# 1. Institutional Basic Information

(Note: Please insert the name of applicant institution and the Sub-Component number in the footer on each page of the proposal)

### 1.1 Institutional Identity:

| | |
|---|---|
| Name of the Institution | Shri Vishnu Engineering College for Women |
| Is the Institution AICTE approved? | Yes |
| Furnish AICTE approval no. | F.No.730-50-317(E)/ET/2001,<br>F.No. SouthCentralRegion/1-3456561/2010/EOA |
| Type of Institution | Private unaided |
| Status of Institution | Autonomous |

Name of Head of Institution and Project Nodal Officers

| Head and Nodal Officer | Name | Phone Number | Mobile Number | Fax Number | E-mail address |
|---|---|---|---|---|---|
| **Head of the Institution (Full time appointee)** | Dr.G. Srinivasa Rao | +918816250864<br>Extn: 301 | 9666832284 | +9108816250099 | principal<br>@svecw.edu.in |
| **TEQIP Coordinator** | Dr.P.Srinivasa Raju | +918816250864<br>Extn: 329 | 9848051152 | 9108816250099 | teqip2@svecw.edu.in |
| **Project Nodal Officers for:** | | | | | |
| **Academic Activities** | Dr.R.Subba Rao | 918816250864 | 9440976619 | +9108816250099 | rsr_vishnu@svecw.edu.in |
| **Civil works including Environment Management** | Mr. V. Kesava Raju | +918816250864<br>Extn: 302 | 9949466778 | +9108816250099 | rajstructures.vegesana@gmail.com |
| **Procurement** | Mr.M.Narasimha Raju | +918816250864 | 7382567436 | +9108816250099 | mnarasimharajucse@svecw.edu.in |
| **Financial aspects** | Dr. G. Subba Raju | +918816250864<br>Extn:303 | 9949470637 | +9108816250099 | hodmba@svecw.edu.in |
| **Equity Assurance Plan & Implementation** | Dr. K. Pushpa | +918816250864<br>Extn:319 | 9848570522 | +9108816250099 | pushpak.iiit@gmail.com |

**1.2 Academic Information:**

- **Engineering programmes offered in Academic year 2014-15**

| S.No | Title of Programme | Level (UG, PG, PhD) | Duration (Years) | Year of starting | AICTE sanctioned annual Intake | Total student strength |
|---|---|---|---|---|---|---|
| 1 | ECE | UG | 4 | 2001 | 180 | 172 |
| 2 | CSE | UG | 4 | 2001 | 180 | 180 |
| 3 | IT | UG | 4 | 2001 | 120 | 120 |
| 4 | EEE | UG | 4 | 2002 | 120 | 88 |
| 5 | Mechanical | UG | 4 | 2009 | 60 | 24 |
| 6 | Civil | UG | 4 | 2009 | 60 | 49 |
| 7 | VLSI Design | PG | 2 | 2008 | 18 | 16 |
| 8 | Power Electronics | PG | 2 | 2008 | 36 | 13 |
| 9 | Software Engineering | PG | 2 | 2009 | 36 | 05 |
| 10 | Computer Science And Engineering | PG | 2 | 2012 | 18 | 14 |
| 11 | Geo-Informatics | PG | 2 | 2013 | 18 | 06 |

- **Accreditation Status of UG programmes:**

**NAAC accreditation by UGC - The expert visit is completed on 27th to 29th April 2015. Waiting for results**

| S.No | Title of UG programme offered | Whether eligible for accreditation or not? | Whether accredited as on 31st March 2015? | Whether "Applied for" as on 31st March 2015? |
|---|---|---|---|---|
| 1 | EEE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 2 | ECE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 3 | CSE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 4 | IT | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 5 | Mechanical | Not eligible | NA | NA |
| 6 | Civil | Not eligible | NA | NA |

- **Accreditation Status of PG programmes:**

| S.No | Title of PG Programme offered | Whether eligible for accreditation or not? | Whether accredited as on 31st March 2015? | Whether "Applied for" as on 31st March 2015? |
|---|---|---|---|---|
| 1 | VLSI Design (ECE) | eligible | No | No |
| 2 | Power Electronics (EEE) | eligible | No | No |
| 3 | Software Engineering (CSE) | eligible | No | No |
| 4 | Computer Science And Engineering(CSE) | Not eligible | No | No |
| 5 | Geo-Informatics(CE) | Not eligible | No | No |

**1.3 Faculty Status (Regular/On-Contract Faculty as on 30th April 2015)**

| Faculty Rank | No. of sanctioned regular posts | Present status: Number in position by highest qualification | | | | | | | | | | | | Total no of regular faculty in position | Total Vacancies | Total no of contract faculty in position |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Doctoral Degree | | | | Master degree | | | | Bachelor Degree | | | | | | |
| | | Engineering Disciplines | | Other Disciplines | | Engineering Disciplines | | Other Disciplines | | Engineering Disciplines | | Other Disciplines | | | | |
| | | R | C | R | C | R | C | R | C | R | C | R | C | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15= (3+5+7+9+11+13) | 16= (2-15) | 17= (4+6+8+10+12+14) |
| Professors | 18 | 15 | - | 03 | - | - | - | - | - | - | - | - | - | 18 | - | - |
| Associate Professors | 22 | - | - | - | - | 20 | 2 | | - | - | - | - | - | 22 | - | - |
| Assistant Professor | 176 | - | - | - | - | 113 | - | - | - | 26 | - | 37 | - | 176 | - | - |
| Total | 216 | 15 | - | 3 | - | 20 | 2 | - | - | | - | - | - | 216 | - | - |

***All faculty members appointed on a regular basis and all positions are filled.**

***Percentage (%) of Doctoral and Masters Degree holders: 100.00**

**1.4 Baseline Data (all data given for the following parameters must be restricted to engineering disciplines/fields only)**

| S.No | Parameters | 2004-15 |
|---|---|---|
| 1. | Total strength of students in all programmes and all years of study | 2770 |
| 2. | Total women students in all programmes and all years of study | 2770 |

| | | |
|---|---|---|
| 3. | Total SC students in all programmes and all years of study | 204 |
| 4. | Total ST students in all programmes and all years of study | 06 |
| 5. | Total OBC students in all programmes and all years of study | 759 |
| 6. | Number of fully functional P-4 and above level computers available for students | 867 |
| 7. | Total number of text books and reference books available in library for UG and PG Students | 51957 |
| 8. | % of UG students placed through campus interviews | 75.02 |
| 9. | % of PG students placed through campus interviews | 15 |
| 10. | % of high quality undergraduates (>75% marks) passed out | 45.53 |
| 11. | % of high quality postgraduates (>75% marks) passed out | 74.26 |
| 12. | Number of research publications in Indian refereed journals | 15 |
| 13. | Number of research publications in International refereed journals | 45 |
| 14. | Number of patents obtained | 01 |
| 15. | Number of patents filed | 02 |
| 16. | Number of sponsored research projects completed | 01 |
| 17. | The Transition rate of students in percentage from 1st year to 2nd year in 2014-15 | |
| | **i.** All students | 79.66 |
| | **ii.** SC | 45.94 |
| | **iii.** ST | No students admitted |
| | **iv.** OBC | 82.48 |
| 18. | IRG from students' fee and other charges (Rs. In lakh) | 1787.46 |
| 19. | IRG from externally funded R&D projects, consultancies(Rs. In lakh) | 58.57 |
| 20. | Total IRG (Rs. in lakh) | 1152.02 |
| 21. | Total annual recurring expenditure of the applicant entity in the year 2014-15 (Rs. In lakh) | 1862.62 |

## 2. Institutional Development Proposal

### 2.1 Give the Executive Summary of the IDP

**Introduction :** Shri Vishnu Engineering College for Women(SVECW) has been selected to submit a proposal as a Lead Institution under the Technical Education Quality Improvement Program (TEQIP-II) of the Government of India.

The purpose of TEQIP-II is to enhance existing capacities of institutions to become dynamic, demand-driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both and the national and international development. The program aims at reinforcing the performance of lead institutions and diffusing their special qualities throughout the technical educational system.

**Background:** SVECW was established within the Jawaharlal Nehru Technological University in 2001, currently under JNTU Kakinada, through the efforts of Padmabhushan Dr.B.V.Raju, doyen of cement industry in India, with three Bachelor courses in Technology viz. ECE, CSE and IT with an intake of 60 each. It has since grown to its 6 divisions of undergraduate courses including three post graduate courses covering, with a total enrolment of 720 undergraduate, 126 Masters level students. It has an approved faculty level of 213 positions with no vacant positions.

SVECW is one of the top performing institutions of the state of Andhra Pradesh. It has number of publications in reputed international journals, output per faculty comparable to the best institutions in India.

Its close relationship with the industry has resulted in collaborative projects like **IBM Centre of Excellence, Infosys Campus Connect**, with a high level of implementation of innovations, a dynamic curriculum development process. Its highly motivated and qualified student body has a brilliant history of academic achievement and successful industrial placement. As a result, SVECW has received, and continues to receive, numerous citations and awards of excellence including **IMC Ramakrishna Bajaj National Quality Commendation Certificate – 2010.**

While these are all very desirable qualities and achievements, of which SVECW is justifiably proud, and which it must seek to infuse into the technical education system, there are many challenges that SVECW must currently face, which, if not addressed, will hamper its capacity to

maintain and diffuse these qualities. Upgrading its facilities; improving the quality of faculty to handle upcoming projects; attracting students of better quality so as to involve them in various research projects, and to improve institute – industry interaction.

Having analyzed its current status, its internal strengths and weaknesses, and the threats and opportunities presented to it by its environment, SVECW has decided to embark on a vast and ambitious program of institutional development to allow it to maintain its excellence and expand it in new directions, and confidently take hold of the opportunities it perceives in its environment.

**Strategic Directions**

The strategic plan that has emerged from this reflection aims at making SVECW more able to serve identified national priorities. These include a vast increase in human resources capable of undertaking focused research and development for the industry in support of increased cost-effectiveness, international competitiveness, environmental management, and the development of rural populations, disadvantaged sectors of the population.

SVECW has identified a number of promising new multi-disciplinary post graduate programmes which offer a great opportunity for the institute to grow as an institute of excellence and become one of the best in technical education sector in India.

In light of these priorities, SVECW has decided to realign its program and focus its energies on the development of research and educational excellence in the key areas of Women empowerment in Technical education ;improving the quality of rural education; to remain committed to social responsibility by helping people with disabilities; working in line with development plans of the state and country.

This ambitious outward thrust must be accompanied by a program of internal structural reforms and organizational development. If it wishes to rise to the challenge, SVECW must be able to attract high quality students, recruit a large number of qualified faculties and substantially improve its administrative efficiency and effectiveness. This requires obtaining full autonomy under an independent Board of Governors/Management, achieving financial stability with dynamic generation of resources, and engaging in a systematic process of organizational change.

SVECW's strategic plan therefore has two main thrusts: increased social responsibility, through a research and making of **the woman technocrat** with strong knowledge base and who is self disciplined and with human values.

Design of TEQIP-II is particularly well suited to support SVECW in these strategic directions.

**Project Objectives**

1. Improving the Quality of Education include:
   - Increased Learning Outcomes of Students
   - To enhance the existing remedial measures to further improve performance of weak students.
   - Establishing a finishing school for weak students.
   - Enhancing employability of graduates.
2. Improving Post Graduate Programmes
   - Strengthening of Existing PG Courses
3. Improving Quality of Faculty
   - Through Training Need Analysis, providing training to faculty on pedagogy and domain knowledge.
4. To bring institutional reforms includes:
   - Bringing innovative practices in curriculum design and delivery by exercising AUTONOMY granted by UGC from the academic year 2014-15
   - Getting accreditation for eligible PG courses, in addition to existing accreditation for all eligible UG course.
   - Getting NAAC accreditation
5. To enhance interaction with industry and institute include establishment of IIIC
6. To enhance Research & Consultancy Activities.

**Project Activities**

The following activities have been identified, which together, will help to achieve the Objectives stated above. They have been classified under the four project headings and corresponding section descriptions as follows:

Section – 4: Action Plan for the Promotion of Academic Excellence

4.1. Improving the Quality of Education

4.2. Improving the Post graduate Programmes

4.3. Improving the Quality of Faculty

4.4 Resource & Financial Requirements

Section – 5: Action Plan for Institutional Reforms

5.1. Structural Reforms

5.2. Organizational Development

5.3. Empowerment of Women

5.4. Support & Development of Differently-abled people

Section – 6: Action Plan for Interaction with Industry

6.1. Existing Interaction & Placements

6.2. Enhancing Interaction with Industry

Section – 7: Action Plan for Research & Consultancy

7.1. Existing Research

7.2. Enhancing Research & Consultancy Activities

**A brief description of the above activities is as follows:**

The structural reforms in the curriculum design and development to be achieved by exercising the autonomous status sanctioned by UGC

- Action Plan for the Promotion of Academic Excellence is achieved by improving the Quality of Education through learning outcome of students, Weak students' progress and Employability of Graduates.
- Improvement of Post graduate Programmes is done through strengthening of existing courses.
- Improving the quality of Faculty through Training in subject domain and Training in pedagogical skills based on Training Need Analysis.
- Institutional reforms are achieved by means of Structural reforms through Autonomy, Accreditation, academic & nonacademic reforms, organizational development.
- Interaction with industry is achieved by reviewing existing interactions and placements and trying to enhance interaction with industry.
- Enhancing Research & Consultancy activities is vital for self-sustainability of the institution.
- Seed grant will be provided at departmental level to get better research and consultancy outputs

The qualities that SVECW seeks, through this project, are to reinforce and diffuse throughout the engineering education system. It is well prepared to do so, by assessing its strengths and weaknesses, elaborated a clear vision for its future, identified opportunities and threats in its environment. Selected a clear set of strategic directions designed to exploit opportunities and build on its strengths, overcome its weaknesses, and address the perceived threats in its

environment. Set clear objectives and plans of action in each of these directions, and, as indicated in the various action plans, having already started moving in the direction of each of the objectives it has set for itself.

In a world of increasing interdependence, individual excellence must be replaced by collective excellence and leadership becomes an act of service by which the talents and potentials of stakeholders in the institute are continuously encouraged and stimulated to find their expression in coherent collective action. This is the role that SVECW sees for itself, which this project will help it to fully embrace, in full awareness of the responsibilities and challenges that such leadership entails.

**2.2:**

- Provide the details of SWOT analysis carried out (in terms of methodology used, analysis and information and data as collected and inferences derived with respect to strengths, weaknesses, opportunities and threats).
- Based on SWOT analysis, provide the "strategic plan" developed for institutional development.
- How the key activities proposed in the Institutional Development Proposal are linked with the results of SWOT Analysis.

**Introduction**

SWOT analysis is a strategic planning used to evaluate the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats involved in an organization. It involves specifying the objective of the institution or project and identifying the internal and external factors that are favorable and unfavorable to achieve that objective

SWOT analysis may be incorporated into the strategic planning model.

1. **S**trengths: characteristics of the organization or team that give it an advantage over others.
2. **W**eaknesses: They are characteristics that place the firm at a disadvantage relative to others.
3. **O**pportunities: External chances to make greater outputs from the environment.
4. **T**hreats: External elements in the environment that could cause trouble for the organization

**SWOT Analysis**

A Questionnaire as enclosed in **Annexure II a** was circulated to all the stakeholders to collect their views. After collecting their views, brainstorming sessions at department level were conducted by involving faculty, students and other stakeholders. From the above discussions, College Strengths, Weaknesses, Opportunities and Threats (SWOT Analysis) were identified.
The respective results are highlighted as follows:

**Strengths:**

- Got Autonomous status by UGC for 6 years.
- Well Qualified and Motivated Faculty members
- Empowering women hailing from the surrounding rural background through professional education and thereby uplifting their families.
- Facilitating students with fully residential ambience.
- The institute is handling R& D projects worth of Rs. 286.07 Lakhs sponsored by external funding agencies.
- The college got **accredited by NBA for five years from 2008-2013 for all eligible courses and applied renewal.**
- **ISO certified and accredited by TCS**, which are major selling points.
- The institute has **IBM Center of Excellence**, wherein staff and students get trained by IBM.
- The college is a **Regional Center of IUCEE** ( Indo-US Collaboration for Engineering Education) which mentors the faculty of engineering colleges in the state of Andhra Pradesh.
- The Jawahar Knowledge Center of the institute is graded with **JKC Star** – recognition and secured **Best JKC award for the year 2009-10**
- **The college is identified as a regional center for Andhra Pradesh Skill Development Center (APSDC)**
- **The college has mobile banking application development company MODEfin server in side the college.**
- The campus is self contained with high quality facilities like -
  a. Academics
     i. Class rooms are provided with AC, Audio Visual facilities and collection of books
     ii. Spacious and well equipped laboratories as per current syllabi.
  b. Facilities
     i. Well established Library with **51957** books, 142 Indian journals and 48

international journals

ii. Wi-Fi enabled campus with **20 Mbps** Internet connectivity dedicated 1:1 connection ratio including hostel.

iii. Backup Power supply (732 KVA)

i. Sewage treatment plant
ii. Solar Power plant
iii. Solid waste management

c. Amenities

i. **Dr. B.V Raju Knowledge Center** for providing hands on experience to the nearby government high school students.

ii. Well established sports fields for football, basket ball, Cricket and field and track events.

iii. Air conditioned indoor stadium

iv. Open air auditorium

v. Separate Fitness Centers for students & staff

- The institute established **Assistive Technologies Lab** with an initial investment of Rs. 12 Lakhs in collaboration with University of Massachusetts – Lowell – USA
- The institute established a campus **Community Radio Vishnu 90.4 through** which social awareness programmes are conducted by the students and faculty of SVECW.
- Vishnu TV academy, a **novel visual arts center** established by the management and utilized by the faculty and students of SVECW by developing innovative programs
- The Basic Sciences Department of the institute conducts **foreign language courses** in **German, French, Spanish & Japanese.**
- The institute has established student centric activities like:
  - Soft-skills training.
  - Professional Student Chapters like ISTE, IEEE, IETE, CSI & SAE.
  - Student Counseling & Customization
  - On-line student feedback
  - Coaching for GRE, TOEFL & GATE
- Insurance facility for both students and faculty is provided.
- The **pro-active and supporting management** is the highest strength of the institute

**Weaknesses:**

- Less number of senior faculty with Doctoral Degree ( More than 25 faculty members are pursuing Ph.D)

- Interaction with other institutes and industries is relatively low ( The operations for Industry Institute Interaction is presently taking care by Entrepreneurship Development Cell. And, the process of establishing I-I-I-C is under process)
- Number of subscriptions for digital library is to be increased. ( Necessary steps are taken to increase the number of on-line journals and also more systems are made available in the digital library)
- Students from rural background with inadequate quality ( Bridge Courses are being conducted to bring **equity of standards** among all students to overcome the locational disadvantage )
- Departmental Research Centers to be established.
- Alumni interaction and participation needs to be enhanced. ( Steps are initiated for more interaction by disbursing Alumni Identity Cards & Memorabilia (Alumni Handbook) to each passed out student )

**Opportunities:**

1. Setting up of R&D Center for Core and Interdisciplinary Research in thrust areas
2. Sending faculty under QIP for up gradation of their qualification with full sponsorship.
3. Setting up of new PG Centre which will have its own PG courses with active participation from nearby Industries.
4. Establishment of Industry Institute Interaction Cell (I-I-I-C) for strengthening links with core & hardware industries for R&D activities.
5. Creating testing, calibration and certification facility to improve internal revenue. High end and modern equipments with new hardware & software to be procured.
6. Establishing a finishing school by industry experts to conduct Certificate Courses and Post Diploma courses to make graduates industry-ready.
7. Providing financial assistance for faculty to start in-house R&D and to attend international conferences and workshops conducted abroad
8. To increase the alumni contribution in institute development and planning.
9. Unique incentive / reward schemes and fast track promotions with increments for faculty to improve retention.
10. To propose IDP for TEQIP-II funding.

**Threats:**

1. Low quality of entry level students, due to localized admissions, because of rapid geographical spread of engineering colleges in the state. (Quality of entry level students more focused through Remedial Classes which results in improving the standards of poor learners)
2. Faculty attrition rate is high due to mushrooming number of engineering colleges.
3. Due to increase in number of Deemed Universities, meritorious students may prefer them.
4. Proposed Centers of Foreign Universities in India
5. Low availability of qualified faculty in rural area.
6. Girl students' preference to higher education is less in rural area.

**Strategic plan developed for institutional development**

The Institution is consistently engaged in framing the real-time strategic planning that has practical resemblance. In this process all the stakeholders including faculty, supporting staff, students, parents and employers have been playing their respective roles to their maximum possible extent. Through deliberations and suggestions the requirements of the stakeholders are collected and considered as inputs for strategic planning.
The outcomes of these sessions are used to reform the existing strategies and to redefine the modalities therefore.

- All the strategies are aimed at producing **'The Woman Technocrat'** suits to the global requirements.
- To increase the number of senior faculty with Doctoral Degree in all departments.
- To identify and facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with members of the Industry, outside Experts, eminent personalities at regular interval.
- To conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students frequently.
- To improve joint research programmes and field studies by faculty and people from industries
- More number of Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Increase number of subscription for digital library and to increase the number of online journals

- Bridge courses are to be conducted extensively so that equity of standards among students are maintained
- To establish Departmental Research Centers
- To provide Laptops to faculty members with internet access
- To arrange frequent Alumni meets for interaction and industry exposure to students.
- To focus more on student centric activities like soft computing training, Professional Student Chapters like ISTE, IETE, IEEE & CSI, student counseling & customization, On-line student feedback coaching for GRE, TOEFL & GATE

**Key activities proposed in Institutional Development proposal linked with results of SWOT Analysis:**

- Increase in learning outcomes of students to attract students opting for Deemed Universities.
- Increase in overall pass percentage of weak students by conducting Bridge courses, Remedial classes, assignments and Pre mid examinations.
- Increase Faculty training in their respective domains to enrich their skills and knowledge.
- MoUs with Foreign Universities strengthen our opportunities to strive better for greater progress.
- Depute in-house faculty for upgrading Qualification.

**2.3:**

State the specific objectives and expected results of your proposal in terms of, "Institutional strengthening and improvements in employability and learning outcomes of graduates". These objective and results should be linked to the SWOT analysis.

