioning the               |  |  |
|         | 19 Grievance                | COVID-19 Grievance Cell .                | students were advised to                   |  |  |
|         | Cell to han-                |  | send their Grievance to regis-             |  |  |
|         | dle students                |  | trar@veltech.edu.in for redressal.         |  |  |
|         | grievances.                 |  |  |  |  |

14.3 To review the action taken on the decisions of the previous meeting of Planning and Monitoring Board held on September 19, 2020.

RESOLVED to record the action taken on the decisions of the previous meeting of Planning and Monitoring Board held on September 19, 2020.

14.4 To inform the board about the leave of absence of the members.

All the members of the Planning and Monitoring Board have attended the Meeting.

RESOLVED to record the leave of absence.

- B. Items for Consideration and Approval
- 14.5 To discuss and approve the following policies for the various disciplines to promote the highest standard and guidelines for decision making.
  - 1. Research Policy
  - 2. Innovation and Start up Policy
  - 3. Campus Infrastructure Maintenance Policy
  - 4. IT Policy
  - 1. Research Policy

Dr.S.Sivaperumal, Dean (International Relations) explained the salient features of the Research Policy put up at the Appendix F, with spefical reference to the Policy Contents, Objectives, Committees constituted for Policy making, Financial support for the researchers, Awards Motivational activities etc.





Prof. Jagadeesh Kumar pointed out that fixing of two papers per year may not appropriate and it may be modified as average of two papers per year. He suggested that recognition of International Conferences should be based on the aim and motivation of those conferences. The other suggestion of Prof. Jagadeesh Kumar is to encourage the Industrial type of research, by forming Research based Industrial Cell as in IIT to promote research activities connected with the Industries.

Some of the highlights pointed out by Prof. S.P. Thyagarajan a. There must be student enabling provisions for the research activities.

- b. Formation of Cell like Project Design Support Cell to help the researchers to arrive at a robust plan to bring forth high Quality Research and to guide the researchers as to which journal the papers can be published, citing the importance of publications to be published in the recognized journals which will enhance the image of the Institution as well.
- c. Plagiarism should be checked by specially formed Monitoring committee, headed by the Dean (Academic).
- d. The Quality Evaluation shall be made by the committee with the help of software like RMS (Research Management Software) which will also be helpful for quickening the Administration, Finance, Academic and Quality related activities of this Institution. Apart from RMS, other commercial soft wares are also available for these purposes which can be utilized appropriately.

RESOLVED to approve the Research Policy, incorporating the suggestions made by the members during the discussion.

### 2. Innovation and Start up Policy

Dr.P. Chandrakumar, Dean (R&D) stated that in November 2016, All India Council for Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions.

Dr. P. Chandrakumar, Dean (R&D) explained the salient features of the Innovation Policy under the headings Overall Procedure for students and faculty governance, Eligibility, Admission Procedure, Incubation Support, IPR, Monitoring and Advosory services, Market research and Counselling, Royalty Income sharing, Periodic Assessment in detail as in the Appendix D.

D. Innovation and Start up Policy



Appendix-D Click here

Prof. S.P. Thyagarajan suggested that the Models for adoption, motivating factors, Royalty, Mentoring particulars, areas of the start-up need to be elaborated.

# RESOLVED to approve the Innovation Policy of Vel Tech.

### 3. Campus Infrastructure Maintenance Policy(CIMP)

The Registrar presented the salient features of the Campus Infra Structure & Maintenance Policy which states how the assets of this Institution are maintained effectively. The main objective of the campus maintenance policy is to ensure the maintenance and optimal utilization of various resources for enhancing the experience of learning and other facilities. The Registrar explained the various aspects involved in the Maintenance of the campus assets such as cleaning, Repairing, computer networking, updating stock register, Resource identification & allocation and Executive Monitoring in details as in Appendix E.





RESOLVED to approve the Campus Infrastructure Maintenance Policy.

### 4. I.T. Policy

While presenting the IT Policy, the Registrar stated that this policy establishes Organization wide strategies and responsibilities for protecting the Confidentiality, Integrity, and Availability of the information assets. Over the last ten years, not only active users of the network facilities have increased many folds but also the web-based applications have increased. This is a welcome change in the Campus academic environment. Now, Vel Tech has about 3500 network connections covering more than thirty buildings across the campus and expected to reach 4000 connections very soon.

Computer Maintenance Cell (CMC) is the department that has been given the responsibility of running the intranet & Internet services.CMC is running the Firewall security, Proxy, DHCP, DNS, web and application servers and managing the network of the campus. Vel Tech is getting its Internet bandwidth from Jio. Total bandwidth availability from ISP is 3000 Mbps (leased line) with redundant link.





Prof. S.P. Thyagarajan pointed out that in the I.T Policy under security features, Cyber crime has to be focused on as it becomes an important area for which guidelines and strategies are to be framed to protect against modern cyber criminals.

## RESOLVED to approve the IT Policy.

## D. Items for Ratification

# 14.6 To ratify the academic initiatives taken due to the Covid-19 pandemic based on UGC guidelines.

Prof.A.T.Ravichandran has presented the academic initiatives taken due to the Covid-19 pandemic based on UGC guidelines as detailed below.

Due to the outbreak of COVID-19 pandemic and as per the Guide-lines/Directions of the UGC/State/Central Government all the UG/PG class works have been conducted through Online mode. The following is the initiative taken by the Institution to ensure the continuity of Teaching – Learning, Continuous Internal Assessment and End Semester Examinations through Online mode.

### 1. Revised Academic Calendar

The revised academic calendar for all programs were prepared and circulated.

#### 2. MooC Courses

During the Lockdown period, special permission has been given for the students to take the courses in online platform like Coursera, instead of Value Education Electives and Institute Electives with a ceiling of 4 credits in each category.

3671 students registered in Coursera Courses under Value Education Electives.

4072 students have registered 520 Courses under Institute Elective category.

On submission of the Coursera Certificates after successful completion, students shall be transferred with the credits as per the approval.

Faculty members also encouraged to register for the MooC Courses to sharpen their knowledge in the area of their specialisation. In total 476 faculty members have registered for 2577 courses, in that 449 members have successfully completed 2015 courses.

#### 3. Online Classes

The Online Classes were started from April 6, 2020 as per the UGC/AICTE Guidelines. Every day 4 hours were allotted for online classes and the same has been conducted in the MS Teams. All the departments conducted online classes for all theory-based courses till end of May 2020 as per the revised academic calendar. The online classes were monitored by the HoDs, Deans and top administrators of the Institution to ensure the effective Teaching-Learning Processes.

#### 4. Assessment

Before the Lockdown, Continuous Assessment Tests (CAT) like Unit Test 1 and Mid Term Test 1 were conducted in physical mode. The Unit Test 2 and Mid Term Test 2 were conducted through online mode in the Moodle platform, as per the academic calendar. In the Unit Test 2, students answered Multiple Choice Questions and Open Ended Questions whereas in Mid Term 2 only Open Ended Questions pattern was followed.

### 5. Laboratory Examinations

All Students were provided with SoP for the Laboratory Examinations.

The following methodology was used for conducting the Laboratory examinations of different type of the laboratory course:

- a. The alternative online platform for simulation-based experiments communicated to students by faculty well before examination. Students needs to be ready with online platform / software for the examination. After simulation during exam, students need to explain the procedure to conduct experiment, problem solving, boundary and initial conditions as well. Students also need to explain the results and interpret it.
- b. The data points for the data-based experiments are given along with the question. Students need to solve the problems using measurements of data points and need to explain the procedure of conducting experiments and problem solving. Students also need to explain the results and interpret it.
- c. The process based experiments need to be explained with clear experimental setup, input and output in the experiment. Faculty will provide observations along with the question. Students need to interpret it and explain the results clearly.
- d. The algorithm-based experiments need to be solved by developing block diagram and writing algorithm. Students also need to explain the expected output of the program and interpret it.

Dr.R.Sivaraman, Controller of Examinations, has presented the Examinations initiatives taken due to the Covid-19 pandemic based on UGC guidelines as detailed below. The Semester End Examinations were conducted through online mode for the Regular and Arrear Courses offered at the institution (based on the type of degree programme). Descriptive type answering pattern was adopted for the Foundation, Programme Core, Programme Elective, Allied and Institute Elective category courses. The software platform by the Integrated Learning Solutions Pvt. Ltd., called Wheebox was used to conduct the examinations. The duration of examination was two and a half hours and conducted for 40 marks, with the Part A consisting of 10 questions each carrying '1' mark and Part B consisting of 5 questions with either-or-choice type, each carrying 6 marks.

The students shall write the answers on A4 paper, take a snapshot of the answers written using a mobile phone loaded with QR code scanner and upload the same into the examination portal. The marks scored out of 40 was converted to 60 marks and was added with the continuous internal assessment marks for the award of grades. The details regarding the mode of conduct of online classes, conduct of examinations and academic calendar are placed in the Appendix - G and H.

RESOLVED to record and approve the Academic initiatives taken due to the COVID-19 Pandemic on the basis of UGC Guidelines.



# D. Items for Reporting

# 14.7 To discuss and approve the new courses and facility to be established in the academic year 2021-22.

The Registrar reported that as routine practice, the Institution has submitted application for EOA for the year 2021-22. Due to poor takers some of the courses have been discontinued and three UG Programmes which are to be introduced in the academic year 2021-22 with the intake of 60 students each. They are:

- (1.) Artificial Intelligence and Data Science
- (2.) Artificial Intelligence and Machine Learning.
- (3.) Computer Science and Design.

The Registrar stated that number of seats for UG which is 2220 and for PG which is 326 altogether 2536 have been maintained. The Registrar concluded that the formalities involved in the submission of application of EOA to the AICTE have been completed, and he hoped that the scrutiny committee of AICTE would inform the EOA to this Institution in a week or two.

# E. Conclusion

### 14.8 Any other items with the permission of Chairperson.

No items other than those discussed in the Agenda of the  $14^{\rm th}$  Meeting of the P&M has been taken up for discussion.

# 14.9 To fix the date for holding the next meeting of the Planning and Monitoring Board.

It has been decided to hold the  $15^{\rm th}$  meeting of P&M in the month of March 2023.

### VOTE OF THANKS

Prof. E. Kannan conveyed his immense pleasure and thankfulness to the members, especially the external members for taking part in the virtual meting and offering suggestions and inputs on different agenda items. Prof. E. Kannan requested for the suggestions and inputs, of any from the members on the draft Strategic Plan 2021-26 so as to incorporate them appropriately. Prof. E. Kannan thanked all the members for active participation in the discussions and continued support all these years.

With the Vote of thanks, the meeting came to a close.



# **STRATEGIC PLAN 2021-26**

### The Path Ahead

Strategic Plan 2021–2026 sets out specific targets in every sphere of activity of the Institute academic programmes, research, collaboration with industry, human resource development, entrepreneurship, development of infrastructure and facilities, student life, placement, community outreach, international and alumni relations. These targets have been set after extensive consultation to ensure that they are both ambitious and achievable

The targets will likely be exceeded if the contributions of stakeholder's faculty, staff, students, alumni, international partners and collaborators from industry are aligned and reinforce each other

# VEL TECH RANGARAJAN DR. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY

### STRATEGIC PLAN 2021-26

#### VISION

To create, translate and disseminate frontiers of knowledge embedded with creativity and innovation for a positive transformation of the emerging society.

### **MISSION**

To nurture excellence in teaching, learning, creativity, and research, translate knowledge into practice; foster multidisciplinary research across science, medicine, engineering, technology, and humanities; incubate entrepreneurship; instill integrity and honor; inculcate scholarly leadership towards global competence and growth beyond self in a serene, inclusive and free academic environment.

Vel Tech has already begun many strategic initiatives to establish itself as one of the Top multi-disciplinary and research-led institutions in India. Some of these are highlighted below.

### **Academic Innovations**

The institution offers 18 UG, 19 PG and 15 Ph.D. programmes. It has 10434 students and 743 faculty members. Vel Tech has established CDIO-Engineering Workspaces, which are accessible to promote and stimulate hands-on learning of products, processes, system development, disciplinary knowledge, and social learning. Adoption of Outcome Based Education and Evaluation in-line with the Washington Accord has been implemented. Professors from world-renowned premier institutions and expert members from top-tier industries visit Vel Tech on a regular basis for academic and research related discussions

### Research:

Institute is pro-active in meeting the demands and goals of NEP-2020 in terms of research. Vel Tech's Research fellowships are given to the full time Ph.D. scholars. Financial incentives for the publication of research papers, consultancy works & funded projects to the faculty members, seed fund and 100% contribution to patenting fees, etc., have created a positive impact on research output. The institution has created a conducive physical ambience with four Centers of Excellence and 20 laboratories to carry out research activities in emerging areas. The institution has interaction with 3800 industries and signed

342 MoUs with government organizations, industries/ MNCs, international universities, public sector units and R&D labs.

# Research Highlights So far

- Vel Tech is a multi-disciplinary teaching and research institute pursuing research
  activities in more than 10 thrust research areas such as, Additive Manufacturing,
  Aerodynamics and Propulsion, Artificial Intelligence and Machine Learning, Bio-Nano
  Technology and Bio-Sensors, Composite Materials and Metallurgy, Computational Fluid
  Dynamics, Finite Element Analysis, Image Processing, and Deep Learning, Nanomaterials and Coatings and Unmanned Aerial Vehicles, etc.
- Vel Tech Research Park houses well established National facilities, Centres of Excellence and Cutting - Edge Laboratories to promote research among students and faculty members.
- Vel Tech has received grants worth of Rs 5000+ lakhs from diverse funding agencies such as DST, SERB, DBT, DST-NSTEDB, MeitY, DRDO, ISRO, CSIR, DST-CII-GITA, ICSSR, AICTE, TNSCST, CPRI, MSME, IE and other International Collaborations (Indo Taiwan, Indo France, Indo Canada, Indo Korea).
- In association with various organizations and industries, sophisticated laboratories were established at Research Park. Over 20 research labs are fully functioning at Research park with active Industry-Academia collaboration. To name a few, the Dassault System Lab, Centre for Autonomous System Research, 3D Printing and Scanning Lab, Cyber Security Lab, Artificial Intelligence Lab and Green Synthesis and Novel Bio & Nanomaterials Lab.
- Institute provides funds for filing provisional, complete specifications until the patent is granted. Seed grant is provided to the faculty members to perform preliminary research, procurement of research equipment, software, and other research activities.
- Research team of Vel Tech involved in development of UAVs in association with University of Victoria, Canada and Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea for bridge inspection and water quality monitoring.
   Indo – France research collaboration focused on the development of Electric Bike.
- High-speed bearing test facility developed with GTRE funding of 188 lakhs is well utilized for testing the bearing of HAL, CVRDE, and GE.
- 25 Research Projects worth of more than Rs. 600 lakh funded by DBT, DRDO, DST, ISRO, SERB, Central Power Research Institute, and TNSCST are ongoing.
- IPR cell has filed 141 patents and out of which 14 are granted and 114 are published.

- Vel Tech received Rs. 180+ lakh from Non-Govt. agencies and Rs. 700+ lakh from Govt.
   agencies for pursuit of Research in last five years.
- Institute has more than 171 MOUs with industry and established industry collaborated labs such as WABCO Centre of Excellence (WABCO India), Engine test facility (ARAI, Greaves Cotton, Ashok Leyland and TAFE), High-Speed bearning Test Facility established with the funding from GTRE, DRDO and promotes industry collaborated research with active participation of faculty members and students.
- Institute has 25 ongoing research projects worth Rs.650 lakh, 14 patents were granted and more than 50 funded projects were completed under different funding agencies.
- Knowledge Resource Centre (KRC) houses more than 200 innovation-driven PoCs and research outcomes. It provides a pipeline of innovations required for Vel Tech Technology Business Incubator.
- Vel Tech has strong international collaboration and 166 MoUs were signed between various Universities/research organizations across the globe.

### What we do

- We value curiosity-driven research at VelTech and reward academic independence by providing an encouraging and supportive work environment. We are known for being passionate doers and always link an objective to an action.
- We employ the best quality people from the best institutions and provide them
  academic independence to set them free to carry out their research interests in well
  supported working ambience at VelTech. We encourage research to achieve
  sustainable development goals across the university.
- We can offer more efficient services with stronger faculty strength, and we would always link an objective and action.
- VelTech is so much more than a leading research-intensive university. We are an
  academic university, a university with values and we give importance to student
  experience besides education and research. Subsequently, our Strategy describes
  how we will build on our strengths to do more efficiently in research, education and
  the wider student experience. We believe and expect the best outcomes from our
  university.
- We will work hard for global recognition and to make VelTech a more significant player in our region, and beyond.

### Infrastructure:

The institution has created a conducive physical ambience with four Centers of Excellence and 20 laboratories to carry out research activities in emerging areas. It has an excellent residential facility to 8000 students, faculty accommodation facility and sports facility.

#### Internationalization:

The semester aboard programme with linage of 171 abroad university and XXX students have got opportunity to study their masters in aboard university. Professors from world-renowned premier institutions and expert members from top-tier industries visit Vel Tech on a regular basis for academic and research related discussions.

## **Entrepreneurship and Innovation**

the institution established the Technology Business Incubator in the year 2010 with the aim to promote entrepreneurship to bring the campus born ventures. Vel Tech Technology Incubator is an institutional mechanism which is dedicated to support entrepreneurship, promoting new technological business ideas to become a growth-oriented startup.

We are supporting startups by providing free incubation space with internet connection, mentoring support, networking support, other strategic partner offerings are from Google Cloud credits, Amazon credits, ZOHO Apps for business, RBL/BOB/DBS bank account, Paytm, Resileo Labs, YNOS venture engine, Effitrac, Stanford seed spark, Wadhwani Foundation, Math works, Sri Ramachandra Hospital, Kauvery Hospital, Sales & Marketing, Training, Workshops, Also Facility support - Manufacturing CoE, IT/ITES (Al/ML/DL - DGX - I Platform), E-Waste recycling,3D Printing, PCB Line of Equipment and finally financial seed support.

Vel Tech Technology Incubator has been selected as "NIDHI - Centre of Excellence" catalyzed and Supported by NSTEDB Division, Department of Science and Technology (DST), GOI with funding support to scale up its activities. It has also been approved DST-NIDHI-PRAYAS, SEED SSS, MeitY TIDE 2.0, and SISFS.

Incubation Space – 30,000 Sq.ft, Office Space – 8000 Sq.ft, Thrust area equipment, Space – 64000 Sq.ft, Conference room – 10,000 Sq.ft, Meeting room – 3500 Sq.ft, Our Thrust Area Equipment Space, CoE of manufacturing, E-waste and Plastic waste recycling facility, CoE of Design, Engineering & Manufacturing – Dassault Supported, CoE of Virtual Instrumentation facility – Supported by NI, Additive Manufacturing facility, CDIO Facility – Product development, CoE for Vehicle Control Systems – Supported by Wabco, CoE for SMD & SMT Technologies, CoE for AI, ML & DL – Supported by NVIDIA

Vel tech established various support services to provide handholding support to incubated startups,

Mentoring for prototype or product development or Commercialization

- In-house 3D Printing, PCB Design and fabrication, CNC machines, CDIO lab to support prototype development
- Start-up coach experienced teaching faculty to mentor the product development
- Demo day/ support to incubatees to participate in technical events
- Industry connect to get expert advice

## Functional Support - Legal Advice, H.R. Support, Marketing support

- Associated with Rajasekaran Associates for speedy IP/Legal advice
- IPR policy in place
- Mentoring support from Chennai Patent office/NRDC Visag
- IP Adviser Dr BK Sahu, VIZAG to advice incubated Startups
- Regular events to educate Startups on importance of IP protection

# Networking - Investor, Corporate, Government etc

- Vel Tech TBI established wide industry associations for mentorship, technical support
- Knowledge Partner of EDII TN Voucher Programme
- Associated with FICCI, SPIN, CII, ISBA.
- Partnered with Industry Association ACMA, AIMA, SIDCO & TIDCO

# Funding done by incubator into incubatees

- NIDHI PRAYAS Scheme –funded 28 idea stage startups
- DST SEED Support Scheme supported 13 Startups to the tune of 2.00 Cr
- EDII TN Voucher Programme Funded One Startup worth of 3.5 lakhs
- MeitYTIDE2.0 Scheme funded 4 idea stage startups

### **Ranking and Recognitions**

In recognition of competitive excellence, Vel Tech stands in the top hundred positions in 'NIRF India Ranking' under the engineering category in a row of five years. The Institute has received major awards in the recent past, including Times Higher Education Rankings for the "Young University Rankings 2022", QS Asia University Rankings 2022 and Diamond University Rating awarded by QS I-GAUGE, University of the year 2020 by Higher Education Review, Outstanding Engineering Institute for Research and Innovation in 2020 and Outstanding University in Training and Placement in 2021 by Digital Learning. In ARIIA Ranking (Innovation and Entrepreneurship), the institution bagged the Fifth position out of

800 institutions in 2019 and ranked in Excellent Band where 36 universities are listed out of 2400 institutions in 2021.

### **Outreach Programmes**

On par with national goals regarding social engagement and life skills, the institute is organizing many societal outreach events with NCC, NSS, UBA, SB schemes and student clubs. Also, Hackathons (Software and Hardware), SANDHAI and other prominent events are regularly organized to motivate students in developing their extracurricular activities.

# **VISION 2026**

## Strategic Plan

The strategic plan of this Institution sets goals on major thrust areas of development. It is believed that the collective efforts of all the stakeholders will lead towards the successful achievement of goals of the strategic plan 2021-26. Several initiatives are being taken with the tremendous co-operation and support of the stake holders in order to have a better and amiable external and internal environment.

The Plan envisages focus on four major areas viz.

- 1. Curricular Aspects improvements
  - a. Teaching and Learning
  - b. Open Distance learning
  - c. Holistic and Multi-Disciplinary Education
  - d. Learning Resources
- 2. Research & Development
- 3. Innovation and Entrepreneurship
- 4. Extension Activities
- 5. Infrastructure Development
- 6. Industry Partnerships
- 7. Internationalization
- 8. Ranking and Recognitions

which covers all the transformational changes in the developmental processes as given hereunder:

# Frame work of Vision 2026 and Strategic Plan

## **VISION and MISSION**



Curricular Aspects

 Continous improveme nt in Design of curriculam with Stakeholder s inputs

 Academic Flexibility

 Multiple entry / exit



Ø

Feaching 8

 Improvement in TLP

 ICT adoption for Delivery

Competency

 Delivery of content through industry experts



 Focus to bring more Distance learning courses



•E content development

 Adaption of ABC

·Weigtage of MOOCS/NPTE L courses

 Adaption of Holistic education



& Development

Research

 Research Centric Institution

 Research Proiects/IPR

 Quality Publications

Cutting edge research centres



 Vibrant Innovations and Entrepreneusrhip Innovation **Ecosystem** 

 Incubation promotion

 Atmanirbhar drive

• Focus on Employyabilit v Generation



Extension ACtivities

 Extension activities with NGOS

 Claen India/ AAB

• NCC/NSS & Social Club **ACtivities** 

 Social issues participation

# **Specific Objectives and Targets**



- Industry Associations for enrichment of curriculam. refinement and delivery
- Industry faculty to deliver courses



nternationalization

 International partnership

 Foreign professor appointment

 Students exchange

 Global benchmarking Curriculam



rastructure Development

Digital technology adoption

•ICT enabled Teaching and Learning



anking and Recognitions

 Positioning NIRF top rankings

Global rankings



Disciplinary Education

Holistic and Multi

 Acheiving NEP 2020 goals on Multidisciplinary and interdisciplinary programmes

• Flexible academic programmes

Active Participation and approval



**Board of Studies** 

**Academic Council** 

**Board of Management** 

# **Curriculum Development and Implementation of Academic reforms**

## (Curriculum and Teaching & Learning)

The institution has been adopting interdisciplinary programs in the thrust areas of study in the faculties of Engineering Technology, Law, Management, and Arts and Science, expanding them in a gradual manner and it is hoped that the institution can offer interdisciplinary courses more extensively. Focusing on offering market-oriented interdisciplinary programs at all levels under this facet, will be largely helpful to the students to be aware of setting trends and it enables them to build skill sets.

Falling in line with the recommendations of the National Education Policy (NEP), It has been proposed to establish a separate cell to monitor induction of a number of schools in multi-disciplinary in nature and to modify existing schools, especially the school of Basic Sciences, School of Management and Law to make them as a School of Liberal Studies and to frame modalities and guidelines as how to effectively these programs can be with the support of partner institutions, wherever, necessary. There is also a proposal to offer disciplines such as Health Economics, Data Sciences, Bioinformatics, etc. at this Institution under interdisciplinary facet, in the near future.

It is believed that the Pedagogical innovations and curriculum changes will promote more inter-disciplinary learning by using technology, involved in teaching and learning. The Institution is strongly believing that there should be a transit from the customary learning methodologies to more practical learning approaches facilitating experiential learning as it is felt that this is the need of the hour. Technology reforms such as powered classrooms allowing for innovative pedagogical approaches like (I) flipped classrooms, (ii) MOOCs, (iii) Collaborative learning, etc., will be constituted to promote education delivery towards global standards.

Hybrid learning is termed as the combination of online and offline modes of teaching and learning process. The institution is planning to set up more number of Active Learning spaces (ALSs) in the Institution. By virtue of the experience that this institution had during the COVID 19 pandemic, the faculty members have gained adequate knowledge and experience in the conduct of online classes and preparation of course materials, activities connected with the delivery of online lectures, distribution of course materials, uploading them in you tubes etc. The institution has been establishing a well-furnished media studio

in the department of media studies with an intention of uploading classic course materials, learning guidelines and principles in the national sites like NTPL and Swayam.

The CDIO (Conceive-Design-Implement-Operate) initiative engineering workspaces, established in the University as first of its kind in India, providing the real industry atmosphere to the students to perform all the duties of professional engineers during the entire programmer of their study. The Vel Tech curriculum bench marked internally with CDIO syllabus version, 2,0 fulfils the graduate attribute of National Board of Accreditation (NBA Tier 1) Washington accord and adheres to the guideline of the Choice Based Credit System (CBCS) based flexible curriculum.

The Institution is also re-modeling the curriculum to include components of Research curriculum pattern called Under Graduate Research Opportunities Program (UROP), internships, capstone project or thesis.

The Institution is planning for the Introduction and implementation of short-duration courses of with the duration of less than a year for the working people in pursuit of career growth, by assigning this responsibility to a senior faculty on a standalone basis or in collaboration with industry partners/ international academic institutions.

This institution will go for ABET accreditation for the core engineering programs in its all campuses during the plan period.

The institution has been intensively working out an intensive plan for getting NBA accreditation for all its departments within this plan period and it is also believed that the Institution will get A++ status under NAAC Accreditation.

Vel Tech is planning to establish Centres of Excellence (COE) in areas to improve the quality of research by investing in faculty development, increasing the number of post graduate and doctorate students and extensively building a network of partnerships with leading local and global institutions.

### Learning Resources

Institutional library holdings in terms of books, journals, e-resources and other learning materials including technology-aided learning mechanisms which enable students to acquire information, knowledge and skills required for their study programmes are adequate. A recent development in the field due to availability of digital technologies, is in the functioning of the library which has undergone a drastic change. Automation of library using the ILMS, use of e-journals and books, providing remote access to e-resources in the library have become a matter of necessity. Providing for these and other such

developments as well as utilizing them well are important indicators of the quality of an academic institution.

# Target 1 Emergence as high rated and focused learning institution

- Development of effective curriculum to cater to the industry needs. In consonance with the New Educational Policy
- 2. To Focus on Inter disciplinary and Multidisciplinary programs along with industry oriented online courses leading to graduates
- 3. Increase of students to 15,500 with 5% International students
- 4. Facilitating industrial internships / Visits for enhancing industry-readiness and employability of students.
- 5. ABET accreditation for core engineering programmes
- Introducing new programmes in emerging areas and multi-disciplinary PG programs
- 6. Improving performance of students in competitive and professional examinations
- 7. Increase the number of full time Ph.D. Scholars with stipends

# Progress in Academic reforms would be tracked on the following parameters.

## Table:

| SI.No. | Particulars   | Upto<br>AY<br>2021 -<br>22 | AY<br>2022 -<br>23 | AY<br>2023 -<br>24 | AY<br>2024 -<br>25 | AY<br>2025 -<br>26 | AY<br>2026 -<br>27 |
|--------|---|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1      | Introduction of<br>Multidisciplinary<br>and ODL<br>Programmes | -                          | -                  | 6                  | 8                  | 12                 | 15                 |
| 2      | ABET accreditation for core engineering programmes            | -                          | -                  | 2                  | 3                  | 4                  | 5                  |
| 3      | Students<br>strength  | 10,500                     | 11,500             | 12,500             | 13,500             | 14,500             | 15,500             |

| 4 | No. of<br>Research<br>Scholars to be<br>admitted                             | 565 | 640 | 715 | 790 | 865 | 940 |
|---|--|-----|-----|-----|-----|-----|-----|
| 5 | No. of Scholars to be Awarded  | 137 | 177 | 227 | 287 | 357 | 437 |
| 6 | Introducing new programmes in emerging areas & Multi Disciplinary Programmes | 3   | 6   | 9   | 12  | 15  | 18  |
| 7 | Increase the number of full time Ph.D. Scholars with stipends                | 94  | 124 | 154 | 189 | 224 | 264 |

# Research & Development

Vel Tech has established a Research Park that houses various laboratories that carry out basic and applied research in several core domains and also inter disciplinary domains with active involved of faculty and students.

Some of the thrust areas are - autonomous vehicles, additive manufacturing, waste management through biological treatment, advanced materials, engineering analysis, advanced materials etc. One of the most important features of the research park is the Vel Tech -France Col laboratory dedicated the development of innovative devices and motors for medical and strategic applications.

The research Park is also the harbinger for fostering relations with the University of Victoria and Tamkang University by virtue of which projects under IC IMPACTS and also GITA are jointly carried out by Vel Tech. Vision 2021 envisages a major focus on Research Park with an estimated inflow of 4% international students and more number of MoUs with Industry and International Institution in a span of 5 years. The continued support by DRDO, DST, DAE etc. has enabled the faculty to set up well-equipped research laboratories.

### Research Highlights So far

 Vel Tech is a multi-disciplinary teaching and research institute pursuing research activities in more than 10 thrust research areas such as, Additive Manufacturing, Aerodynamics and Propulsion, Artificial Intelligence and Machine Learning, Bio-Nano Technology and Bio-Sensors, Composite Materials and Metallurgy, Computational Fluid Dynamics, Finite Element Analysis, Image Processing, and Deep Learning, Nanomaterials and Coatings and Unmanned Aerial Vehicles, etc.

- Vel Tech Research Park houses well-established National facilities, Centres of Excellence and Cutting - Edge Laboratories to promote research among students and faculty members.
- Vel Tech has received grants worth of Rs 5000+ lakhs from diverse funding agencies such as DST, SERB, DBT, DST-NSTEDB, MeitY, DRDO, ISRO, CSIR, DST-CII-GITA, ICSSR, AICTE, TNSCST, CPRI, MSME, IE and other International Collaborations (Indo Taiwan, Indo France, Indo Canada, Indo Korea).
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  academic university, a university with values and we give importance to student
  experience besides education and research. Subsequently, our Strategy describes
  how we will build on our strengths to do more efficiently in research, education and
  the wider student experience. We believe and expect the best outcomes from our
  university.
- We will work hard for global recognition and to make VelTech a more significant player in our region, and beyond.

Research Excellence - Goals



### Research & Engagement

We are and we will:

- Deliver an immense quantity of quality global research across all academic departments through existing in-house COEs and always prepared to establish new ones
- Produce and propagate research that has a positive impact on regional, national and international challenges where it benefits society as a whole and helps to establish a valuable economy with a decent physical environment
- Offer a productive research environment with rewards and incentives throughout the year and facilitate an outstanding research-led learning experience to workforces

### **People**

We are and we will:

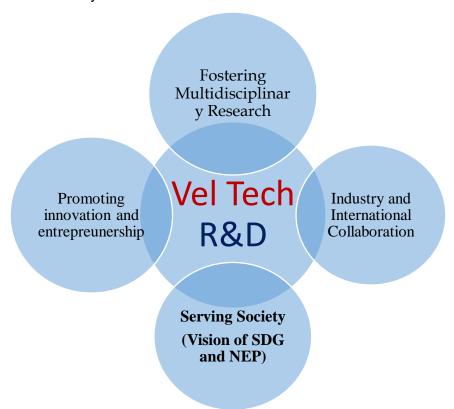
 Strengthen our manpower by steady recruitment and mentoring staff members with the highest quality professional resources.

- Foster job satisfaction, productivity and career advancement routes for employees, and constitute creative teams with colleagues where they can develop their professional expertise
- Safeguard that progressively diverse workforce is treated equally, impartially, and with respect and that all personnel are evidently valued and actively engaged

### **Future Prospects of Research**

Vel Tech has been undertaking research in consonance with the needs of the national and international agencies involved in research and has been successfully carrying many research projects in the multiple disciplines. Hopefully, Vel Tech can handle two hundred plus research projects in the next five years successfully.

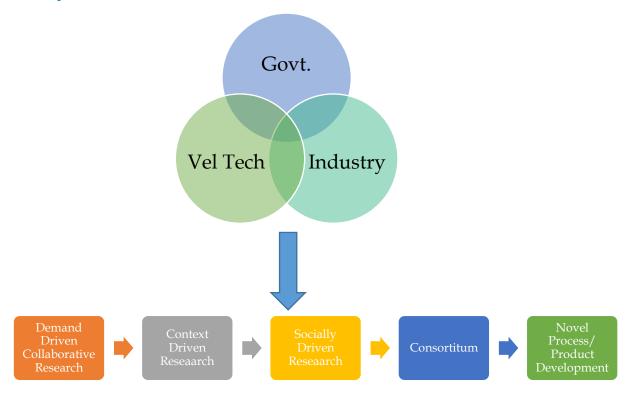
The centres of excellence in partnership with industries such as WABCO, Dassault Systems, National Instruments, IBM etc., have led to specialized facilities with dual benefits of skilling the students in high technology domains and also enabling concerted research. Vel Tech will be setting up Technology Transfer Cell for enhancing commercialization aspects with Industry-Academia Collaboration. The researchers and the faculty members who have interest in multi-disciplinary research are encouraged research under this facet. Vel Tech R & D ecosystem will focus on four main themes



The extramural grants for specific research areas from various funding agencies, industry sponsorships, CSR funds for research, international collaborative research funds would be resourced in Five years to increase the funding of Rs 2000 lakh. The PhD qualified faculty

members will be increased to 80% and number of PhD students would be 1000 in 2026 for promoting high quality research serving to societal needs. The research outcome of the faculty in terms of increase in publications, citations, patents and funded projects will be targeted.

Industry - Academia Collaborative Research



- Focusing on the translational research towards the need of the industry and society by building a well defined process model.
- Marching towards creating center of excellence in the development of bio products, innovative process development, biomedical diagnostics and green energy etc.
- Research of social relevance, which impacts society directly in terms of environment friendly technologies including safe drinking water, sanitation, organic farming, clean energy (solar energy, green fuels etc), disaster management and mitigation through Industrial collaboration.
- Center for functional material classes ranging from semiconductors to polymers and molecular crystals to nanoparticles for the industry needs will be established.
- Getting projects from BIRAC government funding agency in collaboration with industries.
- Extend our research facility for industry experts to pursue PhD in collaboration with our faculty members.

 Creating various domains for the students as per industrial demands, providing solutions, scaleup the industries for validation and implementing the techno economic analysis.

### International Collaborative Research



Progress in Research & Innovation would be tracked on the following parameters

| SI.No. | Particulars                     | Upto<br>Dec-<br>2021 | CY-<br>2022 | CY-<br>2023 | CY-<br>2024 | CY-<br>2025 | CY-<br>2026 |
|--------|---------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|
| 1      | Publications<br>(Scopus)        | 4606                 | 6000        | 7500        | 9000        | 11000       | 13000       |
| 2      | Publications (Web of Science)   | 1907                 | 2500        | 3500        | 4500        | 5500        | 7000        |
| 3      | Citations (Scopus)              | 40321                | 48000       | 56000       | 65000       | 75000       | 85000       |
| 4      | Citations (Web of Science)      | 14347                | 20000       | 25000       | 30000       | 40000       | 50000       |
| 5      | Total Number of Funded Projects | 58                   | 75          | 90          | 110         | 130         | 150         |

| 6  | Funded Projects aims to vision of NEP and SDGs | 5          | 10         | 15      | 20     | 30     | 40     |
|----|--|------------|------------|---------|--------|--------|--------|
| 7  | Industry-Academia Collaborative Research       | 5          | 10         | 15      | 20     | 30     | 40     |
| 8  | International Collaborative Research           | 4          | 6          | 8       | 12     | 16     | 20     |
| 9  | Patents (Application / Grant)                  | 141/<br>14 | 175<br>/20 | 200/ 25 | 225/30 | 250/35 | 275/40 |
| 10 | Commercialization                              | 1          | 5          | 10      | 20     | 35     | 50     |

### Innovations and Entrepreneurship

The Technology Incubator (TBI) sanctioned by DST was promoting innovations and ventures in the area of Waste Management (E-waste / Biowaste / Plastic waste), 3D Printing, Embedded systems / VLSI, Micro Air Vehicle (MAV) Automobiles and Information Technology. TBI fosters and supports technology-based knowledge-driven companies by providing around of help in terms of workspace, access to specialized equipment along with value-added services like find raising, legal services, business planning, and other technical assistance.