**Institutional strengthening and improvement in employability and learning outcomes of graduates**

**Specific Objectives**

- To make students a part of **Center for Teaching & Learning (CTL**) which offers training to students related to Communication Skills, Soft Skills & Personality Development.
- To motivate the entire faculty to take part actively in **Center for Teaching & Learning (CTL)** which offers training for faculty about "Innovative Teaching Methodologies
- To disburse additional money on quality teaching and training equipment to increase **satisfaction index** of the students.
- Develop employability skills by providing fieldwork, internships and industry based learning

- Organize department-wise workshops and conferences and encourage students to acquire team skills.
- To develop inter disciplinary PG Courses which are viable for girl students.
- Multimedia Projectors are to be installed in all class rooms and Laboratories so that faculty can improve teaching learning process

**Expected Results**

- Increase in students' pass percentage every year by 20.
- Increase in quality of faculty every year by producing good number of research publications.
- Rural women employability through placements will be up by 10% every year.
- Interdisciplinary courses will make Women technocrats a best choice for employability.
- Due to establishment of I-I-I cell, interaction with industry can be enhanced every year by 20 percent.
- Research and Development activities will be increased by 25% every year.
- Increase in number of internships in various industries and access to industry projects.
- Increasing incubation facilities by allowing more companies to establish their R&D base.
- Holistic Development of Students through soft-skills, personality, leadership programs along with technical skills.
- Value creation and contribution benefit the society at large.

**2.4:**

Provide an action plan for: (max 1 page each)

a) Improving employability of graduates

b) Increased learning outcomes of the students

c) Achieving the targets of 60% of the eligible UG and PG programmes accredited within two years of joining the Project and 100% accreditation obtained and applied for by the end of the Project of the eligible UG and PG programmes

d) Implementation of academic and non academic reforms (details given in Annex – I to PIP)

e) Improving interaction with industry

f) Enhancement of research and consultancy activities

**a) Improving Employability of Graduates**

**Systems in Practice**

- Soft skills, Aptitude Training, Group Discussions by APSSDC.
- Infosys campus connect program to make students industry-ready.

- Training to the final year UG students through GATE Forum & Elephos.
- Mock Interviews are conducted every year for the students in pre-final and final years of UG.
- Alumni students are invited to campus to encourage students to share their experiences in the interview process and working fields.
- Training in Foreign Languages to the opted students in Spanish, Japanese, French, and German in the campus.

**Strategic Plan**

In order to improve employability of Graduates the Institute has set up its Strategic plan as following:

- Develop employability skills by providing fieldwork, industry based learning and internship.
- To bring academic reforms through autonomy to design industry oriented curriculum.
- Encourage students to take responsibility for self-reviews or assessing their own skills.
- Increase in number of student internships by collaborative projects.
- To implement the systems in practice with more efficacy through the proposed project.

**Projected Outcome:**

- By implementing the above plan through the training provided in Soft skills, Personality development, Mock Interviews, Foreign Language Training and Internships will improve better performance in on-campus and off-campus placements.
- All our students will become employable in reputed institutions, National and International Companies etc.
- The percentage of placements will be raised to *90 by the end of the project period.*

**b) Increasing Learning Outcome of the students**

**System in Practice**

Considering different background of students with different basic knowledge levels, the following teaching methodologies are developed and implemented in SVECW.

- Smart class are equipped with Projector, systems and reference books and faculty adopt power point presentation for their lecture
- Interactive teaching is encouraged so that students learn more with raising doubts and discussions

- For Practical experiments each department is equipped with necessary software and hardware.
- MOOCS is used to train student's subjects in tutorials and better understanding of subjects.
- Assignments are given to students to exercise problems and case studies
- Feedback from students is taken for every methodology implemented and is modified to meet their needs.
- Guest lectures are conducted bringing eminent people from reputed institutions including IITs and Industries.
- Students are encouraged to present technical papers in various paper presentation and symposia.
- Conferences and workshops are conducted to students to get acquainted with latest trends in subjects.
- Student chapters are established (VSI, ISTE, CSI, IEEE & IETE) and student are encouraged in all technical and non technical events to improve their leadership qualities
- Industry Institute Interaction is arranged

As a result, students are benefited to have an all round development and improvement of their personality.

**Strategic plan**

In order to improve the Learning outcome of the students the Institute has setup its Strategic plan as following:

- All class room are to be provided with internet access in the campus to improve online teaching.
- Multimedia Projectors are to be installed in class room for teachers to improve teaching learning process.
- All Laboratories are to be provided with LCD Projectors to show online models for better understanding of the experiments conducted.
- To encourage more number of students and faculty to participate in workshops, conferences and symposia by providing financial aid.
- To develop students with a disciplined and integrated personality by providing training programmes in personality development and Yoga.
- To encourage students to participate in sports and cultural activities.
- To make students a part of Teaching & Learning center which offers training to students related to Communication Skills, Soft Skills & Personality Development.
- To motivate the entire faculty to use Innovative Teaching Methodologies.

**Projected Outcome**

- By implementing the quality measures like Customization, Counseling, Guest lectures, Foreign Languages training, MOU's with Industry and other universities, Industry Interaction, Placement & Training the outcome will be improved in all performance indicators like Student pass percentage, University Ranks, Placements etc.,

**c) Accreditation:**

All eligible UG courses (CSE, IT, EEE, ECE) of SVECW are **accredited for 5 years (2008-2013)** by NBA and applied for Renewal**.** We are planning to get accredited all PG programmes.

**d) Implementation of Academic and Non Academic reforms**

**Academic & Non-academic reforms**

Academic reforms include:

- Curricular reforms
- Evaluation procedures
- Performance appraisal
- Faculty quality improvement
- Accreditation.

Non-academic reforms include:

- Executing full Autonomy
- Establishment of funds
- Revenue generation through a variety of activities
- Filling up vacancies
- Delegation of decision making powers
- Academic support to weak students.

Strategic plans to achieve the above-said reforms are clearly given below.

**Strategic plan for curricular reforms**

- Innovations in teaching and students evaluation methodologies

- Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking and leadership skills
- Problem solving projects from industry
- Elective courses
- Extensive use of media
- Invited expert lectures from industry and field
- Remedial classes are conducted for the weak students; special counseling is given to them and are closely monitored by the facilitators.
- Currently self assessment is done by the faculty on a yearly basis and planned to be more frequent viz., at the beginning, middle and end of each semester.
- Extensive use of online contents and MOOCS
- Customized industry specific credit certificate courses are introduced

**Performance appraisal of faculty by students**

Faculty is given the motivation for a regular self-assessment to meet the needs and expectations of students. Subsequently the performance is monitored by taking feedback from students at the end of every semester in standard format with important teaching parameters viz. use of teaching aids, development of course file, accessibility of faculty, summary, syllabus covered, beyond syllabus efforts, types of tests given etc.

**Faculty incentives for continuing education**

Management gives faculty the opportunity of attending conferences, workshops, seminars, etc., activities like consultancy etc. by providing allowances.

**Delegation of decision making powers to senior institutional functionaries with accountability**

**e) Improving interaction with Industry**

**System in Practice**

- Industry Visits for Faculty as well as students arranged to SHAR, DRDO, Bangalore, Visakhapatnam Steel Plant, EFFTRONICS & ISRO etc.
- Assistive Technologies Lab was established at the institute in collaboration with University of Massachusetts, Lowell, USA. guides students in developing gadgets for the disabled.

- Workshops, conferences and Symposia are organized by various departments of the college. For the workshops conducted so far, a minimum of 25 faculty members from various Engineering colleges in Andhra Pradesh participated.
- Projects in Industries are taken up by students with encouragement from the faculty by providing guidance and periodical review.
- Visiting faculty/professors from industries are invited to campus to address students and faculty members and to spend a few days at campus for participating in workshops.
- The other centers of excellence to improve the industry interaction practiced at SVECW include:
    - **APSSDC**
    - **CAMPUS CONNECT PROGRAMME**
    - **IBM CENTER OF EXCELLENCE**

**Andhra pradesh State Skill Development Center(APSSDC)**

APSSDC is an initiative of AP state govt to deliver a structured, sustainable & scalable framework to impart state of the art skills to the unemployed, underemployed, uncertified and un-benchmarked and to address the lack of relevant skills amongst the current and potential Skill workforce in the state of A.P. and to increase employability in sync with Industrial growth of the State.

**CAMPUS CONNECT PROGRAMME:**

SVECW is one of the institutes selected by Infosys for campus connect programme from 2006 which is being organized periodically on various technical and soft skills. Faculties are trained on advanced topics and course materials are provided on academics and used extensively by the student community to help fresh recruits to be 'industry ready'.

**IBM CENTER OF EXCELLENCE**

The MoU was signed between the institute and IBM and the relationship was established to give the open-standards skills to students and faculty to compete in the ever-changing technology workplace. Center of Excellence was inaugurated on 19th November 2009.

**IBM MOBILITY CENTER**

The Centre was inaugurated in the campus on 19.11.2009 by Sri Himanshu Goel, Country Head, IBM Software Division. The Centre is opened for student projects and learning latest in the field of information technology. Students of third and final years are utilizing the Centre to update their skills and their skills are certified by IBM.

## MODEFIN SERVER

Modefin Server Lab established to provide a platform for current student to work on real IT internship projects.

### NETENRICH (INDUSTRY-INSTITUTE INTERACTION)

NetEnrich Network Operation Centre is being established in the campus with an intention to promote Industry Institute Interaction. NetEnrich is a premiere IT as a Service company which specializes in Remote Infrastructure Management (RIM). Through this centre the campus students will have an opportunity to interact with the employees of NetEnrich and understand the concept of RIM. A batch of students were selected by NetEnrich and trained in RIM. These students will also be considered for Full Time Employment.

### FOREIGN LANGUAGE

Students are taught Foreign Languages which are beneficial to them in getting good placements and during their career. Certification Programmes in German, French, Japanese and Spanish in association with Goethe Zentrum, Launchpad Solutions & Hayakawa Enterprises respectively.

### TOEFL CENTRE

Our college is recognized as TOEFL centre by Educational Testing Service (ETS), USA.

### MOUS WITH FOREIGN UNIVERSITIES

Long term MOUs are signed with organizations to impart soft skill and life skill training to the students. MOUs were signed with foreign universities like Purdue, UMass, etc.

### TRAINING & PLACEMENTS

Seven batches of students have left the college. Students undergo training in various core areas like banking, retailing etc. in reputed institutes to make them aware of the application of their disciplines to these fields. Students have got placement in several companies including Microsoft, Infosys, Mahindra Satyam, TCS, Syntel, Rofous, IBM and Wipro.

### RESULTS

The performance of the students of our college, since its inception, is highly encouraging and satisfying. We are proud that we occupy No.1 position in terms of percentage of passes during the latest University Examination results under JNTUK region and have always been in the top.

**Strategic plan for improvement:**

The following are the areas in which department has to concentrate for better industrial relationships:

- Industrial testing by faculty & technicians at site or in laboratory.
- Joint research programmes and field studies by faculty and people from industries
- Short-term assignment to faculty members in industries.
- Scholarships/fellowships instituted by industries at the Institute for students.
- Professorial Chairs sponsored by industries at the Institute.
- R&D Laboratories sponsored by industries at the Institute.
- Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Human resource development programmes by the faculty for practicing engineers. Utilizing Institutional resources (man power and physical) for industrial manpower training.
- **Institute Industry Interaction Cell:** In our college institute industry interaction activities are coordinated by EDP, it is need to form full functioned IIIC need to established with following objectives
    1. To facilitate joint research work, consultancy involving faculty and students.
    2. To conduct industrial exhibitions to highlight research facilities and expertise available with the institution.
    3. To seek and associate Experts from Industry in Curriculum Development and review.
    4. To identify Continuing Education opportunities, short term programmes and training needs of the Industry, which the institution can provide.
    5. To promote revenue generating activities for the institution like Lab Testing, Calibration, consultancy and R&D etc.
    6. To assess periodically the scientific and technological scenario/ happenings in India and abroad in order to translate it into action for taking up future R&D work.

**Projected outcomes**

- Increase in collaboration with Industry
- Increased rate of campus placement of students

- Increase in industrial training for students arranged by institution
- Absorption of students by same industries providing industrial training
- Increase in IRG by collaborating with Industry
- Increase in utilization of institutional resources by Industry

Increase in solving the real life problems of the region.

**f) Enhancement of Research & Consultancy activities**

R&D, being an integral part of higher education, helps students gain first-hand knowledge of the field besides equipping themselves to face the emerging challenges in their career, so it is needed to improve R& D Activities in the college.

**Strategic plans for improvement**

- The SVECW shall establish a Committee for Research which will administer and oversee all research activities at SVECW. This Committee will be chaired by the Dean R&D.
- Visits of industry executives and practicing engineers to the Institute for seeing research work and laboratories, discussions and delivering lectures on industrial practices, trends and experiences.
- The SVECW shall establish a Committee for Consultancy Services. The role of this Committee shall be: To receive and solicit Consultancy assignments on behalf of the University and direct them to the appropriate departments or Faculties
- Encouraging faculty members to establish linkages with other Higher Education Institutions and participate in joint R&D activities by industries as well as Government research organizations by utilizing expertise of Industry senior personnel as adjunct faculty.
- Incentive support to students participating in Research projects encourages them to involve in other research projects and also attracts more students to join research activities.

**Projected outcomes**

- Publications of paper in national and international journals by the students and faculty
- Developing innovative products and applying for patents
- Awareness towards cutting edge technology in faculty and students.
- Diverting some students to R&D companies like DRDO etc.

**2.5:**

Provide an action plan for organizing a Finishing School and for improving the academic Performance of SC/ST/OBC/academically weak students through innovative methods, such as remedial and skill development classes for increasing the transition rate and pass rate with the objective of improving their employability.

**Objective:**

The institute has initiated various methods to improve the academic Performance of SC/ST/OBC/academically weak students.

**System in Practice:**

- Identifying the weak students
- Identifying the problems that are being faced by the weak students.
- Measures taken to improve the quality of weak students include
  - Conducting the remedial classes.
  - Conducting the counseling classes.
  - Conducting re examinations, pre examinations and assignments.
  - Giving continuous encouragement and inspiration to the students in all aspects.

**Strategic plan for improvement**

- To obtain teacher feedback of weak students.
- To encourage Participation of weak students in class room activities.
- To conduct Workshops for faculty on teaching methodology for the benefit of the weak students.
- To retain high quality faculty by providing extra remuneration and incentives.
- To recruit experienced quality faculty.
- To allocate sufficient budget for faculty development activities.
- To conduct Internal Seminars by students.
- To take the services of professional Counselor to counsel the weak Students.
- To Establish Finishing school for weak students.
- Systematic steps to meet the objective will be taken according to the activity chart.

**Projected outcome:**

The transition rate of SC/ST/OBC/academically weak students will be expected to increase by 20% in the first year and 30% in subsequent years.

**2.6:**

Provide an action plan for strengthening of PG Programs and starting of new PG Programs.

**Objective:**

To promote Post-Graduate education for women students, SVECW has started PG Programs in various disciplines. As part of that, institution needs to develop plans for strengthening PG programmes.

**System in Practice:**

- Effective Teaching methodologies are adopted.
- Faculty are encouraged to improve their qualification
- Strengthening academic Quality is ensured by peer-review process to supplement student evaluation at the end of each semester
- Research teams of various departments guide graduate students in interdisciplinary research projects like Assistive Technologies Lab etc.
- Institute is receiving grants from DST, AICTE etc., which is encouraging both faculty and students.
- Department encourages faculty members to conduct and attend faculty training programs, workshops and conferences etc.
- New Laboratories like Mixed Signal Laboratory are established for the existing PG courses.
- To improve practical knowledge of students, apart from regular labs, additional labs on core subjects are conducted.
- Seminars on latest topics are assigned to students in addition to their curriculum to acquaint them to academic resources like digital library, journals and internet.
- Class room library is provided with prescribed books for immediate reference.
- College Library provides access to IEEE Digital Library to assist students for publishing papers and for developing projects.

- Special attention class tests and assignments are conducted after completion of each unit and guidance to weak students and lately joined students to cope up with the syllabus.
- A separate Projects Laboratory with internet facility is provided to cater students' needs.
- Publicity of activities related to student & faculty in the institute is done through Print and Electronic media.

**Strategic Plan**

- To strengthen academic quality and Reputation.
- To Strengthen PG student enrollment by providing teaching assistantships through TEQIP-II.
- To improve the current evaluation strategy for students with unsatisfactory performance by achieving autonomous status.
- To encourage faculty members by providing facilities and benefits through the enhanced research activities by getting funds.
- To allocate sufficient grants to strengthen PG courses.
- To maximize the efficiency of available resources by making personnel and finance resources centralized are at the institute level.

**Projected outcome:**

- The students will be more exposed to latest technology.
- This strategic plan will enable the faculty to be retrained to suit the new and emerging needs.
- It changes the mindset of faculty and encouraged them to apply for and obtain patents based on their Research findings and Innovations.
- Improvement in collaboration between SVECW and local industries.
- To get enrollment from industry sponsored employees in all PG programs.
- PG courses will get the accreditation.
- All PG courses will have full enrollment.

**2.7:**

Attach a summary of Training Needs Analysis carried out. Also, provide Faculty Development Plan for the first 18 months for improving their teaching, subject area and research competence based on Training Needs Analysis (TNA) in the following areas.

- Basic and advanced pedagogy
- Subject / domain knowledge enhancement
- Attendance in activities such as workshops, seminars
- Improvement in faculty qualifications
- Improving research capabilities

**Objective:**

To provide training for all stake holders is an important context so that their level of quality can be upgraded and to make them survive against all the latest trends in their respective fields.

**System in Practice:**

Specific Proforma given in the guidelines for TNA of PIP for TEQIP –II has been supplied to all staff to get their requirements and to come up with training plan that suits their interest.
Based on the TNA forms received from faculty, training need is divided in to the following categories:

- Training to the Principal, HOD's
- Training in Subject Domain
- Trainings in Pedagogy Skills

Training taken in the above three areas for the last 2 years has been included in the **Institutional Training Need Analysis** as per the proforma.

**Strategic Plan**

Tentative Training Need Plan in the above three areas is given below:

**i) Tentative training plan for Chairs/Principal/HODs:**

| S.No. | Department / Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | Chairs/ Principal / HODs / and Administration Staff | Developing a Culture of Evaluation and support for Faculty Success | Chairs & Heads | 1 | Dec 2015 | IIT/NIT |
| 2 | | MS-Office Custom Workshop | Office Staff | 5 | May 2015 | IIT/NIT |
| 3 | | 19th Annual Administrative Professionals Conference | Office /Administration staff | 4 | October 2015 | IIT/NIT |
| 4 | | Diversity Management in Organizations | Principal/ Administration Staff | 1 | Sep 2015 | IIT/NIT |
| 5 | | Effective Skills for office administration | Principal/ AO/HODs | 2 | April 2015 | IIT/NIT |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | | Strategic Management Society Research Workshop | Office Administrators | 3 | March 2015 | IIT/NIT |
| 7 | | Stress Management | Administration staff /HODS | 7 | October 2015 | IIT/NIT |

**ii) Tentative training plan for faculty members in subject domain:**

| S.NO | Names of staff members | Areas of training/ development | Duration (Days) | Trainer Organizations |
|---|---|---|---|---|
| 1 | K.N.V. Satya Naresh | Cloud computing | 4 | - |
| | | Web technology | 2 | - |
| 2 | K. Pavan Raju | Network Security | 5 | CISCO |
| 3 | P.J.R. Shalem Raju | Computer graphics | 7 | IIT/NIT |
| 4 | A.Seenu | Neural networks | 7 | IBM |
| | | Artificial Intelligence | 5 | UO Hyderabad |
| | | Speech recognition | 7 | C-DAC |
| | | Network Security | 5 | CISCO |
| 5 | P.R.Sudha Rani | Guidance for research | 2 | IIT |
| | | Speech recognition | 2 | IIT or NIT |
| | | Voice recognition | 2 | IIT or NIT |
| | | Speech synthesis | 2 | IIT or NIT |
| | | Speech communication | 2 | IIT or NIT |
| | | Data Mining | 7 | IIT or NIT |

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|---|---|---|---|---|
| 6 | K.Ramesh | Information Retrieval system | 7 | IIT or NIT |
| | | Image processing | 7 | IIT or NIT |
| 7 | K.V.Narayana Rao | Data Mining | 7 | IIT |
| | | Java | 7 | ORACLE |
| | | .Net | 7 | Microsoft |
| 8 | Y.Ramu | Data mining | 7 | IIT |
| | | Cloud computing | 10-15 | VNRVJ,HYd |
| | | Pedagogy Skills | 7 | IIT |
| | | Managerial skills | 3-4 | IIM |
| 9 | T.Gayatri | Workshops | - | IIT |
| 10 | M.S.Sudheer | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 11 | R.Anuj | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 12 | G.Mohan Ram | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 13 | D.N.S.B.Kavitha | Cloud computing | 3 | - |
| | | Computer networks | 3 | - |

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|---|---|---|---|---|
| | | UNIX & LINUX | 4 | - |
| 14 | M.Narasimha Raju | Programming | 10 | IIT |
| | | Network Security | 6 | IIT |
| | | Data mining | 6 | IIT |
| 15 | V. Purushotam Raju | MAT lab | 6 | Math works |
| | | Java | 6 | ORACLE |
| 16 | Ch.Vijaya Krishna | MAT lab | 5 | - |
| | | Data mining | 5 | IIT |
| | | Safety data analysis | 4 | IIT |
| 17 | G.Vani jayasri | Artificial intelligence | 2 | - |
| | | LINUX | 3 | - |
| 18 | P. Raju | Network security | - | - |
| | | Data warehousing & Data Mining | 4 | IIT |
| 19 | G.V.S.S.P.Raju | Data Mining | 4 | IIT |
| | | Network security | - | - |
| | | Cloud computing | - | - |
| | | Newral networks | - | - |
| 20 | Ch. Samba Siva Rao | Data mining | 5 | Any reputed Organization |
| | | Cryptography | 5 | Any reputed Organization |
| 21 | Dr. K Pushpa | Wireless Communication | 5 days | |
| 22 | S Hanumanta Rao | Antenna design and | 5 days | FEKO |

| | | | | |
|---|---|---|---|---|
| | | simulation | | |
| 23 | V Srinivasa Rao | VLSI and Image processing | 15 days | |
| 24 | K Murthy Raju | Computer Networks | 5 days | |
| 25 | M Prema Kumar | Image Processing | 5 days | |
| 26 | Dr. M. Sudheer | Image Processing | 5 days | |
| 27 | M Pradeep | Image processing | 5days | Mathworks and any IIT |
| 28 | K Padmavasavi | Image processing | 4 days | |
| 29 | M V Ganswara Rao | Image Processing, Embedded systems | 7 days | |
| 30 | S. Ravi Kumar | Speech Signal Processing | 5 days | IITS |
| 31 | P Ravi Kumar | Wireless communication | 5 days | |
| 32 | V Vijaya kumar Raju | Image processing | 7 days | Taxas instruments |
| 33 | G kishor Kumar | Bio medical Image Processing | 4 | IITS |
| 34 | R Sushmitha | DSP Processors | 5 days | |
| 35 | R Viswanadham | Embedded systems | 5 days | |
| 36 | M Padmanabha Raju | Digital Signal Processing | 5 days | |
| 37 | D V Rama Krushna | Image Processing & communications | 6 days | |
| 38 | Padmanabha Raju | Digital Image Processing | 5 days | |
| 39 | K S N Raju | MATLAB | 5 days | |
| 40 | E R Praveen | MATLAB | 5 days | |