Vel Tech TBI (Technology Business Incubator) enables technology embedded and innovation powered start-ups to survive and scale across a wide-spectrum of thrust areas with funding, infrastructure, mentorship, industry networking, resources and training. Vel Tech TBI established with E-waste and Plastic waste management as its thrust area and created national recycling facility of e-waste and plastic-waste management, Bio incubator to support bio technology innovations, 3D Printing facility. It was one of the first institution from India to be a member of StEP (Solving the e-waste problem) instituted by Germany.

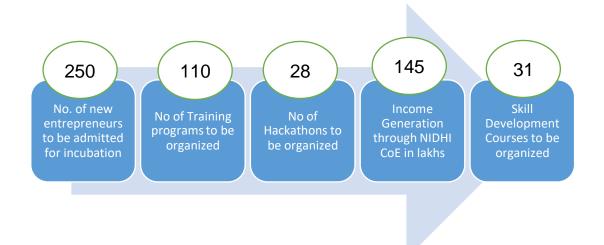
In the year 2015, Department of Science and Technology supported Rs. 2 Cr under DST – Seed Support System. Under this, Vel Tech TBI incubates get financial loan (Convertible debt) up to Rs. 50.00 Lakhs.

In the year 2017, Department of Science and Technology, Ministry of Science and Technology, Govt of India has recognized six existing Technology Business Incubators as Centre of excellence under NIDHI (National Initiative for Developing and Harnessing

Innovations, Vel Tech TBI was recognized as one of the Centre of Excellence based on the performance and thrust area focused and received support of INR 23 Cr. In line with our National Mission "Make in India", Vel Tech TBI has created the state of art facilities such as manufacturing facility with advanced CNC machines, NDT technology for product development & inspection, NVIDIA supported AI, ML, DL & digital services lab to support IT innovations.

The Vel Tech TBI Ecosystem is rich in diversity with startups {Student & Alumni and external}, mentors, investors (Angel and VC's), Trainers, thought leaders in various areas, people from industry bodies, corporate MD's, CXO's, People who assist in company formation (CS Professionals), Chartered Accountants, Industry professionals, various service providers, Lawyers, Technologists, Domain experts in various areas like Retail, Ecommerce, Finance, Insurance, Product building and scaling, Manufacturing, Business Plan experts, Pitching to investors etc.

It is envisioned that the activities of TBI would have a profound influence on young engineering minds and transform them into employees with a positive influence on employment generation on a larger scale in the next 5 years of the strategic plan.



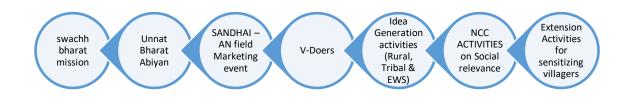
|         | Upto |      |      |      |      |      |
|---------|------|------|------|------|------|------|
| Outcome | Dec  | 2022 | 2023 | 2024 | 2025 | 2026 |
|         | 2021 |      |      |      |      |      |

| No. of new entrepreneurs to be admitted for                   | 226   | 50    | 50    | 50    | 50    | 50    |
|---|-------|-------|-------|-------|-------|-------|
| incubation  |       |       |       |       |       |       |
| No of Training programs to be organized                       | 171   | 186   | 206   | 231   | 256   | 281   |
| No of Hackathons to be organized                              | 12    | 16    | 22    | 28    | 34    | 40    |
| Income Generation through NIDHI CoE in lakhs (Financial Year) | 15.00 | 20.00 | 25.00 | 25.00 | 35.00 | 40.00 |
| Skill Development Courses to be organized                     | 6     | 9     | 14    | 21    | 29    | 37    |

### **Extension Activities**

Learning activities have a visible element for developing sensitivities towards community issues, gender disparities, social inequity etc. and in inculcating values and commitment to the society. Affiliation and interaction with groups or individuals who have an interest in the activities of the institution and the ability to influence the actions, decisions, policies, practices or goals of the organization lead to mutual benefit to both the parties. The processes and strategies inherent in such activities relevantly sensitize students to the social issues and contexts. Sustainable practices of the institution leading to superior performance results in successful outcomes in terms of generating knowledge useful for the learner as well as the community.

Extension also is the aspect of education which emphasizes community services. These are often integrated with curricula as extended opportunities, intended to help, serve, reflect and learn. The curriculum-extension interface has an educational value, especially in rural India.



| Outcome   | Upto<br>AY<br>2021 -<br>22 | AY<br>2022 -<br>23 | AY<br>2023 -<br>24 | AY<br>2024 -<br>25 | AY<br>2025 -<br>26 | AY 2026<br>- 27 |
|---|----------------------------|--------------------|--------------------|--------------------|--------------------|-----------------|
| Extension Activities for sensitizing villagers  | 81                         | 96                 | 116                | 136                | 156                | 176             |
| NCC/ NSS ACTIVITIES on Social relevance   | 120                        | 130                | 145                | 160                | 175                | 190             |
| Activity related to new ideas and improved technologies of practical utility to the rural, tribal and urban privileged and underprivileged people | 8                          | 13                 | 19                 | 27                 | 35                 | 43              |
| V-Doers   | 2                          | 4                  | 7                  | 10                 | 13                 | 16              |
| SANDHAI – AN field<br>Marketing event   | 4                          | 5                  | 6                  | 7                  | 8                  | 9               |
| Unnat Bharat Abhiyan  | 2                          | 4                  | 6                  | 8                  | 10                 | 12              |
| swachh bharat mission   | 3                          | 8                  | 13                 | 18                 | 23                 | 28              |

### **Human Resources and Infra Structure Development**

The Institution is very keen on improving Human resources by recruiting highly qualified faculty at different levels such as Assistant Professors, Associate Professors, and Professors. At Present 45% of faculty in Vel Tech have Ph.D. qualified faculty and in the next five years, it will increase to 80%. The Institution would also focus on increasing the intake of faculty with Ph.D. and recruiting faculty at a senior level – Professors and Associate Professors from diverse and global background to ensure that the faculty blends in world-class curriculum and pedagogy. The institution also takes necessary steps on faculty development and retention strategy to harness its talent.

Keeping in mind, the significance of having a strong infrastructure that supports the innovative teaching and learning environment. formal and informal settings and to foster

a new culture of learning, initiatives are taken to bring forth flipped classrooms, technology-enabled classrooms, etc. to attract students.

A state-of-the-art library/knowledge management system would focus on developing collaborative thinking spaces which would facilitate outside-the-box thinking and provide impetus to innovation.

### **Industry Partnerships & Placements**

Vel Tech Industry relations a team of dedicated faculty members works towards bringing various activities/Partnerships from industry. Vel Tech has a strong Institution-Industry Cell. This office has established Interactions with more than 3119 Industries / Institutes / Organizations and has 178 MoU Signed (45 MoU's are Functional last five years) organizations for various Academic and Research Activities such as Joint Degree Programmes, In-Plant Trainings, Internships, Projects, R&D, Consultancy, Industry Recommended Electives, Curriculum Updates, Corporate Talk, Corporate Tour, Facility Creations, Value Added Courses etc. An inclusive practice of Vel Tech Industry Relations is the Industry-Institution Interaction, Partnership, and Collaboration.

One of the performance parameters that reflect the impact of this institution is providing all required training and coaching for securing employment in the leading companies. Vel Tech has been doing it excellently by having contact with the reputed IT /ITES companies including Audi, Bosch, Caterpillar, HP, MRF, HCL, Rane, Siemens, SAP, TAFE, Titans, TCS, Quest, and many others.

It is hoped that the Institution which is present, offering 80% of employability to the students will be able to provide 150% of employability in the next 5 years under the strategic plan. Some of the key targets of achievements intended in the 5-year Strategic plan are summarized hereunder:

### Target -3: Enhancement of faculty performance and visibility

- Improving the qualification of existing faculty members by deputing them for Postdoctoral Fellowships / Doctoral programs
- 2. Recruiting highly qualified faculty members through Faculty Selection Committee Interview process
- Imparting training to faculty members through participation in industrial training, STTPs, FDPs, workshops, seminars, refresher courses, etc.
- 4. Encouraging faculty to participate in various academic and professional activities (butside Vel Tech) for better visibility and

recognition.

- 5. Deployment of 170 International visiting faculty members
- 6. Maintenance of 1:10 Faculty-Student (FSR) Ratio

### Contribution of Vel Tech Industry Relations

- Makes available the updated database and profile of the companies (Large industries / MNCs /SMEs) and helps each student analyze and choose the company of his specialization/interest for In-Plant Training / Student Projects.
- Facilitates in curriculum improvement by way of periodical feedback and involving industry experts from the industries.
- Organize events such as Hackathon / VISAI / International Conference etc.
   to inculcate a culture of product innovation and a mindset of problem solving.
- Work towards continuous improvement of faculty members by way of Faculty
   Training / Research and Consultancy / Training of employees in Industries.
- Setting up Centre of excellence Facilities in collaboration with Government & Industries to promote Research Activities / Incubation Startups / Skill Development Programme (ASDC) etc.

| Outcome  | Upto<br>AY<br>2021 -<br>22 | AY<br>2022 -<br>23 | AY<br>2023 -<br>24 | AY<br>2024 -<br>25 | AY<br>2025 -<br>26 | AY 2026<br>- 27 |
|--|----------------------------|--------------------|--------------------|--------------------|--------------------|-----------------|
| Specialized Credit Courses delivered by Industry Experts | 52                         | 117                | 187                | 257                | 327                | 397             |
| In-Plant Training Number of Industry                     | 85                         | 185                | 305                | 425                | 565                | 705             |
| The Industry Offered Students Projects                   | 75                         | 155                | 235                | 325                | 425                | 525             |
| New MOU's  | 171                        | 195                | 220                | 245                | 270                | 295             |
| Industry Connected Events                                | 30                         | 35                 | 40                 | 48                 | 56                 | 64              |
| Skill Development<br>Courses                             | 8                          | 10                 | 13                 | 16                 | 19                 | 22              |
| Industry Consultancy Income in lakhs                     | 500                        | 515                | 535                | 555                | 575                | 595             |

### Placement & Training Table:

| SI.No. | Particulars                                | Upto<br>AY<br>2021 -<br>22 | AY<br>2022 -<br>23 | AY<br>2023 -<br>24 | AY<br>2024 -<br>25 | AY<br>2025 -<br>26 | AY<br>2026 -<br>27 |
|--------|--|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1      | No. of Training Activities to be Organized | 27                         | 32                 | 37                 | 42                 | 47                 | 52                 |
| 2      | No of Companies visiting Placement         | 221                        | 250                | 290                | 330                | 380                | 430                |
| 3      | Percentage of Placement Offers             | 138                        | 143                | 148                | 153                | 158                | 163                |

### **Internationalization**

Vel Tech has given immense importance to the development of international partners from several countries such as Germany, Taiwan, USA, Canada, Singapore etc. in the process of strengthening the activities under the following perspectives:

- Student interdisciplinary instructional laboratories
- Joint Research projects like IC IMPACT, Indo Taiwan program
- Semester abroad programs
- International collaboration through broad-based MoUs
- Setting up joint laboratories like Vel Tech Francecol laboratory
- Enabling transformative teaching-learning methodologies like CDIO
- International competitions
- Faculty Exchange
- Student Exchange

Globalization and digitisation bring international knowledge and education to our doorstep. With the proverbial press of a button, our students have access to lectures from all corners of the globe. The international mobility of students and staff has grown immensely in recent decades. Students from all over the world study in Utrecht and international staff are part of our university community. Their knowledge and cultural backgrounds enrich our education and research and their different perspectives add value to the academic debate.

By systematically organizing these activities in a well-planned manner, it is hoped that in the next 5 years, Vel Tech would have more than 170 faculty members from international institutions apart from 5% of the international student strength.

The targets of the Institution under the Strategic Plan 2021-26 are summed up as detailed below:

### Target -4: Expansion of international relations

- 1. Frequent conduct of study abroad programs, internships at Universities / organizations internationally.
- 2. Attracting more international students
- 3. To facilitate interface /internships /projects and inviting foreign faculty/experts for long/short term assignments
- 4. Enhancing Institute collaborations with international institutions
- 5. Preparing for international level accreditation and ranking
- 6. Faculty exchange and student exchange
- 7. Masters Progression, Summer program
- 8. Joint research publication with international experts

### Progress in International relations would be tracked on the following parameters.

| SI.No. | Particulars                | Upto<br>AY<br>2021<br>- 22 | AY<br>2022 -<br>23 | AY<br>2023 -<br>24 | AY<br>2024 -<br>25 | AY<br>2025 -<br>26 | AY<br>2026 -<br>27 |
|--------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1.     | MoU                        | 160                        | 175                | 200                | 220                | 240                | 250                |
| 2.     | Research<br>Internship     | 28                         | 50                 | 75                 | 100                | 130                | 150                |
| 3.     | Summer Program             | 25                         | 35                 | 50                 | 70                 | 95                 | 120                |
| 4.     | Semester Abroad<br>Program | 122                        | 140                | 160                | 185                | 210                | 250                |
| 5.     | Visiting Professor         | 132                        | 152                | 182                | 225                | 275                | 350                |
| 6.     | Masters<br>Progression     | 422                        | 522                | 670                | 800                | 950                | 1200               |
| 7.     | 3 + 2 Program              | -                          | 10                 | 15                 | 20                 | 25                 | 25                 |
| 8.     | 2 + 2 Program              |                            | -                  | 5                  | 10                 | 15                 | 20                 |
| 9.     | 1+1 Program                |                            | -                  | -                  | 5                  | 10                 | 10                 |

| 10. | Faculty Outgoing               | 2   | 5   | 8   | 10  | 15  | 20  |
|-----|--------------------------------|-----|-----|-----|-----|-----|-----|
| 11. | International academic Program | -   | -   | -   | 1   | 2   | 5   |
| 12. | Incoming International student | 88  | 100 | 115 | 130 | 150 | 175 |
| 13. | Abroad Project                 | 122 | 150 | 180 | 225 | 275 | 350 |

### Rankings and Recognitions

To Achieving excellence holistically by 2026 we are marching together to realize our dreams.

- NBA Tier I Accreditation for all eligible UG Engineering programs by 2024
- NBA Tier I Accreditation for the emerging PG Engineering programs by 2025
- ABET Accreditation for core Engineering programs by 2025
- NIRF All India top 75 in Engineering category and top 100 in Overall & University category by 2025
- Top position in Times Higher Education (THE) Word University Ranking, Young University Rankings and Asia University Rankings
- Top position in Quacquarelli Symonds (QS) World University Rankings and Asia University Rankings
- QS Stars University Rating by 2024



# Policies and Procedures

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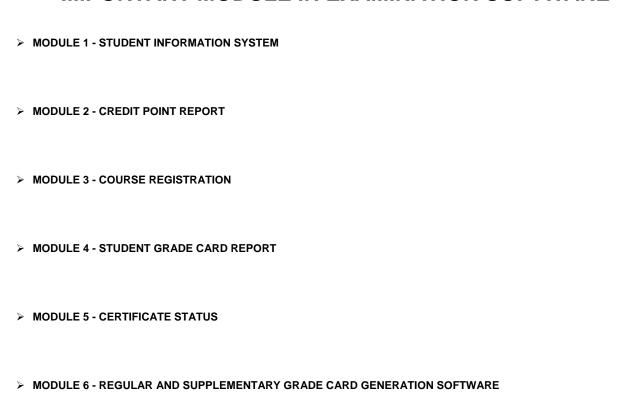
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## I. EXAMINATION MANUAL

# **Examination Software Automation System Manual EXAMINATION SECTION**

(In-house software developed by **Vel Tech Programming Team)** 

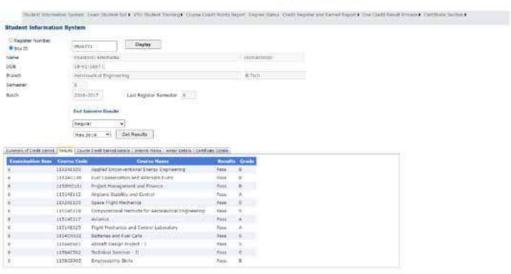
### IMPORTANT MODULE IN EXAMINATION SOFTWARE



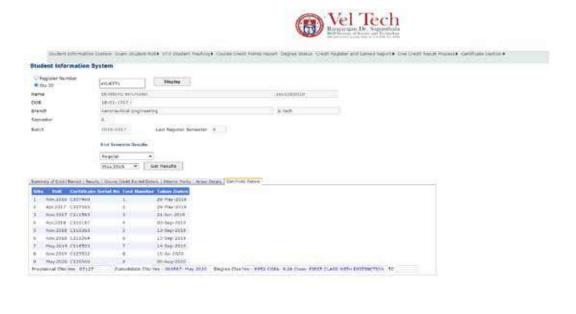


This screen is used to fetch the Summary of Credits Earned details of a student. By providing Student ID or the Register Number and by clicking the "Display" button, we can get the details. The information retrieved will include Date of Birth, Branch of Study, Semester last studied and admitted batch of the student along with the category-wise credits earned by the student.

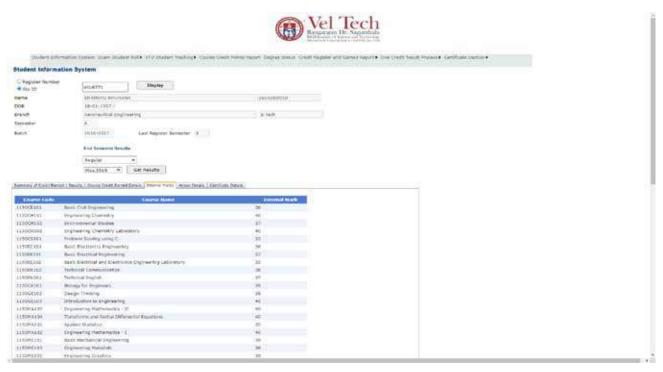




This screen is used to get the results of a student. By providing Student ID or the Register Number and by clicking the "Display" button, then select the "Results Tab" to get the details. We can select to view the 'Regular" or "Supplementary" results, followed by the month and year of the Examination. The course-wise results of the candidate, Pass or Fail status along with the Grades earned is displayed here.



This screen is used to fetch the certificate details of a student. By providing Student ID or the Register Number and by clicking the "Display" button, then select the "Certificate Details Tab" to get the details of certificate generated. The information retrieved will include Year of Registration, certificate serial number and date of printing of certificate.



This screen is used to obtain the Internal Marks of a student. By providing Student ID or the Register Number and by clicking the "Display" button, then select the "Internal Marks Tab" to get the details. Course-wise the internal marks secured by the student are shown here.



The Credit Points of all the UG Courses offered by a Department can be obtained by providing Degree and Department, then by clicking the "Display" button.



The above screen-shot shows the Credit Point Report of all PG Courses Offered by the Department and it can be obtained by providing Degree and Department, then clicking the "Display" button.



The above screenshot shows the Course Registration details of various categories such as Value Education Electives, Independent Learning and Industry Higher Learning. The course offering faculties can register the students for the courses by providing the Year of Registration, Faculty ID, Course code and Student ID.



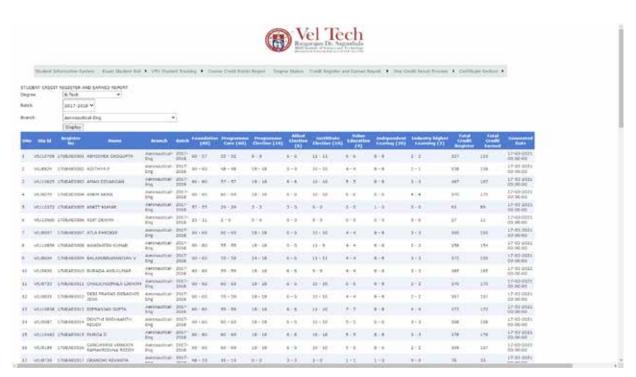
The Examination Marks for the Value Education Electives, Independent Learning and Industry Higher Learning can be entered by providing the information such as Year of Registration, faculty ID, Course code and Student ID



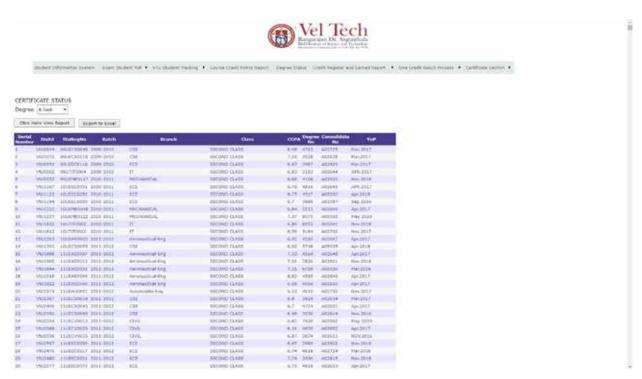
The NAD ID can be printed in the consolidated grade sheet by giving the details such as Student ID No. (VTU No) and NAD ID.



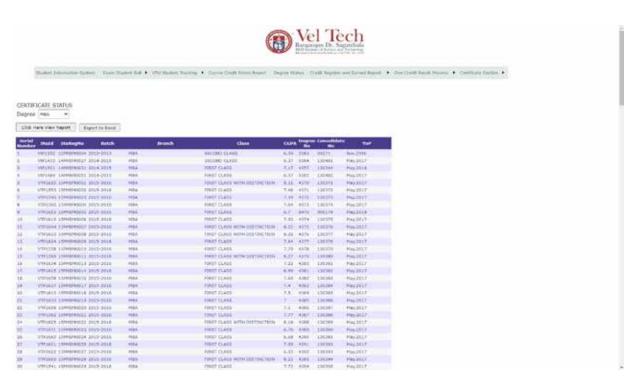
The above screen shot provides the number of Grade cards which have been printed earlier. The said report can be obtained by mentioning the necessary details such as Regulation of study and the required duration (From date and to date). The information retrieved will include Student ID, Student Name, Degree, Branch of Study, Admitted Batch, Certificate Serial No and Exam taken date along with test category such as Regular or Supplementary Exam.



This screen is used to fetch the Student Credit Registered and Earned Report. The total no. of credits registered and earned by the student can be obtained as category-wise and student-wise by providing Degree, batch and branch of study. The information retrieved will also include Student ID, Register No, Name, Branch of Study and Admitted year of the student.



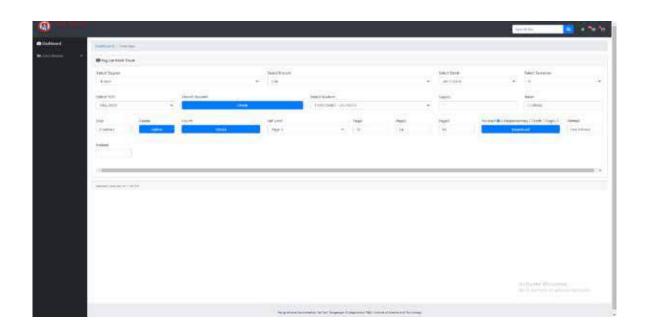
The Certificate details of B.Techprogramme such as CGPA, Division / Class, Year of Pass, Degree Certificate No. and Consolidated Certificate No. can be retrieved by mentioning the degree of study.



The certificate details of M.B.Aprogramme such as CGPA, Division / Class, Year of Pass, Degree Certificate No. and Consolidated Certificate No. can be retrieved by mentioning the degree of study.



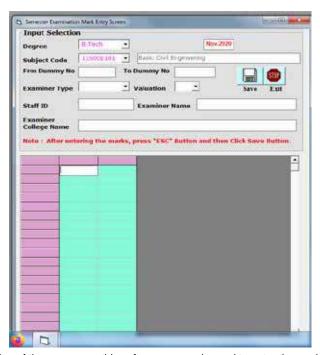
The certificate details of B.Comprogramme such as CGPA, Division / Class, Year of Pass, Degree Certificate No. and Consolidated Certificate No. can be retrieved by mentioning the degree of study.



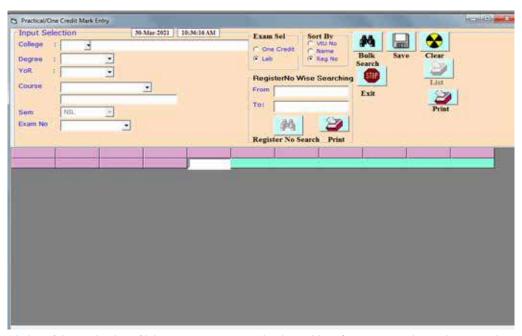
This screen is used to generate the Regular and Supplementary Mark Sheet for all the departments. The Mark Sheet can be generated by providing the details such as Degree, Branch, Batch, Semester, Year of Registration, Student ID and Serial No.



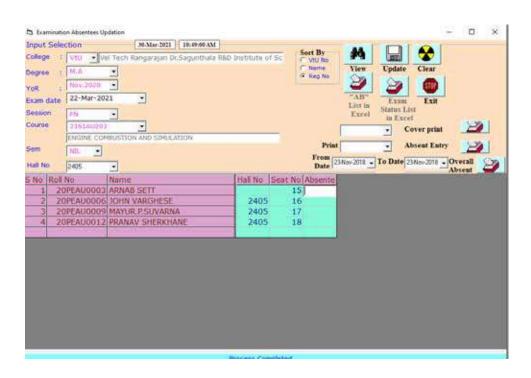
This software screen is used to add the grades and completion status of complementary skill courses.



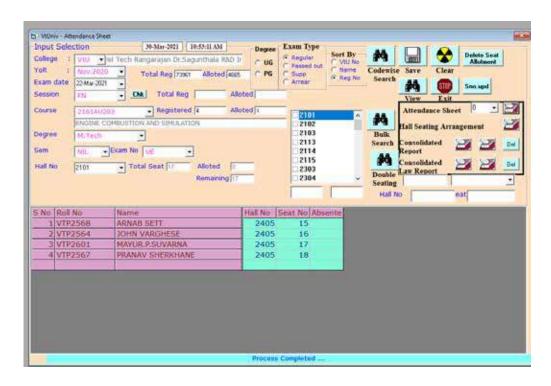
After completion of the evaluation of theory papers, this software screen is used to enter the marks secured by the student based on the dummy number.



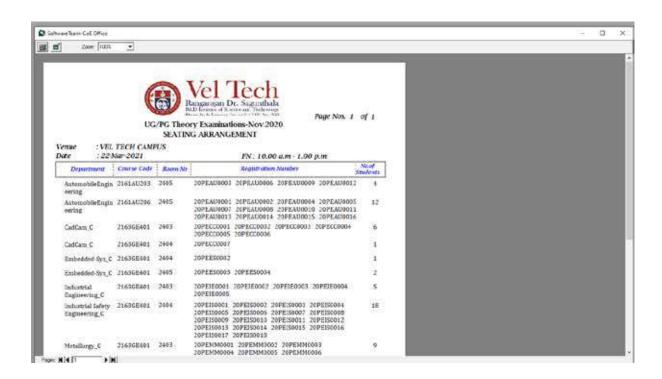
After completion of the evaluation of laboratory course examinations, this software screen is used to enter the marks secured by the student based on the register number



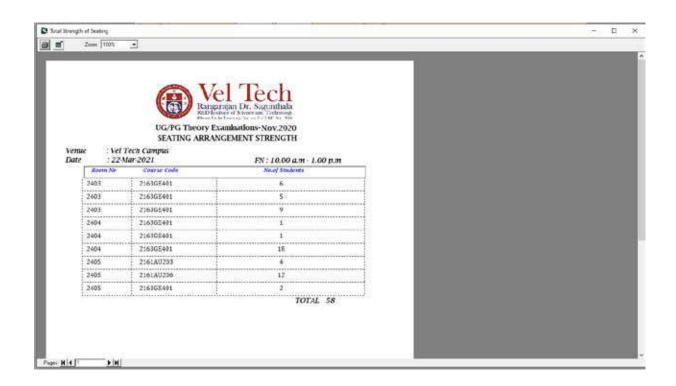
The above displayed software window is used for entering the absentee student details in the semester end examination and accordingly generate a report on total absentees count.



Using the above software window, the examination hall seating shall be assigned to a set of students. The available hall information and along with their seating capacity is already loaded into the database and based on the capacity of the hall, the number of students can vbe allotted.



The report generated on seating arrangement is shown above and this will be published in website as well as on notice boards for information to students.



This is the software generated report on the seating arrangement strength based on hall-wise and course code-wise.



Software screen to print duplicate hall ticket / provisional ID card to the students who have not brought their hall ticket or ID cards on the day of examination



Software screen to generate Provisional Degree Certificate, Consolidated Grade Statement and Degree Certificate



Tallying the 180 credits earned by the student based on the category-wise requirement is done here to assess the eligibility of the student for the award of degree.

### 2. SCHOLARSHIP POLICY

Mahatma Gandhi National Merit Scholarship was instituted in the year 2009 in the name of the Father of our Nation Mahatma Gandhi and this Scholarship Scheme is available for the Meritorious students of our Institution ranging from 100% Scholarship on tuition fee, boarding and loading to 10% concession in tuition fee.

VEL TECH MAHATMA GANDHI NATIONAL MERIT SCHOLARSHIP IN TUITION FEE FOR B.TECH. DEGREE PROGRAMME 100% Scholarship will be awarded to MPC toppers (i.e. in Mathematics, Physics and Chemistry) from each State / Union Territory among admitted Candidates, who have successfully completed the Admission Entrance Test, conducted by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology for B.Tech. programme.

| Scholarship based on Mathematics, Physics and Chemistry aggregate: |  |  |  |
|--|--|--|--|
| Mathematics, Physics and Chemistry (MPC) aggregate                 | Percentage of Scholarship in tuition fee |  |  |
| Above 95%  | 75%                                      |  |  |
| 90 – 94.9%   | 50%                                      |  |  |
| 80 – 89.9%   | 25%                                      |  |  |
| 70 – 79.9%   | 10%                                      |  |  |
| SCHOLARSHIP FOR RANK HOLDERS:                                      |  |  |  |
| Rank Holders   | Percentage of Scholarship in Tuition Fee |  |  |
| Top 20 Ranks   | 75%                                      |  |  |
| Rank 21 – 500  | 50%                                      |  |  |

Minimum Eligibility is 60% in MPC for availing scholarship. Candidate can avail scholarship calculated Based on Mathematics, Physics and Chemistry (MPC) Aggregate / VTUEEE ranking whichever is Higher.

### 3. RESERVATION POLICY

The nstitution has been following the Govt. of Tamil Nadu Reservation Policy. The excerpt from the Tamil Nadu Govt. Reservation Policy with regard to allocation of seats under different backward and SC/ST communities.

- "3. Reservation of seats in private educational institutions. (1) Notwithstanding anything contained in any judgment, decree or order of any Court or other authority, having regard to the social and educational backwardness of the Backward Classes of citizens and the persons belonging to the Scheduled Castes and the Scheduled Tribes who constitute the majority of the total population of the State of Tamil Nadu, the reservation in respect of the annual permitted strength in each branch or faculty for admission into private educational institutions in the State, for the Backward Classes of citizens and for the persons belonging to the Scheduled Castes and the Scheduled Tribes, shall be sixty-nine percent.
- (2) The reservation referred to in sub-section (1) shall, in respect of the persons belonging to the Backward Classes, the Most Backward Classes and Denotified Communities, the Scheduled Castes and the Scheduled Tribes, be as hereunder:-

| (a) | Backward Classes                                 | Thirty per cent.  |
|-----|--|-------------------|
| (b) | Most Backward Classes and Denotified Communities | Twenty per cent.  |
| (c) | Scheduled Castes                                 | Eighteen per cent |
| (d) | Scheduled Tribes                                 | One per cent.     |

**4. Reservations not to be affected.** - Notwithstanding anything contained in section 3, the claims of the students belonging to the Backward Classes of citizens or the Scheduled Castes or the Scheduled Tribes, shall also be considered for the unreserved seats, and where a student belonging to the Backward Classes of citizens or the Scheduled Castes or the Scheduled Tribes, is selected on the basis of merit, the number of seats reserved for the Backward Classes of citizens or for the persons belonging to the Scheduled Castes or the Scheduled Tribes, as the case may be, shall not, in any way, be affected.

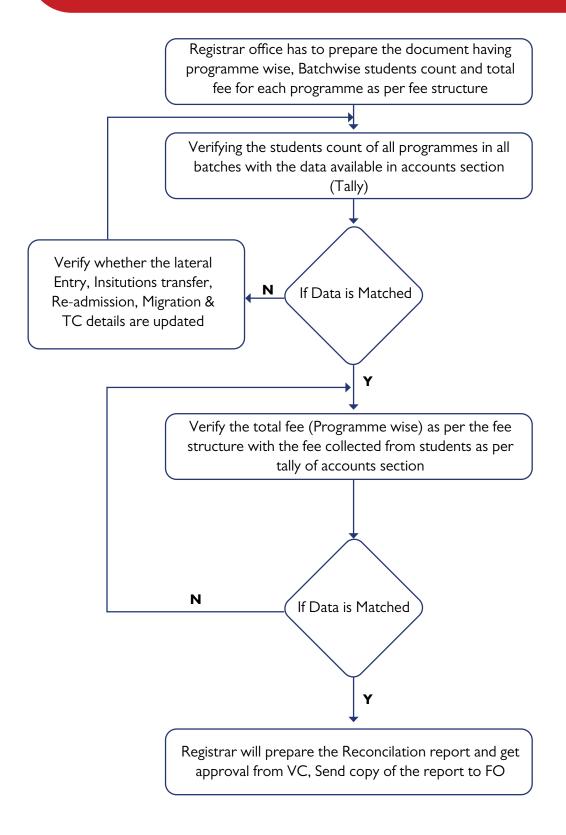
## 4. SOP FOR STUDENT RELATED FEE

## 1. LIST OF STUDENT FEE

- Academic Fee
- 2. Hostel Fee
- 3. Transport Fee
- 4. Re-registration fee
- 5. Late Registration fee
- 6. Extended Registration fee
- Institution Transfer fee 7. (For additional courses)
- Duplicate ID Card Fee 8.
- Arrears Examination Fees
- 10. Transcripts Fee
- 11. Certificate Attestation Fee
- 12. Duplicate Grade Card Fee
- 13. Duplicate Consolidated Grade Card Statement Fee
- 14. Duplicate Degree Certificate Fee
- 15. Duplicate TC / CC/ CCC Fee
- 16. Corrections in Grade Card / TC / CC / CCC Fee

- 17. Corrections in Consolidated Grade Card Statement / Provisional Degree Certificate Fee
- 18. Corrections in Degree Certificate Fee
- 19. Challenge Evaluation Fee
- 22. Photocopy of Answer Scripts Fee
- 21. Re-evaluation of Answer Scripts Fee
- 22. Photocopy with Re-evaluation of Answer Scripts Fee
- 23. Duplicate Hall Ticket Fee
- 24. Temporary Hall Ticket for Examinations Fee
- 25. On Demand Special Examinations Fee
- 26. Postal Charges Fee
- 27. Genuineness Verification Fee
- 28. E-Sanad Fee
- 29. Convocation in Absentia Fee

## 2. FEE RECONCILATION



## 3. FME ADMISSION PROCESS AND RELEASE OF ROLL LIST

### **ADMISSION OFFICE**

- Follow existing admission SOP
- Verification of all original certificates
- Release of admit card after receiving copies of all certificates, original TC and fees
- Preparation of ABC list
- Submission of ABC list with Transfer Certificate to the office of Registrar



### **DEAN-FME OFFICE**

Updating the reported & cancelled students in reconcile with admission office on daily basis till last date of admission



### **REGISTRAR OFFICE**

- Verification of ABC list with original certificates by a committee
- Maintain photocopies of certificates in student's file
- Release of final roll list within a week from the last date of admission



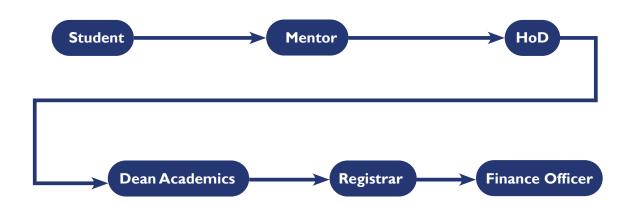
- Dean Academics (DA) (Will circulate to all Academic Deans and HoDs)
- Finance Officer (FO)
- Controller of Examinations (CoE)
- Dean Hostels, Industry Relations, International Relations, Campus to Corporate
- Web Admin

## 4. FINALIZATION OF ROLL LIST FOR SENIOR STUDENTS

### **OFFICE OF THE REGISTRAR ADMISSION** The Office of the Registrar **OFFICE** will release the Migration and Readmission orders based on Preparation of ABC the recommendation from the form and submission Previous office of the Dean Academics. of original Transfer Semester • TC issued student names will certificate and photo Roll List be removed from the Roll List. copies of Mark Sheets The ABC List will be updated (SSLC, HSC, Diploma, and verified with the Lateral Degree) Entry, Institution Transfer and Lateral Institution Re-Admitted Students. Entry Transfer Final roll list will be prepared. Release of the Final Roll List

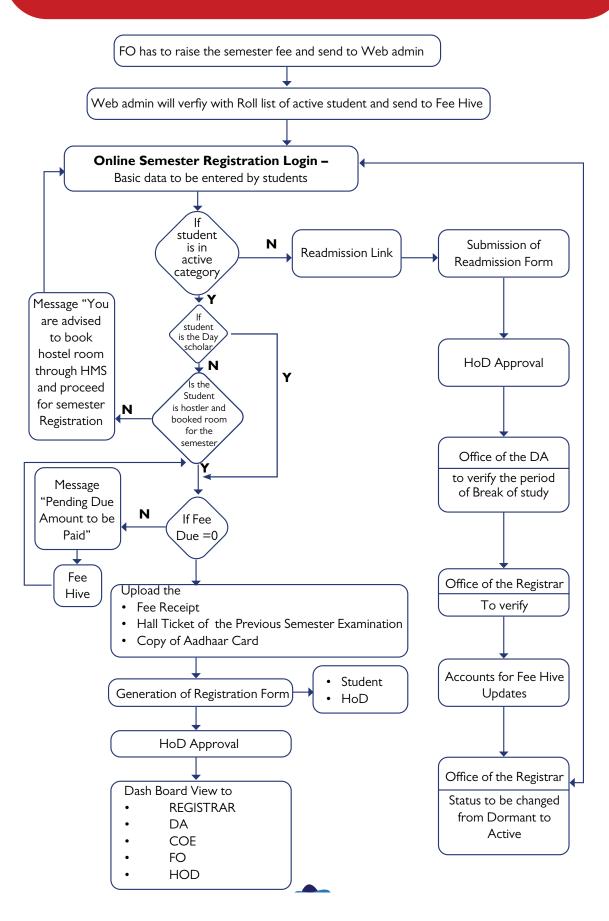
- Dean Academics (will circulate to all Academic Deans and HoDs)
- Finance Officer
- Controller of Examinations
- Dean Hostels, Industry Relations, International Relations, Campus to Corporate
- Web Admin

## 5. SEMESTER REGISTRATION / FEE RAISING

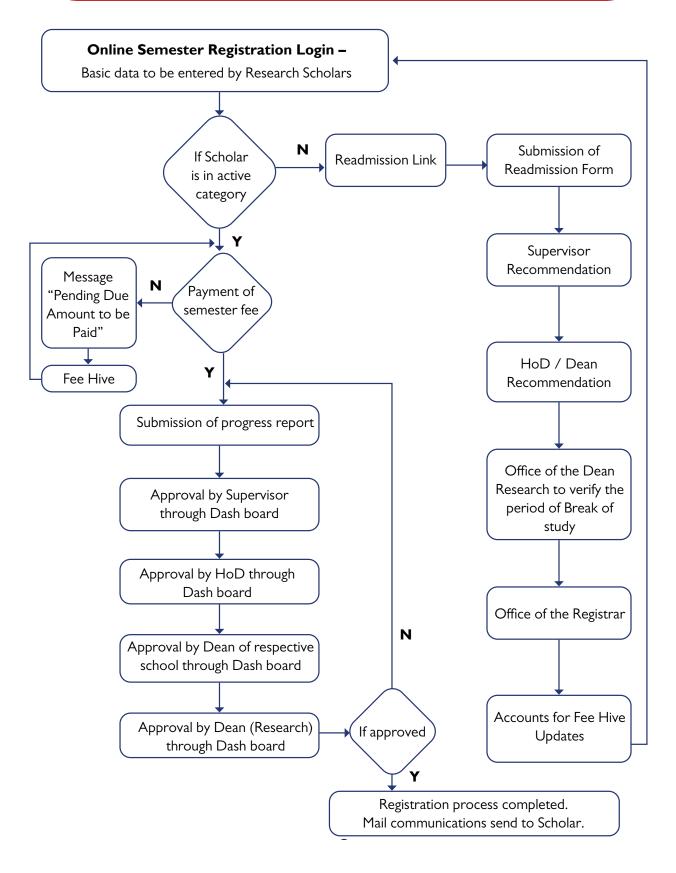


- The semester registration link will be activated in the institution website as per the academic calendar by the office of the Registrar.
- 2. Roll list of the current semester with hostler / dayscholar status to be uploaded in HMS.
- 3. In the summer semester registration, the active students who have booked hostel room through HMS are only permitted to do semester registration. Those Students shall do semester registration after the payment of fees as in V-Fee Hive through online mode only.
- 4. The Student has to submit the duly filled in semester registration form generated through online to the mentor along with the proof of permanent & present address, copy of the fee paid receipt and previous semester hall ticket.
- 5. The mentor will forward the list of registered students along with the above documents to HoD.
- 6. HoDs shall send the list of registered students every day to the office of the Dean Academics.
- 7. Dean Academics shall update the registered students list (B.Tech., M.Tech., Arts, Law, MBA) to the office of Registrar daily till the end of semester registration.
- 8. Office of the Registrar shall verify the semester registered student list against Roll List and update the Active and Dormant student roll list.
- 9. Office of the registrar shall forward the Registered and not Registered students list to the Dean Academics, COE & Finance officer.
- 10. The Finance officer shall reverse the fee dues for the dormant students based on the list received from the office of the registrar.