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|---|---|---|---|---|
| 41 | P.Venkata Rama Raju | Data Mining Tools | 5 | |
| 42 | S.Sreenivasu | Research Methodologies | 2 | |
| 43 | S. Adi Narayana | Advanced Topics in Network Security | 2 | |
| | | Data Mining Tools<br>Statistical Workshop | 5<br>3 | |
| 44 | P.Syamala Rao | Cloud Computing | 3 | Any Reputed Organization |
| 45 | Dr. D.V. Naga Raju | Cloud Computing | 3 | Any Reputed Organization |
| 46 | G.Ratnakanth | Cloud Computing | 3 | Any Reputed Organization |
| 47 | S.Ravi Kumar | Cloud Computing | 5 | Any Reputed Organization |
| 48 | S.Ravi Chandra | Web Application | 5 | Any Reputed Organization |
| | | Advanced Topics in Network Security | 2 | |
| 49 | B.Venkatesh | Research Methodologies<br>Data Mining Tools<br>Web Application | 2<br>5<br>5 | Any Reputed Organization |
| 50 | A.Mohan | Image Processing | 2 | |
| 51 | T.Madhavi | Cyber Security<br>Image Processing<br>Social Networking<br>Parallel Computing | 2<br>3<br>2<br>4 | Any Reputed Organization |
| | | Wireless Networks<br>Data Mining Tools<br>Network Security<br>Open Source Softwares<br>Advanced Technologies | 2<br>2<br>2<br>2<br>2 | |

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|---|---|---|---|---|
| | | Cloud Computing | 2 | |
| 52 | V. Pavan Kumar | Architectural Frameworks | 5 | Any Reputed Organization |
| | | Cryptography | 5 | Any reputed Organization |
| 53 | M.Gowtham | Cloud Computing | 5 | Any Reputed Organization |
| 54 | P.R.S.S.V.Raju | Web Application | 5 | Any Reputed Organization |
| | | Web Application | 5 | Any Reputed Organization |
| 55 | K.Ramu | Cryptography | 5 | Any reputed Organization |
| 56 | G.Devi Priya | Advanced Topics in Network Security | 2 | |
| | | Image Processing<br>Parallel Computing | 3<br>4 | Any Reputed Organization |
| 57 | V.Leela Prasad | | | |
| | | Data Mining Tools<br>Network Security<br>Recent Trends in IT | 4<br>3<br>5 | Any Reputed Organization |
| 58 | G.Tej Varma | Image Processing | 2 | |
| 59 | Mr. P. Srihari Raju | • Faculty Development<br>• Proficiency in English<br>• Communication about in English | 2<br>3<br>3 | EFLU<br>EFLU<br>EFLU |

**iii) Tentative training plan for faculty members in Pedagogy Skills**

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| **1** | Pedagogical Training | Development of Competency Based Curriculum in Technical Courses | ALL Dept. Faculty | 2 | May 2015 | NITTTR, Chandigarh |
| **2** | Pedagogical Training | Developing Innovation & Creativity in Teachers | ALL Dept. Faculty | 5 | Aug 2015 | NITTTR, Chandigarh |

**Activity chart**

| S. No | Activity | Sub activities | Number of Months (from May 2015 to April 2016) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Description | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 |
| 1 | Training | For Principal / HODs | | | | | | | | | | | | |
| | | For Administrative Staff | | | | | | | | | | | | |
| 2 | Training for Technical /Supporting Staff | CSE | | | | | | | | | | | | |
| | | ECE | | | | | | | | | | | | |
| | | EEE | | | | | | | | | | | | |
| | | IT | | | | | | | | | | | | |
| | | ME & CE | | | | | | | | | | | | |
| | | BS | | | | | | | | | | | | |
| 3 | Training for faculty in subject domain | CSE | | | | | | | | | | | | |
| | | ECE | | | | | | | | | | | | |
| | | EEE | | | | | | | | | | | | |
| | | IT | | | | | | | | | | | | |
| | | ME & CE | | | | | | | | | | | | |
| | | BS | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Training for faculty in pedagogic skills | Common for all Dept | | | | | | | | | | |

**Projected outcome:**

- Faculty members will be focused towards attending such programmes as they have financial help towards that and it fine tune their skills in in-house R&D projects. Students will also be benefited from this.
- Teaching / Inter and Intra personal skills of the all the faculty members will be improved once they go through such training and workshop programmes and that will be reflected in the students mind also which is simultaneously going to improve the understanding standards of them and others as well.
- It is also an effective way for the staff and administrators to get exposure to such workshops in premier institutions.

**2.8:** Provide an action plan for training technical and other staff in functional areas.

**Objective:**

To provide training for all stake holders so that their level of quality can be upgraded and to make them survive against all the latest trends in functional areas.

**System in Practice:**

Based on the TNA forms received from Non-Teaching staff training need is divided in to the following categories:

- Training to the supporting staff
- Training to the technical staff
- Trainings to the administrative/finance staff

**Strategic plan for improvement**

To improve the skill levels of supporting and technical staff (Tentative) Training plan has been prepared from the TNA forms received includes 5 short-term and 2 long-term training programmes for Class IV i.e. Support/Technical Staff.

**i) Short term (up to three months) training/development plan for Class IV Staff, Support/Technical Staff:**

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ | Duration (Days) | Tentative date of training/ Development | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | CSE | MCSA | S.Naga raju | 1 month | May-June 2015 | ESCI,Hyd |
| 2 | CSE | Networking | Durga Rao | 1 month | Dec 2015 | Hyd |
| 3 | IT | Basic Networking Technologies | K.Chandra Sekhar | 1 month | May-June 2015 | ZOOM Technologies, Hyderabad |
| 4 | Mechanical | CAD/CAM | J.V. NARASIMHA RAJU | 1 month | June 2015 | Naresh Technologies Ltd, Hyderabad |
| 4 | ECE | How to Rectify Problems in Digital Millimeters, | Chiranjeev Varma | 15 days | May 2015 | Hi-Q Electronic System - Hyderabad |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | CSE | Middle Ware Technologies | M.Chaitanya | 1 month | July 2015 | Naresh Technologies Ltd, Hyderabad |

**Long term (above three months) training/development plan for Class IV Staff, Support/ Technical Staff:**

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | CSE | CCNA | N.B.N.V. DURGA RAO | 3 months | May - 2015 | ZOOM Technologies Hyderabad |
| 2 | IT | Multimedia & web Design | M.Chinna Appanna | 3 months | Dec 2015 | Naresh Technologies, Hyderabad |
| 3 | ME | CAD | N.Kalyan Chakravarthi | 1 month | June 2015 | ZOOM Technologies Hyderabad |
| 4 | CSE | Networking | K.V.N.Ravi | 1 month | Nov 2015 | ZOOM Technologies Hyderabad |

**Projected outcome:**

- Our staff can gain knowledge by attending the training and workshop programmes so that the systems that suits SVECW can be implemented.
- It will help in bringing reforms both Academic and non-academic to improve the efficiency and transparency of the system.
- Administrative staff will be improving their skills in office automation, document preparation and maintenance and so on.
- **Activity Chart for Non – Teaching Staff, Training Plan is shown in 2.7**

**2.9:**

Describe the relevance and coherence of Institutional Development Proposal with State's/National (in case of CFIs) Industrial/Economic Development Plan.

**Vision Statement:** "Transform the society through excellence in Education, Community empowerment and sustained Environmental protection."

**Mission Statement:**

- To achieve Academic excellence through innovative learning practices.
- To instill self confidence among rural students by supplementing with co-curricular and extra-curricular activities.
- To inculcate discipline and values among students.
- To establish centers for Institute Industry partnership.
- To extend financial assistance for the economically weaker sections.
- To create self employment opportunities and skill up gradation.
- To support environment friendly Green Practices.
- Creating innovation hubs.

**State and National Development Plan**

- To empower women in technical education.
- To encourage women in industrial sector.
- Social Empowerment of Women
- Science and Technology.
- Establishments of Knowledge societies.
- To provide Quality Education.

**2.10**:

Describe briefly the participation of departments/faculty in the IDP preparation.

The preparation of IDP and action plan for implementation for TEQIP would not have been in its present stage but for the complete and heart-felt efforts put in by the erudite and dedicated faculty of SVECW.

For this, a committee of 5 nodal officers under the leadership of a senior professor as the coordinator, is constituted by the head of the institution as per the resolution by the BOG to prepare the IDP with the help of 10 more faculty members of the institute, one from each department and to prepare complete action plan for implementation of the TEQIP project.

**2.11:**

Describe the Institutional project implementation arrangements with participation of faculty and staff.

**Committees for the implementation arrangements:**

Institutional TEQIP Unit has been formed with the following representation:

- Academic officials of the Institution,
- Faculty,
- Senior administrative officers,
- Technical and non-technical support staff
- Students.

The nodal officers will operate through committees involving all the committee & staff for procurement of Goods, Works and Services; financial management; implementation of faculty and staff development activities and programs; monitoring project implementation, achievement of targets for all indicators as proposed and keeping MIS updated; ensuring compliance with EAP, EMF and DMF requirements; ensuring implementation of Institutional reforms; organizing efficient conduct of monitoring and performance audits, etc.

The BoG has approved the following committees:

| **Name of the Committee** | **Stakeholders representatives** |
|---|---|
| Academic Council/Committee | Faculty |
| Finance Committee : As per Act / MoA | Faculty |
| Building and Works Committee | Faculty |
| Purchase Committee | Faculty/Students |
| Disciplinary Committee | Faculty/Students |
| Institution Development Committee | Faculty/Students |
| Students Affairs Committee | Faculty/Students |
| Library Committee | Faculty/Students |

| | |
|---|---|
| Grievance Committee | Faculty/Students |
| Anti Sexual Harassment Committee (ASH) | Faculty/Students |

Apart from the above committees, institution has also formed below committees for fulfilling various needs.

| **Name of the Committee** | **Frequency of meeting** |
|---|---|
| 1. Academic Advisory Body | At least once in a semester |
| 2. College Academic Committee | At least twice in a semester |
| 3. Student Counseling / Grievances Redressal Committee( Discipline ) | Once in a Month |
| 4. Purchase/Stores | At least twice in a semester |
| 5. Public Relations/publicity & Press, Media | Once in a Month |
| 6. R&D, Consultancy | Once in a Month |
| 7. Training (Soft skills/ Communications, etc) | Once in a Month |
| 8. Career Guidance & Placements | Once in a Month |
| 9. Hostel Committee | Every 15days |
| 10. Sports & Games | Once in a Month |
| 11. Examinations | Once in a Month |
| 12. Library | Every 15days |
| 13. TEQIP – II | As per the requirement |
| 14. Alumni Committee | Twice in a semester |
| 15. Student Council | Once in month |
| 16. Internal Quality Assurance Cell (IQAC) | Every 15days |
| 17. Women welfare cell | Once in a Month |
| 18. Anti Ragging committee | As per the requirement |

**Monitoring Arrangements and Performance Indicators:**

Apart from the above committees the following performance measures are taken to evaluate the implementation.

- Setting of clear institutional performance targets along each of the priority objectives
- Establishment of a Monitoring and Evaluation Cell
- Systematic data collection for each of these indicators
- Establishment of a central computerized database on institutional performance
- Preparation of quarterly progress reports

- Upgrading of Financial Information Systems
- Quarterly Management Review Meetings

**2.12:** Provide an Institutional project budget in Table-29.

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Infrastructure improvements for teaching, training and learning through | | | | |
| | i | Modernization and strengthening of laboratories * | 10.00 | 5.00 | 5.00 |
| | ii | Establishment of new laboratories for existing UG and PG programmes and for new PG programmes | 100.00 | 50.00 | 50.00 |
| | iii | Modernization of Classrooms * | 12.00 | 8.00 | 4.00 |
| | iv | Updation of learning Resources | 4.00 | 2.50 | 1.50 |
| | v | Procurement of furniture | 10.00 | 5.00 | 5.00 |
| | vi | Establishment / Up gradation of central and departments * | 5.00 | 3.00 | 2.00 |
| | vii | Modernization / improvements of supporting departments * | 3.00 | 2.00 | 1.00 |
| | viii | Modernization and strengthening of libraries and increasing access to knowledge resources | 15.00 | 8.00 | 7.00 |
| | ix | Refurbishment (Minor Civil Works) * | 4.00 | 2.00 | 2.00 |
| 2 | Providing teaching and research assistantships to increase enrolment in existing and new PG programmes in engineering disciplines | | 44.40 | 30.00 | 14.40 |
| 3 | Enhancement of R &D and institutional Consultancy Activities * | | 5.0 | 3.50 | 1.50 |
| 4 | Faculty and Staff Development (Including Faculty qualification up gradation, pedagogical training, and organizing / participation of faculty in | | 106.30 | 73.60 | 32.70 |

| | | | | |
|---|---|---|---|---|
| | workshops, seminars and conferences) for improved competence based on TNA | | | |
| 5 | Enhanced interaction with Industry | 25.00 | 17.00 | 8.0 |
| 6 | Institutional management capacity enhancement | 14.00 | 9.50 | 4.50 |
| 7 | Implementation of Institutional reforms | 23.00 | 18.50 | 4.50 |
| 8 | Academic support for weak students under the aegis of finishing school | 11.50 | 7.00 | 4.50 |
| 9 | Technical assistance for procurement and academic activities | 40.00 | 40.00 | - |
| 10 | Incremental Operating Cost | 25.00 | 17.50 | 7.50 |
| ****Total** | | 432.20 | 277.1 | 155.10 |

* Not applicable for private unaided institutions

****** Total Institutional Project Budget – **432.20** Lakhs

Fund utilization from TEQIP – **269.3** Lakhs

Fund utilization from IRG & Trust - **262.9** Lakhs

**2.13:** Provide the targets against the deliverables listed in Table-30.

| **S.No.** | **Deliverables** | **2014-15** | **Targets to be achieved*** | |
|---|---|---|---|---|
| | | | **At the end of 1 years of joining the Project** | **By project closing** |
| 1 | Number of students registered for | | | |
| | (a) Masters in Engineering programme | 51 | 63 | 126 |
| | (b) Doctoral programme in Engineering | - | - | - |
| 2 | Revenue from externally funded R&D projects and consultancies in total revenue (Rs. in lakh) | 58.57 | 35.00 | 75.00 |

| | | | | |
|---|---|---|---|---|
| 3 | Number of publications in refereed journals | | | |
| | (a) National | 15 | 20 | 40 |
| | (b) International | 45 | 50 | 100 |
| 4 | Total annual recurring expenditure | 1862.62 | 1900.00 | 1900.00 |
| 5 | Number of co-authored publications in refereed journals | | | |
| | (a) National | 15 | 20 | 40 |
| | (b) International | 45 | 45 | 90 |
| 6 | Student credentials | | | |
| | (a) campus placement rate of | | | |
| | UG students | 50.01 | 65.00 | 65.00 |
| | PG students | 15 | 30 | 30 |
| | (b) average salary of placement package for (Rs. in lakh) | | | |
| | • UG students | 3.25 | 3.50 | 3.50 |
| | • PG students | 3.00 | 3.50 | 3.50 |
| 7 | Number of collaborative programmes with Industry | 05 | 08 | 08 |
| 8 | Accreditation status (obtained and applied for) | 100% eligible for UG | 100% eligible for UG+PG | 100% eligible for UG + PG |
| 9 | Vacancy position for faculty and staff | **Zero** | **Zero** | **Zero** |
| 10 | Percentage of regular faculty having a Masters Degree or a Doctorate Degree in Engineering disciplines | 80.00 | 100.00 | 100.00 |
| 11 | Transit rate from 1st to 2nd year for the following: | | | |
| | • All Students | 79.66 | 80 | 80 |
| | • SC and ST Students | 45.94 | 50 | 50 |
| | • OBC Students | 82..48 | 84 | 84 |
| | • Women Students | 79.66 | 80 | 80 |

| | | | | |
|---|---|---|---|---|
| 12 | Autonomy status | Autonomous | Autonomous | Autonomous |
| 13 | Enrolment of faculty with only Bachelor Degree for qualification Upgradation (%) | 75 | -- | -- |
| 14 | Any other academic deliverables (maximum 3) | | | |
| i) | No. of. Students taken up Internships | 75 | 85 | 100 |
| ii) | No. of Workshops/ Seminars conducted | 26 | 40 | 40 |
| iii) | No. of Guest lectures arranged | 06 | 20 | 20 |

*All figures mentioned in the Targets to be achieved are cumulative.

**2.14:**

Give an action plan for ensuring that the project activities would be sustained after the end of the Project.

**Objective:**

The sustainability of a project is that how an institution survives after the completion of the project period even when external funding, human recourses and support systems are withdrawn.

Measures of sustainability can be considered based on three aspects

1. Programmatic
2. Administrative
3. Financial

The above aspects are discussed in sections below

**Continuation of Commitment to Excellence**

The capabilities of SVECW are clearly mentioned in the Annexure --- section 2.9 and it clearly shows how SVECW is working with clear vision by following institutional objectives to reach its mission.

TEQIP-II is a timely and welcome proposal and it is an additional help for organizational development which is a must to meet global standards to empower the women of rural

backgrounds. It is through an analysis of the national and international scenarios that SVECW has chosen to focus on the strategic objectives it has set for itself.

The TEQIP II project provides a significant boost in these strategic directions to reinforce several streams of activity which include:

- Academic Excellence
- Institutional Reforms
- Interaction with Industry
- Research & Consultancy

SVECW is confident that each one of these streams of activity will be sustained and even expanded beyond the life of the project. The sustainability depends up on different parameters and strategies, as briefly discussed below.

**Academic Excellence**

- The sustainability of educational excellence implies the continuation of teaching and curriculum development practices that will have been acquired during this project. It requires, specifically that faculty continue to adopt improved educational practices and that a dynamic and systematic student development process be in place.

- The design of the project in this area calls for several measures that will foster these two processes. Rather than focusing on punctual curriculum changes, one of the major objectives of this project is to systematize the process of improving the quality of education delivered to the stakeholders.

- Once such a process is systematized and operating, it becomes part of the culture of the institution and will continue operating and being refined. The project also focuses on improving teaching practice and instituting a permanent system of quality control and improvement in teaching.
- Attention has been paid to systematic faculty training, the establishment of a performance evaluation system that takes teaching performance into account and systematic processes of faculty development.
- Thus, both continuous attention to faculty improvement and improve the learning outcome of students will become the part of the culture of the institution.

**Institutional Reforms**

- Reforms required for the institutional development are by its very nature, a temporary activity, helping to shape a new institutional culture. Once established, systems and procedures will become part of the institutional culture and will continue operating.
- Most system development efforts will occur during the first two years of the project. SVECW will therefore have three years to stabilize newly introduced behaviors, until the next set of institutional challenges come along.
- But by then SVECW will have learned a new skill of managed institutional change and become a dynamic learning organization. Commitment to change and comfort with change are more important than the systems being introduced. It is for this reason that the project design pays great attention to changing attitudes and creating the right climate and dynamics for change in the first year of the project.

**Interaction with Industry**

- The BoG of the SVECW consisting industrialist, entrepreneurs and academicians who has a clear vision of how to reach industry and also know the best possible way to establish partnership between institute and industry.
- SVECW has already established good relationships with industries and got accreditation with IT companies. This project will give an opportunity to further enhance the relationship with industries. As a part of the project I-I-I cell will start its activities in the first year of the project.
- By the end of this project all the members of the I-I-I Cell will get acquainted with the systematic procedures to build the industry institute interaction. This project will be instrumental in creating new capacities, networks and relationships to make SVECW's action more coherent and effective.

**Research and Consultancy**

- The continuance of research programs depends on the capacity of faculty to generate research grants.
- The only real threat to the further sustenance of SVECW's is whether or not SVECW will be able to induct and train the next generation of faculty that will show the same determination, vision, motivation and drive as their predecessors. This hinges on

SVECW's capacity to attract, hire, train and motivate a large number of new quality faculty.

- SVECW has the capacity to conduct high quality research. It needs to develop the capacity to transfer it to a new generation. Special attention is therefore being paid to increase SVECW's capacity to do so.

- The project also includes a systematic program of faculty training and development to build this capacity and a large increase in the production of well-trained students who will be prime candidates for future recruitment.

**Ensuring Sufficient Fund Flow**

The prospects for financial sustainability, with adequate core funding from the management and the right policy environment, are good.

SVECW already has demonstrated its ability to generate funds through student fees, NRI admissions, Interest on FDR, Externally funded R&D projects, consultancy, and to a certain extent, its endowments. With autonomy, it adds flexibility of increasing student fees. The new PG courses that are being started under this project are a test of that capacity.

The project will improve SVECW's networking and public relations capacity and helps to utilize its alumni and other networks, which will further increase its capacity to generate funds.

As mentioned above, SVECW's capacity to generate project and consultancy revenue also hinges on the quality of the faculty that can be inducted during the period of the project and its proper orientation and training.

**2.15:** Provide a Procurement Plan for the first 18 months for Goods and Civil Works in Table-31 and Consultant Services in Table-32withbudgetandtimeframe.