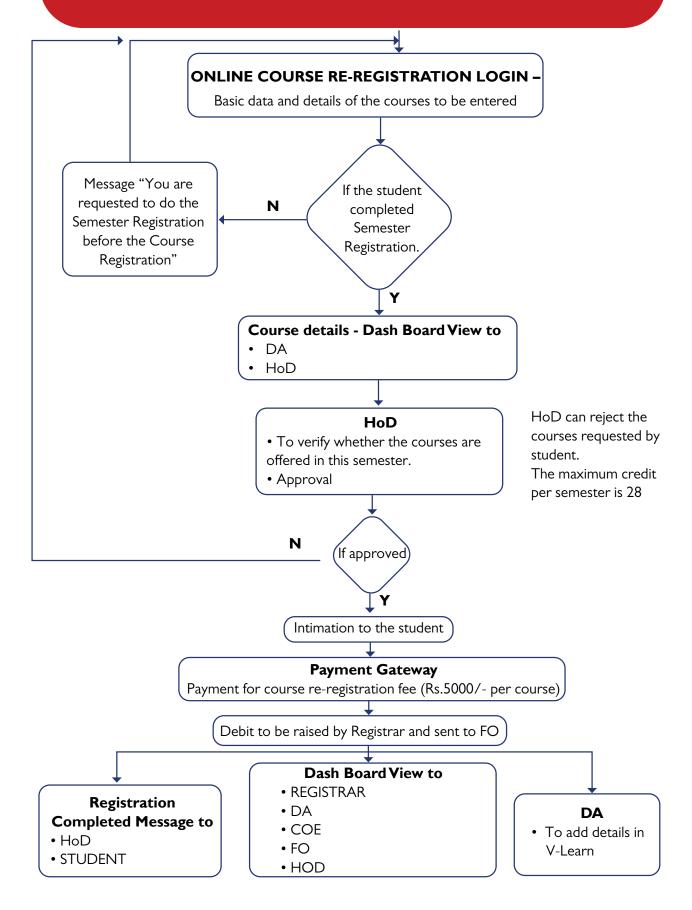
## 6. ONLINE SEMESTER REGISTRATION FOR **UG & PG PROGRAMMES**



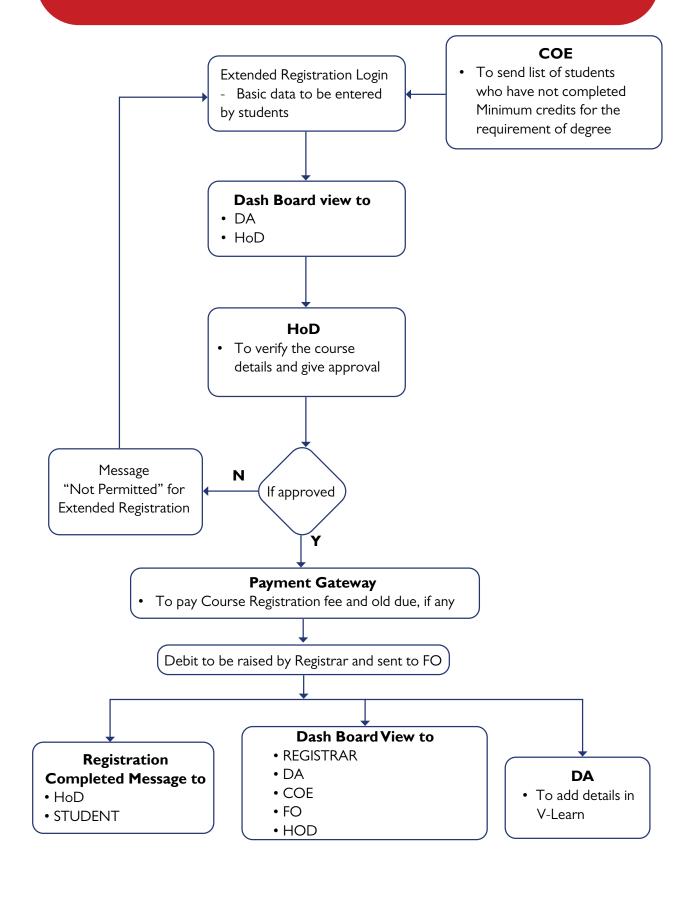
## 7. ONLINE SEMESTER REGISTRATION FOR Ph.D. PROGRAMME



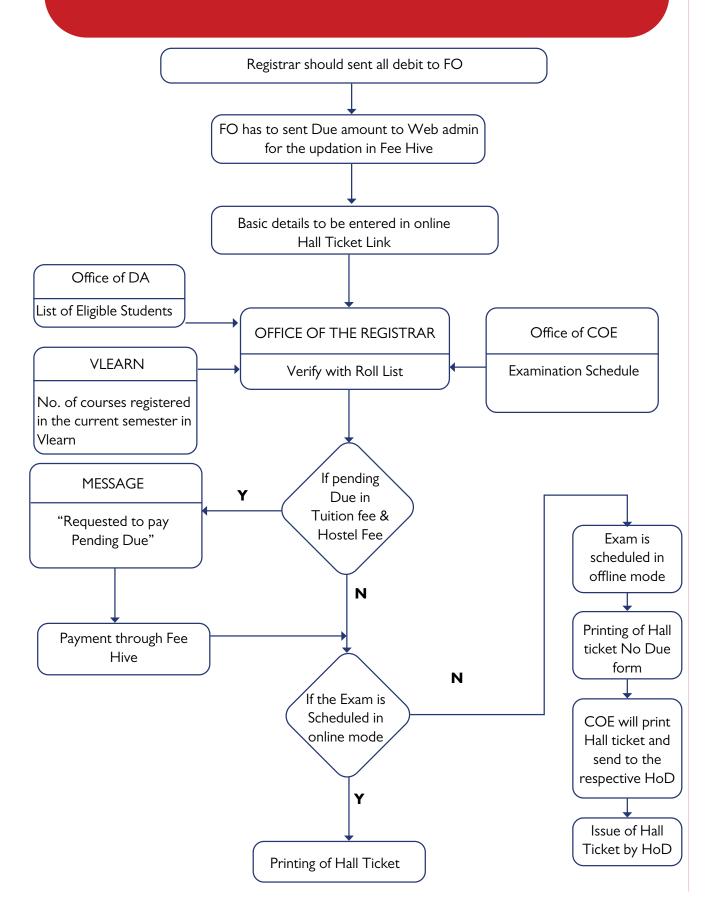
### 8. ONLINE COURSE RE-REGISTRATION



# 9. ONLINE EXTENDED REGISTRATION



## **10. EXAMINATION HALL TICKET GENERATION**



# II. SCHEDULING CUT OFF DATES

| S.No | Description  | SOP   |
|------|--|---|
| 1.   | Last Instruction day (LID).  | As per Academic Calendar.   |
| 2.   | Submission of Student Eligibility list to COE by DA.   | LID + 4 Days.   |
| 3.   | Submission of Internal Assessment marks to COE by DA.  | LID +1 week, but before commencement of End Semester Examination. |
| 4.   | Commencement of End Semester Practical Examinations.   | As per Academic Calendar.   |
| 5.   | Commencement of End Semester Theory Examinations.  | As per Academic Calendar.   |
| 6.   | Commencement of Semester Registration.   | One month before the commencement of class work.                  |
| 7.   | Commencement of Course Registration.   | I Odays before commencement of class work.                        |
| 8.   | Commencement of class work.  | As per Academic Calendar.   |
| 9.   | Submission of Due list to the Office of the Registrar by all Departments.                                      | LID - 3 weeks.  |
| 10.  | Submission of CONDONATION FEE to Registrar by DA.  | LID + 4 days.   |
| 11.  | Submission of Final Due List to FO by Registrar.   | Two days after submission of Due list.                            |
| 12.  | Updation of all Dues of current semester in Tally and Fee Hive by FO.  | 10 days after submission of Due list to FO.                       |
| 13.  | Raising the Tuition Fee for next semester and Condonation fee of current semester in Tally and Fee Hive by FO. | One week before commencement of Semester Registration.            |

### 12. ISSUE OF TRANSFER CERTIFICATE

- ١. The student along with his/her parent shall submit the Transfer Certificate request letter to the HoD through the Mentor. The same shall be forwarded to the Vice Chancellor through the Dean of the respective School & Dean Academics. Upon approval from Vice Chancellor, the letter shall be sent to the Office of Registrar.
- 2. The No-Dues Form will be issued to the student from the Office of Registrar and the student's TC request letter will be forwarded to Account Section as well as Dean-Hostels.
- 3. Role of Accounts Section
  - For either fully attended period or partially attended period, the tuition fee shall a. be collected for all completed semesters
  - b. For unattended period- One Semester Tuition fee will be additionally collected only for professional programmes.
  - Hostel Fee refund will be as per Hostel Stay Refund Norms. c.
  - d. Accounts section must update the due amount in the fee hive. However they must not freeze the student account and regular dues must be raised up to receiving TC сору.
  - Accounts section after updating all, shall forward the TC approved letter to the e. Office of the Registrar with dues mentioned.
- Dean Hostels shall forward the no-dues form to Accounts Section with Biometric Attendance 4. and Hostel Vacation Form by mentioning the dues.
- 5. After the vetting of Accounts Section and Dean Hostels and approval of Management, the student shall be directed by the Office of the Registrar to pay the dues as raised by the Accounts Section.
- 6. After paying the dues, the student shall submit the duly signed no due form to the Office of Registrar (Certificate Section) and shall surrender his/her Hostel Card/Transport Card, Student ID Card
- 7. The TC will be printed and issued to the student and the same will be communicated to concerned Dept., Office of Dean Academics, Controller of Examinations, Dean Hostels, Accounts, Web -Admin, Wifi) to remove from their rolls/records.
- 8. On receipt of the TC issued copy, the Accounts section will update the Ledger as TCR and remove his / her name from the database.

### 13. HOSTEL VACATING

#### **CASE I:** Intensive, credit completed student

- ١. The process starts with the student meeting the mentor, HoD, and Dean of the School concerned with requisition letter, initially the HOD endorses it with appropriate remarks "final semester student, intensive semester student or credit completed by the student "with his endorsement and recommendation for vacating.
- 2. Secondly, the Dean of the School endorses and forwards the letter of the student to Registrar for further processing with his remarks and recommendations.
- 3. The third step is that the Registrar's office, after perusal, forwards it to the Deans (Hostels) with VC's approval for further processing.
- 4. In the meantime, Hostel office prepares vacating form after ensuring the student has vacated on the basis of the authenticated proof of last stay (manual attendance proof), for removal of biometric from attendance & turnstile gate, updates the information to CMC to remove WiFi details and to report it back to accounts. (Once vacating form is generated in online, HMS gets updated and the name of the student is kept in the dormant category in HMS. If vacating form is prepared manually, then it is updated by web admin and CMC).
- 5. The Process ends with the Accounts section processing the caution deposit refund /adjustment.

### **CASE II:** Discontinuing Student (health issues, in disciplinary issues, personal issues etc.)

- ١. The Registrar office sends the Letter of the student for vacating the hostel due to specific health reason to the Dean Hostel with the approval of the VC.
- 2. Vacating form is prepared by the Hostel office, after ensuring that the student has vacated on the basis of the proof of last stay (manual attendance proof) for removal of biometric from attendance & turnstile gate, updates information to CMC to remove WiFi and report the same to accounts. (Once vacating form is generated in online, HMS gets updated. If vacating form is prepared manually, it will be updated to web admin and CMC).
- 3. The Accounts Department prepares the statement of dues for attended period in respect of the student and the same has been updated in Fee Hive.
- 4. The Office of the Registrar, after approval of the VC, sends the details of the amount raised to the Accounts Department to bring the same to the notice of the student concerned.
- 5. Student clears the dues through DD/Cash and to collect the no due form from the Certificate Section.

### **CASE III:** Hosteller wants to stay with parents

١. Student, who is desirous to stay with parents submits a formal request to Mentor, HoD and Dean of

### **HOSTEL VACATING**

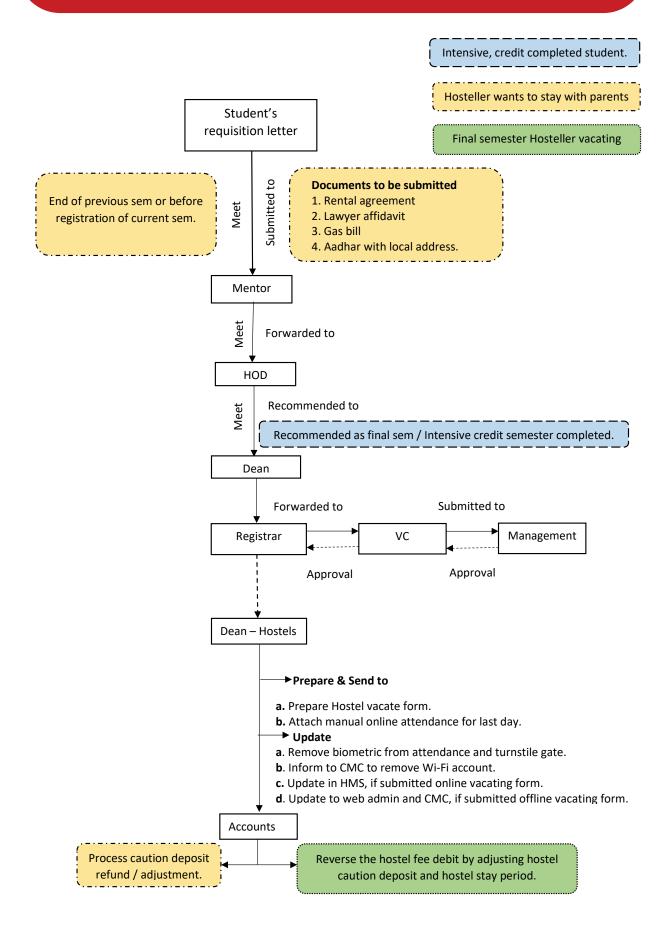
School concerned at the end of previous semester or before registration of the current semester) with the authenticated proof of the documents (a. Rental Agreement b. Affidavit c. Gas bill with local address d. copy of the self attested Aadhar containing the local address) to the Registrar office

- 2. After VC's approval, Dean hostel arranges for generating the vacating form for the period of stay
- 3. After ensuring the student has vacated on the basis of the proof of last stay (manual attendance proof) for removal of biometric from attendance & turnstile gate, updates the information to CMC to remove WiFi details and to report it back to accounts. (Once vacating form is generated through online, HMS gets updated. If vacating form is prepared manually, it will be updated to web admin and CMC).
- 4. Accounts section reverses the mandatory hostel fees debit of the current semester (only for the period of stay) after adjusting the hostel caution deposit.

### **CASE IV: Passed out Final Semester Hosteller Vacating the Hostel**

- ١. Student submits a letter to Mentor for vacating the hostel
- 2. With Mentor recommendation, student meets HOD and Dean of the School
- 3. Dean, after verification, forwards the letter to Registrar with his remarks
- 4. Registrar office forwards it to Dean (Hostels) with VC's approval.
- 5. Hostel office prepares the vacating form, after ensuring student has vacated with the proof of last stay (manual attendance proof) for removal of biometric from attendance& turnstile gate, updates the information to CMC to remove WiFi details and to report it back to accounts. (Once vacating form is generated in online, HMS gets updated. If vacating form is prepared manually, it will be updated to web admin and CMC).
- 6. Accounts section processes caution deposit refund/adjustment.

## **HOSTEL VACATING PROCEDURE**



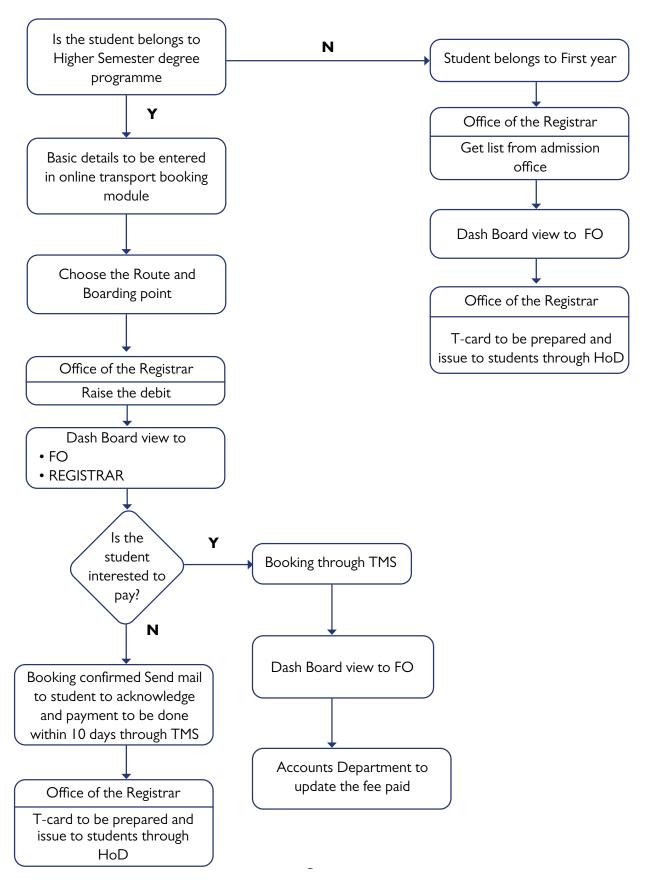
## **HOSTEL VACATING PROCEDURE - DISCONTINUING STUDENT**

### Dues amount informed to students Discontinue requisition letter (DRL) 9 Forwarded to 1 **DRL Approval** Registrar VC **Dues Approval DRL** Approval 7 Dues Forwarded to Dean - Hostels ▶Prepare & Send to a. Prepare vacate form. b. Ensure student vacated hostel. 4 c. Attach online manual attendance of last stay. Update a. Remove biometric from attendance and turnstile gate. **b**. Inform to CMC to remove Wi-Fi account. **c**. Update in HMS, if submitted online vacating form. **d**. Update to web admin and CMC, if submitted offline vacating form. Accounts

6

5 Prepare the dues for attended periods

## 14. STUDENT TRANSPORT BOOKING



### 5. SERVICE RULES AND HR POLICY

#### **CHAPTER 1:**

- 1.1 These rules shall be called as Service Rules for the Vel Tech RangarajanDr.Sagunthala R&D Institute of Science and Technology.
- 1.2 These rules shall be applicable to the employees of the Vel Tech RangarajanDr .Sagunthala R&D Institute of Science and Technology.
- 1.3 These rules shall come in to force with the immediate effect.

#### **CHAPTER 2 – DEFINITIONS**

In the service rules, unless there is anything repugnant to the subject or context,

- 2.1 "Academic Year" means Year beginning with the 1st June of the Calendar year and ending with May 31<sup>st</sup> of the following Calendar year.
- 2.2 "Trust" means Vel Shree R Rangarajan Dr. SagunthalaRangarajan Educational academy(1994).
- 2.3 "University" means Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology situated at #42, Vel Tech-Alamathi Road, Avadi, Chennai-600062.
- 2.4 "Designated Authority" means any person duly authorized by the Management of the Trust or by the Vice chancellor.
- 2.5 "Employees" means all persons in whole time and part time employment of the Trust/University namely Teaching Faculty, Technical Supporting Staff, Administrative Staff and Maintenance Staff, other than the labour force and contingent staff, whether permanent, officiating contract or temporary.
- 2.6 "He" means either he or she.
- 2.7 "Non-Vacation Staff" means all employees other than Vacation Staff.
- 2.8 "Vice chancellor" means the Vice chancellor of Vel Tech RangarajanDr .Sagunthala R&D Institute of Science and Technology.
- 2.9 "Rules" means the Service Rules hereunder.
- 2.10 "Service" includes service as probationer, and period spent on any leave with pay and period spent on deputation, but excludes leave on loss of pay.
- 2.11APPOINTED TO POST: A person is said to be "appointed to a post" when in accordance with these rules or in accordance with the rules applicable at the time, as the case may be, he discharges for the first time the duties of the post or commences the probation, instruction or training prescribed there for.
- 2.12Day means a calendar day beginning and ending at midnight but an absence from headquarters which does not exceed 24 hours is reckoned as one day at whatever hour the absence begins and ends.

- 2.13Duty: A person is said to be "on duty"
  - a. When he is performing the duties of a post to which he is appointed or undergoing the probation, instruction or training prescribed for such post, provided that the performance of such duties is followed by confirmation;
  - b. When he is absent from duty on authorized holidays or on casual leave taken in accordance with instructions regulating such leave issued by the BOM having been on duty immediately before and immediately after such absence; or
  - c. When he is, being a teacher, absent during vacation; or
  - d. When he is, attending conferences of learned societies on deputation by the university;
  - e. While he is, on joining time;
  - f. When he is absent from headquarters or from his routine work attending to other university work not connected with his usual routine to which he has been specifically deputed in his official capacity either by the Vice- chancellor or by the Executive council;
  - g. When he is, absent from headquarters or from his routine work in connection with University duties either remunerative or non- remunerative, provided the duties have been assigned by the Vice- chancellor or by the Board of Management.
- 2.14Honorarium means a recurring or nonrecurring payment granted to an employee of the university as remuneration for special or professional work.
- 2.15Member of a Ministerial staff means a University employee whose duties are entirely clerical and any other class of employees specially defined as such by the Board of Management. The following employees of the university shall be classed as Ministerial staff:
  - i. Additional controllers of examinations.
  - ii. Assistant controllers of Examinations, Assistant Controller of Accounts, Assistant Controller
    - of Finance, Administrative and Accounts, Administrative and Accounts Assistants to Engineer.
  - iii. Secretary to the Vice-chancellor.
  - iv. Public Relation Officer.
  - v. Personal Assistant to Registrar.
  - vi. Managers in the Hostels.
  - vii. Statistical Assistant.
  - viii. Senior assistants, senior assistant accountants.
  - ix. Senior assistant, Stenographers.
  - x. Junior assistants, stores clerks, store keepers, cashier.
  - xi. Typists and stenotypists.
  - xii. Data entry operator.

- xiii. Technical assistant (library).
- xiv. Telephone operators.
- xv. Record assistants.
- 2.16Officiate: A university employee officials in a post when he performs the duties of a post on which another person holds alien. The Board of Management may, if it thinks fit, appoint an employee to officiate in vacant post on which another employee holds a lien.
- 2.17Permanent post means a post carrying a definite rate of pay sanctioned without limit of time.
- 2.18Teachers of the university means teacher appointed by the university to give instruction or guide research in the university and constituent colleges.
- 2.19Temporary post means a post carrying a definite rate of pay sanctioned for a limited time.
- 2.20Tenure post means a permanent post which an individual employee may not hold for more than a limited period.
- 2.21Travelling allowance means all allowances granted to an employee to cover the expenses which he incurs in travelling in the interests of the university or on university business.
- 2.22Transfer from one post to another: The appointing authority may transfer a university employee from one post to another.
- 2.23Provident Fund: Every full-time employee of the university holding a permanent appointment, become a depositor in the university provident fund scheme in force from time to time.
  - A. Teachers who have retired from government service and are appointed in the university shall not be eligible to become depositors to the provident fund.
  - B. Every full-time employee including the registrar and teachers of the university except the vice-chancellor, on confirmation shall, as a condition of service become a depositor to the university contributory provident fund scheme in force from time to time.
- 2.24Work other than that of the office held by an employee:
- a) Remunerative: No full time employee of the university shall undertake any remunerative work without the previous permission of the Board of management or the vice-chancellor.
  - Exception: i) In the case of teachers, the Vice-chancellor may grant permission.
  - ii) No permission is required for publications embodying one's researches or books of university standard.
- b) Honorary: No full-time employee of the university shall undertake any honorary work without the previous sanction of the vice-chancellor.
- 2.25Probation:

- i) No person shall be eligible for appointment as a permanent member of the university service without being on probation for the period prescribed by the rules governing appointment thereto or in the order of appointment.
- ii) Suspension or termination of Probation:
- a) Where the rules prescribe a period of probation for the appointment of a full member of the staff, the appointing authority may at any time before the expiry of such period.
  - i) suspend the probation of probationer and discharge him from service for want of a post; or
  - ii) At its discretion, by order, terminate the probation of a probationer and discharge him from service without assigning reasons.

#### b)Extension of Probation:

- i) If within period of probation a probationer fails to acquire the special qualifications or to pass the special tests, if any, prescribed in the rules or in the order of appointment or serve the period of probation satisfactorily, the appointing authority shall, by order, discharge him from service unless the period of probation is extended being granted for one year at a time.
- ii) Any delay in the issue of an order discharging a probationer shall not entitle him to be deemed to have satisfactorily completed his probation.

### 2.26Seniority:

- a) The seniority of an employee in a grade shall, unless he has been reduce to a lower rank as a punishment, be determined by the date of his first appointment to such grade. If any portion of the service of such person does not towards probation under these rules, his seniority shall be determined by the date of commencement of his service which counts towards probation.
- b) The appointing authority any at the time of passing an order appointing two or more persons simultaneously to a grade, fix the order of preference among them, and where such order has been fixed, seniority shall be determined in accordance with it.
- c) Where the holder any post in a grade is reduced to a lower grade, he shall be placed at the top of the letter unless the authority ordering such reduction directs that he shall take rank in such lower grade next below any specified member thereof.

#### 2.27Promotion:

a) No member of the university service shall be eligible for promotion from the post to which he was appointed unless he has satisfactorily completed his probation in that post. b) All promotions shall be made on grounds of merit and ability, seniority being considered only where the merit and ability are approximately equal.

#### **CHAPTER 3 – RECRUITMENT OF UNIVERSITY TEACHERS**

#### 3.1 SCREENING

- 3.1.1 Recruitment is normally done twice in a year during April and November.
- 3.1.2 The number of Vacancies in the different cadres shall be communicated by the HOD with resolution of Departmental committee based on the student strength / existing faculty / resignations or terminations of staff members, to the management for information and approval.
- 3.1.3 Vacancies shall be advertised by HR through newspapers and university website.
- 3.14 Screening of applications shall be done by the respective Screening Committee and forwarded to selection committee.
- 3.1.5 HR will coordinate the entire process of conducting the interview with knowledge of the Registrar.
- 3.1.6 The applications received will be short-listed based on qualification and experience and the short-listed candidates will be called for personal interview and selection will be made on merit.
- 3.1.7 Direct interview will be conducted. The Selection Committee shall be constituted by the Vice chancellor as per the guidelines approved by the BOM.

#### 3.2 SELECTION COMMITTEE

**Board of Management** delegates its power to **Vice Chancellor** for constituting the Selection Committee for the appointment of Professors, Associate Professors and Assistant Professors. The following selection Committee has been constituted:

### **For Appointment of Professors:**

- a) Vice Chancellor- Chairman
- b) A person nominated by the Chancellor
- c) Dean of Faculty / Head of the Department / Chairman, Board of Studies, provided he / she is a Professor.
- d) Three external experts nominated by the Vice Chancellor out of which atleasttwo experts should present.
- e) Registrar- Member Secretary

#### For Appointment of Associate Professors:

- a) Vice Chancellor- Chairman
- b) A person nominated by the Chancellor

- c) Dean of Faculty / Head of the Department / Chairman, Board of Studies, provided he / she is a Professor or Associate Professor.
- d) Two external experts nominated by the Vice Chancellor.
- e) Registrar- Member Secretary

### **For Appointment of Assistant Professors:**

- a) Vice Chancellor- Chairman
- b) Dean of Faculty / Head of the Department / Chairman, Board of Studies,.
- c) One external experts nominated by the Vice Chancellor
- d) Registrar- Member Secretary.

#### 3.3 PAY FIXATION

- 3.3.1 Pay for the selected candidates shall be fixed by the Selection Committee as per the UGC Sixth pay commission norms for the respective post, and as approved by the Board of Management based upon the qualification and experience of the candidate and other achievements.
- 3.3.2 Higher Pay Packages for exceptionally meritorious and well experienced candidates will be fixed by the Selection Committee subject to the approval of the Vice Chancellor.

**Assistant Professor** Rs.15600-39100+AGP Rs.**6000** Rs.37400-67000+ AGP Rs.9000 Associate Professor Professor Rs.37400-67000 + AGP Rs.10000

#### 3.4 PROMOTION POLICY:

**3.4.1** Faculty who are eligible for promotion as associate / professor may apply to the regular selection committee. The selection committee may consider and promote based on the criteria mentioned.

### PROMOTION CRITERIA

- > Eligibility
- > Experience as per AICTE Norms
- > Seniority
- Additional Qualification Obtained
- Dedication
- Research Publications
- Participations in Faculty Development Programs

#### CHAPTER 4 - RULES AND GUIDELINES FOR THE TEACHING STAFF

**4.1 Hours of work:** The regular working hours for faculty members shall be 7:30 AM to 3:45 PM / 8:30AM to 4:45PM with a lunch break of one hour. Depending upon the exigencies of the work, staff members concerned are expected to be available beyond the office hours indicated above. 1st& 3<sup>rd</sup>Saturdays and all Sundays are normal holidays in a month.

- **4.2 Attendance:** All staff members are required to record their attendance through biometric provided at the Dean's Office in the morning when they come in and in the evening when they go out of college. A maximum of two leave in a calendar month are allowed.
- **4.3 Dress Code:** All male members of the staff are required to wear full trousers with full-sleeved shirts tucked in, with tie and are expected to be in shoes & uniform supplied to all male faculty. The lady members of the staff are required to be dressed in saree. All have to wear the ID card conspicuously around the neck, in a manner readable by the others.

#### CHAPTER 5-RESPONSIBILITIES OF THE VICE-CHANCELLOR

- 5.1 Providing leadership to the University.
- 5.2 Ensuring efficient management of the educational and administrative affairs of the University, including the management of the University's assets, finances, facilities and other resources.
- 5.3 He shall be responsible for strategic planning and policy development of the University.
- 5.4 Addressing quality management, quality research, quality human capital, quality teaching and learning, international linkages, quality infrastructure, and university ranking.
- 5.5 He shall exercise all such powers and functions vested in him / her under the various provisions of the MOA.
- 5.6 In addition, he/she shall exercise such powers and functions vested in or delegated to him / her by the various authorities of the University.
- 5.7 The Vice-Chancellor shall exercise and discharge such powers and duties as are conferred on him / her under the Statues, Ordinances and Regulations of the University.
- 5.8 The Vice-Chancellor may delegate any of his powers or duties to any Officer of the University.
- 5.9 The Vice-Chancellor shall have the power to inspect all institutions of the University.
- 5.10 The Vice-Chancellor shall have power to institute an enquiry in respect of any matter concerning the University.
- 5.11 All proposals which require the sanction of the Board of Management shall be submitted to the Vice-Chancellor for his consideration.
- 5.12 The Vice-Chancellor shall have the power to invite eminent persons to deliver Endowment/Extension Lectures and to sanction their remuneration.
- 5.13 The vice chancellor shall have the power to depute employees of the University to attend to Seminars / Conferences or Workshops, etc. within India and to sanction the TA, DA, Registration Fee, etc.
- 5.14 The vice chancellor shall have the power to depute employee of the University to attend to any work connected with the University and to sanction their TA, DA., etc.
- 5.15 The Vice-Chancellor shall have the power to decide all matters relating to Scholarships, Fellowships and Free ships instituted by the University.
- 5.16 The vice chancellor shall have the power to transfer the administrative officers from one

- office / Branch / Wing. Department to the other.
- 5.17 The Vice-Chancellor shall have the power to order retirement of employees of the University on attaining the age of superannuation and shall have the power to sanction their Gratuity in accordance with the rules in force.
- 5.18 The vice chancellor shall have the power to sanction the installation of Telephones, Computers, Inter Communication systems, etc. at residences of officers, in the offices and institutions of the University.
- 5.19 The vice chancellor shall have the power to grant permission to the employees of the University for attending meetings of the committees constituted by the Government, UGC or otherPublic Bodies and to treat such absence as on Other Duty.
- 5.20 The vice chancellor shall have the power to appoint Paper Setters, Examiners, Adjudicators, Experts from the recommended panels received from the Boards of Studies and to publish the results of the University Examination after evaluation.
- 5.21 The vice chancellor shall have the power to appoint committees on any matter relating to the University or its Colleges and to sanction appropriate honorarium to any of the members of the Committee.
- 5.22 The Vice-Chancellor shall be the Principal executive officer of the University and shall exercise general supervision and control over the affairs of the University and shall be mainly responsible for implementation of the decisions of all authorities of the University.
- 5.23 The Vice-Chancellor shall be Ex-Officio Chairman of the Board of Management, the Academic Council, the Finance Committee, the Planning & Monitoring Board and Selection Committees.
- 5.24 The Vice-Chancellor shall have the power to convene or cause to be convened meeting of the various authorities of the University.
- 5.25 The Vice-Chancellor may, if he /she is of the opinion that immediate action is called for on any matter, exercise any power conferred upon any authority of the University under the Memorandum of Association, Regulations, Rules and Bye-Laws and take such action or proceed to take such action and shall report to the authority concerned on the action taken by him / her on such matters.