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ...II/AP/AP1P09/52 | ArcGIS Educational GISsoftware | Infrastructure Improvement for teaching, training and learning facilities | Minimum two most used softwares in GIS industry needs to be practiced by PG students of Geoinformatics for better employability | 0.00 | Direct Contracting | Post Review | 30/08/2013 | - | - | 15/09/2013 | 19/09/2013 | 24/09/2013 | 29/09/2013 | No |
| ...II/AP/AP1P09/54 | Software for structural analysis lab | Infrastructure Improvement for teaching, training and learning facilities | Every student of civil shall have hand on experience in structural analysis and design and required for consultancy | 586,800.00 | Direct Contracting | Post Review | 30/08/2013 | - | - | 15/09/2013 | 19/09/2013 | 24/09/2013 | 29/09/2013 | No |
| ...II/AP/AP1P09/57 | Online Journals for the year 2014-15 | Infrastructure Improvement for | Which are very important for academics and research and | 0.00 | Shopping | Post Review | 30/11/2013 | - | - | 04/01/2014 | 20/01/2014 | 29/01/2014 | 10/03/2014 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | teaching, training and learning facilities | mandatory | | | | | | | | | | | |
| ...II/AP/AP1P09/58 | Online Journals for the year 2014-15 | Infrastructure Improvement for teaching, training and learning facilities | Which are very important for academics and research and mandatory | 138,978.00 | Direct Contracting | Post Review | 11/11/2013 | - | - | 04/01/2014 | 20/01/2014 | 23/01/2014 | 15/02/2014 | No |
| ...II/AP/AP1P09/59 | Hand books and IScodes for all engineering courses | Infrastructure Improvement for teaching, training and learning facilities | Standard hand books and IScodes are required to follow the standard procedures in engineering | 0.00 | Shopping | Post Review | 30/08/2013 | - | - | 16/09/2013 | 03/10/2013 | 14/10/2013 | 08/12/2013 | No |
| ...II/AP/AP1P09/62 | online Learning Resourse material software for the | Infrastructure Improvement for teaching, training and | course material, Video Lectures of each subject with interactive online and CD's is one of the key requirement | 0.00 | Shopping | Post Review | 30/08/2013 | - | - | 30/09/2013 | 21/10/2013 | 28/10/2013 | 23/12/2013 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | academic year 2013-14 | learning facilities | to improve | | | | | | | | | | | |
| ...II/AP/AP1P09/63 | Books for all M.Tech courses | Infrastructure Improvement for teaching, training and learning facilities | All the necessary Reading material for Pg students | 750,000.00 | Shopping | Post Review | 12/08/2013 | - | - | 23/09/2013 | 29/09/2013 | 29/10/2013 | 08/12/2013 | No |
| ...II/AP/AP1P09/65 | Virtualization Software for M.Tech CSE | Infrastructure Improvement for teaching, training and learning facilities | Virtualization is the future of Computer Science. To enable M.Tech. CSE students to practice Virtual, Cloud technologies | 178,030.00 | Shopping | Post Review | 31/07/2013 | - | - | 10/01/2014 | 30/01/2014 | 08/02/2014 | 22/02/2014 | No |
| ...II/AP/AP1P09/66 | Web Design Software for M.Tech CSE | Infrastructure Improvement for teaching, training and learning facilities | To enable students of M.Tech. CSE to practice Industry tools in Web Designing | 126,905.00 | Shopping | Post Review | 31/07/2013 | - | - | 10/01/2014 | 30/01/2014 | 08/02/2014 | 15/02/2014 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ...II/AP/AP1P09/68 | Mobile Application Design and Development Software | Infrastructure Improvement for teaching, training and learning facilities | To enable M.Tech. students to design and develop Mobile applications for various platforms | 0.00 | Shopping | Post Review | 31/07/2013 | - | - | 10/01/2014 | 30/01/2014 | 07/02/2014 | 15/02/2014 | No |
| ...II/AP/AP1P09/69 | Mathematical Research Tool | Infrastructure Improvement for teaching, training and learning facilities | Super Faster programming and mathematical orientation is cruicial for M.Tech., Research Studetns | 495,000.00 | Direct Contracting | Post Review | 31/07/2013 | - | - | 16/09/2013 | 20/09/2013 | 25/09/2013 | 30/09/2013 | No |
| ...II/AP/AP1P09/71 | QEEE, MHRD Hardware Components | Infrastructure Improvement for teaching, training and learning facilities | QEEE Direct to student program required the components specified by the MHRD | 398,094.00 | Shopping | Post Review | 01/01/2014 | - | - | 03/01/2014 | 18/01/2014 | 20/01/2014 | 27/01/2014 | No |
| ...II/AP/AP1P | Online journals for | Infrastructure | Journals are mandatory and they | 0.00 | Shopping | Post Revie | 02/01/2 | - | - | 26/01/20 | 01/02/2 | 03/03/2 | 12/04/2014 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09/72 | the year 2014-15 | Improvement for teaching, training and learning facilities | are required to improve the quality of education | | | w | 014 | | | 14 | 014 | 014 | | |
| ...II/AP/AP1P 09/73 | IScodes for all engineering courses | Infrastructure Improvement for teaching, training and learning facilities | Standard hand books and IScodes are required to follow the standard procedures in engineering | 200,000 .00 | Direct Contracting | Post Review | 03/02/2014 | - | - | 28/02/2014 | 07/03/2014 | 10/03/2014 | 20/03/2014 | No |
| ...II/AP/AP1P 09/74 | Online journals ElseierSD,Wiley Blackwell | Infrastructure Improvement for teaching, training and learning facilities | Journals are mandatory and they are required to improve the quality of education | 944,873 .00 | Direct Contracting | Post Review | 02/01/2014 | - | - | 14/03/2014 | 18/03/2014 | 23/03/2014 | 28/03/2014 | No |
| ...II/AP/AP1P 09/75 | Online Journals(ASME,ASCE,IEEE,McGraw- | Infrastructure Improvement for | Which are very important for academics and research and | 867,768 .00 | Direct Contracting | Post Review | 30/11/2013 | - | - | 28/02/2014 | 07/03/2014 | 10/03/2014 | 20/03/2014 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hill) | teaching, training and learning facilities | mandatory | | | | | | | | | | | |
| ...II/AP/AP1P09/76 | Online Journals ASTM | Infrastructure Improvement for teaching, training and learning facilities | Which are very important for academics and research and mandatory | 72,600.00 | Direct Contracting | Post Review | 30/11/2013 | - | - | 28/02/2014 | 07/03/2014 | 10/03/2014 | 20/03/2014 | No |
| ...II/AP/AP1P09/77 | software testing and quality assurence software | Infrastructure Improvement for teaching, training and learning facilities | To enable M.tech CSE and SE students to use the tool in laboratory and for project implementations. | 305,000.00 | Shopping | Post Review | 01/03/2014 | - | - | 05/03/2014 | 20/03/2014 | 24/03/2014 | 15/04/2014 | No |
| ...II/AP/AP1P09/83 | QEEE,MHRD Audio Equipment | Infrastructure Improvement for teaching, training and | QEEE Direct to student program required the components specified by the MHRD | 118,000.00 | Shopping | Post Review | 15/11/2014 | - | - | 09/12/2014 | 25/12/2014 | 14/01/2015 | 23/02/2015 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | learning facilities | | | | | | | | | | | | |
| ...II/AP/AP1P09/84 | QEEE, MHRD Hardware Components | Infrastructure Improvement for teaching, training and learning facilities | QEEE Direct to student program required the components specified by the MHRD | 398,094.00 | Shopping | Post Review | 15/11/2014 | - | - | 09/12/2014 | 26/12/2014 | 14/01/2015 | 23/02/2015 | No |
| ...II/AP/AP1P09/85 | Books for all M.Tech courses | Infrastructure Improvement for teaching, training and learning facilities | All the necessary Reading material for Pg students | 750,000.00 | Shopping | Post Review | 15/11/2014 | - | - | 09/12/2014 | 25/12/2014 | 14/01/2015 | 23/02/2015 | No |
| ...II/AP/AP1P09/86 | Online Journals ASTM | Infrastructure Improvement for teaching, training and learning facilities | Which are very important for academics, research and mandatory | 72,600.00 | Direct Contracting | Post Review | 15/11/2014 | - | - | 01/12/2014 | 05/12/2014 | 10/12/2014 | 15/12/2014 | No |

| Package Code | Package Name | Activity Name | Justification | Estimated Cost (Rs.) | Method of Procurement | Review | Estimated Financial Sanction Date | Preparation of Bid Document (Date) | Bank's No Objection to Bidding Document (Date) | Bids Invitation (Date) | Bid Opening (Date) | Contract Award Date | Contract Completion Date | Is COE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ...II/AP/AP1P09/87 | Online journals for the year 2014-15 | Infrastructure Improvement for teaching, training and learning facilities | Journals are mandatory and they are required to improve the quality of education | 944,873.00 | Shopping | Post Review | 15/11/2014 | - | - | 09/12/2014 | 25/12/2014 | 14/01/2015 | 23/02/2015 | No |
| ...II/AP/AP1P09/88 | Online Journals(ASME,ASCE,IEEE,McGraw-Hill) | Infrastructure Improvement for teaching, training and learning facilities | Which are very important for academics , research and mandatory | 867,768.00 | Direct Contracting | Post Review | 15/11/2014 | - | - | 01/12/2014 | 05/12/2014 | 10/12/2014 | 15/12/2014 | No |
| ...II/AP/AP1P09/89 | Online journals ElseierSD,Wiley Blackwell | Infrastructure Improvement for teaching, training and learning facilities | Journals are mandatory and they are required to improve the quality of education | 944,873.00 | Direct Contracting | Post Review | 15/11/2014 | - | - | 01/12/2014 | 05/12/2014 | 10/12/2014 | 15/12/2014 | No |

**2.16:**

Provide any other information related to special academic achievements as given in Eligibility proposal of the institution.

**Institution:**

- **The institute got Autonomous status from UGC.**
- **Came out with Commercial product from student projects.**
- **Got two patents.**
- **Established Modefin Server company delivery center in the college.**
- **Completed NAAC accreditation expert team visit waiting for results.**
- **Applied for NBA and the inspection dates are 15$^{th}$ 16$^{th}$ and 17$^{th}$ of May 2015**
- **Got 452 record placements for the academic year 2014-15**
- The institute signed MoUs with foreign universities i.e. **University of Massachusetts at Lowell** and **Purdue University**.
- **SVECW has got Permanent affiliation to JNTU.**
- **Established APSSDC regional center**
- Got five year accreditation for all undergraduate courses in 2008 by National Board of Accreditation.
- The Institute has received "Top JKC – Jawahar Knowledge Centre - Award for Excellence" for the year 2009-10.
- The prestigious IMC Ramakrishna Bajaj National Quality commendation certificate was conferred to SVECW for the year 2010.
- Assistive Technology lab (AT Lab) was established to develop tools for differently-abled people.
- Vishnu TV Academy- An on campus TV network was set up telecasting college specific academic, non-academic activities like symposia, annual day, guest lectures, workshops etc. **Four Short films** are developed / directed by students in the area of social relevance one of which got the **Best viewer's award in the State Short Film Festival by the Government of Andhra Pradesh.**
- The institute became a member of the Indio-US Collaboration for Engineering Education (IUCEE) college consortium. **SVECW is one of the 14 Regional centers established all over India by IUCEE from 2008.**

**Students:**

- Student of department of Information Technology received gold medals for standing first in the first convocation of JNTU Kakinada.
- Around 50 students have qualified in the GATE
- About 200 students appeared and qualified for GRE/TOEFL exams in the last three years.
- Student s of ECE department won Imagine cup 2010 conducted by Microsoft Inc.
- They also won Cash prize from Texas Instruments ltd. In Analog design contest.
- Every year students have been successfully organizing MEDHAMILAN- A National level Symposium for Women.
- A number of students attended national level symposia at various places and won prizes.

- As a part of AT Lab following projects were developed:
  - *Intelligent Blind Stick* functioning on Ultrasonic/ Optical technologies
  - *Voice Box* for Deaf & Dumb.
  - *Artificial Hand with Gripper and Other Movements* for the Armless.
  - *Voice Keyboard* for Blind person to recognize telephone calls etc.
  - *Voice Controlled Motorized Wheel Chair* for physically challenged.

**Faculty Publications:**

# List of Journals for Academic Year 2014-2015

[1] Mr.M.Gowtham, "BSN with GSM IJAENT" The International Journal of Advanced Engineering and Nano Technology, Vol:2,Issue-4, 18-2015

[2] Mr. V. Purushothama Raju, "A Novel Algorithm for Mining Closed Sequential Patterns IJDKP", Vol 5, Issue No. 1,Doi: 10.5121/ijdkp.2015.510401/2015

[3] Mr. Divya Vani .Y Constructing Horizontal layout and clustering Horizontal layout by applying Fuzzy concepts for Data mining Reasoning IJECS, Vol 4, Issue 1, pp. 10028-10042 ISSN (Online) 2319-7242, 01-2015

[4] Mr. Satya Naresh Constructing Horizontal layout and clustering Horizontal layout by applying Fuzzy concepts for Data mining Reasoning IJECS, Vol 4, Issue 1, pp. 10028-10042 ISSN (Online) 2319-7242, 01-2015

[5] Dr.P.V.V.Rama rao Hybrid 5-Level Inverter fed Induction Motor Drive World Journal of Modeling and Simulation Vol. 10 Issue No. 3, ISSN : 1746-7233 pp. 224-230 2014

[6] Mr. B.Mahendra Chand Hybrid Converter Topology with AC Drive Using Fuzzy logic Technique Journal of Computing Technologies Volume 3 Issue 9 ISSN : 2278 – 3814, pp. 12-23, 2014

[7] Prof. GRLVN Srinivasa Raju Design of a low power multiband clock distribution circuit using single phase clock International Journal of Engineering Research and Applications(IJERA), Vol 4 - Issue 92248-9622 30-36 2014

[8]A. Narayana Kiran, "Efficient Data Transmission by Introducing Stuffing Bits in HUFFMAN Coding Technique" International Journal Of Engineering And Computer Science (IJECS)Volume 3 Issue 10, 2319-7242, 8854-8858, 2014

[9] Mr. K S N Raju Low Power Data Compression Algorithm For Wireless Sensor Networks Using VHDL International Journal Of Engineering And Computer Science 2319-7242, 9067-9072, 2014

[10] Prof. GRLVN Srinivasa Raju Synthesis of Cosecant and square patterns for EMC applications IOSR journal of electronics and Communication Engineering 2278-2834, 1 – 6, 2014

[11] Mr. V. Purushothama Raju A Feature Based Approach for Image Retrieval IJARCSSE Volume 4, Issue 10, ISSN: 2277 128X 2014

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## Section 1 : Background information of Institution

### 1.1 Geographical Location

#### 1.1.1 The state of Andhra Pradesh

**Andhra Pradesh** is one of the 29 states of India, situated on the country's south-eastern coast. The state is the eighth largest state in India covering an area of 160,205 $km^2$ (61,855 sq mi). As per 2011 census of India, the state is tenth largest by population with 49,386,799 inhabitants.

The state has the second longest coastline of 972 km (604 mi) among all the states of India, second only to Gujarat. It borders Telangana in the northwest, Chhattisgarh in the north, Odisha in the northeast, Karnataka in the west, Tamil Nadu in the south and the water body of Bay of Bengal in the east. A small enclave of 30 $km^2$ (12 sq mi) of Yanam, a district of Punducherry, lies south of Kakinada in the Godavari delta to the northeast of the state.

There are two regions in the state namely Coastal Andhra and Rayalaseema and hence, the two regions are more often referred as *Seemandhra* by the media. There are 13 districts with 9 in Coastal Andhra and 4 in Rayalaseema. Visakhapatnam is the largest city and a commercial hub of the state with a GDP of $26 billion followed by Vijayawada with a GDP of $3 billion.

Guntur, Nellore, Kurnool, Kadapa, Tirupati, Rajahmundry , Kakinada , Eluru and Ongole are other important cities.

Andhra Pradesh possesses many hills that run intermittently, separating the state into western and eastern (coastal) Andhra. The hill ranges like Simhachalam, Annavaram, Srisailam and Tirumalai-Tirupati, have become the integral geographical part of state's life and history.

Geographically, Andhra Pradesh is bestowed with two mighty river systems of Krishna and Godavari. Its varied topography ranging from the hills of Eastern Ghats and Nallamallas to the shores of Bay of Bengal supports varied ecotypes, rich diversity of flora and fauna. The state has two regions Coastal Andhra and Rayalaseema. The plains to the east of Eastern Ghats form the Eastern coastal plains. The coastal plains are for the most part of delta regions formed by the Godavari, Krishna, and Penna rivers. The Eastern Ghats are discontinuous and individual sections have local names. The Eastern Ghats are a major dividing line in the state's geography. The Kadapa Basin formed by two arching branches of the Eastern Ghats is a mineral-rich area. The Ghats become more pronounced towards the south and extreme north of the coast. Most of the coastal plains are put to intense agricultural use. The Rayalaseema region has semi-arid conditions. Lambasingi (or Lammasingi), a village in the Chintapalli Mandal of Visakhapatnam district is situated at 1000 meters above the sea level. It is the only place in South India which has snowfall and is also

nicknamed as *Kashmir of Andhra Pradesh*. Throughout the year the temperature here ranges from 0 °C to 10 °C.

The state is divided into two regions viz., Coastal Andhra and Rayalaseema. It has a total of 13 districts, with nine in Coastal Andhra and four in Rayalaseema. These 13 districts are further divided into 664 mandals under the administration of 49 revenue divisions. There are as many as 6 revenue divisions in East Godavari district and only 2 inVizianagaram district. Chittoor district has the most number of mandals with 66 and Srikakulam district has the least with 37.

In terms of industrial development, Andhra Pradesh has progressed rapidly. And, it has emerged as one of the most attractive investment destinations, ranking third in India.

### 1.1.2 Shri Vishnu Engineering College for Women (SVECW)

Shri Vishnu Engineering College for Women (SVECW) is the seat of a vibrant education ecosystem, under the aegis of Sri Vishnu Educational Society (SVES). In an age of global technological and economic competition, SVECW's philosophy is to nurture the student's talent into a readily deployable resource pool, with a perfect blend of academic excellence and a preparation, for an immediate transition to a highly professional and dynamic work environment. SVECW is dedicated to its objective of empowering women by providing equal opportunities of learning and creating a competitive advantage for inclusive growth.

SVECW is strategically located on a sprawling 100 acres serene campus at Vishnupur, Bhimavaram, West Godavari District of Andhra Pradesh. Permanently affiliated to Jawaharlal Nehru Technology University (JNTU), Kakinada, SVECW offers graduate and post graduate programs in Engineering and Master's program in Computer Applications and Business Administration. SVECW approved by AICTE and accredited by NBA.

The self contained campus provides an ideal ambience for balanced approach to academic learning and extra-curricular activities. With a scalable infrastructure, supported by nationally renowned faculty, stream-specific laboratory, project-based learning using in-house developed pedagogic tools and hands-on industry exposure, SVECW offers unmatched resources and facilities to its talent pool.

The institute had a humble beginning with three Bachelor courses in Technology viz. ECE, CSE and IT with an intake of 60 in each, in the academic year 2001, under the dynamic leadership of its chairman Shri K.V. Vishnu raju. Since then, the institute has grown leaps and bounds in terms of no. of courses (both U.G. and P.G.), additional intake of students in each course, infrastructure ,the faculty strength and above all, the reputation earned from all these.

The courses currently offered by the institution are:
**U.G. Courses :**

Bachelor Degree in Technology (B.Tech.) - FOUR YEARS

Electronics and Communication Engineering – ECE (180)
Computer Science and Engineering – CSE (180)
Information Technology – IT (120)
Electrical and Electronics Engineering – EEE (120)
Civil Engineering – CE (60)
Mechanical Engineering – ME (60)

**P.G. Courses (2 Years)**

M.Tech. VLSI – 18
M.Tech. Power Electronics – 36
M.Tech. Software Engg. – 36
M.Tech. (CSE) – 18
M.Tech. (GI) - 18
Master of Business Administration – MBA (60)

The faculty of SVECW is actively involved in industrial consultancy and research projects which have benefited both the student community and industry.

### 1.2 Technical Education in the State

Andhra Pradesh is second leading State in the Country in terms of number of Technical Institutions and program offerings. Till the early 80's, the number of degree and diploma level institutes was very less(less than 15 and less than 50 respectively). Many deserving students were unable to get admission to engineering courses due to limited seats and the outcome is less. Further, the output from these institutions was unable to meet the industrial requirement in the state in terms of its numbers. Therefore to meet the rapid growing industrial requirements and to give opportunities top the aspirations of the students, the State took the policy decisions to open the sector of Technical Education to private sector, which has played main role in the expansion of technical institutes in the State. Currently there are about 300 institutions in the state offering courses of Engineering and Technology at both under graduate and post graduate levels. These include premier institutions run by Central and State governments and several self financing colleges.

The state government has implemented the following projects /policies/schemes to upgrade the overall technical education system in the state.

Andhra Pradesh has an overall literacy rate of 91.01% (2014). According to the report of Sarva Shiksha Abhiyan (2011–12) and Statistical Abstract (2012–13), 37,45,340 children out of 38,05,791 (98.4%), were enrolled in Primary schools with a teacher/student ratio of 29.3%. 21,01,928 children out of 21,56,577 (97.5%), were enrolled in Upper Primary schools with a teacher/student ratio of 24.6%. Schools in Andhra Pradesh require Telugu to be learned.[126] Apart from thousands of schools ranging from the pre-primary to the senior secondary ones, the state is home to a number of institutes, which impart higher education.

The Ministry of Human Resource Development has sanctioned The Indian Institute of Management (IIM) at Visakhapatnam which will start functioning from the academic year 2015-16 The Government of Andhra Pradesh has established Rajiv Gandhi University of Knowledge Technologies (RGUKT) in 2008 to cater to the educational needs of the gifted rural youth of Andhra Pradesh. The higher education includes many colleges, universities and research institutes providing professional education in the fields of arts, humanities, science, engineering, law, medicine, business, and veterinary sciences, with undergraduate and post graduation.

- **APIIC**

Andhra Pradesh Industrial Infrastructure Corporation Ltd. (APIIC) was incorporated on 26th September, 1973 with Authorized Capital of Rs.20.00 crores and paid up capital of Rs.16.33 crores. APIIC is a wholly owned Undertaking of Government of Andhra Pradesh. Invested with the objective of providing industrial infrastructure through the development of industrial areas, execution of civil works for various Government Departments. It has executed works covering Referral Hospitals, Navodaya Schools Polytechnic Buildings Court Complex, Building and Hostel for Indian Institute of Information Technology. Government entrusted the responsibility of constructing Games Stadia and Games Village for the National Games on Project Management Basis. The Corporation is the Nodal Agency for Government Sponsored scheme like Growth Centres, Export Promotion Industrial Parks, and Integrated Infrastructure Development Centres.

- **SEZ**

APSEZ is Multi-Product SEZ developed over an area of 5595.47 acres of land at Atcutapuram and Rambilli mandals of Visakhapatnam District. The Government of India notified the SEZ on 12/04/2007 in the Gazette. It is the major SEZ in the State of Andhra Pradesh.

With the advent of economic liberalization the Corporation has reoriented itself to the changing needs of economy and assumed the role of facilitator. To its credit the Corporation has developed Hi-Tech city with a private promoter. The corporation is the principle facilitator in Mega Projects like Special Economic Zone, Visakha Industrial Water Supply, Gangavaram Port, Convention Centre, Mega Industrial Parks at Parawada, Pashamylaram Financial District Hardware Park at Hyderabad.

- **APIDC**

**A**ndhra **P**radesh **I**ndustrial **D**evelopment **C**orporation Limited was established on 16th December 1960, by the Government of Andhra Pradesh for planned development of medium and large-scale industries in the state. Today, it has an authorized capital of Rs. 110 Crores and paid up capital of Rs. 96.23 Crores. APIDC offers a wide range of financial and consulting services Generation and Implementation of New Project Ideas, Guidance and comprehensive Escort Service to the Entrepreneurs, Participation in Equity Capital, Providing

Term Loans, Providing Bill Discounting Facility, Providing Guarantees, Merchant Banking, Venture capital Fund for IT Industry, ENTIRE (Entrepreneurs Nucleus and Total Investment Requirement Eden).

### 1.3 Current Industrial Scene

Andhra Pradesh has been a Leader on the industrial front of India. It has always been the endeavor to develop sustaining industrial growth, facilitate speedier flow of investment by creating conducive industrial climate in the State. Andhra Pradesh has developed a solid base of industrial infrastructure, strong Human Resources, and sustaining and diverse industrial base. This was possible because the state pioneered several policy initiatives, since inception, in diverse fields.

Visakhapatnam has emerged as a major industrial center and has major public and private sector establishments producing large scale industrial goods ranging from steel, metals, petroleum, polymers, fertilizers, heavy engineering equipment and also facilitates ship building, ports and fishing. Kakinada has multiple fertilizer refineries and produces large scale of natural gas from the offshore of KG basin. Kakinada also exports seafood and related products and produces agricultural products like rice and corn, edible oils, oilmeals, processed food products, chemicals, biofuel etc. Vijayawada is famous for processing of agricultural products, automobile body building, hardware, textile, consumer goods and small scale industries. Andhra Pradesh has one major port at Visakhapatnam and several medium-sized ports like Gangavaram, Kakinada & Krishnapatnam; which account to large export of cargo traffic. They are several large power plants and major ones are established at Visakhapatnam, Vijayawada, Kakinada, Krishnapatnam and Cuddapah.

#### 1.3.1 Competitive Investment Climate

The state has an exclusive financial institution AP State Financial Corporation (APSFC) for providing finance to small industry. Apart from this, thousands of commercial banks are functioning in the state in rural and urban areas. The state has a good network of specialized Small Scale Industries (SSI) branches for extending assistance to small and tiny industry. In the Industrial infrastructure front, the State has taken lot of initiatives for development of industrial infrastructure for the consistent growth. Government in association with Andhra Pradesh Industrial Infrastructure corporation (APIIC) has initiated a set of prestigious projects that include industrial infrastructure, social infrastructure and infrastructure for the specific sectors. The state owned corporation APIIC has already set up large number of industrial estates and specialized parks.

The state has one major port at Visakhapatnam which handles largest tonnage among all Indian ports and minor ports at Kakinada, Krishnapatnam, Vadarevu and Gangavaram. The State has undertaken wide-ranging measures to nurture its industries: simplified, less restrictive regulations, labour and fiscal reforms, incentives. In line with this objective, the State has enacted a law for Single-window clearances. It is the first Sate in the country to

have a law for single-window clearances, which ensures that all clearances to investors are given within a set period. The State has been qualified as "flexible" in its approach to labour regulations and "good" for its simplification of rules and regulations. It introduced the self-certification concept, common annual returns in lace of multiple returns with simplified registers, and zero inspection regime through accredited agencies. As part of its continuing search for ways to ensure a better quality of life, the State has been in the forefront in building its intellectual capital. Andhra Pradesh offers a high quality of life for expatriates and other members.

### 1.4 Feeder System for Technical Education

The literacy rate of the State is 51.17%. Out of the total pass out students from Higher Secondary education i.e. Intermediate about 50% students intend towards Engineering Education. The prominent engineering institution in the state receives excellent response.

Engineering (B. Tech) admissions are made on the basis of Rank obtained in EAMCET Exam and marks obtained in Physics, Chemistry and Mathematics in Intermediate exam. Further, Diploma students are being admitted directly to the second year of the engineering courses on the basis of rank obtained in E-CET exam. Post-graduate admissions are normally done on the basis GATE percentile.

## 1.5. Objectives of State and National Development Plan

### 1.5.1 Women Empowerment

The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles**.** The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favor of women.

In recent years, the empowerment of women has been recognized as the central issue in determining the status of women. The Policy also takes note of the commitments of the Ninth Five Year Plan and the other Sectoral Policies relating to empowerment of Women. The women's movement and a wide-spread network of non-Government Organizations which have strong grass-roots presence and deep insight into women's concerns have contributed in inspiring initiatives for the empowerment of women.

**Goals and Objectives**

- The goal of this Policy is to bring about the advancement, development and empowerment of women. The Policy will be widely disseminated so as to encourage

active participation of all stakeholders for achieving its goals. Specifically, the objectives of this Policy include

- Creating an environment through positive economic and social policies for full development of women to enable them to realize their full potential
- Equal access to participation and decision making of women in social, political and economic life of the nation
- Equal access to women to health care, quality education at all levels, career and vocational guidance, employment, equal remuneration, occupational health and safety, social security and public office etc.
- Changing societal attitudes and community practices by active participation and involvement of both men and women.

### 1.5.2. Women and Industry

The important role played by women in electronics, information technology and food processing and agro industry and textiles has been crucial to the development of these sectors. They would be given comprehensive support in terms of labour legislation, social security and other support services to participate in various industrial sectors.

Women at present cannot work in night shift in factories even if they wish to. Suitable measures will be taken to enable women to work on the night shift in factories. This will be accompanied with support services for security, transportation etc.

### 1.5.3 Social Empowerment of Women

**Education:** Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women.

Reducing the gender gap in secondary and higher education would be a focus area. Sectoral time targets in existing policies will be achieved, with a special focus on girls and women, particularly those belonging to weaker sections including the Scheduled Castes/Scheduled Tribes/Other Backward Classes/Minorities. Gender sensitive curricula would be developed at all levels of educational system in order to address sex stereotyping as one of the causes of gender discrimination.

**Science and Technology:** Programmes will be strengthened to bring about a greater involvement of women in science and technology. These will include measures to motivate girls to take up science and technology for higher education and also ensure that development projects with scientific and technical inputs involve women fully. Efforts to develop a scientific temper and awareness will also be stepped up. Special measures would be taken for their training in areas where they have special skills like communication and information technology. Efforts to develop appropriate technologies suited to women's needs as well as to reduce their drudgery will be given a special focus too.

### 1.5.4 Knowledge society

Historically, Indian society is a hierarchical society and its knowledge base has always been elitist. Whether it is the caste based system or the colonial education system, access to knowledge has primarily been the privilege of the few. But such a system can never lay the foundation for a holistic development strategy. Therefore, all socio-economic and political ideas have to be focused on inclusive growth and socio-economic equality in the real sense.

In view of the significance of knowledge access in national development, it is necessary to look at the ideas ushered in by the NKC which was set up by the Prime Minister of India to prepare a roadmap towards creating a knowledge society based on open and free access to knowledge for all sections of the Indian society. The education sector has been an overregulated sector so far. There is a need to experiment and innovate to bring the academic sector and its allied areas within the reach of the common person.

There has to be major effort to bring literacy and education to the doorstep of all citizens. The academia is still elitist and a very small percentage of Indians have access to higher learning. The percentage of Indians who actually get opportunities to pursue higher education is a meager seven percent according to the NKC's findings. According to the NKC "there is a clear, almost unanimous view that higher education needs systematic overhaul, so that India can educate much larger numbers without diluting academic standards".

To open up the education sector especially to the community, libraries can be important agencies which can help in giving access to a much larger group of people than those lucky few who are actually enrolled in schools, colleges and the universities.

The NKC further recommends reforms in these supporting infrastructures as "the elements of infrastructure that support the teaching-learning process, such as libraries, laboratories

and connectivity, need to be monitored and upgraded on a regular basis" Since the NKC clearly states that education is an essential mechanism for inclusion by creating social opportunities, there is a need for supporting special projects through innovative ideas to give access to education for economically, historically and socially underprivileged people.

This will enable inclusion of such people into the mainstream and fulfill India's dream of an inclusive society which can provide the foundation for a knowledge society.

### 1.5.5 Quality Education

The most important and urgent reform needed in education is to transform it, to endeavor to relate it to the life, needs and aspirations of the people and thereby make it the powerful instrument of social, economic and cultural transformation necessary for the realization of the national goals. For this purpose, education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernization and cultivate social, moral and spiritual values.

**The Mission & Vision of Shri Vishnu Engineering College for Women is in line with the Development Plan of State of Andhra Pradesh. The Project Objectives are also derived to meet the important objectives of National Development Plan.**

## Section 2 : Institutional Basic Information

(Note: Please insert the name of applicant institution and the Sub-Component number in the footer on each page of the proposal)

### 2.1 Institutional Identity:

| | |
|---|---|
| Name of the Institution | Shri Vishnu Engineering College for Women |
| Is the Institution AICTE approved? | Yes |
| Furnish AICTE approval no. | F.No.730-50-317(E)/ET/2001,<br>F.No. SouthCentralRegion/1-3456561/2010/EOA |
| Type of Institution | Private unaided |
| Status of Institution | Autonomous |

Table 2.1 : Name of Head of Institution and Project Nodal Officers

| Head and Nodal Officer | Name | Phone Number | Mobile Number | Fax Number | E-mail address |
|---|---|---|---|---|---|
| **Head of the Institution (Full time appointee)** | Dr.G. Srinivasa Rao | +918816250864<br>Extn: 301 | 9666832284 | +9108816250099 | principal<br>@svecw.edu.in |
| **TEQIP Coordinator** | Dr.P.Srinivasa Raju | +918816250864<br>Extn: 329 | 9848051152 | 9108816250099 | teqip2@svecw.edu.in |
| **Project Nodal Officers for:** | | | | | |
| **Academic Activities** | Dr.R.Subba Rao | 918816250864 | 9440976619 | +9108816250099 | rsr_vishnu@svecw.edu.in |
| **Civil works including Environment Management** | Mr. V. Kesava Raju | +918816250864<br>Extn: 302 | 9949466778 | +9108816250099 | rajstructures.vegesana@gmail.com |
| **Procurement** | Mr.M.Narasimha Raju | +918816250864 | 7382567436 | +9108816250099 | mnarasimharajucse@svecw.edu.in |
| **Financial aspects** | Dr. G. Subba Raju | +918816250864<br>Extn:303 | 9949470637 | +9108816250099 | hodmba@svecw.edu.in |
| **Equity Assurance Plan & Implementation** | Dr. K. Pushpa | +918816250864<br>Extn:319 | 9848570522 | +9108816250099 | pushpak.iiit@gmail.com |

**2.2 Academic Information:**

- **Engineering programmes offered in Academic year 2014-15**

| S.No | Title of Programme | Level (UG, PG, PhD) | Duration (Years) | Year of starting | AICTE sanctioned annual Intake | Total student strength |
|---|---|---|---|---|---|---|
| 1 | ECE | UG | 4 | 2001 | 180 | 172 |
| 2 | CSE | UG | 4 | 2001 | 180 | 180 |
| 3 | IT | UG | 4 | 2001 | 120 | 120 |
| 4 | EEE | UG | 4 | 2002 | 120 | 88 |
| 5 | Mechanical | UG | 4 | 2009 | 60 | 24 |
| 6 | Civil | UG | 4 | 2009 | 60 | 49 |
| 7 | VLSI Design | PG | 2 | 2008 | 18 | 16 |
| 8 | Power Electronics | PG | 2 | 2008 | 36 | 13 |
| 9 | Software Engineering | PG | 2 | 2009 | 36 | 05 |
| 10 | Computer Science And Engineering | PG | 2 | 2012 | 18 | 14 |
| 11 | Geo-Informatics | PG | 2 | 2013 | 18 | 06 |

**NAAC accreditation by UGC - The expert visit is completed during 27th to 29th April 2015. Waiting for result.**

- **Table 2.3 : Accreditation Status of UG programmes:**

| S.No | Title of UG programme offered | Whether eligible for accreditation or not? | Whether accredited as on 31st March 2015? | Whether "Applied for" as on 31st March 2015? |
|---|---|---|---|---|
| 1 | EEE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 2 | ECE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 3 | CSE | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 4 | IT | eligible | **Yes, for five years w.e.f. 2008** | Applied for Renewal-Inspection dates are confirmed 15th to 17th May 2015 |
| 5 | Mechanical | Not eligible | NA | NA |
| 6 | Civil | Not eligible | NA | NA |

- **Table 2.5 : Accreditation Status of PG programmes:**

| S.No | Title of PG Programme offered | Whether eligible for accreditation or not? | Whether accredited as on 31st March 2015? | Whether "Applied for" as on 31st March 2015? |
|---|---|---|---|---|
| 1 | VLSI Design (ECE) | eligible | No | No |
| 2 | Power Electronics (EEE) | eligible | No | No |
| 3 | Software Engineering (CSE) | eligible | No | No |
| 4 | Computer Science And Engineering(CSE) | Not eligible | No | No |
| 5 | Geo-Informatics(CE) | Not eligible | No | No |

**2.3 Faculty Status (Regular/On-Contract Faculty as on 30th April 2015)**

**Table 2.6: Faculty Status (Regular/On-Contract Faculty as on 30.04.2015)**

| Faculty Rank | No. of sanctioned regular posts | Present status: Number in position by highest qualification | | | | | | | | | | | | Total no of regular faculty in position | Total Vacancies | Total no of contract faculty in position |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Doctoral Degree | | | | Master degree | | | | Bachelor Degree | | | | | | |
| | | Engineering Disciplines | | Other Disciplines | | Engineering Disciplines | | Other Disciplines | | Engineering Disciplines | | Other Disciplines | | | | |
| | | R | C | R | C | R | C | R | C | R | C | R | C | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15= (3+5+7+9+11+13) | 16= (2-15) | 17= (4+6+8+10+12+14) |
| Professors | 18 | 15 | - | 03 | - | - | - | - | - | - | - | - | - | 18 | - | - |
| Associate Professors | 22 | - | - | - | - | 20 | 2 | | - | - | - | - | - | 22 | - | - |
| Assistant Professor | 176 | - | - | - | - | 113 | - | - | - | 26 | - | 37 | - | 176 | - | - |
| Total | 216 | 15 | - | 3 | - | 20 | 2 | - | - | | - | - | - | 216 | - | - |

***All faculty members appointed on a regular basis and all positions are filled.**

**2.4 Baseline Data (all data given for the following parameters must be restricted to engineering disciplines/fields only)**

| S.No | Parameters | 2004-15 |
|---|---|---|
| 1. | Total strength of students in all programmes and all years of study | 2770 |
| 2. | Total women students in all programmes and all years of study | 2770 |
| 3. | Total SC students in all programmes and all years of study | 204 |

| | | |
|---|---|---|
| 4. | Total ST students in all programmes and all years of study | 06 |
| 5. | Total OBC students in all programmes and all years of study | 759 |
| 6. | Number of fully functional P-4 and above level computers available for students | 867 |
| 7. | Total number of text books and reference books available in library for UG and PG Students | 51957 |
| 8. | % of UG students placed through campus interviews | 75.02 |
| 9. | % of PG students placed through campus interviews | 15 |
| 10. | % of high quality undergraduates (>75% marks) passed out | 45.53 |
| 11. | % of high quality postgraduates (>75% marks) passed out | 74.26 |
| 12. | Number of research publications in Indian refereed journals | 15 |
| 13. | Number of research publications in International refereed journals | 45 |
| 14. | Number of patents obtained | 01 |
| 15. | Number of patents filed | 02 |
| 16. | Number of sponsored research projects completed | 01 |
| 17. | The Transition rate of students in percentage from 1st year to 2nd year in 2014-15 | |
| | i. All students | 79.66 |
| | ii. SC | 45.94 |
| | iii. ST | No student admitted |
| | iv. OBC | 82.48 |
| 18. | IRG from students' fee and other charges (Rs. In lakh) | 1787.46 |
| 19. | IRG from externally funded R&D projects, consultancies(Rs. In lakh) | 58.57 |
| 20. | Total IRG (Rs. in lakh) | 1152.02 |
| 21. | Total annual recurring expenditure of the applicant entity in the year 2014-15 (Rs. In lakh) | 1862.62 |

## 2.5 Composition of Board of Governors

| S.No | Name of Member of BoG | Qualifications and position in the current engagements | Position in the BoG | Nominated by |
|---|---|---|---|---|
| **Chairperson** | | | | |
| 1 | Sri. K.V.Vishnu Raju | B.Tech. ( REC-Trichy), M.S. (MTU, USA) M.D.-Anjani Portland Cements Ltd. | Chairperson | Management – Sri Vishnu Educational Society, Hyderabad |
| **Members of the Trust/Society/Management** | | | | |
| 2 | Sri. R.Ravi Chandran | B.Tech.(REC-Trichy), Post Graduate Diploma in Management (IIM, Calcutta) Vice Chairman, SVES | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| 3 | Sri Aditya Vissam | B.S. Jt. Secretary, SVES | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| 4 | Sri. S. Ramkumar | Director, SVES | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| 5 | Dr. D. Suryanarayana | Ph.D. Director, VIT | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| **Two faculty members of the Institution** | | | | |
| 6 | Prof. P. Srinivasa Raju | B.E., M.Tech., (Ph.D) Professor & HOD- ME Vice Principal – SVECW | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| 7 | Mrs. S.M. Padmaja | B.Tech,M.Tech.,(Ph.D) Assoc. Professor,Dept.of EEE | Member | Management – Sri Vishnu Educational Society, Hyderabad |
| **Educationists or Industrialists** | | | | |
| 8 | Dr.U.Chandra Sekhar | Director, Engineers Staff College Of India | Member | Nominee by State Govt. |
| 9 | Request Letter to AICTE Dated 29.01.2011 attached Ref. No: SVECW/1H/153/2011 | | Member | Nominee by AICTE |

| | | | | |
|---|---|---|---|---|
| **One nominee of the AICTE/UGC**. -- Nomination requested can be accepted – attach the request letter | | | | |
| 10 | Dr.R.Anusha | CEO, Park Group of Institutions | Member | UGC |
| **One nominee of the State Government**- Nomination requested can be accepted – attach the request letter | | | | |
| 11 | Mrs.K.Sandhya Rani | R.J.D., Kakinada Dept. of Technical Education | Member | State Govt. |
| **One nominee of the University to which the Institution is affiliated**. | | | | |
| 12 | Dr.G.S.R.Prasad Raju | Registrar, J.N.T.U. - Kakinada | Member | J.N.T.U- K Kakinada |
| **Head of the Institution, Ex-officio** | | | | |
| 13 | Dr. G.Srinivasa Rao | Ph.D. Principal, SVECW | Member-Secretary | Management – Sri Vishnu Educational Society, Hyderabad |

## 2.6. Quality of Faculty

Percentage (%) of Doctoral degree holders: **46.15**
Percentage (%) of Master's degree holders: **53.84**

## 2.7. Details of faculty

| S.NO | Surname | First Name | Middle Name | Highest Qualification | Area of Specialization | Date of Appointment in the Institution | Appointment Type |
|---|---|---|---|---|---|---|---|
| 1 | G. | Srinivasa | Rao | Ph.D | Production Technology | 28/12/2009 | Regular |
| 2 | P.V.V | Rama | Rao | Ph.D | POWER ELECTRONICS | 06/05/11 | Regular |
| 3 | Patra | Jagateswara | | Ph.D | DIGITAL ELECTRONICS | 30/07/2014 | Regular |
| 4 | Suresh | Rao | | Ph.D | POWER SYSTEMS | 23/09/2013 | Regular |
| 5 | S.M | Padmaja | | M.Tech(Ph.D) | Information Technology in Power Engineering | 13/06/2003 | Regular |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 | S. | Deelip Kumar | Varma | M.Tech(Ph.D) | Power Systems | 03/05/03 | Regular |
| 7 | G | Bharathi | | M.Tech | High Voltage Engineering | 03/05/06 | Regular |
| 8 | K | Pragna | Swaroop | M.Tech | Power Systems | 15/06/2010 | Regular |
| 9 | M | Venkata | Srikanth | M.Tech | Control Systems | 31/05/2010 | Regular |
| 10 | G. | lAKSHMI | | M.Tech | POWER ELECTRONICS | 22/03/2011 | Regular |
| 11 | B | Kali | Prasanna | M.Tech | POWER ELECTRONICS | 23/04/2013 | Regular |
| 12 | K | Omkar | | M.Tech | POWER SYSTEMS | 10/07/12 | Regular |
| 13 | Y. | T.R | Palleswari | M.Tech | POWER ELECTRONICS | 23/04/2013 | Regular |
| 14 | S | Veera babu | | M.Tech | POWER ELECTRONICS | 18/07/2013 | Regular |
| 15 | P. | Devi kiran | | M.Tech | POWER ELECTRONICS | 20/11/2013 | Regular |
| 16 | A. | Phani | Kumar | M.Tech | POWER ELECTRONICS | 03/04/14 | Regular |
| 17 | B. | Mahendra | Chand | M.Tech | POWER ELECTRONICS | 01/05/14 | Regular |
| 18 | G. | Durga | Prasad | M.Tech | POWER ELECTRONICS | 01/05/14 | Regular |
| 19 | D. | Lakshmana | Kumar | M.Tech | POWER ELECTONICS | 19/05/2014 | Regular |
| 20 | K. | Bhanu | Priya | M.Tech | POWER ELECTRONICS | 12/09/14 | Regular |
| 21 | Nali | Praveen | Kumar | M.E | Power Electronics | 13/09/2014 | Regular |
| 22 | J. | Venkatesh | | M.E | Power Systems&Automations | 09/09/14 | Regular |
| 23 | Behara | VRS | Bhanu Seshu | B.Tech | EEE | 01/02/15 | Regular |
| 24 | Gulupalli | Prasoona | | B.Tech | EEE | 04/02/15 | Regular |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25 | N | Naga | Raju | B.Tech | EEE | 01/12/12 | Regular |
| 26 | Katru | Naga | Raju | B.Tech | EEE | 01/12/12 | Regular |
| 27 | B. | Hari | Prasad | B.Tech | EEE | 02/12/12 | Regular |
| 28 | A.M | Durga | Kumar | B.Tech | EEE | 02/12/12 | Regular |
| 29 | Gorantla | Janney | | B.Tech | EEE | 01/02/15 | Regular |
| 30 | Anyam | Sirisha | | B.Tech | EEE | 01/02/15 | Regular |
| 31 | Somepalli | Anusha | | B.Tech | EEE | 01/01/15 | Regular |
| 32 | K | P.P.Kumar | Kathimanda | B.Tech | EEE | 01/12/12 | Regular |
| 33 | JLSS | Phani | Kumar | M.Sc., | EEE | 15/10/2010 | Regular |
| 34 | G.R.L.V.N. | Srinivasa | Raju | M.Tech(Ph.D) | Instrumentation & controlers | 12/06/02 | Regular |
| 35 | Kotipalli | Pushpa | | Ph.D | ECE | 30/03/2011 | Regular |
| 36 | K | Sheshadri | Sastry | Ph.D | ECE | 07/11/13 | Regular |
| 37 | Rajashekhara | | | Ph.D | ECE | 03/01/14 | Regular |
| 38 | K | Padma vasavi | | Ph.D | Signal processing | 01/08/07 | Regular |
| 39 | S | Hanumatha | Rao | M.Tech(Ph.D) | Communication &Radar systems | 22/11/2010 | Regular |
| 40 | V | Srinivasa | Rao | M.Tech(Ph.D) | Digital systems &Computer electronics | 04/04/07 | Regular |
| 41 | K | Murthy | Raju | M.Tech(Ph.D) | Queing Models | 24/11/2004 | Regular |