Provided that if the authority concerned is of the opinion that such action ought not to have been taken, it may refer the matter to the Chancellor whose decision thereon shall be final.

Provided further that if any person in service of the Deemed University is aggrieved by the action taken by the Vice-Chancellor, he/she shall have the right to appeal against such decision to the Board of Management within 30 days from the date on which such action is communicated to him/her and thereupon the Board of Management shall call the subject in a subsequent meeting and may confirm, modify or reverse the action taken by the Vice-Chancellor.

- 5.26 It Shall be the duty of the Vice-Chancellor to ensure that the Memorandum of Association, Regulation, Rules and Bye-Laws of the Deemed University are duly observed and implemented and he/she shall have all the necessary powers in this regard.
- 5.28All powers relating to the proper maintenance of discipline of the Deemed University shall be vested in the Vice-Chancellor.
- 5.29 The Vice-Chancellor shall have the power to re-delegate some of his powers to any of his/her subordinate officers with the concurrence and approval of the Board of Management.
- 5.30The Vice-Chancellor shall exercise all other powers as may be delegated to him/her by the Board of Management.
- 5.31The Vice-Chancellor shall exercise such other powers and perform such other functions as may be prescribed by the Rules and Bye-Laws.
- 5.32The Vice-Chancellor shall report to the Chancellor.

#### CHAPTER 6-RESPONSIBILITIES OF REGISTRAR

- 6.1 The registrar shall act as Secretary of the Academic Senate, and the Board of management attend the meetings of these bodies and keep minutes of proceedings of such meetings.
- 6.2 He shall issue under direction of the Vice-chancellor all Council, Faculties, Boards of studies, Boards of Examiners, and any committees thereof.
- 6.3 The Registrar shall act as Secretary of apex Bodies and responsible for Preparation of the agenda recording the minutes of the meetings of the apex bodies and follow up actions.
- 6.4 Establishment Appointment, Joining, provision of benefits and facilities, leaves, disciplinary actions, resignations, enquiry committee, etc.,
- 6.5 Ensuring the adherence of University Rules and Regulations.
- 6.6 Human Resources Development of all Non-Teaching Ministerial staff and employees below them. This includes recruitment, training, Placement promotions and incentives.
- 6.7 Legal Matters: Academic, Non academic and estate related.
- 6.8 To represent the Deemed University in suits or proceeding by or against the Deemed University, sign powers of attorney and perform pleadings or depute his/her representatives for this purpose.
- 6.9 Financial Matters to be handled with the help of Finance Officer.

Bank Accounts.

Receipt of Money; Collection of Fees; Payment of Bills

Preparation / Monitoring of Budget

Preparation of Balance Sheet and Income & Expenditure Account

Salary – Preparation & Disbursement, Tax Deduction and Deposition

Internal and Statutory Audit.

- 6.10 To be custodian of the records and the funds and such other property of the Deemed University as the Board of Management may commit to his/her charge.
- 6.11 To conduct the official correspondence on behalf of the authorities of the Deemed University.
- 6.12 To extend necessary support to Director of Evaluation / Controller of Examinations in conduct of University Examination.
- 6.13 To enter into agreement, sign documents and authenticate records on behalf of the Deemed University.
- 6.14 To safeguard the movable and immovable assets of the University.
- 6.15 To perform such other duties as may be specified in the Rules and Bye- Laws or as may be assigned by the Board of management or the Vice- Chancellor from time to time.
- 6.16 Media and Public relations related to the University.
- 6.17 He shall, on application previously made for the purpose of fixing a convenient hour, arrange that any member for the purpose of fixing a convenient hour, arrange that any member of the academic Senate, of the Board of Management or of a Faculty, shall have access to the proceedings of the academic senate, Board of management, or the Faculty respectively, and to any documents connected with such proceedings.
- 6.18 He shall realize and receive all grants or other moneys due to the University from whichever source that may be and he shall give receipts of discharge to all payments to the University.
- 6.19 He shall perform such other work as may from time to time be prescribed by the Board of Management and render such assistance as may be desired by the Vice-chancellor in the performance of his official duties.

#### CHAPTER 7 RESPONSIBILITIES OF DIRECTOR-ACADEMICS

- The vice-chancellor will appoint/nominate one senior professor as the Director-Academics. 7.1
- 7.2 He shall be assisted by a deputy director nominated by the Vice-chancellor from among the teaching faculty for a specific period.
- 7.3 Director-Academics shall look after the academic regulations relating to all courses of study offered by the university.
- 7.4 He shall arrange the Board of Studies meetings of all departments and communicate the resolutions to concerned bodies.
- The director Academics shall be responsible for the following
  - Academic programmes, a.
  - Time table and evaluation schedule

- c. Monitoring of teaching/instruction
- 7.6 The Academic Director will process the files relating to granting equivalency to the degrees awarded by other Universities/ institutions in India and abroad and place them before the equivalency board of the university.
- 7.7 Director Academics will be responsible for outcome based education implementation of innovative TLP, monitoring the effectiveness of attendance system, web updation system, mentoring system, training system and stable e-governance.
- 7.8 Director Academics will be responsible for effective utilization of infrastructure such as library and laboratories.
- 7.9 Director Academics will be responsible for Human Resource recruitment and development.

## CHAPTER 8-RESPONSIBILITIES OF CONTROLLER OF EXAMINATIONS

- 8.1 Controller of examination is appointed by the vice-chancellor to look after the entire process of examinations and results processing.
- 8.2 When the office of the Controller of Examinations is vacant or when he is by reason of his illness or absence for any other cause unable to perform the duties of the office, the duties of the office shall be performed by the Registrar or by such person as the Vice-chancellor may appoint for the purpose.
  - a. Exercise general supervision over conduct of university examinations in a disciplined and efficient manner.
  - b. Arrange for paper setting and printing with strict regard to secrecy.
  - c. Arrange for evaluation and re-evaluation of answer sheets.
  - d. Arrange for the declaration of all the results.
- 8.3 He/she shall be made constantly review the system of examinations in order to enhance the level of impartiality and objectivity with a view to make it better instrument for assessing the attainments of students and any other matter connected with examinations which may, from time to time assigned to him/her by the Vice-Chancellor.

## CHAPTER 9- RESPONSIBILITIES OF DEAN OF SCHOOLS

- 9.1 The Dean is appointed by the Vice-chancellor from among the senior professors of the Departments comes under a defined school. The school consists of the departments running undergraduate and post graduate programme having similar curriculum and use common facilities. The Dean has the following responsibilities.
- 9.2 To co-ordinate among the Departments under the school.
- 9.3 To conduct meetings of the Heads, Chairman BOS to launch new Academic programmes, upgradation of existing programme structure, course description, etc.
- 9.4 Deciding the number of sections, batches for each Theory and Lab. Coursesin consultation with respective HOD.

- 9.5 Discussing departmental committee regarding preparation of Time table and Evaluation Schedule of various classes and Courses.
- 9.6 Adherence of Academic Rules by all teaching community of the school.
- 9.7 Follow up of quality of assignments and maintain liaison with Director and Examination cell.
- 9.8 Transparency in continuous Evaluation System.
- 9.9 To guide the HODs in preparation of the Budget Proposal for the departments.
- 9.10 To participate and contribute in the Committees for which they are nominated or selected members.

## CHAPTER 10- RESPONSIBILITIES OF HEAD OF DEPARTMENTS

- 10.1 Coordinating the activities of the faculty and supporting staff in the department to offer quality education to the students and achieve the desired vision and mission of university.
- 10.2 Planning and monitoring the overall departmental activities.
- 10.3 Monitoring the Time Schedule for the syllabus coverage, internal tests and opening and closing of semesters.
- 10.4 Arranging for the departmental requirements such as staff, equipments, library books, textbooks and other infrastructure facilities.
- 10.5 Preparing and submitting the annual department budget to the Vice chancellor.
- 10.6 Developing, installing and maintaining department labs.
- 10.7 Convening departmental meetings.
- 10.8 Identifying the brilliant and talented students and encouraging them to pursue for Innovative projects. Identifying the weaker students and arrange remedial/ special class.
- 10.9 Counseling and guiding students.
- 10.10 Identifying and encouraging the faculty to apply for Research projects to different funding agencies to carry out consultancy work and to publish papers in National and International Journals conferences with high impact factors and to carry out the activities successfully.
- 10.11 Assisting the Vice chancellor, Director Academics in all administrative and other matters.
- 10.12 Reporting to the Dean of respective schools and Director Academics periodically on all matters in respect academics, administration, discipline, research etc.
- 10.13 Organization of and participation in, seminars and continuing education programmes and to arrange for revision of syllabus in coordination with the university.
- 10.14 To become members in professional organizations.

- 10.15 To take necessary steps to develop industry institute interaction.
- 10.16 Encourage the students to attend and present papers in conferences and to publish papers Journals.
- 10.17 Arrange number of continuing education programmes for practicing engineers and Technical staff of the industry.
- 10.18 To check the course files of the teachers and suggest corrective measures.
- 10.19 Maintaining all records as stipulated by NBA/NAAC/ISO for Accreditation.
- 10.20 HOD shall forward the Performance appraisal of all faculty the department with his remarks and submit to the Vice chancellor every year along with his/her self assessment form.

## CHAPTER 11 -RESPONSIBILITIES OF TEACHING FACULTY IN THE DEPARTMENT

- 11.1 The teaching load will be allotted by the HOD after taking into the account of the Faculty Member's interests.
- 11.2 Prepare the lesson plan in advance incorporating the teaching methods.
- 11.3 Prepare the assignment topics in compliance with course outcome and PEO's and PO's.
- 11.4 Identify the slow learners and arrange remedial classes.
- 11.5 Prepare quality course material collecting material from better sources.
- 11.6 Keep more academic interactions with student.
- 11.7 Mentoring the students is a part of responsibility.
- 11.8 Be a good researcher and cultivate research as part of academic responsibility.
- 11.9 Motivate students to involve in curricular and co-curricular activities.
- 11.10 Take part in all sound development student to become employable/entrepreneur.
- 11.11 Assist HOD/Dean/Authorities in the administration of the department/ school/university.

## CHAPTER 12 – RESPONSIBILITIES OF PLACEMENT & TRAINING OFFICER

- 12.1 To look after the training and placement activities of students.
- 12.2 To have close liaison with industry for placement of students.
- 12.3 To work in consultation with Coordinator, Industry Institute Interaction for Organizing lectures from the Professionals from industry.
- 12.4 To collect feedback from the companies coming for placement.

- 12.5 To Arrange Training programmes for soft skills and for HR and technical skills for the students using institutional and external expertise.
- 12.6 To organize the entrepreneurship workshops.
- 12.7 To prepare Placement Brochures of departments
- 12.8 To invite prospective companies for campus recruitment.
- 12.9 To register students for the placement with prescribed qualifications
- 12.10 To arrange for various facilities required on the date of interview
- 12.11 To collect appointment letters and distribute them to selected students.
- 12.12 To arrange for industrial visits and In-plant training.
- 12.13 To achieve maximum possible placements for the students.
- 12.14 To guide students on various interview techniques, group discussion, aptitude tests.
- 12.15 Periodic conduct for IQ tests.
- 12.16 Arrangement of Personality Development Workshops.
- 12.17 Notification regarding various competitive examinations
- 12.18 To guide students wishing to pursue Higher Education within the country or abroad.
- 12.19 To organize the Faculty Development Programs by the industry experts in association with academic staff college of VTU.
- 12.20 Signing of MoUs with industries for students Training, FDP, research, Guest lecture etc.

## CHAPTER 13- RESPONSIBILITIES OF PHYSICAL DIRECTOR

- 13.1 Co-ordinating the activities of the staff of the physical education department in order to ensure effective functioning.
- 13.2 Planning and time scheduling for student's accessibility to the sport/games equipments, grounds and other facilities made available in University.
- 13.3 Preparation and submission of the annual budget to the Vice chancellor.
- 13.4 Organization and conduction of the university level, state level sports/games.
- 13.5 Attending the meeting at the inter university level regarding physical education.
- 13.6 Arranging for the training for physical directors in advance programs.
- 13.7 Suggesting changes and developmental activities in spots/games to the students.

- 13.8 Ensuring overall discipline among all the students participating in sports and games.
- 13.9 Arranging Inter-departmental sports, inter university competitions.
- 13.10 Assisting the Deans in maintaining discipline in the campus.

## CHAPTER 14 – RESPONSIBILITIES OF LIBRARIAN

- 14.1 Responsible for overall operating efficiency of the library.
- 14.2 Collection of indents from various departments and processing them for procurement.
- 14.3 Purchase and maintenance of books.
- 14.4 Purchase of suggested new journals and renewal of subscriptions.
- 14.5 Co-ordination and management of the library activities including the staff.
- 14.6 Introduction/ Maintenance of library Automation and Digitization of library.
- 14.7 Selection and recommendation of staff for further training.
- 14.8 Preparation of annual budget of the Library.
- 14.9 Maintenance of good inter-departmental relationship of better co-ordination.
- 14.10 Collection and preservation of statistical records related to library.
- 14.11 Administration of library records.
- 14.12 Furnishing information on all matters relating to library.
- 14.13 Updating the records, books and computers.
- 14.14 Removing the obsolete book materials in consultation with the concerned department, securing the soiled through rebinding, and binding arrangements of important back volumes.
- 14.15 Ensuring maximum utilization of library facilities
- 14.16 Maintenance of discipline and decorum inside the library.
- 14.17 Planning for changes and reorganization whenever need arise.
- 14.18 Arranging annual stock verification.

#### CHAPTER 15 – RESPONSIBILITIES OF TECHNICAL STAFF

15.1 Assisting in installation, operation and maintenance of laboratory equipments and their calibrations.

- 15.2 Assisting in scheduling and conduction practical and drawing classes. Helping the students to provide the tools/materials/equipment to carry their practices.
- 15.3 Helping in indenting and purchasing of stores and consumables for laboratories and Workshops.
- 15.4 Helping the faculty in research, consultancy and testing works in respect of projects. Assist the students to carry their mini/major projects.
- 15.5 Assisting the faculty in matters relating to design, fabrication and computer work.
- 15.6 Helping for the supply of water and electricity in the campus.
- 15.7 Assisting in the operation of telephones, intercom, Internet and Audio Visual aids.
- 15.8 Taking specific responsibilities at the time of organizing of function, workshops and seminars specially assigned to him/her.

## CHAPTER 16- RESPONSIBILITIES OF ACCOUNTS OFFICER

The accounting process in the university is fully computerized. In this setup, the responsibility of the accountant includes:

- 16.1 Planning, organization and maintenance of accounts of the university, hostel and general stores account.
- 16.2 Maintenance of imprest cash accounts and advances.
- 16.3 Maintenance of accounts of research projects sponsored by AICTE, DST, CSIR etc.
- 16.4 Auditing responsibility in respect of internal audit once a month and external audit once a year.
- 16.5 Maintenance of all kinds of deposits and refunds together with their records.
- 16.6 Preparation and filing of income tax statements for the university staff.
- 16.7 Settlement of bills through and from Vice Chancellor's office.
- 16.8 Preparation of monthly salary statement.
- 16.9 Assisting the Vice chancellor in the preparation of the annual budget.
- 16.10 Ensuring overall efficiency of the accounting section of the university office and management of the accounting staff.

## **CHAPTER 17-DUTIES AND RESPONSIBILITIES OF HOSTEL WARDEN:**

The Warden shall allot rooms to the students and maintain a list of students along with permanent addresses of parents/guardians and such other information as may be required, in a form prescribed by the appropriate authority.

- 17.2. The warden should consider Welfare of and discipline amongst the residents in the Hostel and to maintain daily record of the resident students such as students present each day, students absent from the Hostel together with reasons for absence.
- 17.3. Wardens should ensure that no ragging takes place in the hostels and maintain a ragging free Hostel
- 17.4. Oversee health, hygiene and general life of the students in the Hostel and to ensure that the students observe the Regulations and discipline in accordance with the rules framed thereof.
- 17.5. They should report to the Registrar in all cases of misbehavior, indiscipline and illness of students residing in the hostel.
- 17.6. Safe custody and maintenance of such properties of the concerned hostel as are entrusted for their repairs within the funds allotted and norms laid down by the University authorities for the same.
- 17.7. The Warden shall have the right to inspect all rooms of the hostel.
- 17.8. The Wardens shall have administrative control over the staff assigned to the hostel.
- 17.9. The Warden shall be available in the Hostel Office everyday at specified hours to attend to official business and to the problems of resident students.
- 17.10. The Warden shall be responsible for the proper up keep and maintenance of such properties of the concerned Hostel, as are under his/her charge;
- 17.11. The Warden shall maintain and check the Resident Student's Register and the Guest Room Register.
- 17.12. The Warden shall take disciplinary action against a resident student for keeping any unauthorized guest / material in his / her room.
- 17.13. Any student defaulting in the regulations of the hostel may be reported to the enquiry protocol 1 committee organizer and enquiry may be conducted in the university as per protocol 1 at the earliest.
- 17.14. Periodically verify the furniture and fittings of the Hostel with the assistance of the Caretaker and take action for their repairs / replacement for obtaining additional furniture.
- 17.15. In case of misuse / damage of the property in the hostel rooms by the students, the Warden shall impose necessary fines and withhold of the hostel deposit amount if required.
- 17.16. The warden should ensure maintenance of discipline in and around the Hostel.

- 17.17. Warden has to submit the self compliance report regularly.
- 17.18. Warden has to give wakeup call by 6 am
- 17.19. Warden has to ensure night plumber has to run motor properly and water tank is full so that student don't have any water shortage
- 17.20. Warden has to distribute morning newspaper to all rooms
- 17.21. Warden has to go frequent rounds to ensure students get ready on time
- 17.22. Warden has to ensure all students have left for college in time
- 17.23. Warden has to ensure only genuine sick students are in hostel, and to take care of them.
- 17.24. Warden has to inform HoD of the absenteeism and to record the names of absentees in register
- 17.25. Warden has to fill the incidence report
- 17.26. Warden has to take feedback of students regarding hostel maintenance
- 17.27. Warden has to rectify all reported issues
- 17.28. Warden has to verify the housekeeping sheets and ensured all rooms have been cleaned
- 17.29. Warden has to ensure corridors dustbins have been cleared
- 17.30. Warden has to ensure pd and indoor games / library hour are being maintained with staff
- 17.31. Warden has to ensure staff available for canteen monitoring
- 17.32. Warden has to ensure linen of the room washed periodically
- 17.33. Warden has to ensure good dhobi facility
- 17.34. Warden has to ensure good shop facility
- 17.35. Warden has to display movie as per student choice on weekends
- 17.36. Warden has to conduct student committee meeting for canteen, sports, education and entertainment
- 17.37. Warden has to inform mentor when student falls ill.
- 17.38. Warden has to visit each room physically and take attendance on seeing the student only.
- 17.39. Warden has to make rounds at 11.30 pm and Morning 5.30 am and to ensure students are in the room as per the hostel records
- 17.40. Warden should be aware of Academic schedule, should collect copy form academic planning.
- 17.41. Warden has to switch off the water cooler by 11.00 pm to 6.00 am &on regular working day, floor wise cooler to be switched off 9.00 am & switched on at 3.00 pm

- 17.42. Warden has to make rounds in between time of study hours 8.30 to 10 pm,
- 17.43. Warden has to ensure all water heater in working condition
- 17.44. Warden has to ensure hot oven should be working in kitchen
- 17.45. Defaulting issues Protocol 3
- 17.46. Hostel monitoring committee will meet 15 days once and you can discuss all issues as per protocol 2
- 17.47. Warden has to collect hostel master ledger for the academic year in May end for existing students and end of July for new admissions . Hostel ml with student information and latest full size photo must be collected before the academic year.
- 17.48. Warden has to issue outpass to the student after getting confirmation with the parents.

## **CHAPTER 18 – CLASS ROOM TEACHING**

- 18.1. Once the subject is allotted the Faculty Member should prepare the lecture hour wise lesson plan for theory/tutorial/lab as per academic calendar.
- 18.2. The Faculty Member should get the lesson plan and course file approved by HOD and Dean. The course file consists of preface CEO and CO, syllabus, model question paper, notes, handouts, test / exam question papers, two model answer scripts for each test / exam, Assignments, minute paper, feedback analysis report.
- 18.3. The Faculty member's Diary must be regularly updated and put up for the inspection every month by HOD / Vice chancellor as the case may be.
- 18.4. The Faculty Member should go to the class at least 5minutes before and enter the class without delay when the bell rings.
- 18.5. The Faculty Member should engage the full 50 minutes( as per time table ) and should not leave the class early.
- The Faculty Member should make use of Power Point Presentation, Models, and smart 18.6. boards etc. as teaching aids.
- 18.7. The Faculty Member should encourage students to clarify the doubts and to ask questions.
- The Faculty Member should get the feedback from the students and act / adjust the 18.8. teaching appropriately.

- 18.9. The Faculty Member should take care of academically backward students and pay special attention to their needs by conducting special classes.
- 18.10. In problem oriented subject, regular tutorials have to be conducted. The tutorial problems have to be handed over to the students at least one week in advance of actual class.
- 18.11. The Faculty Member should interact with the class coordinator or counselor and inform him / her about the habitual absentees, academically backward student, objectionable behavior etc.
- 18.12. The Faculty Member should always aim for 100% pass results in his / her subjects and work accordingly.
- 18.13. The Faculty Member should motivate the students and bring out the creativity / originality in the students.
- 18.14. The test papers must be corrected within three days from the date of examination and allow the students to verify valuation. Marks have to be submitted to the HOD for forwarding to Vice chancellor with remarks.

## **CHAPTER 19 – LABORATORY**

- The Faculty Member going for Laboratory class must perform the experiments personally and be satisfied with the results before asking the students to conduct the experiments.
- Whenever possible, additional experiments to clarify or enlighten the students must be 19.2. given.
- 19.3. The lab observations/records must be corrected then and there or at least by next class and instruct the students.
- 19.4. The laboratory manuals shall be prepared and maintained by the lab in charge.
- 19.5. Maintenance and Calibration of instruments/equipment shall be carried out periodically.
- 19.6. Licenses of software packages shall be renewed.

## **CHAPTER 20 – TEST / EXAM**

20.1. Faculty members having invigilation duty should report to the COE atleast half an hour before the commencement.

- 20.2. During Invigilation, the Faculty Member should be continuously moving around. He / She should not sit in a place for a prolonged time. He / She should watch closely so that nobody does any malpractice in the exam / test.
- 20.3. Whenever any malpractice is noticed, the Faculty Member should get a written statement from the student and inform the Chief Superintendent. (Coordinator and HOD concerned in the case of Unit Test / Mid Term Test).
- 20.4. The Faculty Members should be very fair and impartial in awarding of internal marks to the students or in selecting the outstanding students of the department/university and on similar occasions, it should be done strictly as per the prescribed norms. It should not have any bearing with region, language, religion, caste, status of parents, personal relations etc.

## **CHAPTER 21– SPECIAL INCENTIVE TO FACULTY**

Special incentive is given as per UGC sixth pay performance self appraisal 2010 for publication in journal/conference / publication of books/R&D.

## 21.1 RESEARCH / PUBLICATIONS

## 21.1.1 NATIONAL EVENTS

- The faculty is encouraged to participate/ present quality publications and university will provide Deputation for presenting papers that are accepted for both presentation in the event and for publication in the proceedings.
- Selection based on peer review of full paper. Evidence to this effect should be produced.
- Event registration and TA/DA as applicable will be provided.
- Absence will be treated as on duty.
- Preference will be given to those invited to chair sessions.

## 21.1.2 INTERNATIONAL EVENTS

 Deputation only for presenting papers selected after peer review of full paper for presentation and for publication in the proceedings. Evidence to this effect should be produced.

- From Registration fee, 100% TA and DA will be given to each teacher. To such deputation, the paper presenters should return back and serve the institution (university) for at least two years; otherwise the sanctioned amount is to be refunded to the Institution (university).
- Preference will be given to all faculties on the recommendation of HOD/Dean and approval from vice chancellor.
- However in the case of those who have funded projects, the above conditions may be relaxed and the fund available in the sponsored project may be used with the prior approval of the Vice chancellor and the Management.

#### 21.1.3 FUNDED PROJECTS

- 5% of the value of Research project will be given to investigate from the university.
- 50% of the consultancy will be given to the faculty involved in the consulting work.

## 21.1.4 PUBLICATION OF RESEARCH PAPERS.

• Incentive of Rs10,000 will be given to the author of a research publication with scopus index.

## 21.1.5 PUBLICATIONS OF TEXTBOOKS

• For every good textbook published in the relevant subjects, the authors of the book will be given an incentive of Rs.10, 000/-.

#### 21.2 DEPUTATION FOR HIGHER STUDIES

Faculty members deputed for the PG studies will be required to execute a service bond for 3 years from the date of obtaining the provisional certificate. If they leave the service before the end of the bond period, they will pay the salary for the reminder period not served.

The faculty so deputed for Ph.D programs will execute a service bond to serve for 3 years from the date they complete their viva-voice examination. If they leave the service before the expiry of such bond period, they will have to pay the reminder of salary of such period of default.

Deputations for all the above programs will be based on merit, contribution made in the university and also the seniority position of the staff in the department.

## 21.3 CASH INCENTIVE FOR Ph.D scholars.

Assistant Professors and Associate Professors in Engineering and S & H will get monitory benefit of Rupees 3000/- per month respectively and 15days "ON DUTY" for the academic year.

## 21.4 CASH INCENTIVE FOR SENIOR FACULTY:

All faculty/ staff who complete 10 years of service in the University will be provided one month additional pay named as 13<sup>th</sup> month salary.

## CHAPTER 22 – RESIGNATION / TERMINATION OF SERVICE

- 22.1. The staff shall have to tender his / her resignation by giving two months notice or two months' salary in lieu thereof. The notice shall be co-terminus with the end of the semester / academic year.
- 22.2. The Vice Chancellor has the power to terminate the services of a member of the university for any of the following reasons:
  - Serious misconduct and willful negligence of duty
  - b) Gross insubordination
  - Physical or mental unfitness
  - Participation in any criminal offence involving moral turpitude
- 22.3. In such termination cause, rule 22.1 shall not be applicable and the staff member shall not be eligible for any terminal benefits.
- 22.4. The newly selected faculty should serve at least for one full year. No staff member is eligible to draw vacation salary if he resign during the vacation period.

## **CHAPTER 23 – LEAVE RULES**

| S.NO | Category       | Eligibility   |
|------|----------------|---|
| 1.   | Casual Leave   | 12 days in an Academic Calendar(i.e., July to June)   |
| 2.   | Medical Leave  | 0 – 3 Years – Nil<br>3 - 5 Years – 3 days<br>5 – 10 Years – 1 week<br>10 Years & above – 10 days  |
| 3.   | Vacation Leave | Staff who have completed the minimum service of one year are Eligible for Vacation Leave  Teaching Staff: 14 days at the end of Odd Semester and 21 days at the end of Even Semester. |

|    |                 | Non Teac                           | chingStaff: 14 days at the end of Even Semester.  |
|----|-----------------|------------------------------------|---|
| 4. | Earned Leave    | (i)<br>(ii)                        | 8 days in a year which (July to June) can be accumulated.  During vacation period based on the necessity and on the recommendation of the HoD, staff may be prevented from availing part or whole of the vacation. In such cases, the staff will be eligible for one day of earned leave for every three days (excluding holidays) of actual working. Such earned leave can be accumulated and can be availed whenever necessary. |
| 5. | Maternity Leave | (i) (ii) (iii)                     | On completion of two years service, lady faculty can avail three months maternity leave with salary for two months and one month of other eligible leave.  On completion of three or more year's service, lady faculty can avail three months maternity leave with salary for three months.  Above Leave permission with a commitment of at least 1 year service bond after the leave.  |
| 6. | Special Leave   | 12 days in  (i)  (ii)  (iii)  (iv) | To conduct a Examination of the University / Public Service Commission / Board of Examination or other similar bodies / Institutions. To inspect Academic institutions attach to a statutory board. Attending Conferences/ Seminars / FDP. External Spot Valuation / Research Project Presentations / AICTE / UGC assigned works, BoS, PhD Viva etc.,   |
| 7. | On Duty         | (i)                                | On Duty may be granted to faculties for attending Vel Tech University related works   |

|    |                    | (including Faculty Exchange Programme).                                    |
|----|--------------------|--|
| 8. | Compensatory Leave | Compensatory Leave against the assigned duties during the public holidays. |

## **CHAPTER 24-CONDUCT AND DISCIPLINE**

## 24.a) CONDUCT

- 1) Every employee shall, at all times, maintain absolute integrity and devotion to duty and do nothing which is unbecoming of an employee of the University.
- 2) Every employee shall abide by and comply with the rules and regulations of the university and all orders and directions of his superior authorities, under whose supervision or control, he is placed.
- 3) Every employee shall extend utmost courtesy and attention to all persons with whom he is to deal in with the course of hisduties.
- 4) Every employee shall endeavor to promote the interest of the university and shall not act in any manner prejudicial thereto.
- 5) No employee shall be a member, or be otherwise associated with, any political party or any organization which takes part in politics, nor shall he/she take part in, subscribe in aid of, assist, in any other manner any political movement or activity.
- 6) No employee shall join, or continue to be a member of association the objectives or activities of which are prejudicial to the interests of the sovereignty of India or public order or morality. If any organization engages in activities prejudicial to the interests of the sovereignty and integrity of India or public order or morality, the university shall follow the decision taken by the State Government.
- 7) No employee shall engage directly or indirectly in any trade or business or undertake any other employment. For undertaking honorary work of a social and charitable nature or work of a literary, artistic or scientific character the employee shall obtain prior permission of the authority.

- 8) An employee of the university shall strictly abide by any law relating to intoxicating drink or drug in force in any area in which he may happen to be for the time being and not to be under the influence of anyintoxicating drink or drug during the course of his/her duties at any time is not affected in any way by the influence of such drink or drug.
- 9) Obligation to maintain secrecy every employee shall maintain the strictest secrecy regarding the university's affairs and the affairs of its constituents and shall not divulge, directly or indirectly, any information of confidential nature either to a member of the public or of the university's staff, unless compelled to do so by superior officer in the discharge of his duties
- 10) An employee of the university shall not, without the prior permission of the Vice Chancellor engage in any trade or business or adventure by himself or thought any member of his family, undertake, accept, engage solicit or seek any outside employment or office while on duty on leave, whether stipendiary or honorary.
- 11) No employee of the university shall enter into any partnership, accept any fees, endowment or commission whatsoever from any part other than the university, except with the prior permission of the Vice Chancellor.
- 12) An employee shall not solicit or accept any gift from a constituent of the university or from any subordinate employee, provided that such gifts, grants and donations shall be received by an employee in the official discharge of his duties for the university.

## 24. b) DISCIPLINE

- 1) The Vice Chancellor or any other competent authority shall place an employee under suspension when disciplinary proceedings against him are contemplated or are pending or a case against him in respect of any criminal offence is under investigation, inquiry or trail.
- 2) An employee who is detained in police or judicial custody, whether on a criminal charge or otherwise for a period exceeding 48 hours or is sentenced to a term of imprisonment exceeding 48 hours by a court of law and is not forthwith dismissed or removed or compulsorily retired consequent to such conviction, shall be deemed to have been suspended with effect from the date of this detention/ conviction by an order of the Vice Chancellor and shall remain under suspension until further orders.

- 3) An order of suspension made or deemed to have been made under this rule shall continue to remain in force until it is modified or revoked by the authority competent to do so.
- 4) In a case where in a number of the teaching or non-teaching staff commits any misconduct in discharge of his/her duties, the Vice Chancellor got discretion to award punishment such as warning, censure, withholding of increment with or without cumulative effect after conducting an inquiry by a committee constituted by the Vice Chancellor.

#### **CHAPTER 25-REPEAL**

When these Rules come into force, the existing Service Rules stand repealed.