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|---|---|---|---|---|---|---|---|
| 42 | M | Pradeep | | M.Tech(Ph.D) | Communication Engineering | 20/06/2005 | Regular |
| 43 | M | Prema | Kumar | M.Tech(Ph.D) | ECE | 05/06/07 | Regular |
| 44 | M | V.Ganeswara | Rao | M.Tech(Ph.D) | VLSI&Embedded systems | 14/06/2007 | Regular |
| 45 | T | Sudheer | Kumar | M.Tech(Ph.D) | ECE | 17/12/2014 | Regular |
| 46 | D | Murali | Krishna | M.Tech(Ph.D) | ECE | 03/06/09 | Regular |
| 47 | P | Ravi | Kumar | M.Tech | ECE | 11/10/06 | Regular |
| 48 | J.V | Krishna | Kumar | M.Sc(M.Phill) | ECE | 11/08/08 | Regular |
| 49 | V | Vijaya kumar | Raju | M.Tech | ECE | 20/10/2009 | Regular |
| 50 | R | Susmitha | | M.Tech | ECE | 22/05/2010 | Regular |
| 51 | R | Vishwanadham | | M.Tech | ECE | 10/05/12 | Regular |
| 52 | V | Naga | Valli | M.Tech | ECE | 02/05/12 | Regular |
| 53 | Neelam | Sowmya | | M.Tech | ECE | 01/07/09 | Regular |
| 54 | E.R | Praveen | Kumar | M.Tech | ECE | 02/05/13 | Regular |
| 55 | A | Narayana | Kiran | M.Tech | ECE | 04/05/13 | Regular |
| 56 | D.V | Rama | Krishna | M.Tech | ECE | 13/05/2013 | Regular |
| 57 | K | S.N | Raju | M.Tech | ECE | 13/05/2013 | Regular |
| 58 | V | Vishnu | Vidhyadha Raju | M.Tech | ECE | 26/06/2013 | Regular |
| 59 | Dikkala | Vikram | | M.Tech | ECE | 25/06/2013 | Regular |
| 60 | Alluri | KNRK | RAJU | M.Tech | ECE | 13/05/2013 | Regular |

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|---|---|---|---|---|---|---|---|
| 61 | M | Padhmanabha | Raju | M.Tech | ECE | 02/05/12 | Regular |
| 62 | K | Priyanka | | M.Tech | ECE | 05/05/14 | Regular |
| 63 | K | Praveen | Kumar | M.Tech | ECE | 15/09/2014 | Regular |
| 64 | M | Jyothi | Poorna | M.Tech | ECE | 18/10/2014 | Regular |
| 65 | J | Kiran | | M.Tech | ECE | 03/12/14 | Regular |
| 66 | R | Ashok Chaitanya | varama | M.Tech | ECE | 07/01/15 | Regular |
| 67 | P | Swathi | | M.Tech | ECE | 07/01/15 | Regular |
| 68 | S | Radhika | | M.Tech | ECE | | Regular |
| 69 | K | Veer | Raju | B.Tech | ECE | 20/06/2006 | Regular |
| 70 | B. | Santhosh | Kumar | M.Tech | ECE | 26/12/2013 | Regular |
| 71 | P | Prashanthi | | M.A(M.Phill) | Indian-English Literature | 01/08/07 | Regular |
| 72 | CH | L | Prasana | M.Sc | - | 18/09/2013 | Regular |
| 73 | S | Padmini | | M.Sc | ECE | 04/12/13 | Regular |
| 74 | M | M.V.P.V.L.N. | Vani | M.Sc | ECE | 03/03/14 | Regular |
| 75 | S | Annapurna | | M.Sc | ECE | 02/08/10 | Regular |
| 76 | P. | Sri | Charani | M.Sc | ECE | 23/05/2012 | Regular |
| 77 | G | J.V.J | Prasad | M.A | ECE | 06/08/11 | Regular |
| 78 | Nagalla | Madhavi | | B.Tech | ECE | 02/12/12 | Regular |
| 79 | N | Sithamma | | B.Tech | ECE | 07/12/12 | Regular |

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|---|---|---|---|---|---|---|---|
| 80 | Bonda | Srilakshmi | kusuma | B.Tech | ECE | 01/02/15 | Regular |
| 81 | Bopina | Madhavi | | B.Tech | ECE | 01/02/15 | Regular |
| 82 | K. | Lakshmi | Sowjanya yadav | B.Tech | ECE | 04/02/15 | Regular |
| 83 | Sri | lakshmi | Alekhya | B.Tech | ECE | 0/12/2012 | Regular |
| 84 | Puppala | Reshmika | | B.Tech | ECE | | Regular |
| 85 | K | Yamini | | B.Tech | ECE | | Regular |
| 86 | V | Purushothama | Raju | M.Tech(Ph.D) | Software Engineering | 14/06/2004 | Regular |
| 87 | P | Kiran | sree | M.Tech | CSE | 01/08/14 | Regular |
| 88 | Yadavalli | Ramu | | M.Tech | Computer Science Engineering | 21/05/2007 | Regular |
| 89 | Aaluri | Seenu | | M.Tech(Ph.D) | Computer Science Engineering | 26/06/2009 | Regular |
| 90 | Prathipatu | Ratna | Sudharani | M.Tech(Ph.D) | CST | 15/05/2010 | |
| 91 | T | Sree rama | Murthy | Ph.D | Queing Models | 24/11/2004 | Regular |
| 92 | D | Ravi | Kiran | M.Sc.,M.Phill(Ph.D) | Mathematical Modeling | 16/06/2003 | Regular |
| 93 | K | Ganesh | Reddy | Ph.D | CSE | 01/08/14 | Regular |
| 94 | P.J.R | Shalem | Raju | M.Tech | CSE | 01/04/07 | Regular |
| 95 | S | Sarvana | Kumar | Ph.D | CSE | 09/09/13 | Regular |
| 96 | R | Sugumar | | Ph.D | CSE | 07/10/13 | Regular |
| 97 | S. | Babu | | Ph.D | CSE | 21/10/2013 | Regular |
| 98 | N | Ganesh | | Ph.D | CSE | 26/12/2 | Reg |

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|---|---|---|---|---|---|---|---|
| | | | | | | 013 | ular |
| 99 | V. | V.R. | Maheswara rao | Ph.D | CSE | 05/07/04 | Regular |
| 100 | P. | Sri hari | Raju | M.A,M.Phill,(Ph.D) | CSE | 03/08/01 | Regular |
| 101 | M | Narasimha | Raju | M.Tech | CSE | 20/01/2013 | Regular |
| 102 | D | NSB | Kavitha | M.Tech | CSE | 26/04/2012 | Regular |
| 103 | GVSS | Prasad | Raju | M.Tech | CSE | 28/05/2012 | Regular |
| 104 | CH | Vijaya | Krishna | M.Tech | CSE | 22/05/2012 | Regular |
| 105 | P | Raju | | M.Tech | CSE | 11/06/12 | Regular |
| 106 | K.V. | Narayana | Rao | M.Tech | CSE | 31/08/2007 | Regular |
| 107 | M.S | Sudheer | | M.Tech | CSE | 27/04/2013 | Regular |
| 108 | R | Anuj | | M.Tech | CSE | 29/04/2013 | Regular |
| 109 | T | Gayathri | | M.Tech | CSE | 01/05/13 | Regular |
| 110 | M.V.V. | Rama | Rao | M.Tech | CSE | 13/06/2013 | Regular |
| 111 | M. | Ramesh | Babu | M.Tech | CSE | 14/06/2013 | Regular |
| 112 | B | Kiran | Kumar | M.Tech | CSE | 20/06/2013 | Regular |
| 113 | T | Kesava | | M.Tech | CSE | 25/10/2013 | Regular |
| 114 | N | Silpa | | M.Tech | CSE | 03/06/09 | Regular |
| 115 | T | Madhavi | | M.Tech | CSE | 21/11/2011 | Regular |
| 116 | K | Bhadrachalam | | M.Tech | CSE | 28/10/2013 | Regular |
| 117 | G | Mohan | Ram | M.Tech | CSE | 24/04/2013 | Regular |

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|---|---|---|---|---|---|---|---|
| 118 | k | Pavan | Raju | M.Tech | CSE | 04/01/13 | Regular |
| 119 | CH | Samba Siva | Rao | M.Tech | CSE | 10/06/13 | Regular |
| 120 | Y | Ravi | Raju | M.Tech | CSE | 01/05/14 | Regular |
| 121 | K.N.V. | Satya | Naresh | M.Tech | CSE | 05/05/14 | Regular |
| 122 | P | Sai | Prasad | M.Tech | CSE | 05/05/14 | Regular |
| 123 | K. | Ravi | Teja | M.Tech | CSE | 02/05/14 | Regular |
| 124 | Y | Divya | Vani | M.Tech | CSE | 23/06/2014 | Regular |
| 125 | M | Dhana | Lakshmi | M.Tech | CSE | 09/10/14 | Regular |
| 126 | Bandi | Sowbhagya | Lakshmi | B.Tech | CSE | 04/02/15 | Regular |
| 127 | D.T | Vijaya | lakshmi | B.Tech | CSE | 14/12/2012 | Regular |
| 128 | P. | Pravallika | | B.Tech | CSE | 14/12/2012 | Regular |
| 129 | P | Naga Venkata | Aditya | B.Tech | CSE | 14/12/2012 | Regular |
| 130 | G | Vijaya | Kumari | B.Tech | CSE | 07/12/12 | Regular |
| 131 | M | Raj | Kumar | B.Tech | CSE | 07/12/12 | Regular |
| 132 | D. | Krishna | Kumar | B.Tech | CSE | 01/12/12 | Regular |
| 133 | S | Naga | Rani | B.Tech | CSE | 01/12/12 | Regular |
| 134 | J.V | Srinivsas | | M.Sc,B.Ed(Ph.d) | Ultrasonics Studies of Binary Liquids | 31/08/2010 | Regular |
| 135 | A | Vijaya | Prasanthi | M.Sc | CSE | 27/09/2010 | Regular |
| 136 | K | Poul | | M.A.,M.Phil | An Evaiuative | 02/06/1 | Reg |

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|---|---|---|---|---|---|---|---|
| | | | | | Study of ELT Practices in Central Schools of Coastal Andhra | 4 | ular |
| 137 | V. | Naganjaneylu | | M.Sc., | - | 05/02/15 | Regular |
| 138 | V.V.L | Usha | Ramani | Ph.D | From Feminism to Womanism;A Study of Gloria Naylor | 20/08/2014 | Regular |
| 139 | P | Venkata | Rama Raju | M.Tech(Ph.D) | DW&DM | 03/12/05 | Regular |
| 140 | D | Venkata | Naga Raju | Ph.D | Computer Science and Engineering | 04/05/06 | Regular |
| 141 | S | Srinivasu | | M.E | IT | 13/05/2005 | Regular |
| 142 | S | Adi | Narayana | M.E | IT | 10/04/08 | Regular |
| 143 | P | Syamala | Rao | M.Tech(Ph.D) | IT | 06/08/08 | Regular |
| 144 | G | Rathnakanth | | M.Tech | IT | 26/06/2007 | Regular |
| 145 | S | Ravi | Kumar | M.Tech | IT | 23/08/2007 | Regular |
| 146 | S. | Ravi Chandra | Sri Ram | M.Tech | IT | 28/04/2011 | Regular |
| 147 | P.R.S.S | Venkatapathi | Raju | M.Tech | IT | 20/01/2012 | Regular |
| 148 | V | Pavan | Kumar | M.Tech | IT | 19/04/2014 | Regular |
| 149 | K | Ramu | | M.Tech | IT | 17/12/2012 | Regular |
| 150 | A | Mohan | | M.Tech | IT | 05/07/07 | Regular |

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|---|---|---|---|---|---|---|---|
| 151 | M | Gowtham | | M.Tech | IT | 23/04/2012 | Regular |
| 152 | G | Tej | Varma | M.Tech | IT | 02/05/13 | Regular |
| 153 | G | Devi | Priya | M.Tech | IT | 13/05/2013 | Regular |
| 154 | V | Leela | Prasad | M.Tech | IT | 03/06/13 | Regular |
| 156 | B. | Venkatesh | | M.Tech | IT | 23/12/2012 | Regula |
| 157 | M | Srinivasa | Varma | M.Tech | IT | 09/09/11 | Regular |
| 158 | R | Srinath | | B.Tech | IT | 20/06/2012 | Regular |
| 159 | M | Kiran | Kumar | MCA | IT | 07/08/12 | Regular |
| 160 | M. | Sandhya | Rani | M.Com., | IT | 13/07/2003 | Regular |
| 161 | S | Murali | Krishnam Raju | MBA | IT | 28/01/2003 | Regular |
| 162 | K | Vijaya | Lakshmi | M.Sc., | IT | 03/06/03 | Regular |
| 163 | R | Vasu | Babu | M.Sc.,M.Phil(Ph.D) | IT | 08/07/09 | Regular |
| 164 | K | Jagadish | | M.Sc., | IT | 01/06/10 | Regular |
| 165 | G.R.K. | Raju | | M.Sc., | IT | 17/06/2011 | Regular |
| 166 | CH | Satyanarayana | | M.Sc., | IT | 16/02/2012 | Regular |
| 167 | H.C.P | Pavan | Kumar | M.Tech | IT | 01/05/14 | Regular |
| 168 | K. | Lakshmipathi | Raju | M.Tech | IT | 24/05/2014 | Regular |
| 169 | A | Sri | Krishna | M.Tech | IT | 15/09/2014 | Regular |
| 170 | P | Srinivasa | Raju | Ph.d | MEC | 06/09/01 | Regular |

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|---|---|---|---|---|---|---|---|
| 171 | K | Ashok | Kumar | M.Tech | MEC | 30/05/2012 | Regular |
| 172 | N. | Srinivasa | Rao | M.Tech | MEC | 11/07/13 | Regular |
| 173 | G.V. | Subhash | | M.Tech | MEC | 07/10/13 | Regular |
| 174 | J.V | Narasimha | Raju | M.Tech | MEC | 25/06/2003 | Regular |
| 175 | SK | Madhar | Pasha | M.Tech | MEC | 29/02/2012 | Regular |
| 176 | B.N | Malleswara | Rao | M.Tech | MEC | 02/12/13 | Regular |
| 177 | K. | Mohan | Kumar | M.Tech | MEC | 11/12/13 | Regular |
| 178 | J | Teja Venkata | Satish | M.Tech | MEC | 12/05/14 | Regular |
| 179 | D.V. | Shekhar | | M.Tech | MEC | 19/05/2014 | Regular |
| 180 | G | Rama | Krishna | M.Tech | MEC | 18/02/2015 | Regular |
| 181 | P | Surya Prakash | Varma | M.Tech | MEC | 02/07/14 | Regular |
| 182 | Tammina | Jnana | Prasoona | B.Tech | MEC | 01/02/15 | Regular |
| 183 | N. | Ramya | Sree | B.Tech | mec | 01/02/15 | Regular |
| 184 | S.A. | Mangatayaru | | M.A.,M.Phill(Ph.D) | MEC | 01/06/12 | Regular |
| 185 | U | Venkatapathi | raju | Ph.D | Sediment Transport | 01/12/11 | Regular |
| 186 | P | Janaki | Rama raju | M.Tech.,M.E | Structures | 27/01/2003 | Regular |
| 187 | V | Kesava | Raju | M.Tech(Ph.D) | Structures | 01/07/09 | Regular |
| 188 | P | Sridhar | | M.Tech. | CIVIL | 02/11/12 | Regular |
| 189 | Kodimela | Anil | | M.Tech. | CIVIL | 05/02/13 | Regular |

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|---|---|---|---|---|---|---|---|
| 190 | B | Venkatesh | | B.E(M.E) | Structures | 02/11/12 | Regular |
| 191 | Y | S.S | Parvathi | B.Tech(M.Tech) | CIVIL | 10/06/13 | Regular |
| 192 | JNSSN | Raju | | M.Tech. | CIVIL | 05/01/15 | Regular |
| 193 | Rajeev | Rajan | | M.Tech. | Environmental | 19/02/2015 | Regular |
| 194 | V | Sunitha | | B.Tech. | CIVIL | 15/02/2014 | Regular |
| 195 | M | Thulasi | | M.Tech. | CIVIL | 18/12/2014 | Regular |
| 196 | K | Sudeepa | | M.Tech. | CIVIL | 12/11/14 | Regular |
| 197 | B.S | Diwakar | | Ph.D | CIVIL | 26/03/2014 | Regular |
| 198 | K | Dinesh | | B.Tech. | CIVIL | 01/12/12 | Regular |
| 199 | B | Govind | | Ph.D | Nano Technology | 02/02/15 | Regular |
| 200 | CH | Ganga | Bhavani | M.Sc., | CIVIL | 07/09/12 | Regular |
| 201 | P | Vinay | | M.Sc., | CIVIL | 19/07/2013 | Regular |
| 202 | V | Leela | Krishna | M.A,M.Phil., | CIVIL | 30/06/2014 | Regular |
| 203 | S.S.V. | Sumalatha | | M.Sc., | CIVIL | 0109/2014 | Regular |
| 204 | K | Vasumathy | Srinivas | M.Sc,M.Phill | English Literature | 20/01/2015 | Regular |
| 205 | K | Rama Chandra | Rao | M.Tech., | MCA | 08/04/06 | Regular |
| 206 | R | Subba | Rao | Ph.D | Software Reliability growth models | 25/07/2007 | Regular |
| 207 | D | Narasimha | Raju | MCA,M.Tech., | MCA | 11/06/07 | Regular |
| 208 | P. | Sunil | | M.Tech., | MCA | 01/06/0 | Reg |

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|---|---|---|---|---|---|---|---|
| | | | | | | 7 | ular |
| 209 | G | Subba | Raju | Ph.D | Performance of small scale industries in Andhra Pradesh | 06/06/02 | Regular |
| 210 | M | Siva Krishna | Raju | MBA | Makrketing and Human Resources | 30/04/2002 | Regular |
| 211 | J | Swarna | jyothi | MBA | Makrketing and Human Resources | 01/10/10 | Regular |
| 212 | A | Bharathi | Lakshmi | MBA | Marketing &Finance | 18/08/2011 | Regular |
| 213 | CH | Anudeep | | MBA | Makrketing and Human Resources | 13/11/2012 | Regular |
| 214 | A.s | Kishore | Varma | MBA | MBA | 01/07/09 | Regular |
| 215 | M | Prudhvi | Raju | MBA | Makrketing | 05/08/13 | Regular |
| 216 | B | Veena | | MBA | Finance and Human Resources | 11/06/14 | Regular |

## 2.8. Built-up space

| S. No. | Particulars | Area Available (sq.m) |
|---|---|---|
| 1 | Instructional Area (Carpet Area) | 14700 |
| 2 | Administrative area (Carpet Area) | 1770 |
| 3 | Amenities area (Carpet Area) | 17439 |
| 4 | Circulation and other area* | 3100 |
| **Total** | | **37009** |

* Circulation and other areas include Corridor, toilets, staircases, common area etc.

## 2.9 Capabilities of SVECW:

**Shri Vishnu Engineering College for Women (SVECW)** is an integral part of the group of educational institutions managed by **Shri Vishnu Educational Society (SVES)** established by the great visionary Late Dr. B.V. Raju who was a doyen of the cement industry in India and also a recipient of Padma Sri and Padma Bhushan awards by the Government of India.

The main objective behind starting a women's engineering college in rural Andhra Pradesh is to empower women in professional courses and aim at excellence in technical education through continual improvements and thus providing responsible technocrats for effective nation building. The Mission, Vision and Objectives are clearly described in the Section 3.

The college works in coordination with the other colleges, part of SVES here in Bhimavaram and elsewhere in and around Hyderabad by

- Imparting quality education and training
- Developing students with a disciplined and integrated personality
- Facilitating faculty and supporting staff to update their knowledge and skills to match the industrial and technological development.

### 2.9.1 Culture of Excellence and innovation:

SVECW strives to excel in the field of academics and kindle the enthusiasm in students by developing Culture of Excellence and innovation through:

**The Assistive Technologies lab:** The main task of Assistive Technology Lab is to identify and develop Electronic systems and cost effective solutions which are suitable for the physically challenged people for Indian conditions. The college management has strong concern for the societal development as such it encourages the staff and students to involve in the design and development of assistive technologies to help the physically challenged.

**Knowledge Centre:** This nodal centre for excellence in school education was started in December 2006. The Knowledge Centre has the capacity to accommodate 120 students and is equipped with physics, chemistry, biology and computer laboratories to facilitate students from VI to X classes to gain knowledge through first hand experimentation. Apart from this, the Knowledge centre has provided a well stocked library, computers with internet facility, LCD Projectors and teaching audio-visual aids, scientific equipment and models, and subject CDs for classes VI to X.

**IUCEE Regional Centre:** Indo-US Collaboration For Engineering Education (IUCEE), A Non-Government Organization, Was Formed About a year back to establish collaboration between Indian and US universities. IUCEE has received 39 proposals for setting up IUCEE regional centers of excellence in engineering education in different parts of India. IUCEE board members have attended the one day workshop conducted at Shri Vishnu Engineering College for Women, Bhimavaram. At the end of the workshop announced SVECW as an IUCEE provisional regional centre. This is one of two regional centers in Andhra Pradesh.

**MODEFIN SERVER**

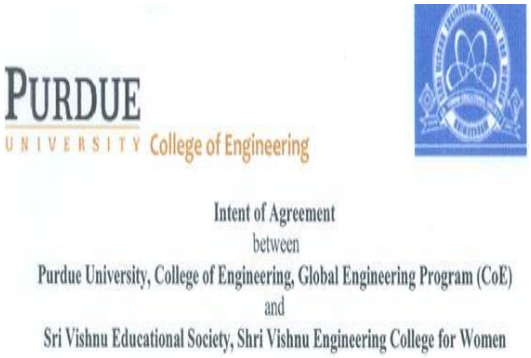
Modefin Server Lab established to provide a platform for current student to work on real IT internship projects.

**IBM Centre of Excellence:** The MOU was signed between the institute and IBM and the relationship was established to give students and faculty the opportunity to work closely with the industry and utilize both the resources in the best possible manner. This initiative offers a wide range of technology education benefits that can be scaled to meet the goals of most educational institutions, ranging from large research universities to local community colleges


**Radio Vishnu 90.4:** Radio Vishnu fm 90.4 station is established in our campus. Radio programs/content developed by students focusing on issues relevant to education, environment & community development, discipline, scientific temper and Indian culture etc. are broadcast during specified timings.


**Vishnu T.V. Academy:** Shri Vishnu Educational Society Is the only campus in Andhra Pradesh to have a TV academy exclusively for students. In order to improve communication and soft skills in students, Vishnu TV academy conducts programs in the areas of education, entertainment, news, events.

**MOU'S – Universities:** During the visit to various US Universities, MOUs were signed by Shri Vishnu Engineering College for Women (SVECW) with University of Massachusetts (U. Mass) and Purdue University (PU). More details are being worked out to collect necessary information and enter into MOU with some more universities in specific areas of common interest including exchange of students and faculty and collaboration in research activities.


PURDUE
UNIVERSITY College of Engineering

Intent of Agreement
between
Purdue University, College of Engineering, Global Engineering Program (CoE)
and
Sri Vishnu Educational Society, Shri Vishnu Engineering College for Women

**MOU'S –Industries:** SVECW is one of the institutes selected by **Infosys** for campus connect program. Infosys's Campus Connect program introduced at SVECW in 2006 has its own courseware along within the existing curriculum, helping fresh recruits to be 'industry ready'. For the Academic Year 2008-09, The Department of Computer Applications has successfully conducted a two Months course on *"Introduction to Oracle 9i: SQL"* under **Oracle WDP.** Further the institution has MOUs with different industries like Elico, Effronics, Vennar Ceramics, Anjani Cements etc., for hands on experience.


**Foreign Languages:** Science and Technology is gaining more and more a global feature with its exponential growth. Keeping this in view it is very essential more particularly for engineering institutions to produce students with multi-skills. India being a country rich in population is having more potentiality. For the countries rich in technology India is a promising place. With this future vision, Sri Vishnu Educational Society, encouraged and motivated the English Department of SVECW and it culminated in the establishment of facility to learn Foreign Languages in the campus.

**EDP CELL:** Vital aspects of entrepreneurship are nurtured by the Institute's EDPs, which train students in business basics, project preparation, business opportunities, working capital management, motivation exercises, and export opportunities

**CAMPUS CONNECT PROGRAMME:**

SVECW is one of the institutes selected by Infosys for campus connect programme from 2006 which is being organized periodically on various technical and soft skills. Faculties are trained on advanced topics and course materials are provided on academics and used extensively by the student community to help fresh recruits to be 'industry ready'.

**IBM MOBILITY CENTER**

The Centre was inaugurated in the campus on 19.11.2009 by Sri Himanshu Goel, Country Head, IBM Software Division. The Centre is opened for student projects and learning latest in the field of information technology. Students of third and final years are utilizing the Centre to update their skills and their skills are certified by IBM.

**NETENRICH (INDUSTRY-INSTITUTE INTERACTION)**

NetEnrich Network Operation Centre is being established in the campus with an intention to promote Industry Institute Interaction. NetEnrich is a premiere IT as a Service company which specializes in Remote Infrastructure Management (RIM). Through this centre the campus students will have an opportunity to interact with the employees of NetEnrich and understand the concept of RIM. A batch of students were selected by NetEnrich and trained in RIM. These students will also be considered for Full Time Employment.

**TOEFL CENTRE**

Our college is recognized as TOEFL centre by Educational Testing Service (ETS), USA.

**2.9.2 Strong Relationship with the Industry**

SVECW is established in 2001 whose visionary leaders spearheaded, from the very beginning, the induction of quality faculty and the development of laboratories, library and other infrastructure. The history of SVECW is one of symbiosis of academic excellence and industrial relevance and this has helped it strike the appropriate balance between fundamental science, industrial practice and human resource development.

The special relation with the industry manifests itself in many ways:

**Financial Support** : Being a self financing institute, much of the revenue for SVECW is generated by means of tuition fee paid by students. Apart from this, close association with some industries and philanthropists help the institute in receiving grants in the form of money, material and equipment which will be used for up gradation of the existing facilities and better amenities for students .

**Curriculum Development** : Remaining in a lead position as a technological institution is one of the biggest challenges SVECW always lives with. Rapid development and diversification in various fields of technology, coupled with consumer-driven markets require SVECW to provide complete professionals to the industry who are well versed and trained not only in the respective modern technological advancements but also capable of independently solving day to day problems with conscious commitment to the environment and society.

**Consultancy:** Being in the stage of development, SVECW is gearing up to take consultancy activity in a small way. All the senior faculty members of the institute are advised to closely interact with their acquaintances in Industry and get in hand some consultancy projects, so that though they do not generate much revenue for the institute, they will give the much needed exposure to the faculty and the students about the practical aspects of the theoretical knowledge.

**Involvement of Industry in Teaching:** Although the faculty of SVECW has a strong interaction with the industry, which enriches their knowledge and the process of imparting the same to the students in lectures and practical's, In order to enable the students to have the benefit of their rich knowledge, gained through experiential learning, experts from the industry are invited to deliver a certain number of limited lectures in specific emerging areas of technology. This makes the students up to date as far as the industrial situation and the kinds of problems faced day to day are concerned.

**Activities of Alumni:** SVECW has been truly blessed with strong ties with its alumni through chapters of the Alumni association. The Alumni association can always be counted upon to assist with whatever help needed by the institute in any form. These alumni also provide precious inputs in terms of required changes in the syllabus as well as direction in the thrust of research from the industry's point of view. They consider SVECW as their mother institution and feel privileged to employ the students of SVECW wherever they serve. SVECW has a large number of alumni abroad and they too are planning to contribute to the Alumni association.

**Record of Placements** : SVECW has an excellent track record of student placements. Every year around 50% of the eligible final year students of all branches are placed in companies of repute. The Training and Placement cell works in tandem with the requirements of the industry and arranges training for the students to give them the necessary skills to get them placed in the fields of their interest.

### 2.9.3 Commitment to Post-Graduate Education

SVECW, being established in the academic year 2001-02, initially concentrated on laying a strong foundation for the graduate course of B. Tech With an urge to promote Post-Graduate education for women students, in its fourth year of establishment (2004-05) the college started Master of Computer Applications (MCA) course with an intake of 60. In the

year 2008 M. Tech courses in' Power Electronics and 'VLSI Design' with an intake of 18 each, were started. Subsequently in the year 2009 the intake in the above courses were increased to 36 and new courses M. Tech in Software Engineering, Computer Science & Engineering, Geoinformatics have introduced.

The results of the Post-Graduate students in University examinations are highly outstanding and encouraging.

**2.9.4 Quality of Students**

Students are the main torch bearers of SVECW. They have always let the flag of SVECW fly high with their performance while in college and when they performed elsewhere and also in the capacity of alumni .Since inception, the performance of the students of SVECW in university examinations has been exceptional with the college always being ranked in the top 5 to 10% of the total 300 and above engineering colleges in the State.

About 20% of the students graduating every year go for post graduation in reputed institutes in India including SVECW by qualifying in GATE etc.., and another 10% go for post graduation in institutes abroad by qualifying in TOEFL and GRE exams. Another 50% go for jobs in their core fields and software field.

**2.9.5 Existing Facilities**

The very fact that SVECW has been able to attain such a pivotal position in technological education within a short period stands as testimony of the presence of adequate infrastructure, well equipped laboratories, and one of the best libraries in the region, with more than 51957 volumes in addition to Digital Library facility. These facilities have been maintained over the years due to the keen interest shown by the management to give the best to the students and faculty for their academic pursuits.

**2.9.6 Commitment to social responsibility**

SVECW, as part of its social responsibility takes upon itself to produce manpower that applies itself in the building of a strong nation and reaching the technology to the masses.

Apart from the above, with SVES and Dr. B.V. Raju Foundation in its fore front, SVECW caters to the needs of people of the surrounding places through the following gestures of social responsibility:

**Scholarships:** Every year scholarships worth about Rs. 20 lakhs are distributed to the needy students of the campus colleges and also to the students of the surrounding schools and colleges. Also, some schools in the surrounding places are adopted and funds are spent to upgrade the schools with better facilities.

**Housing:** The foundation developed and distributed several acres of land to the needy for construction of residential structures. Also cement is donated to the government of Andhra Pradesh for its scheme of constructing houses for the poor.

**Health:** Cash donation is given to the local leprosy centers for better medical and treatment facilities. Feeding and financial assistance is provided to the patients of the suffering from chronic diseases.

**Water supply:** The foundation at its cost supplies water to the people residing in places far away from the town by means of water tankers. One of the nearby villages is equipped with Mineral water treatment plant at the cost of the foundation.

**Dr. B. V. Raju knowledge centre :** This nodal centre for excellence in school education was started in December 2006 at the small village called Kumudavalli, located 5 kms. from the town of Bhimavaram. The Knowledge Centre has the capacity to accommodate 120 students and is equipped with physics, chemistry, biology and computer laboratories to facilitate students from VI to X classes to gain knowledge through first hand experimentation. Apart from this, the Knowledge centre has provided a well stocked library, computers with internet facility, LCD Projectors and teaching audio-visual aids, scientific equipment and models, and subject CDs for classes VI to X.

### 2.9.7. Systematic Curriculum Development Process

The curriculum at SVECW has always been an open-ended one and there has been sufficient freedom for the teachers to discuss the subjects of their interest with the students. SVECW has started Personality Development Programs for Students. This includes Personal Counseling, Intellectual Analysis, Medical Check-up, foreign languages, Communication Skills, Stress Management and Time Management through Yoga Education, Interpersonal Skills, Leadership Skills, Entrepreneurial Skills, Presentation Skills, and Interview and Group Discussion Skills.
In order to gain greater freedom in the development of curriculum, academic processes and student evaluation, The institute has applied to the UGC for autonomous status from the affiliating university JNTU Kakinada

### 2.9.8 Existing Partial autonomy

All the activities listed in the sections 2.9.2 and 2.9.6 are successfully being carried out due to the considerable amount of autonomy given to the institute by its visionary management. Apart from that, the institute, in the interest of the student s, exercises Partial autonomy, in the following manner:

- Conducting tutorial classes and extra lab sessions for the students in addition to those prescribed by the university.
- Conducting Pre Mid examinations in between the Internal Examinations to get regular feedback on students' progress.

- Preparing and implementing a co-curricular calendar for every semester , which includes coaching in Soft skills and Life skills like Aptitude, Group Discussion, Technical Quiz, PPTs, Two minute talks, Mock Parliament etc.
- Organizing counseling sessions to the students so that they bring forward their problems, grievances and suggestions if any, to the notice of the Principal and other members of the management.
- Decentralizing certain responsibilities and powers to the Departments concerned thus authorizing and enabling them to take quick and effective decisions in the interest of Students.

**2.9.9 Capacity to generate financial resources**

SVECW has a good ability to generate funds through its strong industry connections and with a good number of people pursuing their research projects. These include projects under the MODROBS scheme, Staff Development Programs and Faculty Improvement Programs sponsored by AICTE. Being a self financing institution, the continuance of this input of funds is regular challenge SVECW has to meet.

The institute with the support of the Shri Vishnu Educational Society (SVES) and through the connection with industry is able to raise funds to set up Advanced Labs like Assistive technologies Lab and centers of excellence like IBM center of excellence.

The college also houses regional centers for Institute of Electronic Governance (IEG) and Jawahar Knowledge Center(JKC) which are innovative schemes introduced by the government of A.P.

The institute is also able to generate revenue by accommodating a center for TOEFL exam which facilitates several students of this region for taking the exam without going to far-off places.

The college also getting revenue by providing a Nano technology project to a pharmacy college of its parental society.

**2.9.10 National and International linkages**

Indo-US Collaboration for Engineering Education (IUCEE), a non-government organization, was formed about our year back to establish collaboration between Indian and US universities. IUCEE is the brain child of Prof. Krishna Vedula, Professor and Dean Emeritus, University of Massachusetts Lowell and Executive Director, IUCEE. Under this banner, 23 one week workshops were conducted for 581 Indian faculty participants at Infosys Campus, Mysore during summer 2008 by Indo-US Engineering Faculty Leadership Institute in which 23 US expert *faculty* delivered the content. In order to scale up and sustain the impact, a few Regional Centers were established throughout India. Two of these Regional Centers are

established in Andhra Pradesh, one in Shri Vishnu Engineering College for Women, BHIMAVARAM.

During the visit to various US Universities, MOUs were signed by Shri Vishnu Engineering College for Women (SVECW) with University of Massachusetts (U. Mass) and Purdue University (PU). More details are being worked out to collect necessary information and enter into MOU with some more universities in specific areas of common interest including exchange of students and faculty and collaboration in research activities.

### 2.9.11 Leadership and commitment to organizational change

A recent assessment by IMC Ramakrishna Bajaj National Quality Award examiner team has found the following to be two key strengths of SVECW:

*"Chairman, Vice Chairman and Principals of colleges continuously interact directly with students, faculty and staff and understand needs of Students, which helps in developing a congenial atmosphere among Senior Leaders and Staff & Students. Good performance of students and retention of faculty shows the commitment of Senior Leaders to sustain the performance."*

***AND***

*"Leadership participation and involvement in succession planning and development of future leaders is seen, however Institute may wish to extend the same to all levels, which, once done systematically for all levels helps in continuity without any ambiguity"*

SVECW Leadership is committed to consultative decision-making and Organizational change. A substantial further improvement in this area, helping to transform SVECW organizational culture in the direction of flexibility, team work and systematic performance, is one of the main expected outcomes of the TEQIP –II project. SVECW has already begun the process of visualizing more effective ways of allocating organizational responsibilities examining its systems and procedures.

These are some of the qualities that have resulted in SVECW's impressive record of achievements and earned it its reputation and recognition. Before the IMC Ramakrishna Bajaj National Quality Award, SVECW was conferred upon the Best JKC for the academic year 2009-10 from Government of Andhra Pradesh.

It is these very qualities that SVECW seeks, through this project, to reinforce and diffuse throughout the engineering education system. It is well prepared to do so, having assessed its strengths and weaknesses, elaborated a clear vision for its future, identified opportunities and threats in its environment, selected a clear set of strategic directions designed to exploit opportunities and build on its strengths, overcome its weaknesses, and address the

perceived threats in its environment, set clear objectives and plans of action in each of these directions, and, as indicated in the various preparedness sections, having already started moving in the direction of each of the objectives it has set for itself.

In a world of increasing interdependence, individual excellence must be replaced by Collective excellence, and leadership becomes an act of service by which the talents and potentials resident in the network of institutions are encouraged and stimulated to find their expression in coherent collective action. This is the role that SVECW sees for itself, which this project will help it to fully embrace, in full awareness of the responsibilities and challenges that such leadership entails.

**Section 3 : The Mission & Vision Document of SVECW**

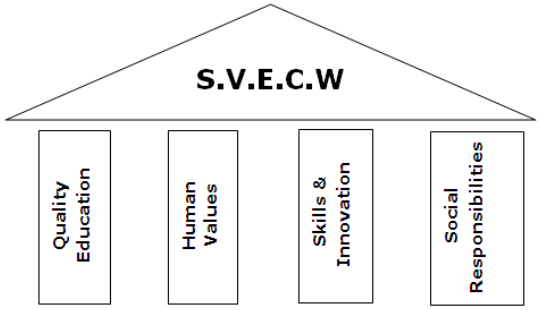
**Vision Statement:** "Transform the society through excellence in Education, Community empowerment and sustained Environmental protection."

**Mission Statement:**

a. To achieve Academic excellence through innovative learning practices.
b. To instill self confidence among rural students by supplementing with co-curricular and extra-curricular activities.
c. To inculcate discipline and values among students.
d. To establish centers for Institute Industry partnership.
e. To extend financial assistance for the economically weaker sections.
f. To create self employment opportunities and skill up gradation.
g. To support environment friendly Green Practices.
**h.** Creating innovation hubs.

The four pillars of SVECW upon which the glorious edifice has been erected are:

- **QUALITY EDUCATION**
- **HUMAN VALUES**
- **SKILLS & INNOVATION**
- **SOCIAL RESPONSIBILITY**



Our Mission is a continual process that highlights the urge for human touch in the development of a global citizen. The institution believes in following this path for its endurance and excellence.

**3.2 Institutional Vision:**

Vision of the institution has been drafted based on the strategies identified from time to time such that growth of the institution becomes a continuous flow. In all its strategies the under current is **women empowerment** and the same is focused in the vision statements consistently. The frontline focus of the organization comprises of the following facts and factors:

- Restructuring the institutional framework according to the government and university guidelines from time to time
- Promotion of talents/skills/techniques and technologies of all concerned in the final evolution of centre of excellence.
- Monitoring of implementation of developmental activities emerged out of strategic planning.
- Updating/modifying the work processes by following the advanced methodologies prescribed by the state higher education department and the affiliating university.

The institutional vision can be conveniently categorized as

a) Programmatic vision and
b) Organizational vision.

**a) Programmatic Vision:**

SVECW has been continuously maintaining its spirit of **women empowerment** in the light of L P G, the Liberalization - Privatization – Globalization policy laid down by Government of India. Empowerment of women has also been a part of the AP State Government's Vision-2020 document. The programmes designed and structured by the institution are well knitted and crafted to suit the women community by and large. The UG and PG programs offered by the institution are widely accepted by public from all corners of the state with great interest. The under lying concern of the institution is to make technical education more purposeful and meaningful.

The steps already taken in line with global requirements are as follows:

- The institution has made an innovative effort by intertwining of co-curricular events with the regular curricular subjects which facilitates the students to learn branch subjects as well as placement oriented subjects together.
- To achieve academic excellence the major work process of teaching-learning is developed highly lucrative by adopting innovative lecture methods like ICT based teaching -learning method, IUCEE method, micro level lesson planning and one-minute paper presentation on the spot etc.
- In addition to the curricular aspects certain social aspects are loaded to the students' innovation by facilitating them the novel establishment of Assistive Technologies Laboratory (ATL). The students design and fabricate assistive devices to meet needs of **differently-*abled* people.**

- International collaboration with two American universities, U Mas at Lowell and Purdue University, improves the quality and standards of the institution. Through the college community Radio Vishnu 90.4 the students and staff conduct many awareness programs like women health and hygiene, child labor, fight against plastic and contagious diseases.

**b) Organizational Vision:**

In addition to the programmatic vision the institution also has organizational vision that focuses the motive of the institution which drives it to reach the projected goals in the prescribed time frame. Organizational vision encapsulates the management perspectives associated with societal requirements that are expected from the institution.

**3.3 Our Product:**

The final outcome of the institution is **'The Woman Technocrat'**. It has been recognized as our product when the individual possesses the following characteristics:

- A strong knowledge base on the fundamentals of the basic sciences and mathematical aptitude.
- A very self-disciplined, easy approaching young engineer.
- A woman entrepreneur with human values.
- A holistic personality with real-time vision.
- A positive attitude in facing challenges.

- A blend of expertise in subject and language proficiency much required for placements.
- The spirit of teamwork and leadership qualities.
- Well aware of professional ethics to be practiced.
- A person with social commitment.
- Understanding organizational structures and processes.
- Easy accessible and agile.
- Willing to engage in a lifelong learning process.

### 3.4 SWOT Analysis

**Procedure:** A Questionnaire was circulated to all the stakeholders to collect their views. After collecting their views, brainstorming sessions at department level were conducted by involving faculty, students and other stakeholders. From the above discussions, College Strengths, Weaknesses, Opportunities and Threats (SWOT Analysis) were identified.