#### **CHAPTER 26- UNDERTAKING BY THE MEMBER**

Every member of the faculty should carefully read and understand the above "**Duties and Responsibilities**" and undertake to abide by them. As a mark of such commitment the member at the time of joining the service should sign and give undertaking as given below:

"I have read and understood all the rules above and agree to abide by them without any lapse. I also understand that in case of non-compliance with any of the above I will be relieved from the employment of Vel Tech Rangarajan Dr.Sagunthala R&D Institute of science and Technology".

| Signature:                                   | •                           |  |  |  |  |
|--|-----------------------------|--|--|--|--|
| Name & Designation:                          |                             |  |  |  |  |
| Date:  |                             |  |  |  |  |
| CHAPTER – 27SELF ASSESSMENT FORM FOR FACULTY |                             |  |  |  |  |
| Annual Performance Base                      | ed Faculty Appraisal System |  |  |  |  |
|  | Academic Year:              |  |  |  |  |
| Personal Details:-                           |                             |  |  |  |  |
|  | T                           |  |  |  |  |
| Name   |                             |  |  |  |  |

| Highest Qualification and Year<br>Obtained |  |
|--|--|
| Designation                                |  |
| Date of Joining                            |  |
| Designation at the Joining                 |  |

# **Summary of Appraisal:-**

| Category   | Essential | Desirable |
|--|-----------|-----------|
| Teaching, Evaluation and                             |           |           |
| Learning   |           |           |
| Professional, Co-curricular and Extension Activities |           |           |
| Research, Consultancy and Development                |           |           |

## **Significant Achievements:-**

# Teaching, Evaluation and Learning contributions

## A. Essential

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Classes (L T P) conducted w.r.t. allotted  |         |           |                         |
| Continuous and Semester end Evaluation duties (invigilation, evaluation, web updation)                     |         |           |                         |
| Project guidance   |         |           |                         |
| Course portfolio Management(<br>Course file, course coordinator,<br>course assessment and<br>observations) |         |           |                         |
| Performance (Formal Feedback, Results, CO attainment)  |         |           |                         |

## **B.** Desirable

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Adaption of modern teaching methods appropriate to the Course                  |         |           |                         |
| Learning resource generation and distribution                                  |         |           |                         |
| CE (question paper and assignment) quality and relevance                       |         |           |                         |
| Contributions in designing open ended laboratory experiments                   |         |           |                         |
| Offering/delivering special classes for students with varied learning aptitude |         |           |                         |

# **Professional, Co-curricular and Extension Activities**

## A. Essential

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Membership in Professional bodies and Organising / attending events conducted by professional bodies     |         |           |                         |
| Attending Faculty development/ refresher program   |         |           |                         |
| Collaboration with faculty/students from other institutions or Industry/Society                          |         |           |                         |
| Contributions in Curriculum / course design and updation   |         |           |                         |
| Contribution in the institutional level co-curricular activities(tech fest, symposiums, NSS, NCC etc.,.) |         |           |                         |
| Mentoring the students towards studies, career, attitude etc.,. and interacting with parents             |         |           |                         |

## **B.** Desirable

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Contributions to Newsletters/Magazines( institution or other wise)             |         |           |                         |
| Offering/delivering continuing education programs                              |         |           |                         |
| Resource Person/Chairing session in conferences, seminars, workshops organised |         |           |                         |
| Offering/delivering career guidance programs/courses                           |         |           |                         |
| Contributing to institutional/departments governance and administration        |         |           |                         |

# **Research, Consultancy and Development**

## A. Essential

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Publishing research findings in indexed Journals |         |           |                         |
| Conducting sponsored research/<br>Consultancy    |         |           |                         |
| Guiding PhD/M.Phil/Research scholar/ PG Student  |         |           |                         |

## B. Desirable

| Crtiteria  | Faculty | Committee | Remarks by<br>Committee |
|--|---------|-----------|-------------------------|
| Publishing in high impact factor journals  |         |           |                         |
| Disseminating Research findings in international conferences                     |         |           |                         |
| Publishing<br>Books/chapters/monographs  |         |           |                         |
| Obtaining IPR  |         |           |                         |
| Mentoring students to participate in project/design contests/industry internship |         |           |                         |

## 28.QUALIFICATIONS

Faculty are recruited based on the qualification prescribed by the UGC – Approval Process Handbook 2011-2012.

| PROGRAM                 | CADRE                  | QUALIFICATIONS  | EXPERIENCE   |
|-------------------------|------------------------|---|--|
| Engineering /Technology | Assistant<br>Professor | Good academic record as defined by the concerned university with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed) at the Master's Degree level in a relevant subject from an Indian University, or an equivalent degree from an accredited foreign university |  |
| Management              | Assistant<br>Professor | First Class or equivalent in<br>Masters Degree in<br>Business Administration<br>or equivalent and<br>2 years relevant<br>Experience is desirable  | 2 years relevant Experience is desirable   |
| All Program             | Associate<br>Professor | i Good academic record with doctoral degree, with performing ability of high professional standard. ii. Eight years of experience of teaching at the University, College level and/or research in University/national level institutions excluding the period spent for obtaining the research                | Minimum of 8 years experience in teaching and/or research and/or Industry of which at least 2 years shall be post Ph.D is desirable. In case of Architecture, Professional Practice of 5 years as certified by the Council of Architecture shall also be considered Valid. |

|             |           | degree.   |   |
|-------------|-----------|---|---|
| All Program | Professor | An eminent scholar with a doctoral degree actively and engaged in research with ten years of experience in teaching in University/College and/or research at the University/National level institutions including experience of guiding research at doctoral level with outstanding performing achievements in the field of specialization. | Minimum of 10 years teaching and/or research and/or industrial experience of which at least 5 years should be at the level of Associate Professor.  OR minimum of 13 years experience in teaching and/or Research and/or Industry. In case of research experience, good academic record and books/research paper publications/IPR/patents record shall be required as deemed fit by the expert members in Selection Committee. If the experience in industry is considered, the same shall be at managerial level equivalent to Associate Professor with active participation record in devising/designing, planning, executing, analyzing, quality control, innovating, training, technical books/research paper publications/IPR/patents, etc. as deemed fit by the expert members in Selection committee. In case of Architecture, Professional Practice of 10 years as certified by the Council of Architecture shall also be considered valid. |

## 6. INNOVATION AND START-UP POLICY

 $\begin{tabular}{ll} \it Vel\ Tech\ Innovation\ \&\ Startup\ Policy \\ \it Experts\ Committee\ Formed\ at\ HEI\ to\ Formulate\ the\ Innovation\ and\ Start-up\ policy \\ \end{tabular}$ 

| <b>Dr. E. Kannan</b><br>Registrar<br>registrar@veltech.<br>edu.in | Dr V. SRINIVASA RAO Professor & Head, Department of Computer Science & Engineering Dean, School of Computing                     | Dr. S. Sivaperumal Dean - R & D and International Relations Professor - Dept. of Electronics and Communication Engineering | Mr. Rajaram Venkataram an CEO – NIDHI CoE Vel Tech Technology Business Incubator | Dr. P. Chandrakumar Dean Industry Relations / TBI                      |
|---|--|--|--|--|
| Dr.M.S.R.MARIY APPAN Dean - School of Management                  | Dr. E. Balasubraman ian Professor, Dept. of Mechanical Engineering, Head - Centre for Autonomous System Research, Research Park, | Suresh. S Incubation Manager Vel Tech Technology Incubator (Vel Tech TBI)  | <b>Dr. Manoj V.R</b> HOD / Biotechnology   | <b>Dr. R. Jaganraj</b> Head of the Department Aeronautical Engineering |

## Administrative Support

C. Thilipkumar AP/EEE Vel Tech TBI

Shaju N S

Manager-Nidhi Prayas

Vel Tech Technology Incubator (Vel Tech TBI)

Students those have any innovative idea and want to establish a successful startup are advised to contact the following faculty of their branch. The nominated faculties will help them to show direction to avail pre-incubation and incubation facility. Students must not directly approach Vel Tech – TBI.

| S No | Branch/ School                            | Faculty                                |
|------|---|--|
| 1    | Automobile                                | Name: Mr A P Venkatesh                 |
|      |   | Mobile: 6381211850                     |
|      |   | Email: venkteshap@veltech.edu.in       |
|      | Aeronautical                              | Name:                                  |
| 2    |   | Mobile:                                |
|      |   | Email:                                 |
|      | Civil Engineering                         | Name: Mr. M. Sridhar(TTS 2547)         |
| 3    |   | Mobile: 8508442352                     |
|      |   | Email: msridhar@veltech.edu.in         |
| 4    | Mechanical Engineering                    | Name: Mr.R.Vijayan (TTS3072)           |
|      |   | Mobile: 9940846695                     |
|      |   | Email: vijayanr@veltech.edu.in         |
|      | Electrical Engineering                    | Name of the faculty: Mr.P.Sathyanathan |
| 5    |   | Mobile: +919488068232                  |
|      |   | Email: sathyanathanp@veltech.edu.in    |
|      | Electronics and Communication Engineering | Name: Dr. P. ANANDAN                   |
| 6    |   | TTS no.: TTS2783                       |
|      |   | Mail id : dranandanp@veltech.edu.in    |
|      |   | Mobile: +91 8056445321                 |
|      | Science and Humanities                    | Name: Dr. N.Edayadula                  |
| 7    |   | Mobile: 9865312896                     |
|      |   | Email: dredayadulan@veltech.edu.in     |
|      |   | Name: Dr.A.Kanniraj                    |
|      |   | Mobile: 9489692606                     |
|      |   | Email: drakanniraj@veltech.edu.in      |

| 8  | Computer science and Engineering | Name: Mr.Kishore kumar                  |
|----|----------------------------------|---|
|    |                                  | Mobile :8144460709                      |
|    |                                  | Email: kishorekumar@veltech.edu.in      |
| 0  | Information Technology           | Name of the Faculty : R.Hariharan       |
|    |                                  | Mobile Number : 9894550871              |
| 9  |                                  | Email Address :                         |
|    |                                  | hariharanr@veltech.edu.in               |
|    | Bio Technology                   | Name: Dr.Mriganko Das                   |
| 10 |                                  | Mobile: 9971274551                      |
|    |                                  | Email: drmrigankodas@veltech.edu.in     |
| 11 | Bio Medical Engineering          | Name:                                   |
|    |                                  | Mobile :                                |
|    |                                  | Email:                                  |
|    | Management                       | Name: Dr.Leena Jenefa                   |
| 12 |                                  | Mobile: 9025715473                      |
|    |                                  | Email: drleenajenefa@veltech.edu.in     |
|    | Law                              | Name:                                   |
| 13 |                                  | Mobile :                                |
|    |                                  | Email:                                  |
| 14 |                                  | Name: Mr. M. Lakshmi Narayan            |
|    | Media                            | Email: mlakshminarayanan@veltech.edu.in |
|    |                                  | Mobile No: +91 94451 02992              |

## Contact Vel Tech TBI

Dr. P. Chandrakumar, Dean TBI, Mobile: 9600040254 / veltechtbi@veltech.edu.in

## **PREAMBLE**

In November 2016, Al India Council for Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Startup Action Plan' of Government of India. Subsequent to release of the Startup policy by AICTE and further interaction & feedback received from educational institutions, a need was felt for an elaborate and comprehensive policy guiding document, which could be applicable for all the HEIs in India. This leads to the 'NationalInnovation and Startup Policy (NISP)'.

In context to the NISP, a fourteen member committee was constituted in VEL TECH to formulate detailed guidelines for various aspects related to innovation, startup and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in VEL TECH, which covered Intelectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, VEL TECH Innovation and Startup Policy was prepared for students and faculty of VEL TECH deemed to be University.

## **MISSION**

To identify student innovators, promote and support them to evolve self-sustaining business models. It works to cultivate the innovation ecosystem within the university to harness the entrepreneurial potential of the young minds.

To impart a supportive and vibrant environment to stimulate the innovation attitude of the student entrepreneurs, startups / SMEs and enable them to design technology based products and services leading to job creation for strengthening the regional and national economy.

## **VISION**

India aspires to become 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research and innovation and deep-tech entrepreneurship. The 'National Student and Faculty Startup policy 2019' is a guiding framework to envision an educational system oriented towards startups and entrepreneurship opportunities for student and faculty. The guidelines provide ways to students and faculty of VEL TECH Deemed to be University for developing entrepreneurial agenda, managing Intelectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises established by faculty and students.

In India, innovation is stil not the epicenter of education. In order to achieve the cultural and attitudinal shift and to ensure that 'Innovation and Startup' culture is the primary fulcrum of our higher education system a policy framework and guidelines are the need of this hour. These guidelines will enable VEL TECH institution to actively support their faculty, staff and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider startups and entrepreneurship as a career option.

## 1. Overall Procedure for Students and faculty governance

- A student / group of students has to find out a problem statement. Problem statement a. should be realistic one and it should be associated directly with societal issue. The problem statement must be adhered to any of the area given in annexure 1.
- b. Student has to find out a potential solution that can solve the predefined problem. The solution should be an innovative solution. The idea or innovative process is to be uploaded through website: www.veltechtbi.com. The ideas must be in TRL 3 level. (Refer to annexure <u>2</u>).
- By default these, ideas will be considered to be taken part in National Innovation Contest C. organized by MHRD Innovation Cell, GOI. If anyone wants to opt out from the contest may opt out for the same.
- d. Each group will be assigned to a faculty member for mentorship. Each group has to prepare a prototype or design under the mentorship of the faculty. The prototype must adhere to minimum TRL 5 (Refer to annexure 2). Institution will provide all the lab facility to the groups for preparing prototype.
- The prototype will be evaluated by experts and based on potential, market value etc. will be decided whether it is eligible for a startup or not.
- Once the idea/prototype is eligible for startup as decided by experts, this should be registered as a student startup under a form of business entity like Partnership Firm, LLP, Private Limited Company and One Person Company. Start-ups should be able to provide a copy of the registration certificate/letter to his/her academic institution.
- In next step, the student startup should be admitted to VEL TECH-TBI for incubating startup.

- h. VEL TECH-TBI will help the startup in every manner to let it be the successful startup in market.
- i Faculty need not undergo ideation stage and take part in competition as stated above. They may directly go for registration of their idea/prototype and follow steps 5-7.

## 2. Eligibility

The admission to VEL TECH Innovation and startup scheme can be in any one of the following categories:

## **CATEGORY I:**

Faculty, academic staff and students of VEL TECH having the intent of trying out a novel technological idea for up-gradation to a commercial proposition, scaling up a laboratory proven concept, and setting up a technology business enterprise qualify for a pre-incubation project. This category people must have an idea and they will undergo pre-incubation stage. It is expected that the innovator would like to commercialize the technology and would graduate to Category II within 1 year from beginning the pre-incubation.

## **CATEGORY II:**

Technology based Start-up Company promoted by a first generation entrepreneur desirous of R&D partnership with the institute or a company, with the objective of commercializing a novel technological idea, scaling up a laboratory proven concept and setting up a technology business enterprise. Following are the eligibility criteria for admission to VEL TECH Innovation and startup scheme.

- It is open to the faculty, staff, researchers, alumni and students of VEL TECH having S & T background.
- VEL TECH Innovation and startup policy would also welcome outside promoters.
- Majority of Founders/core team should be Indian citizens.
- A company has to be registered with RoC (Registrar of Companies) to be incubated in VEL TECH-TBI (except Category I). A company not registered with RoC

## Vel Tech Innovation & Startup Policy

(Proprietorship or Partnership) would have to do so within 6 months of admission to VEL TECH-TBI or before the disbursal of seed fund, whichever is earlier. A company can exist as a private limited company, proprietorship or partnership before it is admitted.

VEL TECH Innovation and startup scheme would admit only technology based companies in any engineering discipline. Acceptable business would involve innovative, technology-based product, idea or service.

#### 3. Admission Procedure

Anyone wants to avail VEL TECH innovation and startup scheme must register through website www.veltechtbi.com. After registering Category I has to give details of their ideas and category II has to put all the details about ideas, registration certificates etc. in the website itself. The confirmation of admission will be notified in the website.

## 4. Nurturing Innovation and startups

VEL TECH Innovation and startup scheme establish processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG and Ph.D.), staff (including temporary or project staff), faculty, alumni and potential startup applicants even from outside the institutions. While defining their processes, VEL TECH Innovation and startup scheme will ensure to achieve following:

## Incubation support:

Offer access to pre-incubation & Incubation facility to startups by students, staff and faculty for mutually acceptable time-frame.

## Will allow licensing of IPR from institute to startup:

Ideally, students and faculty members intending to initiate startup based on the technology developed or co-developed by them or the technology owned by the institute, should be allowed to take a license on the said technology one as y term, either in terms of equity in the venture and/ or license fees and/or royalty to obviate the early-stage financial burden.

## Will allow setting up a startup (including social startups) and working part-time for the startups while studying/working:

VEL TECH will allow its students/staff to work on their innovative projects and setting up startups (including Social Startups) or work as intern/part-time in startups (incubated in any recognized HEIs/Incubators) while studying/ working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Student in ventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a startup may be interdisciplinary or multidisciplinary. The salient features of incubation process are given in the following.

- The student must describe how they will separate and clearly distinguish their ongoing a. research activities as a student from the work being conducted at the start up.
- b. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying would be allowed to use their address in the institute to register their company with due permission from the institution.
- c. Student entrepreneurs would be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.
- d. VEL TECH allows its students to take a semester/year break (or even more depending upon the decision of review committee constituted by the institute) to work on their startups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. Institute would set up a review committee for the review of startup by students, and based on the progress made, it may consider giving appropriate credits for academics.
- e. faculty and staff are allowed to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as unpaid leave/casual leave/earned leave for working on startups and come back. VEL TECH allows the use of its resource to faculty/students/staff wishing to establish start up as a fultime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

- f. VEL TECH will provide a part-time/fultime MS/ MBA/PGDM (Innovation, entrepreneurship and venture development) program where one can get degree while incubating and nurturing a startup company. AICTE has already issued guide lines for a similar program.
- g. Institute will facilitate the startup activities / technology development by allowing students/faculty/staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
- h. Short-term/six-month/one-year part-time entrepreneurship training.
- i. Mentorship support on regular basis.
- j. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
- k. Institute may also link the startups to other seed-fund providers/angel funds/venture funds or itself may setup seed-fund once the incubation activities mature.
- I. License institute IPR as discussed in section 5 below.
- m. In return of the services and facilities, institute may take 2% to 9.5% equity/stake in the startup/company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute should normally take much lower equity share, unless its full-time faculty/staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed funds, support for accounts, legal, patents etc.
- n. For staff and faculty, institute can take a maximum of 20% of shares that staff/faculty takes while drawing full salary from the institution; however, this share will be with in the 9.5% cap of company shares, listed above.
- o. No restriction on shares that faculty/staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work/duties. In case the faculty/staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical/ leave without pay/earned leave.

- p. In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the institute/incubator. In that case, during the cooling period, institute cannot force startup to issue equity on the first day of granting incubation support.
- The institute would also provide services based on mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis.
- r. Institute would extend this startup facility to alumni of the institute as well as outsiders.
- Participation in entrepreneurship related activities needs to be considered as a legitimate s. activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.
- t. Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion.
- Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.
- v. Institute would ensure that at no stage any liability accrue to it because of any activity of any startup.
- w. Where a student/ faculty startup policy is pre-existing in an institute, then the institute may consider modifying their policy in spirit of these guidelines.

## 4.1 Pre-incubation facility

It is very important to primarily identify which ideas can successfully go through the incubation process. This phase of pre-incubation can prepare student entrepreneurs for the incubation phase by providing them prerequisite skills and knowledge that will help them validate and assess their ideas as well as define their business models in detail. In the preincubation planning phase, the following activities are to be performed:

- a. **Identification of problems:** Students will visit various sectors like villages, hospitals, urban areas etc. and will visualize practical problems that are associated with those sectors. Various other field visits may occur for identification of real-life problems.
- b. Idea generation: Depending upon the problems, students have to come out with a potential solution for a specific problem. That idea should be novel, innovative and can be able to solve a real life problem effectively.
- c. **Collection of Ideas:** Students have to submit the ideas in proper format to the authority in online mode. The ideas may be considered to take part in smart India Hackathon and National Innovation Contest i.e., conducted by MoE.
- d. **Screening of Ideas:** Selected applicant will be invited to give presentation to evaluation committee based on their potency of idea they will be shortlisted.
- **Supporting, mentoring and strengthening of ideas:** The shortlisted ideas will go through series of workshops, webinars, lecture series etc. In order to improve their ideas to solve problems and know various aspects of startups. Each idea may be under mentorship of a mentor from VEL TECH DU. Under his/her provision, ideas may go to incubation stage.
- f. **Business plan preparation:** Workshop will be conducted on 'business plan development' for awareness of students by inviting renowned expert from industry or academia. Selected ideas are required to present their business plan with market analysis.
- g. **Prototype development:** Finally, students have to prepare a prototype for their ideas. The prototype may be prepared under direct supervision of mentor assigned.
- **Basic Idea Testing:** Student idea needs to be tested before applying for incubation. Academic Institutions must ensure pre-incubation qualification of a student's business idea.
- **Promoters Details:** Relevant details of promoters are required to be validated before allowing start-ups to enter the incubation process.
- **Registration of Start-up:** The Student Start-up needs to be registered under a form of business entity like Partnership Firm, LLP, Private Limited Company and One Person Company. Start-ups should be able to provide a copy of the registration certificate/letter to his/her academic institution.
- k. **Admission to Incubator/ Co-working Space:** Admission into a start-up incubation/coworking space programme of any TBI (approved by GoI) is permissible.

This facility shall be offered to students who are currently enrolled in any degree program at VEL TECH. This is a support system to help students 'test' their ideas. They shall be offered

- ✓ Seed loan on availability
- ✓ The Institute shall offer seed-loan on generous terms to promote start-ups Space in the incubation Centre
- ✓ Use of Laboratory and Equipment
- Deferment of dues: Incase, the student is offered a pre-incubation and they are using facilities or availing seed loan, then they shall be permitted to defer such dues of the institute or incubation centre, based on a declaration to repay at a later stage.

## 4.2 Incubation facility

After the process of pre-incubation, students have to be admitted in VEL TECH-TBI for availing incubation facility. The objective of the incubation facility is to promote the students' ideas into successful startups. For this noble cause, a number of facilities and services are provided by VEL TECH TBI to incubatees so that the innovative ideas can be converted to successful startups. The facilities and services provided to incubatees are illustrated below by the help of which VEL TECH TBI will try its best to turn students and faculty into successful entrepreneurs.

## 4.3. Infrastructure and service provided to incubatees

## 4.3.1 Infrastructural service

Upon admission to VEL TECH-TBI, the following infrastructural facilities will be offered to the incubate companies on an individual basis, apart from a set of shared/common infrastructure mentioned hereinafter:

- Office space: Company specific
- Internet connection
- Common use printer and reception service
- Common Lab services

Besides, VEL TECH-TBI will facilitate the incubate companies to access the laboratories and other resources of VEL TECH-TBI for their product development purposes. Access to departmental resources is possible through the request made to officials of VEL TECH-TBI and usage of such resources should be with permission of the concerned department to avoid conflict with departmental activities and objectives.

Further usage of such resources shall be on commercial basis and in conformity with the policies of VEL TECH-TBI for consultancy/sponsored projects prevailing from time to time. The consideration payable to the VEL TECH-TBI for usage of departmental resources will generally be in the form of cash (payable by cheque or demand draft), though VEL TECH-TBI may accept the consideration in the form of equity. However, decision as to whether to accept such consideration in form of equity will be solely rest with VEL TECH-TBI. Augmentation of resources in the department on account of such usage shall be the properties of the concerned department.

Irrespective of requirements of departmental facilities for usage, al incubate companies will primarily locate in to VEL TECH-TBI. Apart from company specific infrastructure as stated above, VEL TECH-TBI will provide certain facilities be shared by all incubate companies which would include:

- **Laser Printer**
- Photocopier
- Scanner
- Shredder
- Meeting/Conference room with projection equipment
- Common secretarial pool/staff (depending on availability of such staff with VEL TECH-TBI)

Apart from physical infrastructure as stated above, VEL TECH-TBI intends to create certain other supports and services which would include:

- Pool of mentors, experts in technology, legal, financial and related matters, with or without consideration,
- Organizing events to help companies in networking and showcasing their technologies b.
- Meetings with visitors of VEL TECH-TBI (such as successful entrepreneurs, VCs, Industry C. professionals). Incubatee companies can avail the above support and services when offered by VEL TECH-TBI. In addition, VEL TECH-TBI will also buildup information and knowledge pool to be useful generically for start-up companies. VEL TECH-TBI will coordinate with its allied partners and training providers to train the start-up companies.
- Training in business management: structured short courses
- Training in business communication: written as well as verbal
- Accounting tools/software
- Common pool/staff of secretarial Experiences successful companiesacknowledge/information site would be created where management concepts, intellectual property evaluations, deal making, negotiations, networking, VC funding, company registrations etc. are provided
- Networking events/showcases
- Tie-ups with chartered accountants and other professional organizations as required

# 4.3.2 Mentoring and advisory services

Strategic Checkups: The VEL TECH-TBI Head will meet with company CEOs at least once a month for strategy reviews and discussion of operational issues.

- Each incoming company is offered a "Mentor". This is a person with extensive business experience or specific industry in sight who will advise the company on a limited basis regarding matters of particular importance to the company.
- A faculty advisor is also associated with the incubate as a mentor on technology issues.
- Specialized mentors will also be available to the companies to assist with particular strategic areas or to provide project-oriented consultation.
- All companies would be provided access to consulting by professionals.

# 4.3.3 Market research and counselling

VEL TECH partner organizations provide consulting and market research services to incubatees. Services may include:

- Market research and opportunity identification
- Valuation of Businesses
- Competitor Research
- Market analysis and sizing
- **Customer Search**
- Electronic Research
- Marketing plan formulation
- Consulting on strategies at various stages: Launch, Growth and Harvest of businesses.

Any specialized consultancy work for a specific company has to be paid for by the incubate directly. However, VEL TECH may provide certain services to all incubatees, which it may choose to bear the complete cost. However, it would be sole prerogative of VEL TECH to choose who would pay for these specialized services.

#### 5. IPR evaluation

Any IPR related activity will be dealt as per IPR policy of VEL TECH deemed to be University. This document explains briefly the policy and the procedures for the Intellectual Property filing, evaluation of Intellectual Property, ownership, royalty sharing and is applicable to all the full and part time employees full-as well as students. The document provides some salient features of IPR policy of VEL TECH Deemed to be University and may be used as guidelines for IPR evaluation.

### 5.1 Evaluation of IP

Evaluation of Intellectual Property will be done by the IPsC (Intellectual Property subcommittee). IPsC will assist various departments/schools of the University in all matters relating to intellectual property. Among other responsibilities, the IPsC will help various departments to secure protection for intellectual property where appropriate and will review infringements, maintain central databases and files of patent applications, issued patents, trademarks and copyrights, licenses and agreements, coordinate with various departments in negotiating and preparing license and other agreements and review and approve as to formal agreements relating to intellectual property.

IPsC shall be a standing committee with a tenure of five years. The Vice-Chancellor shall be the Chairman of this committee. Three members shall be nominated by the Vice- Chancellor from members of the faculty in order to provide broad technical expertise across various disciplines. Head, CIR will also be a member of this committee. The committee will invite subject experts as and when required. Evaluation of IP means

- Determining the ownership of IP and who made the intellectual contribution.
- Determining whether an IP is innovative and qualifies the eligibility so given under respective statute in India or foreign countries.
- Determining whether the IP has a reasonable chance for commercialization.

# 5.2 Royalty Income Sharing

For transfer/licensing of/permission to use IP owned by VEL TECH in favour of the incubate companies, the costs of securing the property, licensing, including the costs to operate and support a technology transfer office and IPsC, and the costs of obtaining a patent or other protection for the property on behalf of the University shall first be recaptured from any royalties or other license payments received by VEL TECH University and the remainder of such

income (including, but not limited to, license fees, prepaid royalties, minimum royalties, milestone payments and sublicense payments) shall be divided as per university rule.

| <b>Cumulative Net Income</b> | Inventor | Department of | VEL TECH Deemed to |
|------------------------------|----------|---------------|--------------------|
|                              |          |               | be University      |
| Rs. 1 to Rs.1,00,000         | 50%      | 20%           | 30%                |
| Rs. 1,00,001 to Rs.5,00,000  | 50%      | 20%           | 30%                |
| Above Rs. 5,00,000           | 40%      | 20%           | 40%                |

# 5.3 Product Ownership Rights for Technologies Developed at Institute

- When institute facilities/funds are used substantially or when IPR is developed as a part of curriculum/academic activity, IPR is to be jointly owned by inventors and the institute.
- b. On the other hand, if product/IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
- If there is a dispute in ownership, a minimum five member committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization) and one legal adviser with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institute can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni/faculty of their own.
- Institute IPR cel or incubation center will only be a coordinator and facilitator for providing d. services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are using their own funds or non-institute funds, then they alone should have a say in patenting.
- Institute's decision-making body with respect to incubation / IPR / technology- licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department/institute will have no say, including heads of department, head of institutes, deans or registrars.
- f. Interdisciplinary research and publication on startup and entrepreneurship would be promoted by the institution.

# 6. Organization capacity, HR & Incentives

- a. VEL TECH-DU would recruit staffs that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the I&E culture.
  - ✓ Some of the relevant faculty members with prior exposure and interest would be deputed for training to promote I&E.
  - ✓ To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff would be developed with constant upskilling.
- b. Faculty and departments of the VEL TECH have to work in coherence and crossdepartmental linkages should be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.
- Periodically some external subject matter experts such as guest lecturers or alumni will be engaged for strategic advice and bringing in skills which are not available internally.
- d. Faculty and staff are to be encouraged to do courses on innovation, entrepreneurship management and venture development. In order to attract and retain right people, institute would develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
  - The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.
  - The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associate ships, etc.
  - A performance matrix would be developed and used for evaluation of annual performance.

### 7. Creating innovation pipeline & pathways

To ensure exposure of maximum students to innovation and pre-incubation activities at their early stage and to support the path way from ideation to innovation to market, mechanism has been devised at VEL TECH-DU.

- Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability should be a part of the institutional entrepreneurial agenda.
- Students/staff would be taught that innovation (technology, processor business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.
- Students would be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.
- To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities would be done.
- b. VEL TECH would link its startups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.
- VEL TECH has established Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cel and allocated appropriate budget for its activities. VEL TECH IIC would guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts would be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.
- d. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.
- Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.

- Provide business incubation facilities: premises at subsidized cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new start-ups.
- A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to make every effort possible to prove that the funding agency did right in funding him/ her.
- e. VEL TECH must develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage on institute's website to answer the doubts and queries of the innovators and enlisting the facilities available at the institute.

# 8. Norms for faculty startup

- For better coordination of the entrepreneurial activities, norms for faculty to do start-ups has been created by the institutes. Only those technologies would be taken for faculty start-ups which originate from within VEL TECH DU.
  - Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
  - Institutes should work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
  - Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b. In case the faculty/staff holds the executive or managerial position for more than three months in a start-up, they will go on sabbatical/leave without pay/utilize existing leave.
- c. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/company.
- In case of selection of a faculty startup by an outside national or international accelerator, a maximum leave (as sabbatical/existing leave/unpaid leave/casual leave/earned leave) of one semester/ year (or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty.
- e. Faculty must not accept gifts from the startup.
- Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.

g. Human subject related research in startup should get clearance from ethics committee of the institution.

# 9. Collaboration, Co-creation, Business relation

- a. Stake holder engagement would be given prime importance in the entrepreneurial agenda of the institute. Institute would find potential partners, resource organizations, micro, small and medium sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.
- b. The institute has developed policy and guidelines for forming and managing the relationships with external stakeholders including private industries.
- c. Knowledge exchange through collaboration and partnership would be made a part of institutional policy and institute must provide support mechanisms and guidance for creating, managing and coordinating these relationships.
- d. Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students of the institute would be given the opportunities to connect with their external environment.

## 10. Periodic Assessment

Impact assessment of entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education would be performed regularly using well defined evaluation parameters such as

- a. Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning would be assessed.
- b. Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the institutes would be recorded and used for impact assessment.
- c. Impact would also be measured for the support system provided by the institute to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- d. Formulation of strategy and impact assessment would go hand in hand. The information on impact of the activities would be actively used while developing and reviewing the entrepreneurial strategy.

e. Impact assessment for measuring the success would be in terms of sustainable social, financial and technological impact in the market.

#### 11. Conflict of Interest

The inventor(s) are required to disclose any conflict of interest or potential conflict of interest. If the inventor(s) and/or their immediate family have a stake in a licensee or potential licensee company then they are required to disclose the stake they and/or their immediate family have in the company. Under these circumstances, it must be ensured by the inventor(s) that their entrepreneurial activities do not have an adverse impact on inventor(s) teaching, research and any other institutional responsibilities.

## 12. Agreements

The following agreements are required to be signed by the companies to the extent applicable:

# a. Incubation Agreement:

Between VEL TECH and incubate company for admission of the company in VEL TECH.

### b. Non-Disclosure Agreement (NDA):

Between VEL TECH and incubate company/Client for availing R&D services in VEL TECH on a case-to-case basis.

### c. Equity agreement:

Between VEL TECH, and incubate company and its Promoters for VEL TECH's equity holding in the incubate company.

# d. Transfer of technology Agreement/Technology License Agreement:

Between VEL TECH and incubate company/licensee for transfer of technology from VEL TECH in the favour of Licensee.

# e. Loan Agreement:

Between VEL TECH and incubate company on sanction of the seed loan to the incubate company in VEL TECH.

# f. Usage of Lab:

Between VEL TECH Departmental lab and an incubate company for usage of departmental resources of VEL TECH by the incubate company as per the prevailing policy of Departmental lab of VEL TECH.

#### 13. Disclaimer

The incubatee company will understand and acknowledge that VEL TECH intends to provide supports and services to the Company in good faith to pursue its objective to promote entrepreneurship by converting innovative technologies developed in the Institute to commercialization by incubating and supporting new enterprises. It is understood that by agreeing to provide various supports and services, VEL TECH does not undertake responsibility for:

- ✓ Ensuring the success of an incubate company, its products/process/services or marketability.
- ✓ Ensuring quality of support and services provided by VEL TECH DU to the complete satisfaction of the incubate companies or their promoters/founders.
- ✓ Ensuring quality of services of the consultants engaged by the incubate companies through VEL TECH DU/VEL TECH-DU network. Incubatee companies will have to apply their judgments before getting in to a relationship with them.
- ✓ The incubate companies agree that VEL TECH DU or their employee shall not be held liable for any reason on account of the above.

#### 14. Others:

- a. VEL TECH does not guarantee success and/or feasibility of the technology transferred from the Institute. VEL TECH or any person representing them shall not be liable for any acts or omissions of the incubated company.
- b. The above policy is subject to periodical review and amendment at any time.
- c. Any/al disputed between the parties shall be referred for arbitration to the Vice Chancellor, VEL TECH or person so nominated by him/her, whose decision will be final and binding upon the parties. The place of arbitration shall be Chennai.

# **Annexure 1**

IIC Institutes should scout student innovation on the following themes:

- 1. E waste and Plastic waste Management
- 2. Additive Manufacturing
- 3. Healthcare & Biomedical devices.
- 4. Electronic System Design ( PCB)
- 5. Smart Vehicles/Electric vehicle/Electric vehicle motor and battery technology.
- 6. Robotics and Drones.
- 7. Clean & Potable water.
- 8. Renewable and affordable Energy.
- 9. IoT based technologies (e.g., Security & Surveillance systems etc.)
- 10. ICT, cyber-physical systems, Block chain, Cognitive computing, Cloud computing, AI&ML.

# **Annexure 2**

- TRL 0: Idea. Unproven concept, no testing has been performed.
- TRL 1: Basic research. Principles postulated observed but no experimental proof available.
- TRL 2: Technology formulation. Concept and application have been formulated.
- TRL 3: Applied research. First laboratory tests completed; proof of concept.
- TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype).
- TRL 5: Large scale prototype tested in intended environment.
- TRL 6: Prototype system tested in intended environment close to expected performance.
- TRL 7: Demonstration system operating in operational environment at pre-commercial scale.
- TRL 8: First of a kind commercial system. Manufacturing issues solved.
- TRL 9: Full commercial application, technology available for consumers.

# 7. RESEARCH POLICY

#### 1. Preamble

In observance with its Commitment, Vision & Mission, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology (Vel Tech) expects that Research conducted in its name should be of the highest standard, promotes interdisciplinary and cutting edge research activities for solving scientific and social problems.

Vel Tech through the office of Research & Development, engaged in framing key research policies and procedures which are adhered by all researchers (Faculty members, staff, research students/scholars, project staff and unless otherwise stated all visiting academicians & research personnel).

Vel Tech facilitates and encourages emerging innovations by creating and promoting challenging novel research fields, creating sustainable and productive ambiance, motivating staff and students with incentives and in-house research seed grants support.

Prioritized goals of Vel Tech are to inspire, direct and coordinate various R & D accomplishments and undertakings of the staff and students towards national/international grant write-ups, the establishment of a unique network with other organizations/institutions/industries for translational and collaborative research.

#### 2. Objectives

The envisioned research policy has the following objectives which provide a broad framework and an overview of the Vel Tech's substantial aims.

- To develop, create and promote sustainable research culture among all the researchers of the institute
- To identify challenging research areas and promoting interdepartmental and translational R & D activities
- To establish centre of excellences which works on sustainable development goals that bring people together from diverse disciplines capable of producing 'competency centres' where facilities and resources can be shared
- To increase the visibility of the institute by establishing state of art facilities with innovative thrust areas by creating and maintaining hierarchy in administrative policies and practices
- · To inspire faculty and staff with incentives towards research activities
- To encourage and organize workshops/seminars/conferences on novel research topics and training programmes in diverse research fields
- To warrant the quality, integrity, and ethics in research accomplishments as per the Code of Practice for Research
- To facilitate, coordinate and integrate research outputs from various departments, assuring them with needed support to conduct R & D and publish scholarly papers, articles, and books
- To enable the exchange of views regarding recent advancements in numerous research fields through organizing leadership talks, annual/periodic compilation of works/abstracts/papers presented by the staff and students in national/international events
- To provide guidelines for the use of technology in faculty research with proper security and protection to research data
- · To protect innovations and to ensure legal benefits to the researchers through a IPR Cell
- To serve as a facilitator for Interdisciplinary-Integrative research approaches with Industry-Academia & National-International research networks set-up
- To provide Faculty Development Allowances and promote professional guidance, technical support and financial assists

#### 3. Committees and Panels for supporting Research

#### a. Vel Tech R&D Advisory Board (VRDAB)

The Vel Tech R&D Advisory Board (VRDAB) is established for advising and overseeing the research activities of the institute. This Board reports to the Board of Management.

#### i. Constitution

The VRDAB comprise of the following members

- Vice-Chancellor Chairman (ex officio member)
- Dean R&D Coordinator (ex officio member)
- One eminent expert from government R&D lab
- One eminent expert from Institute of National Importance / Institute of Eminence (IoE)
- One eminent expert from industry
- Two Deans of the Schools on rotation basis

#### ii. Nomination and term of non - ex officio VRDAB members

- Non-ex officio members will be appointed as per the approval of the Vice-Chancellor based on recommendations by Dean R&D.
- All non-ex officio members serve for a term of up to three years, extended to serve up to a maximum of six years (i.e., two full terms) as per the approval of the Vice-Chancellor based on the recommendations by Dean R&D.

#### iii. Roles and Responsibilities

The Vel Tech R&D Advisory Board (VRDAB) will strive to

- Develop and enhance the institute's research capabilities.
- Formulate, amend, and adhere to policies to promote, protect, and commercialize the institute's intellectual property.
- Develop infrastructure and awareness to improve the quality of the institute's research.
- Review the quarterly research progress reports and offer critical comments and suggest corrective measures.

#### iv. Frequency of meeting

The VRDAB will meet at least once a semester to review research progress and formalize strategies to enhance the research activities of the university.

# b. School R & D Committee (SRDC)

#### i. Constitution

The School R&D Committee (SRDC) comprise of the following members

- Dean R&D Chairman (ex officio member)
- Dean of the respective school Coordinator (ex officio member)
- Head of departments under the respective school (ex officio member)
- One professor from each department under the school
- One associate/assistant professor from each department under the school

#### ii. Nomination and term of non-ex-officio members

- Non-ex officio members will be nominated by the respective departments with the approval of

  Doan
- All non-ex officio members of the SRDC shall serve for a term of up to two years, extendable to
  a maximum of total two terms, based on the recommendation of the Head of the department
  and must be approved by the Dean of the respective school.

# iii. Roles and Responsibilities

The School R&D Committee (SRDC) will

- Report to the VRDAB
- Identify the school's research and development priorities and monitor the quality and quantity of school research outcomes.
- Identify and promote the school's research thrust areas and suggest measures to achieve tangible outcomes.
- Carry out a comprehensive mapping of the core and ancillary competencies of individual faculty members of the school.
- Suggest and develop training/upskill programmes for the faculty members of the school.
- Motivate faculty members to generate their funds for undertaking research by means of external grants.
- Identify and foster inter-school collaboration to promote research in interdisciplinary areas.
- Promote and devise schemes to build strategic and durable partnerships with industries.
- Promote building of cooperation and collaboration with international experts.
- Oversee the adherence to the code of research ethics for the responsible practice of research.
- Evaluate research seed grant proposals and recommend for approval to VRDAB.
- Evaluate the post-doctoral fellowship proposals received by the school and provide comments/recommendations on them to the VRDAB.
- Prepare a research budget for the school for each Financial Year and submit to VRDAB for approval.
- Make recommendations to the VRDAB on matters related to the school's research promotion and infrastructure.
- Prepare concise quarterly research progress reports for the VRDAB.

#### iv. Frequency of meeting

- The SRDC will meet at least twice a semester to review the research progress made by the school.
- The quorum for meetings of the SRDC shall be at least 50% of the membership of the SRDC.

#### 4. Office of Research and Development

The Office of R&D executes the strategic research plan and research-related activities which are approved by the VRDAB.

- The office supports and helps the researchers towards smooth conduct of Research.
- This office serves as first-hand information provider with respect to all R & D activities such as Funding, Publication, Patent etc.,
- The office of R&D facilitates interaction with national and international experts, agencies supporting research & development, and liaises between institute and funding agencies.
- The Office of R&D supports the researcher for the Research Proposal Preparation on the administrative side to get the required document/endorsement certificate from the institution.
- It supports faculty members in the filing of patents and documenting IPR generated through the research activity of the institute.
- Monitor the funded project on purchases/expenses as well as getting funds from the funding agency.
- Facilitate the laboratory facilities for the ongoing projects depend on need and plan for the future equipment purchases.
- This office holds responsibility of reviewing the faculty members' Research Performance through SRDC.
- This office is headed by a Dean and reports to the Vice Chancellor.

#### 5. Responsibilities of Researcher

This section covers the roles and responsibilities of all the researchers of the institution, who are involved in practicing research activities in the institution. All researchers should abide by the research regulatory framework of the institution and strictly follow the code of ethics in the conduct of research. The multiple roles and responsibilities of the researcher as faculty, Ph.D. supervisor, principal investigator, research collaborator and independent researcher are as follows:

- Each researcher is determined to develop and establish the area of research in various centres of excellence/laboratories under every department.
- The researcher will be involved in teaching and encouraging the students to take up the challenging projects in his/her areas of excellence.
- The faculty member who has completed a doctoral degree should get Ph.D., supervisorship. The researcher will be involved in training and supervising students, project fellow and Ph.D. scholars.
- The researcher is eligible to avail seed grant support from the university to build the basic research infrastructure and establish well equipped research laboratories.
- The researcher will be engaged in planning and conducting research experiments, analysing, and interpreting data, experimenting with field studies and implementing a solution for societal problems.
- The responsibility of the researcher lies in taking forward his/her research by applying for funded research projects from central and state government funding agencies. In addition, the researcher can focus on establishing international funding, industry sponsorship and consultancy projects.
- The researcher is responsible for the scientific rigor and integrity of the research work. The researcher should strictly adhere to the research regulatory framework in the research conduct to avoid any conflict of interest, malpractice, and plagiarism.
- It is the sole responsibility of the researcher to maintain the research quality standards and encouraged to establish MoUs or collaboration with reputed national/international research centres for improving the research standards.
- The researcher must create and maintain the database of research projects, stock register listing the equipment and consumables with a clear picture of the budget utility.
- The researcher is responsible to publish the research work in peer reviewed SCI Indexed journals, file patents and copyrights. The balance between the academic and research has to be taken care by the researcher to (i) publish at least two research articles as the first author in a peer reviewed SCI/SCOPUS INDEXED journal, (ii) present in at least one reputed international conference and (iii) submit at least one research proposal in a year.

### 6. Integrity and Code of Ethics

#### a. Principle

Research is the concordat to support research integrity as "a process of exploration leading to new insights, effectively shared", it includes the invention and production of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights. Research integrity is defined in terms of the commitment to the values of honesty, responsibility, authenticity, and dissemination.

#### b. Falsification, Fabrication and Plagiarism (FFP)

Falsification means existing data or results were illegitimately altered, that is changing words, ideas, or information to change the meaning of original. To avoid falsification, read the whole text in the research articles and clarify when you add your ideas into the manuscript/thesis. Fabrication is making up or construction of the data and makes it as true, in other words 'lying'. To avoid fabrication, look for more information and be willing to change your mind based on the evidence. Plagiarism is using words, ideas, or information from someone else without giving credit/citation. In other words, swindling ideas accidentally or on purposefully. To avoid plagiarism, cite where you got the information.

#### c. Institutional Guidelines for curbing FFP

It is the key responsibility of an Institute to differentiate the original content from FFP work. The students, scholars and faculty members are mandatory to submit a signed declaration that they were conscious of the FFP policy of the Institute and no element of their work, either research articles, proposals, thesis or dissertation is imitated in any structure. The Institute offers software to detect the FFP content in various sources that have already been published.

It is expected that, every researcher to use the tools/software to check Plagiarism before submission of any document for publication, funding etc.

#### d. Violation of code of ethics

Action will be taken on the researcher/s who were involved in FFP as per the Guideline / Advisory issued by the statutory bodies.

#### 7. Financial Support

The institute encourages and supports the Faculty members to take up various Research activities. The financial support is granted based on the Department / Office of R&D budget availability.

#### a. Support for analytical/testing charges

The institute supports the faculty members for their experiments and tests done from outside the institute. The procedure for claiming analytical and testing charges is mentioned below.

- This financial support shall be applicable to the first author of the article only.
- The maximum grant for this scheme is Rs.10,000 (Rupees Ten Thousand Only). It will be granted based on the impact factor of the published article. If the impact factor is less than 3 and greater than or equal to 3, up to Rs.5000 and Rs.10,000 will be reimbursed respectively.
- Invoice for the Testing /Characterization must be obtained in the name of the Institution.
- Article / Paper must be published in SCI Indexed journal.
- Results of the Testing /Characterization should reflect in the published article, and it is mandatory to acknowledge the Vel Tech funding for the research work.
- · Reimbursement request must be submitted by the first author through Proper Channel to office of Dean - R&D with Reprint of the published Paper / Article, Original Invoice (with email communication, if the invoice is sent by email), Copies of Characterization / Testing results and proof of impact factor.

#### b. Presenting paper in conferences (National/ International)

The institute supports the faculty members for presenting research articles in conferences in India and abroad. The procedure and guidelines for submitting the grant application to avail the grant under this scheme are given below.

- The institute will offer a grant up to Rs.25,000 (Rupees Twenty-Five Thousand) for the International Conference held outside India and up to Rs.8,000 (Rupees Eight Thousand) for the conferences held within India.
- The research articles presented in the conference should be indexed in SCI / Scopus.
- For international conferences, the faculty members are encouraged to apply the travel grant into funding agencies such as SERB, INSA, CSIR, etc. If not selected, the faculty member shall submit the grant application to the Institute through the concerned Dean and Head of the department.
- A faculty member shall avail anyone travel grant either from a funding agency or from the institute. However, for the need of an additional grant in case the funding agency grant is not sufficient, the faculty member can also request the institute grant. The approval will be based on the justification provided by the faculty member with details of expected expenses.
- If the applicant avails the Institute travel grant, the faculty member shall not submit another grant application until the completion of 1 year from the date of completion of previous conference at India and 2 years from the date of completion of previous conference aboard.
- The faculty member shall be a first author or corresponding author of the accepted paper. No grant for co-authors even if the faculty members are from the same institute.

- In case of any publication from the conference, it is necessary to acknowledge the Vel Tech Funding for the research work.
- The faculty member should submit the claim bills and other necessary documents within 30 days of the last day of the conference along with the published article.
- At the time of bill closing, the faculty member shall submit a detailed conference report to the Institute through the respective Dean and Head of the department and deliver a lecture to the students on the same topic.

#### c. Seed grant

The Seed Grant scheme is to encourage, and support newly joined and recently completed Doctoral faculty members to nurture preliminary R&D setup that will initiate their research career in the institution. The guidelines for submitting the proposal to avail Seed grant and to execute R&D work under this scheme are mentioned below:

- The seed grant scheme shall be applicable to the faculty members, preferably with a Doctoral degree, within 2 years from the date of Joining the Institute or within two years from the date of Ph.D. viva voce examination.
- The Institute supports the Seed Grant of up to Rs. 2 Lakhs.
- The Faculty Member shall submit a Seed Grant Proposal in prescribed format to Office of R&D through the respective head of the department and dean of the school.
- Initial screening of the proposal will be done by the department review committee and the shortlisted proposals will be further evaluated by SRDC to recommend the proposals for funding. However, the final recommendation shall be approved by the Vice Chancellor through Dean (R&D).
- If the proposal is accepted in principle, suggestions made by the SRDC should be incorporated and the revised proposal should be submitted by the applicant to the Office of R&D. On receiving the revised proposal, Dean (R&D) may recommend to the Vice Chancellor for release of the funds.
- The duration of the seed fund grant will be for one year from the date of approval by the Vice Chancellor. The approved grant will be utilized for necessary items/actions such as minor equipment, consumables, travel, testing and contingency. Purchase of laptop/PC/printer, publishing research articles and appointment of research assistant are not allowed from the Seed Grant.
- The PI of the Seed Grant Project shall mandatorily submit the quarterly report of the progress made in the project.
- At the time of project completion, the PI shall submit a detailed Project Report to the Institute
- The PI expected to publish at-lease one Research Article in any SCI indexed journals and / or to submit a Research proposal to funding agency after internal reviews.
- It is also mandatory to acknowledge the Vel Tech Seed Grant Funding for the research work.

#### d. Visiting research lab/ facilities

The guidelines for visiting the research lab are mentioned below.

- This research visit is mainly supported for the preliminary discussion towards submission of a project proposal by the applicant.
- The institute shall support the faculty members who visit the research lab at reputed Institutes/Lab anywhere in India. The applicant should produce an approval letter from the host institute or mentor for the research stay.
- The research stay shall be permitted maximum for two weeks.
- After the completion of a research visit, if any relevant funding schemes are opened, the faculty member shall submit a project proposal based on the outcomes of a research visit. The applicant faculty member will also submit a detailed technical report to the Institute and reflect the results in the publication.
- The financial support towards travel/stay will be decided on case to case basis.

#### 8. Affiliation & Acknowledgement

- All researchers of the Institution must use the full name of the Institute i.e. Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology. No acronym or short form to be used.
- Please ensure that the units within each affiliation are in hierarchical order from smallest to largest.
- Ex. Lab name (if applicable), Department of Aeronautical Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Chennai-600062, India.
- Affiliations are usually in title case (which means that all words except minor words like "of" or "on" are capitalized. Do not enter information in ALL CAPS or all lower case.
- Equal contributions (typically for first author) should be mentioned with a symbol near the authors in superscript and should be mentioned in the first page.
- Researcher should acknowledge the funding Agencies/Vel Tech, if any.

#### 9. Collaboration

The institute encourages all the researchers to take up interdisciplinary research and to collaborate with researcher/s working in different group/area, different departments, different institutions & industry across the globe and societies towards providing scientific solutions to various problems encountered by the society.

#### 10. Safety

All the researchers should follow the institute's safety regulations. A brief safety norms / precautionary measures to be followed are as follows

- Each lab should be equipped with a fire extinguisher and first aid kit
- In addition to the regular safety norms, every lab should have its own safety protocols.
- Operating manuals, list of "Do's and Don'ts" should be placed in the closer vicinity of every Instrument/equipment.
- Each faculty/researcher is accountable for framing safety guidelines and SOPs for their respective research labs.
- Every researcher should ensure the appropriate waste disposal methods in their respective labs.
- Each faculty/researcher is responsible for advising and helping members of his / her team in appropriate health and safety procedures that must be followed at work.
- Periodic inspections will be conducted by the Institute Level Safety Committee in all labs with/without prior information.
- It is the responsibility of the PIs to obtain Safety approvals (Ex. Institutional Biosafety Committee), Ethical committee's approval and other relevant approvals well in advance before initiating the works / submitting the proposals.

# 11. Submission of Research Proposals

The faculty members are advised to follow the listed steps for the submission of research proposals.

- On identifying the right funding call, the faculty members/PIs are advised to approach the Office of R&D at-least 10 working days before the deadline with the clearance from the Head of the Department as per the format prescribed in Annexure 1.
- The faculty members are expected to discuss the proposal in the department level committee towards getting critical reviews on the status and novelty of the proposal.
- It is the responsibility of PIs to check the eligibility status of the Call for Proposal (CFP) before approaching the Office of R&D.
- The PI should prepare the proposal as per the prescribed format indicated in the CFP.

- The PI should check the similarity index of the proposal before approaching the Office of R&D.
- Detailed CV of all the researchers involved with the overall list of publication and the publications in the corresponding area of the proposal must be submitted to the Office of R&D.
- The office of R&D, on approval of the Dean R&D, will obtain the declaration/certificates required for submission of the proposal.
- PI should obtain quotation/s for all the proposed Non-Recurring items and, if applicable, Recurring items with the validity of at-least one year.
- It is the responsibility of the PI to submit the proposal by Online /Offline.

#### 12. Execution of Funded Research Project

On receiving the sanction order from the funding agency, PI should forward all the details related to the sanctioned Project. PI may raise a request for allotment of laboratory / sharing a laboratory to the Office of R&D through proper channel.

To execute the projects efficiently, the institute will provide all the basic infrastructure such as computers, workspace with furnishing and internet facilities.

The execution of all the funded R&D project/s must be as per the terms and conditions of the funding agency and as per the sanction order. No deviation from the conditions indicated the sanction order will be permitted. Any such deviation requires written prior permission from the funding agency.

#### a. Recruitment of Research Staff

- Research staff for the funded project must be recruited as per the norms of respective funding agencies (such as valid GATE score / CSIR UGC NET and other National Eligibility Tests).
- PI must post an advertisement in the institute website and other standard social media by clearly mentioning the funding norms and technical requirements with the approval of Dean – R&D.
- PI has to submit the list of candidates satisfying the afore mentioned norms in the ratio of 1:3. A research committee consists of PI, Co-PI, Dean R & D/Nominated faculty and Respective Head of the Department / Nominated faculty will interview the candidates and recommend a candidate as per the project requirement to Dean R&D for necessary approval.
- The selected candidate will be approved by the Vice Chancellor
- The research staff must abide by the institute's rules and procedures in all aspects. The candidate is encouraged to register for Ph.D. at Vel Tech.

## b. Procurement/ Purchase procedure

- PI must purchase Recurring / Non-recurring items as per the sanction order. Any deviation from the sanctioned item requires written approval of the respective funding agency.
- PI should submit a written request with the quotation and comparative statement from at-least three suppliers to the Office of R&D with PI's preference. The payment terms, taxes, import / custom charges (if any), delivery period, delivery mode and account details of the suppliers should be clearly mentioned in the quotation. No further modification will be allowed once the Purchase Order is placed.
- PI is expected to negotiate the amount as per the technical requirements.
- The office of R&D takes care of further procurement process as per the Institute's purchase procedure.
- It is important that the PI should not make any purchase commitments to any suppliers during this process.
- Any purchase above Rs.10,000 (Rupees Ten Thousand) will be through the Purchase Order process only.
- Typically, more than 50% of advance is not permitted unless otherwise a prior approval is obtained for paying more than 50% from Dean R&D.
- PI may raise an advance cash approval, if necessary, for the purchase of contingencies worth not more than Rs.10,000 (Rupees Ten Thousand).

- It is expected that all the payments are to be done by account transfer from Institution to the supplier directly.
- No item should be procured without prior approval of the Dean R&D.
- In case of Purchase Order, every item brought into the campus must be with proper delivery chalan, original invoice and copy of the Purchase Order. All the items must be produced at the gate and will be verified by the Security / Gate in-Charge at the main gate.
- Items purchased must be entered in the respective Stock Book of the Lab / Project.
- All the Purchase Orders must be closed within 15 days from the delivery of the items.
- All the advance cash must be closed within 15 days from the advance payment.

#### c. Progress monitoring of funded research projects

- The project progress for the funded projects from various funding agencies including institute seed fund are reviewed Quarterly during the entire project period towards ensuring the timely completion of the project.
- The PI must give a detailed presentation to the SRDC or Committee Constituted by Dean R&D
  on the milestones achieved with reference to the committed objectives and future works to be
  carried out as per the PERT / BAR chart submitted to the respective funding agencies.
- The expenses incurred under various heads allocated by the funding agencies during the Quarterly period and total are to be clearly indicated during the presentation and the future usage of balance amount can also be explained in detail.

#### d. Submission of periodic progress report, completion report and UC /SE

- Each funded project necessitates the project progress report, Utilization Certificate (UC) and Statement of Expenditure (SE) for every financial year/end of every year from sanctioned date. The PI and Co-PI must prepare the same as per the prescribed format of respective funding agencies and submit it to the office of R & D for necessary approval. Office of R&D support/assist in preparing the financial reports.
- Office of R & D will verify the prepared UC / SE and approved by the Dean R & D.
- Further, the finance officer will verify the account statements and expenses incurred under various heads and provide the approval which in turn the head of the institute will approve it.
- Once all the approvals are made by the Institute officials, the authorized charted accountant (CA) empanelled by the Institute will authenticate it. The PI should produce all the bills pertaining to the project to CA.
- During the project closure, a detailed project report detailing the completion of all the listed objectives and corresponding major conclusions, achievements, publications in the reputed journals, submission of intellectual patent rights, and other significant accomplishments must be brought out.
- The PI shall make sure that the project is completed in all aspects including financial and technical delivery. Also, PI should ensure that the unspent amount is returned to the funding agency.
- The PI shall be responsible to get project work completed as per the proposal within the sanctioned grant and duration. Also, the PI shall ensure that the head-wise expenditure does not exceed the budgetary allocation as sanctioned by the funding agency. PI shall handle all the communication to the respective funding agencies
- In case, a PI leaves the Institute, retires, proceeds on leave, or is unavailable for some reason, the Co-PI will assume the powers and responsibilities of the PI.
- If any equipment is to be returned to the funding agency after completion of the project, the same should be clearly spelled out explicitly in the project proposal, supported by written communication before the start of the project from the funding agency to this effect.
- A copy of all project reports and UC /SE must be submitted to the office of R & D.

#### 13. Awards & Recognition

#### a. Awards

The Institute research awards are to recognize and encourage the faculty members for their outstanding contribution in publications, funded projects, books, and patents. Every year the research awards and incentives will be distributed on the Research Day Celebration.

#### Best Researcher of the Year (Institution)

- This award will be granted based on the maximum points scored among institution level.
- The award includes a cash prize (Rs.25,000), certificate and memento.

#### Best Researcher of the Year (School) ii.

- This award will be granted based on the maximum points scored among school level.
- The award will be given to one member from each school.
- The award includes a cash prize (Rs 5,000), certificate and memento.

#### iii. Emerging Researcher of the Year

- The faculty up to age limit of 35 years will be considered for this award.
- This award will be at the Institution Level.

Points will be calculated for the last 3 completed calendar years. Once awarded, the faculty member is not eligible for next two years.

#### b. Incentives

• 70% weightage is given to PI / 1st Author / 1st Inventor and 30% will be divided among all the Co-PIs / Co-Authors / Co-Investigators.

#### i. Funded R&D Projects

• For the funded projects, 5% of the amount received will be given as an incentive to the investigators.

#### ii. **Publications**

| <u>Category</u>                          | Minimum Compliance Per Calendar Year                           |
|--|--|
| <u>C</u><br>(Only M.Tech)                | 2 (If Scopus indexed) or 1 (If SCI indexed)                    |
| <u>B</u><br>(Only Ph.D.)                 | 3 (If Scopus indexed) or (If 1 SCI indexed & 1 Scopus Indexed) |
| <u>A</u><br>(Only Ph.D at Research Park) | 4 (If Scopus indexed) or 2 (If SCI indexed)                    |

*Notes on publications (Journals / Conference proceedings / Book chapters):* 

<u>For A</u>: Three publications shall be as first author and other one as second author (if all are scopus indexed) (OR) Two publications in scopus indexed shall be as first author and other two in SCI indexed with other authors (OR) One publication shall be as first author and other one as a second author (if both are SCI indexed)

<u>For B</u>: Two publications shall be as first author and other one as second author (if all are scopus indexed) (OR) Two publications in scopus indexed shall be as first author and other one in SCI indexed as second author (OR) One publication in SCI indexed shall be as first author and other one in scopus indexed as second author (OR) Two publications as second author (if both are SCI indexed)

For C: M. Tech qualified faculty must publish minimum 2 papers per year as first author in any journal / conference proceedings / book chapter etc (all Scopus indexed).

Faculties are eligible for the incentive of:

- Rs. 5000 for each Scopus publication over and above the compliance
- 2. Rs. 10000 for each SCI publication over and above the compliance
- 3. 50% for first author and remaining 50% will be shared to all authors

#### iii. **Patent**

Rs. 10000 for each patent granted and it will be divided equally to all inventors

#### iv. **Books Published**

Rs. 5000 - Rs. 15000 for each book publication depending on the reputation of publisher ( It will be divided equally for all the faculty members)

#### 14. Management of Research Data

- It is the responsibility of every researcher to provide the complete information/data related to the Research carried out with the affiliation of this Institute to the Data Management Cell (DMC) at the Office of R&D.
- The data obtained from their research work should be kept for their backups and for the security of the data for not getting pirated by any other sources.
- The DMC will ensure their research data privacy confidentially.
- The loss of data during their research activity can be retrieved through proper approval from the DMC.
- A constant data storage will be maintained by DMC for about 5 years or till the completion of project or whichever is posterior.

#### 15. Management of Research Facility

- Research Facilities category will be applicable for the hardware and software modules which are established with the internal or external funding irrespective of the place of establishment. The funding sources may be from external funding agencies, Govt schemes, seed money schemes, and internal funding from institution. Research facility management will be applicable for the hardware and the software available in the research park premises, Research labs, in depository as equipment, consumables, software, data, results of the previous completed, abandoned projects, ongoing research activities, and documents or reports.
- Every Research facility established as indicated above can be accessed by any researcher working in the institution with the prior permission of the competent authority.
- It is the responsibility of the faculty member to maintain the Research Facilities established and in case of non-functioning / malfunctioning of any equipment / tool/software must be immediately reported to the Head / Dean / Office of R&D.
- It is the responsibility of every researcher to maintain stock/inventory of all the items in their respective labs.

### **PROPOSAL INFORMATION SHEET**

| 1. Details of the PI:   |
|---|
| (a) Name:   |
| (b) Designation:  |
| (c) Department and School:  |
| (d) E-mail ID:  |
| (e) Mobile no.:   |
| 2. Details of the Co-PIs or Partners:   |
| (a) Name:   |
| (b) Designation:  |
| (c) Department:   |
| (d) Organization and Address:   |
| (Add more sections to include additional investigators)                                 |
| 3. Details of the proposal:   |
| (a) Funding agency and scheme:  |
| (b) Title:  |
| (c) Area of research:   |
| (d) Budget:   |
| (e) Mode of submission: Online / Offline  |
| (f) Last date of submission of proposal:  |
| (g) Whether hard copy to be submitted to funding agency: Yes/No                         |
| If Yes, provide dispatch address details and indicate the last date of submission:      |
| 4. Any other details: (if specific details such as Contribution                         |
|   |
|   |
|   |
| Signature of all Head of the Department Dean of the School Dean - R&D the Investigators |

Note: PI should prepare the cover letter, endorsement letter and other certificates or forms (if any) and submit along with this form.

# **Documents to be enclosed:**

Detailed CV, Scopus Author Profile, Similarity Report, Certificates from Investigators, Filled-in Endorsement, Proposal as per the prescribed format, letter from collaborators (if any).

# 8. CONSULTANCY POLICY

# Introduction

The objective of Consultancy Policy is to promote interaction between academic, industry and research sectors and encourage and facilitate the faculty members to provide knowledge inputs sought by industry, government agencies or other academic / research organizations. The Consultancy is well-recognized as an effective way for Academic institutions to disseminate knowledge and make an early and direct impact on society. However, the balance between consultancy and the traditional roles of the faculty needs to be managed and the interests of the institute must be protected. This Policy provides provisions for conducting consultancy to ensure that consultancy services undertaken by faculty are in consistent with the Institute's strategic and operational objectives.

# **Purpose**

This policy is intended to provide a clear framework for the faculty members who are engaged in, or those who wish to engage in consultancy.

# CONSULTANCY RULES AND NORMS

- Consultancy Services may be offered to industries, service sectors, government agencies and other national & international agencies in niche areas of expertise available in the institute.
- > Testing & Evaluation services are to be normally offered in selected specialized areas, in order to meet the needs of certain governmental and related agencies, and special clients.
- > Standardization and Calibration services may be offered in areas in which facilities are available or can be augmented. Such services should normally be backed by periodic Calibration / Standardization of laboratory equipment used for such purposes.
- > The consultancy work which is too complex to handle because of certain constraints inherent in any academic and research environment should not normally be taken up. Suchservices can be taken up in collaboration with IITs, NITs and DRDO Labs, if allowed through MoU
- ➤ All the research projects sponsored by the Government (DST, DBT, ICMR, DRDO, etc.) private, national & international agencies and autonomous bodies do not fall under the purview of consultancy services.

## Consultancy categorized mainly as under:

Category 1: Individual Consultancy: (Expert Advice and Development Project) Consultancy that does not involve the use of any institutional facilities and is solely based on the expertise of the Principal Investigator

Category 2: Institutional / Departmental Consultancy: Consultancy that involves the use of University infrastructure / facilities such as equipment, instrument, laboratory staff, etc

Category 3: Testing and Evaluation / Calibration and Standardization of Services: The service involves the routine testing and evaluation in order to meet the needs of other organization / agencies / educational institutions.

#### ELIGIBILITY FOR UNDERTAKING CONSULTANCY

Consultancy and related assignments can be taken up by full-time faculty members of Departments, Core Research Scientists of Schools / Departments / Centres and all other employees of Vel Tech. All employees of Vel Tech undertaking consultancy shall hereinafter to be referred to as Principal Investigator (PI).

# APPROVALS

- Any consultancy proposal received by the Staff of Vel Tech should be passed on to their Head of the Department / Dean / Dean Industry Relations/ Vice Chancellor, for recommendation/approval.
- > In Consultation with the faculty member, the Head of Department / Dean / Dean Industry Relations, as appropriate, will then take a decision as to whether to accept or reject the proposal.
- > The decision to accept a proposal to undertake consultancy activity is not automatic and various factors will be considered for arriving at the conclusion.
- > In case of any ambiguity, whether a proposed work constitutes consultancy, Staff should seek advice from their Head of Department / Dean / Dean Industry Relations, as appropriate. The Industry Relations Office will provide clarifications wherever necessary to the Head of Department / Dean / Director as appropriate, in reaching a decision about the classification of a particular piece of work. In case of any difference of opinion, the final decision shall however rest with the Vice Chancellor / Dean Industry Relations,

- Prior Approval in writing shall be obtained by the faculty member for all consultancy work.
- ➤ Vel Tech reserves the right to reject any consultancy, without assigning any reasons.
- > It is the responsibility of individual members of faculty to maintain their records and ensure it is signed by the appropriate authority.
- After legitimate enquiry, any faculty member found violating the Policy is liable to face disciplinary action

# RECORDING

# Agreement and recording of consultancy activity are essential to:

- Enable Vel Tech to meet formal monitoring and reporting requirements, both Internal and External, current and future, and that may be required by Government or Government agencies.
- > Prevent uncontrolled or inadvertent transfer of Vel Tech Intellectual Property to a Client.
- Ensure the protection of individuals and Vel Tech and to identify unduly high-risk projects for special treatment.
- Enable Heads of the Departments / Schools or equivalent who are responsible for workload allocation for the faculty to ensure that both Private and Vel Tech consultancy activity undertaken by faculty does not interfere with their normal duties and does not give rise to immediate or potential future conflicts of interest within the faculty member's terms of employment.

## TIME LIMITS

- A PI shall be allowed to spend normally one day per working week subject to a maximum of 60 days during the calendar year for consultancy. In no case, the number of working days in a calendar week shall be in excess of two days. In special cases, the time limits can be extended with the written approval of the Vice Chancellor.
- The Approver shall accord the approval or otherwise within 15 working days of the receipt of clear and complete consultancy proposal from the Recommending Authority.
- The Recommending Authority shall provide his recommendation or otherwise within 7 working days of the submission of a complete, clear and full proposal by the Principal Investigator.

#### **METHODOLOGY**

- ➤ Vel Tech's Costs identified on the Project Initiation Report (PIR) shall be fully recovered before the following income distribution model is applied.
- > Costs shall include such expenses as payments to external consultants / Industry experts, subcontractors, procurement costs including costs of materials, leasing of supplies, consumables, etc.
- > The PIR form provides recommended rates for consultancy and only in exceptional circumstances (and with the approval of the Dean Industry Relation / Vice Chancellor.) should consultancy be undertaken at below this rate.
- Filled up PIR form should be initiated and signed by the Principal Investigator (PI) and approved by the Head of School and then forwarded to the Dean Industry Relation for further processing.
- It shall be the responsibility of the PI to estimate the time and cost required to accomplish the task.
- Some consultancy work, especially where Vel Tech's resources are being used (e.g. IP) are more appropriately managed under a separate service contract. In such cases, Dean Industry Relation will enter into a separate Service Contract or Memorandum of Understanding (MoU) with due approvals.
- ➤ While entering into consultancy agreements, only the standard contract terms & conditions of Vel Tech's consultancy agreement model shall be used. This is to ensure that the legal and statutory requirements like applicability of duties, taxes and other statutory levies are complied to by the contracting authority.
- ➤ The Head of the Department / Dean Industry Relations can recommend work that can be undertaken under the Vel Tech standard terms and conditions. A copy of the recommendation must be forwarded to the Dean Industry Relation, together with the signed PIR. Dean Industry Relation shall then evaluate the recommendation and shall accord approval in line with this Policy. The information of the approval will be recorded by Industry Relation Office on the research system. Later, Industry Relation Office shall arrange for the appropriate information to be sent to finance office to enable invoice(s) to be raised.
- Industry Relation Office may be involved in the contract negotiations and shall advise the Head of the Department on key issues arising from the terms of the contract. Where issues are considered problematic, approval of Vice Chancellor shall be sought prior to final sign-off.

➤ Where a Client insists for an Agreement on the Client's terms, PI will carry out a review of the Client's terms and conditions, in consultation with the Legal Department of Vel Tech, for acceptance of the Client's terms or request renegotiation. Any Agreement with the Client, outside of the approved Standard Terms and Conditions can be entered only after approval of the management of Vel Tech and shall be done by Industry Relation Office

### DISTRIBUTION OF CONSULTANCY FEES

| Consultancy Categories   | PI and team<br>members | Vel Tech |
|--|------------------------|----------|
| Category 1 Individual Consultancy  | 70%                    | 30%      |
| Category 2 Institutional / Departmental<br>Consultancy                       | 60%                    | 40%      |
| Category 3 Testing and Evaluation / Calibration and Standardization Services | 30%                    | 70%      |

# **EXCLUSIONS**

This policy does not apply to those activities, which may be paid or unpaid, and which are in furtherance of scholarship or general dissemination of knowledge, such as but not limited to:

- Authorship of or royalties from publication of books, Research, training and teaching, Guest Lectures, serving on Scientific Advisory Boards, Research Councils.
- Associations and Statutory Bodies, Service on charitable committees, External examiner duties, Lecture tours and conference presentations or attendance, Editorship of academic journals or publication of academic articles, Professional arts performances, and Any other activity as defined by the job description of the faculty.

# **Dispute Resolution**

The clause regarding dispute resolution should be in built in Memorandum of Understanding/Memorandum of Association to be entered with the party while undertaking Consultancy project. In case of any dispute remaining unresolved, it shall be dealt with by the Court of law located within the jurisdiction of the Institute.

# 9. INTELLECTUAL PROPERTY RIGHTS - POLICY

#### 1. Overview

Intellectual property rights (IPR) are like any other property right allows innovators, creators or owners, of patents, trademarks or copyrighted works to gain value from their own work or creation. Intellectual property plays a significant role in providing a competitive edge to an organization. IPR not only used as protective tool to safeguard creativity and generate revenue but also useful to build strategic alliances for the socio-economic and technological growth.

This policy document aims is to stimulate ethical environment and to conduct creative research by identifying the importance of innovations, assisting innovators so that their concepts are translated into products, processes and services. Furthermore, the resultant outcomes from IPR could be utilized in the society providing benefits to the University and creators involved as well. Resourceful innovations may lead to the development of intellectual property know-how, copyrights, designs, instruments, devices, processes, software and so forth inventions which have the potential for commercialization with or without the registration under various Acts enacted by the Government for protection of intellectual properties.

## 2. Objectives

- To afford academic freedom and offer protection to the IPR generated from the individuals involved in developing innovations at the University
- Encouraging and improving the standards of the research levels which can be translated certainly to IPRs
- To provide guidelines for the institute innovations or concepts developed from the associated organizations to commercialize IPR through bilateral/ multilateral agreements
- To materialize technology transfer procedures and mechanisms thereby protecting the interest
  of the creators/licensees of the IPR and in process generating revenue for the institute and the
  creators or licensees
- To make innovators aware of IP laws and rules for ensuring their compliance
- Establishing the IPR management policy and procedural rules which make the inventions and discoveries accessible and available to the public
- Promoting, facilitating and providing incentives to the inventor/s who takes up the effort to transfer University IP to the public.
- Supporting implementation of judicious IP management practices within the University to promote IPR culture

#### 3. Administrative Setup

The IPR Cell comprises of a team of individuals having defined roles and its structure would be as follows:

| S.No. | Compilation  |
|-------|--|
| 1.    | Coordinator ( Chairperson)                                   |
| 2.    | Two faculty members from Basic Sciences/Engineering-Member   |
| 3.    | Two IP expert ( Consultant/Intern/Law faculty member)-Member |
| 4.    | Two Research Scholars  |

The tenure of the members of the IPR cell may be fixed to three years and the cell should be accountable for administration of all decisive issues related to IP policy and other pertinent matters as should be determined from time to time.

Screening of requests for **patent** will be through IPR Cell and the Cell will keep record of patents in the University and may help in negotiating transfer of technology (ToT) as well. IPR Cell facilitate patent form filling upon receiving inputs (preferably prior art search) from area experts and legal opinion from within and outside University as deemed fit by Chairperson, IPR Cell.

#### 3.1 Roles and Responsibility

- IPR Cell shall be responsible for supervision and implementation of all recommendations and decisions pertaining to IPR in the University
- Chairperson shall be the responsible authority for finalizing Agreements, Memoranda of Understandings, Confidential Disclosure Agreement (CDA), Material Transfer Agreement (MTA) and licensing agreements of the patents and copyrights
- Chairperson will the consent of panel have the authority to create or amend administrative mechanisms from time to time, can create administrative bodies and entrust roles and responsibilities in view of changing needs to facilitate implementation of IPR Policy
- With changing government rules and national/international developments such as treaties and legal judgments, IPR Cell will have the authority to make changes in the IPR Policy or bring out new policy as and when it is felt necessary
- The innovator should endure the responsibility for the changes in legal instruments and would be signing these documents as a creator as well as shareholder of the royalty so generated

# 3.2 Appeal Procedure

- In case of any grievance or conflict regarding ownership of IP or handling of IP proposals or procedures adopted for implementation of IPR Policy and interpretation of various clauses of IPR Policy; concerned aggrieved person can send appeal to the IPR Cell. Resultant IPR Cell recommendations in this aspect will be submitted to the Vice Chancellor of University or his/her nominee, whose decision shall be final.
- In case of infringement/violation of IPR such as patents by faculty/staff/students or any third party associated, the University will refer the matter to IPR Cell for investigation and will take final decision to resolve it via a resolution. In case of any third party infringement on the IPR of the University, the IPR Cell would examine and make recommendation to the Vice Chancellor for any legal course of action, if required.

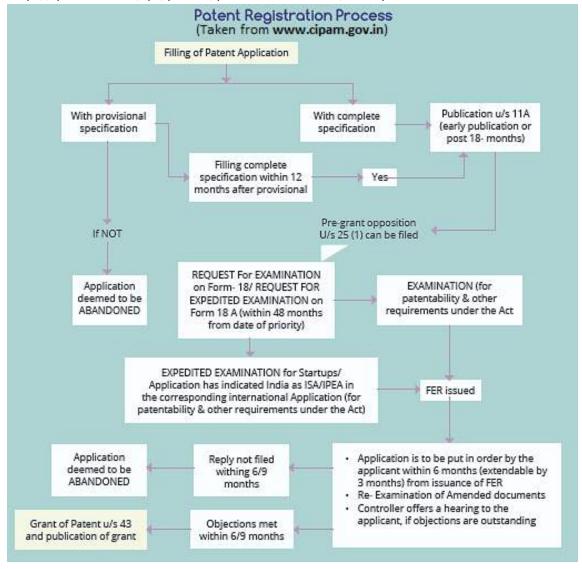
### 4. Ownership of IPR

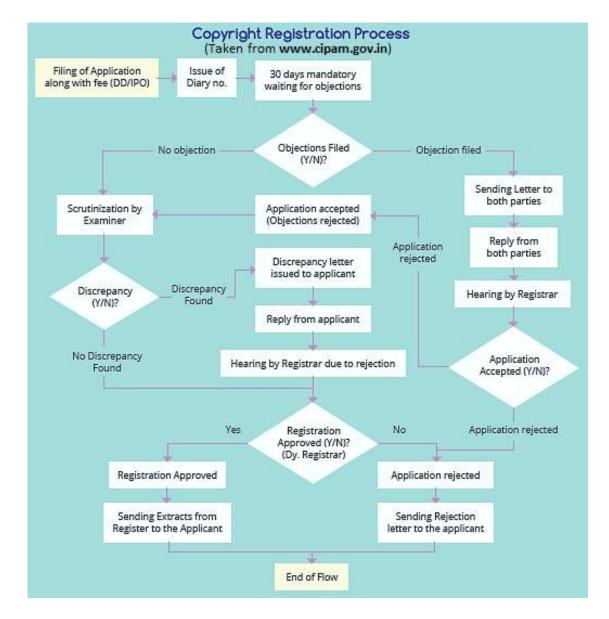
#### 4.1 Types of Activities leading to Generation of IPR

- Research taken up by a faculty, student, project or supporting staff, etc., in the normal course of his/her appointment/engagement at the University with funds supported from the **University** (this would also include research projects undertaken by students under the direction of the faculty member);
- Research taken up by a faculty, student, project or supporting staff, etc., from funds coming from sponsors such as Government of India, State governments, international agencies, or foreign governments, etc.;
- Joint or Collaborative research executed with other institutions including government departments and agencies, PSUs and private companies located in India and/or abroad
- Research supported by **companies** and other private organizations through research projects or consultancy assignments; and any combination/s of the above

Various kinds of IPR include Patents, Designs, Trademarks, Copyrights, Geographical Indications, Semiconductor Integrated Circuit Layout Designs, Plant Varieties, and Trade Secrets. Each has specific registration process and can be accessed from National IPR policy website links; dipp.nic.in and cipam.gov.in. For instance, process steps for Patent and Copyrights are given below and for fee details please refer to;

http://ipindia.nic.in/ipr/patent/patent\_FormsFees/Fees.pdf





# **General steps to file a patent application** (taken from cipam.gov.in) Step 1: Documents can be filed in the patent office

- through online (e-filing) or
- www.ipindiaonline.gov.in/online
- through post or
- can be submitted by hand

# Step 2: Procedure for obtaining a patent

- Filing of patent application
- Publication after 18 months
- Pre Grant Opposition /Representation by any person.
- Request for examination
- Examination: Grant or Refusal
- Publication of Grant of patent
- Post Grant Opposition to grant of patent
- Decision By Controller

# Contents of a Patent-techno-legal document ((taken from cipam.gov.in) Legal Information:

- Name ,address ,
   contact details
   inventor,
   assignee,
   Assignments

  Form 1

  Form 1

  Form 1
- Details of foreign filing
- Request for examination Form 18
- Request for Early publication Form 9
- Power of authority(if assigned to patent agent) Form 26

# **Technical information (Specification):**

#### Form2

## **Background of the invention**

describes the need for the invention

#### Summary of the invention

- describes how the invention works
- someone should be able to duplicate your work
- the preferred embodiment
- examples

#### **Claims**

- most important part
- independent claims
- dependent claims

# **Abstract**

# **Documents required for filing of A Patent Application** (taken from cipam.gov.in)

- 1. Covering letter-indicating the list of documents;
- 2. Application for Grant of Patent in Form 1 [section 7, 54 & 135 and Rule 20(1)] in duplicate;
- 3. Complete/Provisional specification in Form 2 in duplicate [Section 10; Rule 13]
- 4. Statement and Undertaking in Form 3 [Section 8; Rule 12];
- 5. Power of Attorney in Form 26 (in original) (Rule 3.3 (a) (ii)); (if filed through attorney)
- 6. Declaration of Inventor-ship in Form 5

(only in case of an Indian Application; (Rule 4.17);

- 7.Request for examination: F18
- 8. Requisite Statutory fees (cheque / DD).

# Essential ingredients of Complete Specification (taken from cipam.gov.in)

- > Title and Preamble
- Prior art
- Drawbacks in prior art
- Efforts or Solution to Drawbacks
- Summary of the Invention
- Statement of invention
- Detail description of invention
- Detail description with reference to drawings
- Examples
- Claims

## 4.2 Ownership Criteria

# 4.2.1 Patent, Copyright on Software, Industrial design, IC layout design and New plant variety

- (A) Intellectual property is held wholly or exclusively by University if:
  - It has been developed either exclusively with the use of funds/facilities provided by the University or with a mix of funds/facilities of the University and external agencies but without any formal connected agreement
  - It has been developed/advanced with the use of external funds/facilities, including, that of sponsored research and consultancy projects without any associated agreement/s
  - It has been developed under any contract arrangement comprising "work for hire", work commissioned and/or outsourced by the University.
  - It has been developed pursuant against a legal/written agreement where ownership has been transferred to the University.
  - It is not transferable to an individual or a specific group of identifiable contributors, i.e. software or technology or process developed over a period of time with contribution from different personnel of / for the University.
- (B) Intellectual property can be owned by Third party/ies (exclusively or jointly with the University) if:
- · It has been developed with external funding from Third party/ies including sponsored research, consultancy projects and other collaborative activity/ies with a proper associated agreement.
- It has been developed without external funding from third parties under collaborative project/s or activity/ies with them and are with associated agreement/s.
- It has been developed out of the work carried out by the University faculty/scholar/student or personnel during their visit to a Third party Institution/organization.
- For sharing of IP in case of sponsored research and consultancy projects or any other collaborative actions, the following strategies shall be followed:
- If the funding agency allows the University to own the IP, then the University may share its rights with other Third party/ies subject to their individual contribution.
- · In case of funds provided by an agency of Government of India, the ownership shall be decided in acquiescence with the ownership clauses defined by the funding agency at the time of approval of the activity/ies.
- In case of funds arranged by a non-government agency; the ownership may be shared between the University and funding agency. The distribution may take into consideration relative contributions of parties involved as well as any background IP with respective parties. Waiver of joint ownership can be deliberated by the University recommendation/s of the involved Inventor/s or Key Inventor based on the adequacy of compensation provided to the University.
- For a multi-country/multi-institutional collaborative project/s, there must be an clear agreement defining the ownership of IP generated.
- Usually, IP will be shared between only those parties that contribute towards creation of IP through direct involvement of their human/other resources.
- In case of collaborative activity with foreign institutions encompassing indigenous biological material, IP ownership has to take into account restrictions as per the prevailing 'Biological Diversity Act 2002' of India.
- (C) The Intellectual property can be retained by the Inventor/s if:

 None of the situations defined above for the University or Third party ownership applies, and the IP is not linked to the inventor's engagement with the University. For faculty and staff, the engagement denotes responsibilities associated with employment. It is also expected that the individual concerned would have pursued these activities outside of usual working hours of the University.

#### 4.2.2 Copyright other than Software

- (A) The copyright owned by the author/s: The copyrights is owned by the authors for textbooks, research books, articles, monographs, teaching- learning resource materials and other scholarly publications if not restricted by an associated agreement. These may also include popular novels, poems, musical composition, other works of artistic imagination and so forth. It is advisable to keep the University informed about such activities/creations.
- (B) The copyright owned by the University: The copyright is held by the university if the work is created under any contract.
- (C) The copyright reassignable to Authors: Copyright works that are normally assignable to the University may be reassigned to the author upon request from the respective individual provided it does not violate any agreement with Third party and does not intervene or harm the interests of the University.

## (D) Copyright owned by scholars/student:

Copyrights of thesis, dissertations, term papers, laboratory records, and of other documents that are produced by a research scholar/student during the course of his/her study will belong to the student unless restricted by an associated agreement and/or research carried out using facilities that have come to the University with pre-imposed IP protection restraints.

For claiming ownership of copyright for thesis and dissertations, the scholar/s and/or student/s has/have to declare that the thesis does not include any information that prerequisites IP protection by the University.

#### 5. IPR facilitating Process by Vel Tech

- Forward a proposal prepared by the concerned investigator/inventor to the IPR Cell outlining the wish to file a patent application with the key highlights of the invention and requesting to facilitate for prior-art search (novelty search) through patent processing agents or agencies
- IPR cell will screen the application for IP filing after having Patent Search Report to evaluate patentability. The report by experts and members can be availed through proper channel
- If found patentable as per the Indian Patent Act, 1970, IPR cell may forward the potential cases to patent facilitators/ processing firms/agencies/.private patent agents/attorneys
- All filing and post filing fees, attorney fee etc. for normal and urgent processes will be met out of the **allocated budget of IPR Cell** or from University resources.
- For joint patent to be filed in name of the University along with funding agency/third party; the costs and benefits will be **shared** between the joint applicants as per the signed MoU

#### 6. Transfer of IPR

#### 6.1 Policy Related to Transfer of Biological Resource and Associated Knowledge

The Biological Diversity Act 2002 of India regulates the right to use/access to Biological resources of the country by non-citizens, non-residents of the country as well as a body corporate, association or organization not incorporated or registered in this country. The Act forbids such persons/entities from obtaining any biological resource occurring in India or knowledge associated with it towards research or for commercial utilization or for bio-safety and bio-utilization. The Act prevents individual/s from transferring the results of any research for financial consideration or otherwise to any entities/persons without prior approval of the National Biodiversity authority (NBA).

#### **6.2 Policy for IP Licensing and Assignment**

Licensing intellectual property to a third party is the key modality for technology transfer leading towards commercialization. There are various modes of licensing strategy as detailed below:

- Exclusive licensing: The licensor licenses the IP only to one licensee. In other words the licensee is the only one authorized by the licensor to use and exploit the IP. Even the licensor is excluded from using and exploiting the IP.
- Sole licensing: In this case also, the licensor licenses to only one licensee. However, under this licensing, the licensor can also use and exploit the IP.
- Non-exclusive licensing: In this type of licensing, the licensor is permitted to enter into agreements with more than one entity for use and exploitation of the IP. In other words, the same IP may be used by many licensees at the same time for the same purpose or for different purposes.
- Sub-licensing: Sub-licensing is applicable when a licensee wishes to further license the IP to another party/ies.

The following guidelines are appropriate to license agreement with a Third party:

- i) Mostly no entity shall be granted exclusive right for the development/commercialization of intellectual property owned by the University.
- ii) If an entity is granted exclusive rights with respect to a particular IP, the same should be for a limited period to avoid the possibility of misuse/no-use.
- iii) Sub-licensing must be stated whether it is permitted or not, and even if permitted, whether the consent of the licensor is required or not should be clearly specified in the license agreement.
- iv) The University and its inventors should be protected and insured from all liability arising from development and commercialization of a particular intellectual property.
- v) Wherever applicable, it should be ensured that the licensing process does not limit the research/publication rights as well as incorporation of necessary material in the thesis of the associated faculty/student inventor/s.
- vi) Will not place restriction/s beyond the inventor/s on the University from entering into research and development in the same area independently or with other organization/s.
- vii) Assignment of IP by the University to another party may be carried out under the situations such as conditions by the government or its agencies, defence purposes or if the IP created distinctly ensues benefits to the society at large.

# 6.3 Policy Related to the Use of Name of the University and Trademarks Owned by the **University by Third Parties**

The University would sanction the use of its name and trademarks owned by it to the Third party/ies to whom IP has been licensed/assigned through a signed agreement on following conditions:

- a) IP is envisioned to be used for the benefit of society.
- b) IP is licensed/assigned with an undertaking from the licensee/assignee that IP will be used
  - i. in a responsible manner to create a product/process in compliance to environmental safety, and good manufacturing practices promoted by the Government of India and its regulatory bodies.

- ii. in stimulating truthful claims and information, i.e. not for misleading the society or
- iii. without any liability to the University in case of misuse of IP or accidental damage amassing due to use of IP.
- c) In no case IP will be used against the interest of country.
- d) In all such cases, the licensee/assignee must take prior approval of the University about the manner in which the name of the University and its trademarks are to be used in any media such as print and/or electronic media.

## 7. Revenue Sharing

- The net earnings generated by the use and exploitation of IP will be shared among the Inventor/s and the University on 70:30 ratio.
- In case the patent filing costs are not borne by the University, the inventor can first withhold the costs incurred in this regard (which include maintenance of such patents till licensing) from income amassing from the commercial exploitation of the patent. Excess income beyond such recovered costs will be shared with the University.
- In case there is a third party, the respective shares of the University and inventors will be calculated on the net receipts after abstracting the third party's share.
- The inventor's share will remain to be paid irrespective of whether or not the individual continues as an employee /student/ research scholar of the University.
- Co-inventors of IP should sign at the time of disclosure or filing for IP protection, a distribution of the IP earnings agreement, which should state the proportional percentage dispersal of earnings from IP to each co-inventor. The inventor/s may, at any time, by mutual consent, revise the distribution of IP earnings agreement.
- If there is only one inventor of the IP, the whole amount of inventor's share will be reserved by the inventor. If there is more than one inventor, inventor's share will be distributed between the coinventors on the mutually agreed terms and conditions.
- If there are two inventors, the principal investigator/supervisor/team leader will get upto 60%, while the co-inventor will get atleast 40% of inventor's share by common agreement.
- If there are more than two inventors, the principal investigator/ supervisor/ team leader will get upto 60% of inventor's share and the rest will be disseminated among the co-inventors in the proportions on the mutually agreed terms and conditions at the time of IP disclosure or at the time of filing for IP protection.
- Students/Project staff may have a share in revenue earned but the share in case of 'work for hire' is not as a right, but may be as an incentive at the sole choice of the principal investigator or supervisor in consultation with the IPR Cell, if there exists a need.
- Revenue sharing is not necessarily concurrent with the inventorship. Mere assistance like support in the preparation and conduct of the experiments, data analysis, etc. does not entitle one for inventorship, but may entitle for revenue sharing as an acknowledgement of intellectual contributions for routine/mechanical support at the sole discretion of the principal Investigator/ Supervisor of the work.
- If any inventor is unable to be contacted/traced for one year because of lack of information, the revenue matching to his/her share will be credited to the IP fund.
- Of the University share, 50% will be used for creating a University's IP fund, which will be used for any activity related to commercialization and maintenance of IPR or obtaining IPR in another country, or for capacity building. Further, 10% of the share will be paid to the University as Administrative charges and 40% will be made available to the concerned Department for the purchase of equipments or material or for any research activity and promotion of industrial partnership.

#### 8. Commercialization of IPR

- The overheads involved in obtaining and maintaining the statutory rights as the University owned
  property shall be met by the University. There would be a time frame in which the institute owned
  property allowed to be commercialized with the consent of IPR group of the institute either on case
  to case basis or as a set pattern decided by the IPR Cell.
- Third parties must obtain prompt authorization writing from the University towards commercialization of the IP. Confidentiality agreements will continue in force even if the commercialization process is terminated at any stage.
- The University IPR Cell will license the rights in the Institute owned intellectual property at its own freedom of choice through third parties who may or may not be the creator of IPR through exclusive/ non- exclusive licenses or by assigning its ownership right to the third party safeguarding financial and legal interest of the institute and the creators.
- The costs of transfer of rights/interests/ownership or exclusive marketing right of the Instituteowned intellectual property will be borne absolutely by the licensee, assignee or person acquiring
  such rights. Further the licensing or assignment by the institute may be subject to special terms
  and conditions wherein the licensee or the assignee will be lay open to to sharing the revenue or
  the cost of maintenance of the intellectual property or both as decided and deliberated mutually.
- In circumstances wherein the assignee or the licensee has not taken suitable steps for the commercialization of the University owned intellectual property; the University would be free to revoke the license and assign it to a different party.

#### 9. Pertinent Issues Relating to IPR

#### Conflict of Interest:

The inventor/s are required to reveal any conflict of interest or potential conflict of interest. If the inventor/s and/or their immediate family have a stake in a licensee or potential licensee company, then it is necessary to disclose the stake to the Chairperson/Coordinator of IPR Cell. A license or transfer of rights of a patent to a company in which the inventors have a stake should be subject to the approval of the IPR Cell body.

#### Dispute Resolution:

IPR Cell will settle any conflict/grievance/dispute between the University and the innovator/collaborator/sponsors regarding ownership of IP, execution of IP Policy and shall recommend the same to the VC of University or his/her nominee, whose decision shall be final.

#### Legal Jurisdiction:

As a policy all agreements approved by the University and disputes arising therein, will be subjected to the legal jurisdiction of Tamil Nadu High Court only.

#### Mandatory Obligation for Investors:

All credits and benefits of collaborative/joint work including the intellectual property created during the tenancy would be shared between both parties i.e. University and collaborating agency as per the mutually agreed MoU.

## Copyright Issues w.r.t. Educational Resources:

In matters of copyright, if any portion of their creation is not their original work then the creators must provide documentary proof that necessary permission has been acquired from the original creator (owner) or provide a statement which could give acceptable reasons that permission is

not required in their case. They will further certify that the work contains neither malicious material nor material that invades the privacy of others.

Under situations wherein the third party alleges infringement of rights by the innovator and the IPC finds a prima facie in this respect indicating that the creator has made false claims; the University shall immediately take steps to disassociate itself from the said intellectual property. Provisions would be made in writing with the creators to comfort and prevent the University from any damages ascending out of such litigations.

It is to be noted that while retention of the hard copy by the University library is necessary for the meeting of requirements for a degree, and the student/scholar must agree to let the abstract of the thesis to be made available electronically, the student/scholar will have the option to refuse the release of the full electronic text of his/her thesis on any network. On the University part, the library has a duty to warrant that the use of the texts of theses held by it is in agreement with laws governing copyright and fair use, as well as sound academic practice.

# **10. ACADEMIC AUDIT MANUAL**

# **VISION**

To evolve benchmarked quality metrics/procedures for the educational practices, processes and methods.

# **MISSION**

Mission is to benchmark the practices and processes against CDIO standards, National/International accreditation criteria and ranking parameters for facilitating administrative systems achieving continuous improvement.

## I. ACADEMIC AUDIT

The Academic Audit, like more traditional program reviews, is a peer review process which includes a self-study and a site visit by peers from outside the institution. It emphasizes self-reflection and self-improvement in addition to compliance with predetermined standards.

## 2. DEFINITIONS

- a) "Commission" means University Grants Commission (UGC).
- b) "University" means Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology.
- c) "Programme" means cohesive arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the award of a degree.
- d) "Course" means a unit of teaching, which encompasses various topics, that typically lasts one semester, is led by one or more faculty and has a fixed set of registered students.
- e) "Degree" means an academic degree conferred by the University upon those who complete the undergraduate / postgraduate / doctoral programme successfully.
- "Academic Year" means a period consisting of two consecutive (one odd + one even) semesters.
- "Choice Based Credit System" means providing choice for students to select courses from the prescribed course categories (core, elective, value-based, complementary skill courses), in the preferred semester complying prerequisites and based on their learning aptitudes.
- h) Program Educational Objectives (PEOs) Program educational objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Program educational objectives are based on the needs of the program's constituencies.
- i) Graduate Attributes (GAs)— Graduate attributes form a set of individually assessable outcomes that are the components indicative of the graduate's potential to acquire competence to practice at the appropriate level. The graduate attributes are exemplars of the attributes expected of a graduate from an accredited programme. Graduate attributes are clear, succinct statements of the expected capability, qualified if necessary by a range indication appropriate to the type of programme.
  - http://www.ieagreements.org/assets/Uploads/IEA-Extended-Glossary.pdf
- j) Programme Specific Criteria (PSC) Program Specific Criteria provide the specificity needed for interpretation of the baccalaureate level criteria as applicable to a given discipline. Requirements stipulated in the Program Specific Criteria are limited to the areas of curricular topics and the availability of faculty. If a program, by virtue of its title, becomes subject to two or more sets of Program Specific Criteria, then that program must satisfy each set of Program Specific Criteria; however, overlapping requirements need to be satisfied only once.
- k) Programme Outcomes (POs) Programme outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire as they progress through the program. Learning outcomes must be fulfilled at the exit level of a programme that are consistent with the educational objectives

- I) Course Outcomes (COs) Course outcomes describe what students are expected to know and be able to do by the time of completion of a course. These relate to the skills, knowledge, and behaviors that students acquire as they undergo the course.
- m) Assessment Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process.
- n) **Evaluation** Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained. Evaluation is expected to result in decisions and actions regarding program improvement.

## 3. PURPOSE OF ACADEMIC AUDIT

- To encourage departments or programs to evaluate their "various academic processes visàvis their quality" the key faculty activities required to produce, assure, and regularly improve the quality of teaching and learning.
- To facilitate HoDs / Deans / Directors how faculty approach to academic decision making and how they organize their work, using the resources available to them and working collegially to provide a quality education in the best interests of the student learning.

# 4. OBJECTIVES OF ACADEMIC QUALITY AUDIT

- To assure that each course in the curriculum addresses, agreed upon content, that sound teaching practices are carried out appropriately and consistently, that assessments are conducted as planned, and that agreed upon plans to improve courses or the program as a whole are implemented by the concerned persons.
- To assure ourselves that other faculty activities affecting students, such as academic advisement, are being performed appropriately and consistently.
- To provide meaningful, timely feedback and recognition to faculty regarding how they are performing work related to the curriculum, teaching and learning, assessment, and other practices affecting students.
- To identify benchmarked best practices in quality assurance and use this information to improve how we assure that the work of the program is performed appropriately and consistently.
- To review our quality assurance practices periodically to see how they might be improved.

## 5. ELEMENTS OF ACADEMIC AUDIT

The focal elements of the academic audit are:

- I. Curriculum Design
- 2. Teaching-Learning
- 3. Assessment and Evaluation

# 5.1 Curriculum Design

The curriculum audit for any programme is a strategy for taking the programme towards excellence. It is one of the methods to assure the quality of graduates being produced.

The curriculum audit is conducted with the following purposes.

- Improve, expand, innovate, redesign, add value, reengineer and increase the scope of the education programme.
- Compare the provisions of curriculum and actual achievements and find out the gaps in respect of well-defined criteria.
- Assess the level of quality attainment in different phases of curriculum life cycle.
- Identify the difficulties in the implementation of the curriculum.
- Design and implement the curricular innovations.
- Assure the quality for the next cycle of the programmes.
- Compare the effectiveness of the programmes within the institution and among the institutions.
- To verify the extent of curriculum compliance to the guidelines of concerned Regulatory Authority.
- Assure the effective participation / involvement of external stakeholders in the curriculum design & revision.
- To verify the fulfillment of curriculum with the requirement of the Program Specific Criteria (PSC) of respective programme prescribed by appropriate professional / lead society.
- To verify the adequacy of the curriculum to address all the Program Outcomes of the respective programs.
- To verify the frequency of curriculum revision / syllabi modification.
- To analyse the summary of feedback of course handling faculty on courses & syllabi.
- To verify the Recommendations of BoS & Academic Council incorporated in the curriculum & syllabi.
- To verify the relevance of course outcomes with respect to the content.

## 5.2 Teaching-Learning

- To consciously consider the program outcomes and course outcomes to decide the teaching methods in our courses.
- To discuss our teaching practices with each other and work collaboratively to improve teaching and learning.
- To consult sources beyond our own faculty while selecting our teaching practices. (e.g., employers, students or graduates, comparable programs in other institutions, professional associations, etc.)
- To identify the best practices in teaching and use these information to improve our own teaching.
- To review periodically our teaching methods to see how they might be improved.
- To monitor the conduct of the meetings Course Coordinator / Module Coordinator as per the schedule.
- To follow-up action suggested in the Course Coordinator / Module Coordinator Meeting.

- To monitor the implementation of Innovative Teaching Learning / Active Learning Methods Attempted / Incorporated / Employed / Contemplated.
- To verify course file maintenance.
- To analyse students' feedback and follow-up action.

## 5.3 Assessment and Evaluation

- To measure the extent to which our students are achieving course outcomes and program outcomes
- To work collaboratively to develop and implement assessments of course outcomes and program outcomes.
- To consult sources beyond our own faculty when designing assessments of program learning objectives. (e.g., employers, students or graduates, comparable programs in other institutions, professional associations)
- To discuss assessment data and use our findings to improve our curriculum, co-curriculum and teaching practices.
- To identify the best practices in assessment of course outcomes and program outcomes and use this information to improve our assessments.
- To review periodically our assessment methods to see how they might be improved.
- To assess the fairness and transparency in the evaluation.
- To identify whether assessment has been conducted for the entire course outcomes and program outcomes.
- To identify the effectiveness of assessment methods.
- To verify the adequacy of laboratory spaces, equipment etc. for the conduct of experiments.

## 6. AUDIT PROCESS - THE PEER REVIEW

- Auditors are primarily academicians who are trained on education quality processes and audit methodology.
- Audit team (2-4 members) most likely come from other institutions.
- Since the auditors focus on quality processes, they do not have to come from the academic discipline of the department being audited.
- Audit visits are typically one day per department.
- Auditors meet the departmental leadership, faculty, and students.
- Auditors write a report highlighting examples of exemplary practice, noting areas for improvement, and evaluating a department's approach to educational quality practices.

# 7. GUIDELINES TO AUDITOR(s) / AUDITEE(s)

Following tables show the Audit criteria & guidelines for both Auditors and Auditees vis-à-vis documents, material evidences, exhibits etc. to be verified during the audit process and prepared / maintained for audit process respectively. Tables 1, 2 and 3 shows the Audit criteria for curriculum design, teaching-learning and assessment & evaluation respectively.

Table 1. Audit Criteria for Curriculum Design

| SI.<br>No. | Criteria   | Guidelines to the Auditor and Auditees  |
|------------|--|---|
| I          | The extent of curriculum compliance to the guidelines of concerned Regulatory Authority (eg. AICTE for technical programmes, BCI for law etc.)                   | Verify whether guidelines of the respective regulatory council followed and complied.   |
| 2          | Effective participation / involvement of external stakeholders in the curriculum design & revision   | Minutes of the meeting, mail communications, consolidated views of stakeholders etc. should be verified.  |
| 3          | Satisfaction of curriculum for the requirements of Program Specific Criteria (PSC) of respective programme prescribed by appropriate professional / lead society | Mapping of program curriculum with Program Specific Criteria of appropriate professional society.  Mapping of program curriculum with faculty competency. |
| 4          | Adequateness of the curriculum to address all the Program Outcomes of the respective program   | Mapping of program curriculum / courses / course outcomes with programme outcomes to be verified.   |
| 5          | Frequency of curriculum revision / syllabi modification  | Once in semester / year / two years / three years / four years.   |
| 6          | Summary of feedback of course handling faculty on course & syllabus  | Consolidated feedback summary of individual course handling faculty on course & syllabus  |
| 7          | Recommendations of BoS incorporated in the curriculum & syllabi  | Minutes of BoS and revised curriculum and syllabus.   |
| 8          | Recommendations of Academic Council incorporated in the curriculum & syllabi   | Minutes of Academic Council and revised curriculum and syllabus.  |
| 9          | Relevance of course outcomes with respect to the content   | Articulation of course outcomes with taxonomy level and their appropriateness.  |

Table 2. Audit Criteria for Teaching - Learning

| SI.<br>No. | Criteria   | Guidelines to the Auditor and Auditees   |
|------------|--|--|
| I.         | Conduct of Course Coordinator / Module<br>Coordinator Meeting as per the schedule                        | Seven meetings must be conducted. Adherence to the meeting schedule. Discussion of Agenda tabled. Resolution made on each agenda tabled. |
| 2.         | Action taken / follow up of Course Coordinator /<br>Module Coordinator Meeting                           | Implementation of actions arisen from the meeting resolution.  Have observations made by the HoD & Dean concerned?                       |
| 3.         | Innovative Teaching – Learning / Active Learning Methods Attempted / Incorporated / Employed / Followed. | Instruction materials are prepared for delivery of syllabus content through contemporary teaching-learning methods.                      |
| 4.         | Students' attendance maintenance   | Maintenance of the students' attendance and assessment record.   |
| 5.         | Course file maintenance  | Maintenance of course file as per the list. Relevance of the materials with content. Quality of the material & documentation.            |
| 6.         | Feedback of the follow-up action on course faculty   | Feedback collected from at least 80% of the students and analyzed, and corrective measures are taken.                                    |

| SI.<br>No. | Criteria   | Guidelines to the Auditor and Auditees   |
|------------|--|--|
| 7.         | Conduct of prescribed number of hours as per the LTP   | Total hours to be conducted = (L+T+P) * 15.  For 1 credit (L = 15 / T = 30 / P = 30).  L-Lecture; T-Tutorial; P-Practical;  To be verified with logbook & course file. |
| 8.         | Student Mentoring  | It is expected to verify whether student records are updated regularly. Impact of mentoring should be documented   |
| 9.         | Availability of the academic facilities & Equipment / Software / Hardware to conduct experiments | Experimental set-up for all the experiments, working condition of equipment and availability of open source / licensed software.                                       |

Table 3. Audit Criteria for Assessment and Evaluation

| SI.<br>No. | Criteria   | Guidelines to the Auditor and Auditees   |
|------------|--|--|
| I          | Assessment conducted to all the COs                            | Assessments (tests, seminars, assignments etc.) must be conducted to measure the attainment of each course outcome.                  |
| 2          | Taxonomy level of questions and corresponding course outcomes  | Taxonomy level of at least one Assessment task should be as same as the level of the corresponding course outcome.                   |
| 3          | Adequateness of time   | A maximum of ±5% of total time error may be tolerated.   |
| 4          | Language and Grammar   | Question should be free from spelling mistake and grammar mistake.   |
| 5          | Assignment tasks and Taxonomy level                            | Taxonomy level of at least one Assignment task should be as same as the level of the corresponding course outcome.                   |
| 6          | Availability of schemes for evaluation                         | Mark allocation scheme must be available for each assessment. Rubrics are expected wherever required.                                |
| 7          | Fairness in the evaluation                                     | A maximum of $\pm 10\%$ mark variation in the evaluation may be tolerated.   |
| 8          | Transparency in the evaluation                                 | It is expected to distribute the valued answer scripts to<br>the students and get signature of the students in the<br>answer script. |
| 9          | Quality of the experiments in practical courses / project work | It is expected to verify record / observation note book and laboratory manual.   |
|            | a. Conduct of all the experiments                              | ,  |
|            | b. Regularity of observation and record work completion        | Students completed one experiment in each lab session and got signature before the next lab class.                                   |
|            | c. Rubrics for practical courses                               | Verify the rubrics developed for practical course and followed for each experiment.  |
|            | d. Model Examinations  | Verify some sample answer scripts.   |
|            | e. Project review  | Two / Three reviews must be conducted.   |
|            | f. Rubrics for project work                                    | Rubrics developed for various reviews informed to students well in advance and followed throughout the project work.                 |
|            | g. Project report as per guidelines                            | Verify the sample project report.  |

# 8. AUDIT REPORT

Following tables show the Audit report to be filled by the Auditor during audit process. Tables 4, 5 and 6 show the audit report form for curriculum design, teaching-learning and assessment & evaluation respectively.

Table 4. Audit Report for Curriculum Design

| SI.<br>No. | Criteria   | Extent of Gaps | Description of Gaps or Scope for improvement | Strategies to<br>bring<br>improvement |
|------------|--|----------------|--|---------------------------------------|
| ı          | The extent of curriculum compliance to the guidelines of concerned Regulatory Authority (eg. AICTE for technical programmes, BCI for law etc.)                   |                |  |                                       |
| 2          | Effective participation / involvement of external stakeholders in the curriculum design & revision   |                |  |                                       |
| 3          | Satisfaction of curriculum for the requirements of Program Specific Criteria (PSC) of respective programme prescribed by appropriate professional / lead society |                |  |                                       |
| 4          | Adequateness of the curriculum to address all the Program Outcomes of the respective program   |                |  |                                       |
| 5          | Frequency of curriculum revision / syllabi modification  |                |  |                                       |
| 6          | Summary of feedback of course handling faculty on course & syllabus  |                |  |                                       |
| 7          | Recommendations of BoS incorporated in the curriculum & syllabi  |                |  |                                       |
| 8          | Recommendations of Academic Council incorporated in the curriculum & syllabi   |                |  |                                       |
| 9          | Relevance of course outcomes with respect to the content   |                |  |                                       |

Table 5. Audit Report for Teaching – Learning

| SI.<br>No. | Criteria   | Extent of Gaps | Description of<br>Gaps or Scope<br>for improvement | Strategies to<br>bring<br>improvement |
|------------|--|----------------|--|---------------------------------------|
| ١.         | Conduct of Course Coordinator / Module Coordinator Meeting as per the schedule                           |                |  |                                       |
| 2.         | Action taken / follow up of Course Coordinator / Module Coordinator Meeting                              |                |  |                                       |
| 3.         | Innovative Teaching – Learning / Active Learning Methods Attempted / Incorporated / Employed / Followed. |                |  |                                       |
| 4.         | Students' attendance maintenance   |                |  |                                       |
| 5.         | Course file maintenance  |                |  |                                       |
| 6.         | Feedback of the follow-up action on course faculty   |                |  |                                       |
| 7.         | Conduct of prescribed number of hours as per the LTP   |                |  |                                       |
| 8.         | Student Mentoring  |                |  |                                       |
| 9.         | Availability of the academic facilities & Equipment / Software / Hardware to conduct experiments         |                |  |                                       |

Table 6. Audit Report for Assessment and Evaluation

| SI.<br>No. | Criteria   | Extent of Gaps | Description of Gaps or Scope for improvement | Strategies to<br>bring<br>improvement |
|------------|--|----------------|--|---------------------------------------|
| 1          | Assessment conducted to all the COs                            |                |  |                                       |
| 2          | Taxonomy level of questions and corresponding course outcomes  |                |  |                                       |
| 3          | Adequateness of time   |                |  |                                       |
| 4          | Language and Grammar   |                |  |                                       |
| 5          | Assignment tasks and Taxonomy level                            |                |  |                                       |
| 6          | Availability of schemes for evaluation                         |                |  |                                       |
| 7          | Fairness in the evaluation                                     |                |  |                                       |
| 8          | Transparency in the evaluation                                 |                |  |                                       |
| 9          | Quality of the experiments in practical courses / Project work |                |  |                                       |
|            | a. Conduct of all the experiments                              |                |  |                                       |
|            | b. Regularity of observation and record work completion        |                |  |                                       |
|            | c. Rubrics for practical courses                               |                |  |                                       |
|            | d. Model Examinations  |                |  |                                       |
|            | e. Project review  |                |  |                                       |
|            | f. Rubrics for project work                                    |                |  |                                       |
|            | g. Project report as per guidelines                            |                |  |                                       |

# **Extent of Gaps**

- **D Deficiency:** Not complied and must be addressed immediately; there is a huge gap between the expected and available.
- **W Weakness:** Poorly complied with high-probability for non-conformance; there is a moderate gap between the expected and available.
- **C Concern:** Complied at present but there is a probability for non-conformance in near future.
- **S** Strongly Complied.

# 9. SUMMARY OF AUDIT REPORT

| Name of the School |  |
|--------------------|--|
|--------------------|--|

| Name of the Department                 |   |
|--|---|
| Name of the Programme                  |   |
| Name of the HoD                        |   |
| Name of the Auditor-I with affiliation |   |
| (Internal / External)                  |   |
|  |   |
|  |   |
| Name of the Auditor-2 with affiliation |   |
| (Internal / External)                  |   |
|  |   |
|  |   |
| Date(s) of Audit                       |   |
|  | ı |

| Description of Gaps:         |  |
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| Suggestions for Improvement: |  |
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Signature of the Auditor-1

**Signature of the Auditor-2** 

| Description of Gaps:         |  |
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| Suggestions for Improvement: |  |
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**Signature of the Auditor-1** 

**Signature of the Auditor-2** 

| Description of Gaps:         | ` |
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| Suggestions for Improvements |   |
| Suggestions for improvement: |   |

**Signature of the Auditor-1** 

**Signature of the Auditor-2** 

# II. INFORMATION TECHNOLOGY POLICY

## 1. Essential of IT Policy

Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology (Vel Tech) - IT policy establishes Organization-wide approaches and responsibilities for protecting the Confidentiality, Integrity, and Availability of the information assets that are accessed, created, managed, and/or controlled by the Institution in a legal way.

This policy includes Data, Computers, Information system, Network Devices, Intellectual properties and other computing and communication devices. It also includes documents and orally communicated information on the Campus

This policy establishes Organization-wide strategies and responsibilities for protecting the Confidentiality, Integrity, and Availability of the information assets that are accessed, created, managed, and/or controlled by the Vel TechInformation assets addressed by the policy include data, information systems, computers, network devices, intellectual property, as well as documents and verbally communicated information Intranet & Internet services have become most important resources in educational institutions & research organizations. Realizing the importance of these services, Vel Tech took initiative way back in 2000 and established basic network infrastructure in the academic complex of the university.

Over the last ten years, not only active users of the network facilities have increased many folds but also the web-based applications have increased. This is a welcome change in the Campus academic environment.

Now, Vel Tech has about 3500 network connections covering more than thirty buildings across the campus and expected to reach 4000 connections very soon.

Computer Maintenance Cell (CMC) is the department that has been given the responsibility of running the intranet& Internet services.

CMC is running the Firewall security, Proxy, DHCP, DNS, web and application servers and managing the network of the campus.

Vel Tech is getting its Internet bandwidth from Jio. Total bandwidth availability from ISP is 3000 Mbps (leased line) with redundant link.

While educational institutions provide Internet access to their faculty, students and staff, they face certain constraints:

- · Limited Internet bandwidth
- Limited infrastructure like computers, computer laboratories and Digital Libraries
- Limited financial resources in which faculty, students and staff should be provided with the network facilities and
- Limited technical manpower needed for network management.

Uncontrolled, uninterrupted and free web access can give rise to activities that are neither related to Teaching/learning processes nor governance of the organization.

At the outset, we need to recognize the problems related to uncontrolled surfing by the users:

- Prolonged or intermittent surfing, affecting quality of work
- · Heavy downloads that lead to choking of available bandwidth
- Exposure to legal liability and cases of sexual harassment due to harmful and embarrassing content.
- Confidential information being made public.

In order to secure the network, CMC has been taking appropriate steps by

Installing firewalls, access controlling and installing virus checking and content filtering software at the gateway.

However, in the absence of clearly defined IT policies, it is extremely difficult to convince users about the steps that are taken for managing the network. Users tend to feel that such restrictions are unwarranted, unjustified, and infringing the freedom of users.

Without strong management policies, IT security measures will not be effective and not necessarily align with management objectives and desires. Hence, policies and guidelines form the foundation of the Institution's security program. Effective policies are a sign of due diligence, often necessary in the event of an IT audit or litigation.

Policies also serve as blueprints that help the institution implement security measures.

An effective security policy is as necessary to a good information security program as a solid foundation to the building; hence Vel Techproposes to have its own IT Policy that works as guidelines for using the Organization's computing and communication facilities

#### 1.1 IT Resources

This policy is applicable for the following categories'infrastructure and other relevant IT resources

- Desktop / Server / Computing Facilities
- Network Devices and other IT and Network Communication equipment
- Internet facilities
- Email Facility in the Campus
- Institute Website / Web applications
- Network Security
- Reprographic Facilities (Printing/ Photocopying Facility)
- **Biometric Devices**

## **1.2** Stake holders – on Campus/ off campus

- Students: Current UG,PG Students and Research scholars
- Employees: Permanent/Temporary/Contract Employees
- Faculty Members: All Teaching Faculty
- Staff Members: Administrative/ Accounting /Technical/ non-technical
- Higher Authorities and Officers: Chancellor / Vice Chancellor / Registrar / Deans /COE/ HOD's
- Guests: Visiting Professors / Alumni / other Persons visit to the Institution

## 2. The IT Policy Categories:

## The IT Policy may be classified in the following Categories:

- 2.1 Infrastructure Equipment / Device purchase
- 2.2 Hardware Assembling and infrastructure establishments
- 2.3 Software Installation and Licensing
- 2.4 Network (Inter and Intra) Access policy
- 2.5 Email Account and usage policy
- 2.6 Website policy
- 2.7 Electronic Surveillance Policy
- 2.8 Institution Database usage policy
- 2.9 Biometric Device Access

## 2.1.Infrastructure Equipment / Device purchase:

Any IT equipment (henceforth it may be mentioned as CMC equipment) purchase will be through getting minimum three different quotations with registered/trusted suppliers of Vel Tech and the same will be evaluated by CPC (Central Purchase Committee) Members along with concern School/Department/Division Internal Experts, all / top 3 suppliers will be called for CPC Meeting for Face to face interaction and Discussion about Terms and Conditions, then the CPC Committee will finalise a Supplier for Purchase Order request to the Purchase Department.

## 2.1.1 Supply of Goods:

All the Materials supplied by the Supplier should meet the standard best in class as well as per purchase Order and the same will be verified by Quantity Checking and Quality Checking.

Incase of non-tangibleasset / service purchase/render,License key/ Account ID/ Connected Official Email ID along with warranty Certificate /Agreement will be received through online as well as document as per Indian Government Law.

The same purchase should be updated to CMC with purchase and license details to the central Software registry before the purchase bill closing as per internal procedures

## 2.2. Hardware Assembling and infrastructure establishments

### 2.2.1 Individual Component:

Computer Maintenance Cell will receive the Hardware after Quantity Checking and will be assembled/deployed to the User area/place except Research Equipment.

In case of complex assembly of hardware equipment, vendor/supplier support may be utilised.

## 2.2.2 UserSpace:

- 2.2.2.1 Student Space -Computer Labs, Language Labs, Research Labs, Class Rooms
- 2.2.2.2 Higher officials Space-Office of the President, Vice president, Chancellor, Vice Chancellor, Registrar, Director, Dean and HoD
- 2.2.2.3 Common Space: Library, Staff cabin, Purchase, Maintenance, Placement Training, Knowledge Resource Centre, Seminar Hall, Club offices, Sports offices, NCC, Security, Accounts, warden Office, canteen and all Wi-Fi space

#### 2.2.3 Warranty and Maintenance:

Computer Systemspurchased for User space are preferably purchased with 3 Years standard onsite warranty. Post warranty periodminor services/replacement of sparesshould be taken care by the concern department for Student space.

CMC should attend all kind of service /spares replacement for Higher official's space and common space (it includes all Wi-Fi coverage area, Projector and Surveillance equipment)

All the computers should be properly shut down before the electrical switch isswitched off. Users and other persons not related to maintenance should not switchON/OFF MCB (Miniature Circuit Breaker) unless emergency.

# 2.2.4 Power Supply to Computers:

All Computers should be connected with Electrical Point strictly through online UPS System and Power supply to UPS should not be disconnected without prior notice to maintain the battery charged and the UPS should be properly connected with earth as per the manufacturer's recommendations.

UPS power supply to the computers should not be shared with other Electrical and Electronic equipment

#### 2.2.5 Network Cable Connection:

All copper Network cables from network equipment to end devices should be properly shielded with Pipe/Trenchand kept awayat least 15cm from Electrical wire/devices.

All cable terminals should be properly terminated with labels/numbers for identification purpose

All Backbone cables may be equipped with Fiber or at least 1000BASE-T (Gigabyte Ethernet) as per ITU-Ethernet standard.

Incase of a very few users in a remote building, wireless point to point devices(Network Bridge) may be used as backbone.

## 2.2.6 File and Print Sharing:

File and print sharing facilities on the computer over the network should be installed only when it is absolutely required. When files are shared through network, they should be protected with password and with read only access rule.

#### 2.2.7 Shifting Computer from One Location to another:

Computer system may be moved from one location to another with prior written intimation to the office of the registrar, as office of the registrar maintains a record of computer Asset Number. Such Asset Number follows the convention that it comprises building name abbreviation and room No. As and when any deviation (from the list maintained by office of the registrar) is found in any computer system, network connection would be disabled and the same will be informed to the user by email/phone, if the user is identified. When the end user meets the compliance and informs CMC through proper channel in writing/by email, connection will be restored.

#### 2.2.8 Noncompliance:

Vel Tech faculty, staff, and students not complying with this computer hardware installation policy may leave themselves and others at risk of network related problems which could result in damaged or lost files, inoperable computer resulting in loss of productivity. An individual's noncompliant computer can have significant,

adverse effects on other individuals, groups, departments, or even thewhole university. Hence it is critical to bring all computers into compliance as soon as they are recognized not to be.

#### 2.3. Software Installation and Licensing Policy

With respect to anti-piracy laws of the country, Institution IT policy does not allow any pirated/unauthorized or modified software installation on the Institution owned computers and the computers connected to the Institution campus network. In case of any such instances, Institution will hold the department/individual personally responsible for any pirated software installed on the computers located in their department/individual's room

## 2.3.1 Operating System and its Updating

Institution IT Policy encourages to use Opensource operating systems such as Ubuntu, Fedora and software like Open office, Libre office, Sumatra pdf, 7zip Individual Users(officials) and respective Lab incharges whereverMicrosoft Windows (7/8/10) operating system used had better ensure the operating system is up to date. That will ensure the bug free,vulnerability less system for smooth Learning and working experience.

It is recommended to Concern officials confirm the license availability with CMC for installation other than open source/freeware.

#### 2.3.2 Data Loss Prevention:

All official computers are installed with at least 2 hard disk partition. Mostly 1<sup>st</sup> partition is used for operating systemand 2<sup>nd</sup> partition is for data storage. So even Operating system corrupted your data may be safe. However, there is no assurance for full data loss, hence users are advised to take copy of their data in to their pen drive/external Hard disk or cloud back up.

The Institution cannot be responsible forthe loss of the users' data by Virus/other threads or hardware failure.

## 2.4. Network (Internet and Intranet) Access policy

As per UGC guidelines Internet leased line should be subscribed from ISP directly or through Authorised partners with failover backbone / additional subscription.

Institution Local Area Network is divided into multiple Subnets for easy maintenance and better performance of the network with three tier architecture

All users will be provided with Internet login credentials to access the internet through Institution network (both wired and Wireless).

All Wired computers/Serversconnected with Institutional networkshould be assigned with individual Ip address by CMC. An IP address assigned for a particular computer system should not be used on any othercomputer even if the other computer belongs to the same individual and will be connected to the same port. IP addresses are given to the computers but not to the ports. IP address for each computer should be obtained separately from CMC. Trying and accessing remote desktop inside and outside from Institutional network is not advised unless there is official necessity.

Use of any computer at end user location as a DHCP server to connect to more computers/communication devices through an individual switch/hub/wifi router and distributing IP addresses (public or private) should strictlybe avoided, as it is considered absolute violation of IP address allocation policy of the organization.

Similarly, configuration of proxy servers should also be avoided, as it may interfere with theservice run by Institution or Authorised service provider. Even configuration of any computer with additional network interface card and connecting another computer to it is considered as proxy/DHCP configuration.

Non-compliance to the IP address allocation policy will result in disconnecting the port from which such computer is connected to the network. Connection will be restored after receivingwritten assurance of compliance from the concerned department/user.

Accessing private Proxy tunnels, pirated videos and unlawful contents/ websites through Institution network is fully prohibited. Incase if found, suitable action will be taken through higher officials, in extreme conditions details will be handed over to law enforcement agency as per IPC Act 2000.

#### 2.4.1 Internet via Wi-Fi:

Stakeholders of this institution are allowed to use internet via their own Laptops with preshared credentials through institutions DHCP server.

On special reasons internet may be provided without credential by MAC Address Binding with institutional server/ service provider server.

## 2.4.2 Network Device Access Policy:

Authorised CMC personal can access Network Switch/Rack fiber terminals for configuration maintenance purpose.

Even though the Individual users have knowledge of the network communication, they are not advised to repair the same in order to maintain the configurations and logs

## 2.4.3 Logs

Log of each Inter network access record should be maintained at the server side at least for 3 months, if it is outsourcing the service provider should maintain the same.

#### 2.5. Email Account and usage policy

Email is an official means for communication within this institute. Therefore, the Organization has the right to send communications to faculty, staff and students via email and the right to expect that those communications will be received and read in a timely fashion. You can access the email from on/off campus.

Each student and faculty member may be assigned with at least one official email id; they can redirect the email to other email ID. All email access policy shall be under the Information Technology Act, 2000

While leaving the organization official users are advised to do the necessary backup / download of your data and further claims may not be accepted for losing of email service/data.

#### 2.6. Website policy

### 2.6.1 Server Policies & Procedures:

The following is a list of software and configurations that we have installed to secure, optimize our server. The following software is not resource intensive

We've configured server scanning tool to find most types of exploits (backdoors, suspicious files, md5 hash comparisons, and is over 99% accurate in detecting such exploits. We've scanned your system reported that your system is clean.

CSF Firewall is installed and configured only to allow traffic on the ports that are used by the standard cpanel configuration. LFD comes with CSF and is a brute force detection utility to block any IP Addresses of users that fail authentication too many

times. IMPORTANT: If you are using any non-standard ports, please let us know so that we can open them

System Configuration File host.conf has been secured to prevent DNS lookup poisoning. It also provides protection against spoofs

System Configuration File nsswitch.conf has been secured. We have also optimized it to perform DNS lookups more efficiently.

System Configuration File sysctl.conf has been secured to help prevent the TCP/IP stack from syn-flood attacks. It is also configured to prevent other various and similar network abuse.

/tmp and /var/tmp have been secured to prevent the execution of malicious scripts Custom server configuration added to monitor the mysql activity realtime

SPRI has been installed now. This program changes the priority of different processes in accordance to their level of importance. You should see at least a 5-20% decrease in the average load level of your server on averageunused programs which have been disabled from the OS of the server. This reduces the chance of being compromised through software exploits on old or deprecated programs.

Telnet has been disabled to prevent insecure transmissions of data and passwords, and SSH must be used instead of Telnet, and it should function the same way.

SSH has been hardened by restricting the SSH Protocol to SSH 2, and changing port to a non-standard one.

To help prevent outgoing spam, we recommend lowering the hourly mail limit for all accounts and disabling the unauthenticated mail functions such as formmail php mail scripts, this would require any scripts that send mail to use SMTP authentication with an email username/password. This is much more secure and increases the mail deliverability/

acceptance rates, but it will block any scripts that send mail the old fashion way with send mail. If you would like this done, please let us know.

ConfigServer Explorer has been installed into WHM with root level permissions. This allows system root files to be edited in an emergency situation when SSH is not accessible.

!!IMPORTANT!! This simulates SSH access, treat it as such, do not use it unless you are familiar with SSH. Moreover, do not execute any commands you are not fluent with. As with SSH, damage can be done if this program is not used properly.

If you are unfamiliar with SSH, do NOT use this program. It should be left in case of such an emergency. Again, this file can only be accessed through WHM while being logged in as root.

Your FTP server software has been updated and tweaked to increase the security of FTP connections to the server.

## **2.6.2** Cyber Data:

#### 2.6.2.1 system will be hacker proof

Can we guarantee your system will be hacker proof? No, NOBODY can! It is 100% impossible to make a server hacker proof, that's a fact. This is even more impossible when vulnerable freeware scripts are so commonly used (forums, bb's, guestbooks, formmails). Nevertheless, even multibillion dollar company's such as banks, government computers, credit card companies, have had server's compromised. We consider our security hardening procedures to make your system hacker resistant. The software we install secures the system without adversely effecting or hindering the normal operations of your server.

Please note that over 99% of hacks come from insecure php scripts. These insecurities in php scripts come from the programming code, and therefore there is absolutely no way search to find "all" insecure scripts.

Remote based hacks are extremely rare. If there is no weak passwords, and no insecure php scripts, you have a very rare chance of ever being hacked.

So as long as you and your users keep all of your scripts up to date, and remove any unused scripts and remove any insecure scripts, then the chances of being hacked through the most common method is greatly reduced. If you feel your users do not know how to check or are not responsible enough to keep their scripts secure, we can harden php further by disabling functions that are commonly used in exploits, but please note that since the same functions are also used legitimately so disabling them will also interfere with a lot of scripts that require them. If you would like this done.

## 2.6.2.2 Support Data:

In order to provide the Services to you, We may collect information from you including but not limited to:

- (a) IP addresses, usernames and passwords necessary to login to SSH, WebHost Manager and the Server's root directory;
- (b) The usernames and passwords necessary to login into any affected accounts including email accounts, cPanel accounts, MySQL accounts and other accounts
- (c) Other information that you voluntarily supply or that we requests in order to resolve your Incident.

#### 2.6.3 Security:

The security of your Personal Information is important to us, but remember that no method of transmission over the Internet, or method of electronic storage is secure. While we strive to use commercially acceptable means to protect your Personal Information, we cannot guarantee its absolute security.

We also recommend making backups on a regular basis when backups are finished, they must be manually reviewed and checked on a regular basis to ensure they are up to date and working properly

## 2.6.4 Acceptable use policy

This Acceptable Use Policy document, including the following list of Prohibited Activities, is an integral part of your Hosting Agreement with us. If you engage in any of the activities prohibited by this AUP document, wereserve the right suspend or terminate your account. Our Acceptable Use Policy (the "Policy") for our Services is designed to help protect us, our customers, and the Internet community ingeneral from irresponsible or, in some cases, illegal activities. The Policy is anonexclusive list of the actions prohibited by us.

#### 2.6.5 Prohibited Uses of Systems and Services

- 2.6.5.1 Transmission, distribution or storage of any material in violation of any applicable law or regulation is prohibited. This includes, without limitation, material protected by copyright, trademark, trade secret or other intellectual property right used without proper authorisation, and material that is obscene, defamatory, constitutes an illegal threat, or violates export control laws.
- 2.6.5.2 Unacceptable practices include but are not limited to
  - Drug dealing
  - Piracy/Pirating

- Violation of copyright law
- Illegal gambling/Lottery sites
- Illegal arms trafficking
- Stalking or violating state or federal law.
- Attempting without authorization to access a computer system
- Threatening bodily harm or damage to individuals or groups
- Interfere with or disrupt the Services or servers or networks connected to the Services, or disobey any requirements, procedures, policies or regulations of networks connected to the Service
- 2.6.5.3 Sending Unsolicited Bulk Email ("UBE", "spam"). The sending of any form of Unsolicited Bulk Email through our servers is prohibited. Likewise, the sending of UBE from another service provider advertising a web site, email address or utilizing any resource hosted on our servers, is prohibited. our accounts or services may not be used to solicit customers from, or collect replies to, messages sent from another Internet Service Provider where those messages violate this Policy or that of the other provider. ANY form of spamming activity (e.g. mail spam, Usenet spam, pop- up spam, selling/buying spamware, and so on) conducted ANYWHERE on the Internet
- 2.6.5.4 Advertising, transmitting, or otherwise making available any software, program, product, or service that is designed to violate this AUP or the AUP of any other Internet Service Provider, which includes, but is not limited to, the facilitation of the means to send
- 2.6.5.5 Unsolicited Bulk Email, initiation of pinging, flooding, mail-bombing, denial of service attacks.
- 2.6.5.6 Operating an account on behalf of, or in connection with, or reselling any service to, persons or firms listed in the Spamhaus Register of Known Spam Operations (ROKSO) database at www.spamhaus.org/rokso.
- 2.6.5.7 Unauthorized attempts by a user to gain access to any account or computer resource not belonging to that user (e.g., "cracking"). our reserves the right to report illegal activities to any and all regulatory, administrative, and/or governmental authorities for prosecution.
- 2.6.5.8 Obtaining or attempting to obtain service by any means or device with intent to avoid payment.

- 2.6.5.9 Unauthorized access, alteration, destruction, or any attempt thereof, of any information of any our customers or end-users by any means or device.
- 2.6.5.10 Knowingly engage in any activities designed to harass, or that will cause a denial-of service (e.g., synchronized number sequence attacks) to anyother user whether on our network or on another provider's network.

#### **Electronic Surveillance System** 2.7

Institution owned Closed Circuit Television (CCTV) may be installed in all common area of the Institution and its Hostel Premises for additional monitoring purpose. No claim in any aspect based on CCTV is acceptable.

## 2.8. Institution Database Usage Policy

Data collected through the above may be used/shared to Government / trusted 3<sup>rd</sup> party service providers (eg.: bankers for fee update) on essentials. However, online payment credentials, debit/credit card details will not be saved and shared by the institution.

This Policy relates to the databases maintained by the Institution administration under theInstitution eGovernance.

Data is a vital and important institution resource for providing useful information. Its use mustbe protected even when the data may not be confidential

#### 2. 8.1 Database Ownership:

Vel Tech is the data owner of all the data generated in the institution

#### 2. 8.2 Custodians of Data:

Individual Sections or departments generate portions of data that constitute institution's database. They may have custodianship responsibilities for portions ofthat data.

## 2. 8.3 Data Administrators:

Data administration activities outlined may be delegated to someof the Officials in that department by the data Custodian

This may be monitored by the head of the institution.

#### 2.9 Biometric Device Access

The Institution has set up Biometric Devices for Attendance and (or) Access Purpose in the Institution and other related premises, and all Employees and Staff should enrol their Biometric Identity with the Institution and the same will not be shared with any other party except Government Agencies in case of any specific official requirement.

Any persons with Disability, wounds or any communicable disease can use biometric device only with Prior permission from higher officials

The Institution has the rights to remove Biometric Identity from device at any time without prior Notice. The institution cannot be held responsible if any person's Biometric attendance data is not updated / received in the machine properly.

#### 3. Computer Maintenance Cell

Organization's IT Team is internally named as CMC(Computer Maintenance Cell) to avoid conflicts with Academic IT department

## 3.1 Responsibilities of Computer Maintenance Cell:

- Maintaining Computer and its peripherals in Office space and Common space
- Maintaining Layer 2 Network along with Passive Network Components
- Maintaining Biometric devices and generating reports to the Salary/Attendance **Process**
- Maintaining Electronic Surveillance System
- Maintaining Projectors at All Digital Classrooms
- Installation of Operating system in all Institution-Purchased Computers and Software Installation at Office and Common Space
- Maintaining the record of All telephones / Cellular lines/connections and its functional details and co ordinating with concern Service Providers
- Cooperating with Internet Service Provider and Annual Contract Vendors for IT Products and supports.
- Establishing Network Connections every year if Sufficient funds are allotted
- Upgrading new Technologies wherever required
- While New Blocks are constructed, planning and Implementing Network and Surveillance system are also carried out.
- Maintaining the record of Hardware and Software DetailsCentrally

## 3.2 Guidelines for CMC Engineers & Technicians:

#### 3.2.1 Receiving Complaints:

CMC in charge or representative on behalf may receive a Complaint about Network, Computer, Printerand Projector related issues. Such issues can be informed via Phone/Email/Letter.

## 3.2.2 Deputing Work:

CMC in charge or Designated person will Depute an internalService engineer /team based on the nature of the complaint received from user.

The service engineer /team should resolve the work within a reasonable time Incase the work has time constraint orif it is not solved by internal engineers, they may get outside support after obtaining permission from the higher officials.

#### 3.2.3 Hardware Service:

Service Engineer should service only Institution purchased Hardware. While attending the service they should verify the hardware warranty status and they are not allowed to open any device under warranty without CMC in charge's knowledge

If the devices are to be replaced with spare parts, that should be properly received from CMCStores by authorising in Stock register and the faulty spare should be returned to CMC office, marked with Institution Asset number and removed date on the spare.

The Engineer should ensure that the Hardware Driver is downloaded from OEM websitebeforeinstalling it in the computers.

For warranty service /non warranty service the spare purchased/added details should be updated in "Computer History Book".

#### 3.2.4 Software Service:

Service engineers may encourage the users to use Open source software and discourage themfromUsing/installing any Piracy and unauthorised

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software for any purpose. They should strictly refrain from obliging such request.

Incase of Operating system reinstallation, they should note down network address details, list of software installed details in their service receipt and the same should be reinstalled with updated/upgraded one.

#### 3.2.5 Network service:

If any passive components are newly added/replaced, source/destination details should be marked and the same should be immediately reported and updated in the Building Network Drawing.

All switch Configuration details should be preserved for restoration purpose.

#### 3.2.6 IT Policy Violation Incident:

If any institutional IT policy is violated by any Application/ individual/department, it should be brought to the notice of CMC in charge and Institution Authorities immediately.

Co-ordination with Other Department / Contractors:

With the knowledge of CMC in charge, Engineers shall coordinate with Service providers and other related internal departments for official work.

#### 3.2.7 Responsibility:

The Head-Admin and Maintenance (H-A&M) of the campus is the overall responsibility for this policy.

Questions concerning the policy may be directed to the Institution's CMC in charge or H-A&M. The Head-A&M will review the policy on a Bi-Annual Basis and respond to formal complaints resulting from the implementation of this policy.

Violations of this policywill result in appropriate disciplinary measures in accordance with the Institution'scode of conduct

#### 4. Disclaimer:

It is individual's risk if any loss caused to your Device/application due to this IT policy.

# 12. MAINTENANCE POLICY

## 1. Introduction

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology framed various Policies and Procedures to ensure the comprehensive growth of all the stakeholders related with the institution.

Vel Tech has a wide range of buildings, classrooms, laboratories, playgrounds, dining halls and other common amenities. A separate section named as Maintenance & Services section (M&S) is available under the control of a Professor designated as Head (Maintenance and services). It has a well understood procedure to maintain the facilities in the campus in order to ensure that facilities are utilised properly and effectively.

The main objective of the M & S section is to monitor and ensure the optimal utilization of various resources in order to support the smooth conduct of teaching learning process. The M & S section has qualified engineers, executive engineer, maintenance supervisors for all technical divisions, electricians, plumbers, computer maintenance staff, carpenters, AC mechanics, housekeeping staff, civil engineers etc., who will attend the repairs and maintenance works immediately while the complaints are raised. As per the nature of the maintenance works, the M&S section categorizes the works as Major work and Minor works. The M&S section will solve the minor maintenance issues within one hour to two days and will solve the major maintenance issues within one week to fifteen days.

# 2. Objective

The main objective of the campus maintenance policy is to ensure the maintenance and optimal utilization of various resources for enhancing the experience of learning and other facilities.

# 3. Scope

- 1. Ensures the maintenance of university buildings, infrastructure, electrical, plumbing, air conditioning, Sewage Treatment Plant, RO water plants, guest house and common areas.
- 2. Ensures to keep the classrooms, laboratories, faculty cabin, non-academic areas like gyms, rest rooms, auditorium, cafeteria, and play grounds clean and hygiene.
- 3. Disposes the waste materials in proper ways that are collected from various places.
- 4. Renovation, interior painting, mechanical & civil works and repair of furniture & water lines are also their part of services.

- 5. Maintains a complaint register for the complainant to enter the type of faults so that the M&S section will resolve all the issues in a timely basis.
- 6. Annual maintenance contract is executed with the authorised vendors for UPS, Generators, Turnstile gates, CCTV camera systems, passenger lifts, etc.

# 4. Available facilities, locations and other common amenities for Maintenance:

#### **LOCATIONS, FACILITIES & AMENITIES**

| CLASSROOM VC & REGISTRAR CABIN DEAN & HOD CABIN FACULTY CABIN DEPT. LIBRARY LABORATORY AUDITORIUM COE OFFICE | ACADEMIC AREA        |
|--|----------------------|
| DEAN & HOD CABIN FACULTY CABIN DEPT. LIBRARY LABORATORY AUDITORIUM   |                      |
| DEAN & HOD CABIN FACULTY CABIN DEPT. LIBRARY LABORATORY AUDITORIUM   | VC & REGISTRAR CABIN |
| DEPT. LIBRARY LABORATORY AUDITORIUM  | DEAN & HOD CABIN     |
| LABORATORY<br>AUDITORIUM   | FACULTY CABIN        |
| AUDITORIUM   | DEPT. LIBRARY        |
|  | LABORATORY           |
| COE OFFICE   | AUDITORIUM           |
|  | COE OFFICE           |

| NON ACADEMIC AREA |
|-------------------|
| DINING HALL       |
| CAFETERIA         |
| CORRIDOR          |
| TOILETS           |
| LAWN              |

| COMMON AREA     |   |
|-----------------|---|
| GROUND          |   |
| GYM             |   |
| SECURITY OFFICE |   |
| HEALTH CENTRE   |   |
|                 | _ |

| FACILITIES AND AMENITIES    |
|-----------------------------|
| PASSENGER LIFT              |
| GOODS LIFT MACHINE          |
| SOLAR WATER HEATER          |
| TURNSTILE GATE              |
| GENSET                      |
| AUDIO SYSTEM                |
| TRANSFORMER                 |
| NEON BOARD                  |
| RO PLANT                    |
| SEWAGE TREAMENT PLANT (STP) |
| UPS                         |
| SOLAR STREET LIGHT          |
| BIO GAS PLANT               |
| GYM EQUIPMENTS              |
| BAIN MARIE                  |
| WASHINE MACHINE             |
| XEROX                       |
| WATER COOLER                |
| GEYCER WATER HEATER         |
| ATM                         |
| PRIVATE CANTEEN             |
| CCTV CAMERAS                |
| TRANSPORT                   |

# Responsibility and Nature of work:

| S.No. | Type of     | Locations                | Responsibility              | Nature of Work                               |
|-------|-------------|--------------------------|-----------------------------|--|
|       | Maintenance |                          |                             |  |
|       | & Services  |                          |                             |  |
|       |             | Academic Area:           |                             |  |
|       | Cleaning    | Classrooms,              |                             | Ensures the cleanliness and hygienic nature. |
|       |             | Laboratories, Libraries, |                             |  |
|       |             | Vice Chancellor office,  | Housekeeping<br>Supervisors |  |
| 1     |             | Registrar office, CoE    |                             |  |
|       |             | Office, office of Deans, |                             |  |
|       |             | HoDs and Faculty         |                             |  |
|       |             | Cabins, Auditorium       |                             |  |
|       |             | Non-Academic Area:       |                             |  |

|   |                               | Dining Hall, Cafeteria,  |              |                          |  |
|---|-------------------------------|--------------------------|--------------|--------------------------|--|
|   |                               | Corridor, Toilets, Lawn  |              |                          |  |
|   |                               | Common Area:             |              |                          |  |
|   |                               | Ground, Gym, RO Plant,   |              |                          |  |
|   |                               | STP, Security Office     |              |                          |  |
|   |                               | Academic Area:           |              |                          |  |
|   |                               | Classrooms,              |              |                          |  |
|   |                               | Laboratories, Libraries, |              |                          |  |
|   |                               | Vice Chancellor office,  |              |                          |  |
|   |                               | Registrar office, CoE    |              |                          |  |
|   |                               | Office, office of Deans, |              |                          |  |
|   |                               | HoDs and Faculty         | 3.5.         | Repairs and              |  |
|   |                               | Cabins, Auditorium       | Maintenance  | replacement of           |  |
| 2 | Electrical                    | Non-Academic Area:       | Supervisor-  | light, fan, switch       |  |
|   |                               | Dining Hall, Cafeteria,  | Electrical   | box, electrical          |  |
|   |                               | Corridor, Toilets, Lawn, | Supervisor   | cables, motors, AC, etc. |  |
|   |                               | Lift                     |              |                          |  |
|   |                               | Common Area:             |              |                          |  |
|   |                               | Ground, Gym, RO Plant,   |              |                          |  |
|   |                               | STP, Security Office     |              |                          |  |
|   |                               | 511, Security Office     |              |                          |  |
|   |                               |                          |              |                          |  |
|   |                               | Classrooms,              |              |                          |  |
|   | Computer systems & Networking | Laboratories, Libraries, |              |                          |  |
|   |                               | Vice Chancellor office,  |              |                          |  |
|   |                               | Registrar office, CoE    |              | Monitoring and           |  |
|   |                               | Office, office of Deans, | Maintenance  | Maintenance of           |  |
|   |                               | HoDs and Faculty         | Supervisor-  | computer system          |  |
| 3 |                               | Cabins, Auditorium       | CMC / System | and networking           |  |
|   |                               | Non-Academic Area:       | Admin        | devices, Internet        |  |
|   |                               | Dining Hall, Cafeteria,  | Aumin        | facility, CCTV           |  |
|   |                               | Corridor                 |              | facility, CCT v          |  |
|   |                               |                          |              |                          |  |
|   |                               | Common Area:             |              |                          |  |
| 4 |                               | Security Office          | Mointana     | Monitoria                |  |
|   | Plumbing                      | Academic Area:           | Maintenance  | Monitoring and           |  |
|   |                               | Classrooms,              | Supervisor-  | Maintenance of           |  |
|   |                               | Laboratories, Libraries, | Plumbing in- | water distribution       |  |
|   |                               | Vice Chancellor office,  | charge       | system                   |  |

| Registrar office, CoE Office, office of Deans, HoDs and Faculty Cabins, Auditorium   |               |
|--|---------------|
| HoDs and Faculty Cabins, Auditorium  |               |
| Cabins, Auditorium   |               |
|  |               |
| NY A N · A   |               |
| Non-Academic Area:   |               |
| Dining Hall, Cafeteria,  |               |
| Corridor, Toilets, Lawn  |               |
| Common Area:   |               |
| Ground, Gym, RO Plant,   |               |
| STP, Security Office   |               |
| Sardening  Lawn and Tree Supervisor-Garden incharge  Monitoring Maintenance supervisor-Garden incharge  Monitoring Maintenance green environment trimming of lawn and place. | ent,<br>tree, |
| Academic Area:   |               |
| Classrooms, Laboratories, Libraries,   |               |
| Civil repair Vice Chancellor office,   |               |
| and Registrar office, CoE Maintenance  |               |
| maintenance, Office, office of Deans, Supervisors-   |               |
| Construction, HoDs and Faculty and concerned Maintenance   |               |
| 6 repair of Cabins, Auditorium lab in-charges civil repair   |               |
| Furniture, Non-Academic Area: and technicians carpentry regions.   | pairs         |
| repair of lab Dining Hall, Cafeteria, etc.   |               |
| equipment Corridor, Toilets, Lawn  |               |
| etc. Common Area:  |               |
| Ground, Gym, RO Plant,   |               |
| STP, Security Office   |               |

# 5. Campus Maintenance Schedule and Services:

M & S section aims at optimum utilization of various resources in the campus through Preventive Maintenance and Breakdown Maintenance. Housekeeping supervisors are available to oversee the cleaning of classrooms, roads, common places, classroom tables etc. Sufficient securities are located at the gates of the campus, hostel

and the places wherever necessary.

The horticulture team comprising of a garden supervisor and gardeners will maintain the gardens in the campus. The sewage treatment plants in all the hostels are maintained by the civil engineer. The classrooms are maintained by the staff under the control of HODs and they will inform the M&S section for any maintenance and services issues and it will be rectified immediately. Scrap disposal is carried out periodically throughout the year.

Maintenance and Service Section shall prepare the detailed list of preventive and predictive maintenance schedules for academic, non-academic, common areas with required resources for execution of such activities. The schedule shall include the activities to be carried out in terms of daily, monthly, quarterly, half yearly and annual maintenance.

In case of urgent requirements which might arise due to the failure of certain systems, the maintenance supervisor shall attend immediately and restore the system back in appropriate conditions. On completion of maintenance activities, the maintenance supervisor shall update in his work load note and will inform the completion of work to Head Maintenance and services.

# **Updating of Stock Register:**

The maintenance supervisors. section in-charges shall maintain Stock registers of various consumable items, equipments available with them and update the stock registers as and when the items are used for carrying out the maintenance activities. Periodically they shall monitor the consumption of various items present in the stores for initiating purchase activities for further usage.

## 6. Resource Identification and Allocation:

Maintenance and Service Department has to identify and distribute the manpower under the selected supervisors / in-charges and allocate the roles and responsibilities to complete the tasks assigned as per the schedule.

# 7. Execution and Monitoring:

Maintenance supervisors / section in-charges shall distribute the required equipment, materials and consumables to the selected supervisors / in-charge to monitor the proper execution of the assigned tasks as per the schedule.

# 8. Review and Analysis:

Maintenance and Service section shall analyze the complaints and assign the job accordingly to the available manpower. Head - Maintenance and services shall discuss with the section in-charges daily for monitoring and maintaining the facilities.

## 9. Certifications:

Registrar will obtain the mandatory certification to ensure the safety of systems deployed in the campus such as building & electrical safety, fire safety, lift safety.



# Office of the Industry Relations

# Activities during the period from September 2021 to January 2022

# 1. Credit Course during the Summer semester of AY 2021-22

No. of courses offered: 29

No. of students registered: 2177

No. of students earned credits: 1991

| S. No | Department | No. of<br>Courses | No. of students registered | No. of Students<br>Earned Credit |
|-------|------------|-------------------|----------------------------|----------------------------------|
| 1     | CSE        | 10                | 774                        | 731                              |
| 2     | ECE        | 9                 | 814                        | 741                              |
| 3     | EEE        | 1                 | 63                         | 56                               |
| 4     | Biotech    | 1                 | 73                         | 67                               |
| 5     | Biomedical | 1                 | 48                         | 45                               |
| 6     | AERO       | 0                 | 0                          | 0                                |
| 7     | AUTO       | 1                 | 53                         | 51                               |
| 8     | CIVIL      | 3                 | 167                        | 129                              |
| 9     | MECH       | 3                 | 185                        | 171                              |
|       | Total      | 29                | 2177                       | 1991                             |

# 2. Industry Projects 2021-22

No. of students registered: 480

No. of vacancies in industries: 744

No. of virtual projects: 73

No. of Physical projects: 526

No. of students mapped: 340



| Department | No. of<br>students<br>registered | No. of<br>vacancies<br>in Industry | No. of<br>virtual<br>projects | No. of<br>Physical<br>projects | No. of students mapped |
|------------|----------------------------------|------------------------------------|-------------------------------|--------------------------------|------------------------|
| CSE & IT   | 135                              | 232                                | 47                            | 185                            | 90                     |
| ECE        | 87                               | 134                                | 25                            | 26                             | 51                     |
| EEE        | 26                               | 35                                 | 1                             | 14                             | 15                     |
| Biomedical | 23                               | 44                                 | 0                             | 16                             | 16                     |
| Biotech    | 12                               | 26                                 | 0                             | 12                             | 12                     |
| Auto       | 13                               | 30                                 | NA                            | 30                             | 13                     |
| Aero       | 50                               | 55                                 | NA                            | 55                             | 26                     |
| Civil      | 26                               | 46                                 | NA                            | 46                             | 26                     |
| Mech       | 108                              | 142                                | NA                            | 142                            | 91                     |
| Total      | 480                              | 744                                | 73                            | 526                            | 340                    |

# 3. Memorandum of Understanding (Signed)

- 1. AutoIntell Services
- 2. Nandha Infotech Pvt Ltd
- 3. Igarashi Motors India Limited
- 4. Voltme Motors Pvt Ltd
- 5. Magnetic FAAC India Pvt Ltd
- 6. Prathista Industries Limited
- 7. Tripura Biotech Limited
- 8. Vaishavi Biotech Limited
- 9. My Assessment India

# 4. Consultancy Projects

- 1. "Mix Design and Test Report for M25, M35 AND M45 grade of cement concrete sample". For The Divisional Engineer/ Central/ MAS / Southern Railway Chennai division, Consultancy Rs.15,000 dated 13.01.2022
- 2. Fire safety audit for M/s. Hetero Drugs, Choutapally, Telangana, Consultancy cost: Rs. 45000/-



# 5. Events (Proposed) – Date 24th Feb 2022

VISAI 2022 (Virtual) – 12<sup>th</sup> International Project Competition and Exhibition in collaboration with Indian National Commission for Cooperation with **UNESCO** on the Sustainable Goals.

8 Themes of SDGs
Participation from 54 Institutions
350 Abstracts received
8 Industry experts as jury on the relevant theme
Total Prize worth 2.5 Lakhs

Theme wise Three best projects.

- Additionally, 10 Special Category awards:
  - Best start up idea/Business Potential award,Best Interdisciplinary award,
  - Best Innovation award.
  - Best Environment Sustainability award.
  - Best Measurable award.
  - Best Prototype award.
  - Best Scalability Innovation award.
  - Best Team Work award.
  - Best Video Making award.
  - © Encouragement prize award.

#### 6. FDP

- a. One-week Faculty Development Programme from 25<sup>th</sup> to 29<sup>th</sup> October 2021 on Computer Vision and Deep Learning using NVDIA-DGX 1 facility of Vel Tech TBI by Boston IT Solutions 30 CSE Faculty completed the FDP.
- b. One-week Faculty Development Programme from 31st January to 4th February 2022 on Data Science with Python using NVDIA-DGX 1 facility of Vel Tech TBI by Boston IT Solutions. 40 ECE Faculty participating in the FDP.