The SWOT analysis of the institute has been done and the respective results are highlighted as follows:

**Strengths:**

- Empowering women hailing from the surrounding rural background through professional education and thereby uplifting their families.
- Facilitating students with fully residential ambience.
- The institute is handling R& D projects worth of Rs. 63 Lakhs sponsored by AICTE, MSME etc.
- The college got **accredited by NBA for five years from 2008-2013 for all eligible courses.**
- **ISO certified and accredited by TCS**, which are major selling points.
- The institute has **IBM Center of Excellence**, wherein staff and students get trained by IBM.
- The college is a **Regional Center of IUCEE** ( Indo-US Collaboration for Engineering Education) which mentors the faculty of engineering colleges in the state of Andhra Pradesh.
- The Jawahar Knowledge Center of the institute is graded with **JKC Star** – recognition and secured **Best JKC award for the year 2009-10**
- The campus is self contained with high quality facilities like -
  a. Academics

i. Class rooms are provided with AC, Audio Visual facilities and collection of books

ii. Spacious and well equipped laboratories as per current syllabi.

b. Facilities

i. Well established Library with **43375** books, 98 Indian journals and 48 international journals

ii. Wi-Fi enabled campus with **10 Mbps** Internet connectivity dedicated 1:1 connection ratio including hostel.

iii. Backup Power supply (732 KVA)

c. Amenities

i. Dr. B.V Raju Knowledge Center for providing hands on experience to the nearby government high school students.

ii. Well established sports fields for football, basket ball, Cricket and field and track events.

iii. Air conditioned indoor stadium

iv. Open air auditorium

v. Separate Fitness Centers for students & staff

- The institute established **Assistive Technologies Lab** with an initial investment of Rs. 12 Lakhs in collaboration with University of Massachusetts – Lowell – USA
- The institute established a campus **Community Radio Vishnu 90.4 through** which social awareness programmes are conducted by the students and faculty of SVECW.
- Vishnu TV academy, a **novel visual arts center** established by the management and utilized by the faculty and students of SVECW by developing innovative programs
- The Basic Sciences Department of the institute conducts **foreign language courses** in **German, French, Spanish & Japanese.**
- The institute has established student centric activities like:
  - Soft-skills training.
  - Professional Student Chapters like ISTE,IEEE,IETE & CSI.
  - Student Counseling & Customization
  - On-line student feedback
  - Coaching for GRE, TOEFL & GATE
- Insurance facility for both students and faculty is provided.
- The **pro-active and supporting management** is the highest strength of the institute

**Weaknesses:**

- Less number of senior faculty with Doctoral Degree ( More than 25 faculty members are pursuing Ph.D)
- Interaction with other institutes and industries is relatively low ( The operations for Industry Institute Interaction is presently taking care by Entrepreneurship Development Cell. And, the process of establishing I-I-I-C is under process)
- Number of subscriptions for digital library is to be increased. ( Necessary steps are taken to increase the number of on-line journals and also more systems are made available in the digital library)
- Students from rural background with inadequate quality ( Bridge Courses are being conducted to bring **equity of standards** among all students to overcome the locational disadvantage )
- Departmental Research Centers to be established.
- Alumni interaction and participation needs to be enhanced. ( Steps are initiated for more interaction by disbursing Alumni Identity Cards & Memorabilia (Alumni Handbook) to each passed out student )

**Opportunities:**

1. Setting up of R&D Center for Core and Interdisciplinary Research in thrust areas
2. Sending faculty under QIP for upgradation of their qualification with full sponsorship.
3. Setting up of new PG Centre which will have its own PG courses with active participation from nearby Industries.
4. Establishment of Industry Institute Interaction Cell (I-I-I-C) for strengthening links with core & hardware industries for R&D activities.
5. Creating testing, calibration and certification facility to improve internal revenue. High end and modern equipments with new hardware & software to be procured.
6. Establishing a finishing school by industry experts to conduct Certificate Courses and Post Diploma courses to make graduates industry-ready.
7. Providing financial assistance for faculty to start in-house R&D and to attend international conferences and workshops conducted abroad
8. To increase the alumni contribution in institute development and planning.
9. Unique incentive / reward schemes and fast track promotions with increments for faculty to improve retention.
10. To propose IDP for TEQIP-II funding.

**Threats:**

1. Low quality of entry level students, due to localized admissions, because of rapid geographical spread of engineering colleges in the state. (Quality of entry level students more focused through Remedial Classes which results in improving the standards of poor learners)
2. Faculty attrition rate is high due to mushrooming number of engineering colleges.
3. Due to increase in number of Deemed Universities, meritorious students may prefer them.
4. Proposed Centers of Foreign Universities in India.( MOU's with Foreign Universities strengthen our opportunities to strive better for greater progress )
5. Low availability of qualified faculty in rural area.
6. Girl students' preference to higher education is less in rural area.

### 3.5. Strategic Plan

The Institution is consistently engaged in framing the real-time strategic planning that has practical resemblance. In this process all the stakeholders including faculty, supporting staff, students, parents and employers have been playing their respective roles to their maximum possible extent. Through deliberations and suggestions the requirements of the stakeholders are collected and considered as inputs for strategic planning.

The outcomes of these sessions are used to reform the existing strategies and to redefine the modalities therefore.

- All the strategies are aimed at producing **'The Woman Technocrat'** suits to the global requirements.
- To increase the number of senior faculty with Doctoral Degree in all departments.
- To identify and facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with members of the Industry, outside Experts, eminent personalities at regular interval.
- To conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students frequently.
- To improve joint research programmes and field studies by faculty and people from industries
- More number of Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.

- Increase number of subscription for digital library and to increase the number of online journals
- Bridge courses are to be conducted extensively so that equity of standards among students are maintained
- To establish Departmental Research Centers
- To provide Laptops to faculty members with internet access
- To arrange frequent Alumni meets for interaction and industry exposure to students.
- To focus more on student centric activities like soft computing training, Professional Student Chapters like ISTE, IETE, IEEE & CSI, student counseling & customization, On-line student feedback coaching for GRE, TOEFL & GATE

### 3.6. Project Objectives

Project Objectives to achieve the Mission, Vision of the institute are divided in to three categories :

a) Objectives of Programmatic Vision
b) Objectives of Organizational Vision
c) Proposed Objectives under TEQIP - II

Steps taken to achieve the Programmatic Vision & Organizational Vision are specified below. Expected Key Deliverables under TEQIP Phase – II are also clearly specified below.

#### 3.6.1. Objectives of Programmatic Vision:

- To achieve academic excellence through innovative practices that usher green fragrance to gather women students of all corners of the state and all backgrounds.
- To introduce multidiscipline orientation in the grooming of the future technopreneurs
- To send well disciplined and integrated fresh engineers into the competitive world..
- To establish centers of excellence in the core fields as well as applied fields.

#### 3.6.2. Objectives of Organizational Vision:

- To spread technical education to rural areas through motivating the surrounding rural school and 10+2 students by arranging hands on experience in the Knowledge Center established by the management of the institution.

- To obtain Accreditation for all eligible UG & PG courses for five years, in addition to the existing five year accreditated UG courses.
- To obtain Autonomy to the institution that enables to start new courses and to frame state of art curriculum.
- To develop the institution as self sustained by creating financial resources abundantly.
- To upgrade the faculty through Faculty Development Programs and Induction Programs periodically.
- To enrich the students through imparting training on professional skills and placement skills.
- To obtain accreditation by NAAC with high score.
- To get more collaborations with software as well as core industries which pave concrete paths for student settlement.
- To upgrade laboratory equipment in tune with the latest requirements in the concerned fields.

Steps taken to meet the objectives:

- Improving budgetary allocations progressively to meet the objectives sequentially.
- Setting and monitoring the individual and departmental goals periodically.
- Keeping name of the institution in air as much as possible by connecting people through social activities and public concerns.
- Providing relevant industry exposure to the students through Industry-Institute Partnership program.
- Creating congenial atmosphere for learning by developing air conditioned smart class rooms.
- Online internal communication system has been developed within the institution and also with the top management.
- Round the clock internet facility is provided both for faculty and students.
- Free access to e-learning facility is available 24/7 basis through digital library.
- The culture of teamwork is inculcated among students through NSS activities.
- **Center for Teaching & Learning(CTL) for students:** It provides training to both students & staff. It offers training to students related to Communication Skills, Soft Skills & Personality Development. Training in foreign languages is also provided to the student community. All these activities will be an added advantage in getting better placements in and abroad.
- **Center for Teaching & Learning ( CTL) for Faculty :**It offers training to faculty about Teaching Methodologies and “Innovative Teaching Methodologies. It also focus on

organizing various technical seminars & workshops which bring lot of exposure to latest trends in core areas of engineering and technology to the faculty.

### 3.6.3. Proposed Objectives Under TEQIP :

- To Achieve **Academic Excellence** by improving the learning outcomes
- To increase the annual production of Graduates & Post-Graduates capable of leading the creation of sustainable and cost-effective innovations in the industry.
- To Adopt a special program of action for the full participation of poor learners to improve their abilities to bring **equity of standards** among students.
- To Improve the quality and relevance of education and training provided by SVECW for the creation of a **"A Complete Woman Technocrat"**.
- To strengthen the existing PG programmes
- To Establish a collaborative partnership with a Foreign Universities & Industries resulting in its greater capacity for research and reach up to date market trend.
- To Achieve increased academic, managerial, administrative and financial autonomy with an organisational culture of systematisation, teamwork, efficiency and accountability.

- To Formalize, through clear objectives, organizational arrangements and systematic activities for **women empowerment** & a program to **support & develop differently abled people** & rural community to meet the Vision 2020 of state of Andhra Pradesh & India

### 3.6.4. Key Deliverables under TEQIP

**Improves Quality of Education:**

- Disciplined students are best assets. Students with core competence and participating in co-curricular activities become Leaders
- Increased skill set of the students coming from rural background. Better changes for employment due to proficiency in additional languages.
- Hiring qualified & domain experts to teach UG & PG students. So that Students are exposed to industry experts and their practices.
- Students get exposure to industry standard certification and testing.
- To organize regular industry visits to students & faculty
- The employability of the students will be increased, and especially Women students get increased opportunity to work in multinational companies.

**Improves Quality of Faculty:**

- Improves the faculty & students outlook in the society.
- Sponsoring of faculty to workshops & conferences.
- Faculty gets exposure to state of the art technologies and opportunities to upgrade their skills.
- Faculty confidence level increases and the retention of faculty increase.
- More faculty register for their higher degree. Faculty publish and present more research papers.

**Enhances Interaction with Industry:**

- It will create IIIC
- The interaction with the industry is established by conducting workshops and seminars on certification and testing.

**Enhances R&D and Consultancy Activities:**

- Infrastructure is established to promote testing facilities
- The laboratories become Incubation Centers for the Centers of Excellence. Students can do in-house live developmental projects. In-house R&D activities create platform for Centers of Excellence.
- Generates revenue for sustaining R&D culture.

**Establishing New Centers:**

- To establish Centers with facilities to impart domain knowledge
- Institute will establish PG center
- It will Create institute Alumni Center.

**Improves General facilities:**

- Up gradation of institution library & internet facility
- Autonomous status gives flexibility to match the demands.
- Reforms bring improves the efficiency & transparency of the system

### 3.7. Proposed Activities

The following activities have been identified, which together, will help to achieve the Objectives stated above. They have been classified under the four project headings and corresponding section descriptions, as follows:

Section – 4: Action Plan for the Promotion of Academic Excellence

- 4.1. Improving the Quality of Education
  - 4.1.1. Learning Outcome of the Students
  - 4.1.3. Employability of Graduates
- 4.2. Improving the Post graduate Programmes
  - 4.2.1. Strengthening of Existing Courses
- 4.3. Improving the Quality of Faculty
  - 4.3.1. Training Need Analysis
  - 4.3.2. Training in Subject Domain
  - 4.3.3. Training in Pedagogical Skills
- 4.4 Resource & Financial Requirements

Section – 5: Action Plan for Institutional Reforms

- 5.1. Structural Reforms
  - 5.1.1. Autonomy
  - 5.1.2. Accreditation
  - 5.1.3. Academic & Non-Academic Reforms
- 5.2. Organizational Development
- 5.3. Empowerment of Women
- 5.4. Support & Development of Differently- abled people

Section – 6: Action Plan for Interaction with Industry

- 6.1. Existing Interaction & Placements
- 6.2. Enhancing Interaction with Industry

Section – 7: Action Plan for Research & Consultancy

- 7.1. Existing Research
- 7.2. Enhancing Research & Consultancy Activities

Each one of these activities is described separately, using the prescribed format in sections 4 to 7. In this proposal, we mentioned activities which come under TEQIP Phase – II, Sub Component 1.1 to strengthen our Institution to improve Learning Outcomes and employability of Graduates.

## Section-4: Action Plan for Promotion of Academic Excellence

### 4.1 Improving the Quality of Education

**Introduction**

Improving the quality of education and training is a common pursuit of providers and practitioners of education and training in our organization. Symptomatic of the prevalence of the quest for quality are the various references in analyses of education and training reform initiatives to national qualifications frameworks; training funds; and utility of workplace and institutional training in developing suitable skills, knowledge and attitudes.

We define good teaching as instruction that leads to effective learning, which in turn means thorough and lasting acquisition of the knowledge, skills, and values the instructor or the institution has set out to impart.

All sections are divided into sub sections, to give the clarity about strengthening institutions to improve the learning outcomes and employability of graduates, as given below

a) Background
b) System in practice
c) Outcome of present system
d) Strategic Plan to improve learning outcomes
e) Projected outcome
f) Resource requirements (Budget)
g) Activity Schedule
h) Beneficiaries
i) Preparedness
**j)** Sustainability

#### 4.1.1 Learning Outcome of Students

**Background**

Increased learning outcomes of the students are important as they represent the effective teaching standards of the institution. To increase learning outcomes of students, apart from required classroom and laboratory facilities, our teachers adopts effective teaching methods in education.

Teacher has many options to choose from different teaching methods designed specifically for teaching and learning. The teaching method should be adopted on the basis of certain

criteria like the knowledge of the students, the environment and the set of learning goals decided in the academic curriculum.

#### 4.1.1.1 Systems In Practice at the Institution

Considering different background of students with different basic knowledge levels, the following teaching methodologies are developed and implemented in SVECW.

- **Smart classrooms:** Most of the class rooms are equipped with Projector, Computer System and Bookrack with necessary reference books for that section. Faculty member adapts Power Point Presentations using audiovisual equipment.
- **Teaching in Interactive Mode:** Faculty member asks questions in the middle of the lecture with an intention to know what the student has learnt from earlier discussions and what it helps in deciding and what should be taught further, also students are encouraged to raise doubts at any stage of lecture and those doubts are clarified in the classroom itself to enhance their understanding of the subject.
- **Lectures with more Real-time Examples:** Faculty members are encouraged to prepare lectures with factual information in a direct and a logical way by including suitable examples. It helps students in better understanding of the subject.
- **Modeling:** The students learn more by observing the things and acquire it by imitating it time and again. Therefore, faculty members exhibit parts of relevant models like electronic kits, system models and their experimental results.
- **Practical Experimentation:** It is a very good method used for demonstrating the subject. Each department is having laboratories equipped with computers and hardware kits. The computers have different software's installed in them.
- **Learning-ware Software:** It provides tutorials on all subjects for better understanding of students. NPTEL and other media are accessible to all the faculty and students.
- **Assignments:** Exercise problems/Case studies are given as assignments to students to develop skills in using internet, library and other learning resources.
- **Feedback:** Feedback is taken from students after every lecture and lecturing methodology is modified to meet the requirements of the students.
- **Handouts:** Lab Manuals, Hand books and materials are provided to students for better understanding of the subject.
- **Guest Lectures:** Eminent people from Industries, IITs and Universities are invited to address students on advanced topics to make students aware of latest trends in the subjects they study. Minimum of three guest lectures are conducted in every academic year.

#### 4.1.1.2 outside classroom Activities

- **Paper Presentations:** Students are motivated towards presenting technical papers and guide them in paper preparation by providing facilities like computers and internet.
- **Conferences and Workshops:** Workshops on techniques of creative problem solving are conducted and students are encouraged to participate in then. Also, students are encouraged to participate in conferences and workshops conducted by other colleges to get acquainted with latest trends in the subjects they study.
- **Industry Tours/Educational Trips:** Educational trips are conducted once in an year and 3$^{rd}$ year students are encouraged to visit Industries related to their field of study.
- **Student Volunteers:** Students are taken as volunteers in Technical Festival (known as Medha Milan) so that they come to know how technical paper contests are conducted.
- **Student Chapters:** VSI, ISTE, CSI and IETE student chapters are established in the college. IEEE student chapter is under establishment stage. Under these chapters, students form committees and conduct technical and non-technical events. While conducting these events they acquire leadership qualities.
- **Mini Projects:** Students are divided into batches, each batch consisting maximum of Four members. A faculty member is assigned to each project batch. Under the guidance of faculty members students develop hardware of the technical topic of their interest.
- **Online Feedback:** At the end of each semester, online feedback is taken from all UG and PG students on all subjects taught during that particular semester based on which high scoring faculties are appreciated and low scorers are personally advised by the HOD.
- **Industry Institute Interaction:** Interaction of students were arranged with Industrial Institutions like Ensine Consulting Pvt.Ltd., VEM Technologies Pvt.Ltd., HI-Q Electronics Systems Ltd., Radical Semicon Technologies, Netenrich, IdeaLabs.
- As a result of these programmes students are benefited to have an all round development and improvement in the academics as well developed willpower to face the moderate tasks throughout the study.

#### 4.1.1.3 Outcome of Present System

**Table 4.1: Ist Year B.Tech Pass %**

**Description of ranks :**

With the system followed in the institution, encouraging results are obtained. Pass percentage of I year students is only 79.66 % in 2013-14. But after following the system in the institution, the pass percentage of students increased and it reached 75.28% in 2012-13.

**Table 4.2: University Ranks (B.Tech)**

**Description:**
With the systems followed in the institutions, encouraging ranks has been obtained. Students securing top Ranks in University Results.

**Table 4.3: Overall Pass Percentage**
**Description:**
With the tremendous efforts put by our Staff members by following the systems in the college the pass overall student pass percentage has been increased from 93% (2008-09) to 95% (2009-10).

**Participation in Technical Paper Presentation Contents:** Students are encouraged from II B.Tech. onwards to present papers in different workshops and conferences. Table 4.4 shows list of papers presented by students in different academic years.

**Table 4.4: No. of Paper Presentation of students of SVECW in various Academic Years**

**Description:**
With the systems followed in the institution, our students got enough encouragement and they actively participated in outside class room activities like paper presentation at various conferences and symposia. In 2007-08 the number of students participated in paper presentation was 200 and it increased to 260 in 2008-2009 and was tremendously raised to 379 in 2009-10 and 491 in 2010-11.

**Table 4.5: Various measures taken for Student needs**
**Description:**
The systems followed in the institutions were to fulfill the student needs in taking extra attention for their overall empowerment in both academics and employability. The students needs identified are Bridge courses, placement related courses, extracurricular courses and GRE/TOEFL/ICET/ECET Training. The following graph shows the number students who have undergone in the past 4 academic years from 2007-2011.

### 4.1.1.4 Strategic Plan to improve learning outcomes

- All class rooms are to be provided internet access with wired and wireless network through campus wide networks which enable to utilize it as resources for online teaching.
- Multimedia Projectors are to be installed in all classrooms so that all the Faculty members use Multimedia Projectors for teaching to improve the teaching learning process.
- Establishment of a high speed Data Transfer Networking (Campus Wide Networking) or Wireless LANs improves the efficiency and effectiveness of learning process in the Institution.
- In all Laboratories LCD Projectors are to be installed and internet access to be provided to show online models for better understanding of the experiments conducted.
- Faculty need to be encouraged to participate in more number of training programme both in subject and pedagogy skills.
- To encourage more number of students to participate in workshops, conferences and symposia by providing financial aid.
- To develop students with a disciplined and integrated personality by providing training programmes in personality development and Yoga.
- To encourage students to participate in sports and cultural activities.
- To arrange training programmes for students to develop soft skills and multilinguistic skills.
- To make students a part of Center for Teaching & Learning (CTL) which offers training to students related to Communication Skills, Soft Skills & Personality Development.
- To motivate all the faculty to take part actively in Center for Teaching & Learning ( CTL) which offers training faculty about “Innovative Teaching Methodologies. To focus on organizing various technical seminars & workshops which bring lot of exposure to latest trends in core areas of engineering and technology.
- To disburse additional money on quality teaching and training equipment to increase **satisfaction index** of the students.
- Utilization of Learning Course ware by Winzest Technologies, Hyederabd and IUCEE – India for the comfort of learning process for student community

### 4.1.1.5 Projected Outcome

- By implementing the quality measures like Customization, Counseling, Guest lectures, CTL, Foreign Languages training, MOU’s with Industry and other universities, Industry

Interaction, Placement & Training the outcome will be improved in all performance indicators like Student pass percentage, University Ranks, Placements etc.,

- Usage of Learning Course ware by Winzest Technologies, Hyederabd and IUCEE – India by students gives exposure to the high standard & conceptual learning.
- It also increases the **satisfaction index** of the students
  - Satisfaction level of students is a measure of performance for an educational organization by means of the factors like facilities, equipments, financial support, teaching aptitude, teaching methodology, and management
  - Based on satisfaction index of students our Teachers detect whether the subject combination in which their students are studying is suitable for them. By doing so, the students may get hold of improved results and as a consequence experience greater satisfaction.

### 4.1.2 Finishing School of Weak Students and Employability

**Background:** The institute initiated various methods to improve the performance of weak students in undergraduate engineering programs. The reputed engineering institutions in the country, are also having some students who are weak at entry. Due to lack of equity action plan their performance levels are poor throughout their study. SVECW is following a systematic approach to bring up the learning levels of weak students which is described below.

**Introduction:** 'weak' students are those who had a 3rd class, had failed more than 40 or 50 percent of their subjects in a given year, and/or had lost a year or more.2 These students were generally believed not to have attended classes regularly. Some –but not all – had entered with low marks through either the reservations or management quota.

#### 4.1.2.2 Systems In Practice at the Institution

**Identifying the weak students :** Some of the students, they take several extra years to complete their courses (supplementary candidates). Some of them may fail to get employment at the end of their degree program, because of overall low performance or inadequate skills at the completion of their courses.

Some of the students may come from rural or remote areas with insufficient communication skills. Some of the students, who had third class, had failed more than 40% or 50% of marks of their subjects, in a given year and some of the students had entered with low marks (just pass) through their reservation or management quota.

Some of the students are not regular to their classes that are attendance wise also we can identify the weak students; those who are have 40% to 50% of attendance percentage. Some of the students getting very less marks in internal examinations also identified as weak students.

**The identified problems that are being faced by the weak students**

- Lack of self confidence, inadequate language or communication skills leading to poor communication and participation in the class room and other academic activities.
- Students from poor families, first generation college students and first generation English speakers, some of the students entered with good marks or more social in nature than socio economic.
- As engineering text books and materials are purely dominantly in English, inadequate knowledge of English can be a handicap.
- Weakness in mathematics was reported among students who entered directly in to the 2nd year of B.Tech. with a diploma. These students have not studied mathematics beyond class
- 10th, nor during their 3 years course, so they at considerable handicap, when they enter in 2nd year engineering which is even for a good student.
- Some of the students are not interested to join engineering course but they are coming to the college by the force of their parents.

**Dealing with Backward Students:** The Socio-economically backward students are identified through the finishing school strategy and suitable measures are taken to enhance their knowledge levels by conducting remedial classes, counseling classes, re-examination, assignments and mentoring. They are encouraged by the trust by providing financial support from IRG.

**Measures taken to improve the quality of weak students include**

1. Conducting the remedial classes
2. Conducting the counseling classes
3. Conducting re examinations, pre examinations and assignments

4. Giving continues encouragement and inspiration to the students in all aspects

### 4.1.2.2 Outcome of Present System

**Academic Support for Weak Students**

We follow Common Activity Plan to improve the academic performance of weak students. For example, the Activity plan followed for III B.Tech (II Semester) students of academic year 2004-2015 who failed in the subject Microprocessors and Interfacing is shown below.

1. No. of students failed in this subject: 09 out of 70 students
2. Remedial classes are conducted during 4-5 PM (weekly)
3. Counseling is conducted during 11 AM-12 PM every Saturday
4. Assignment discussion is conducted during 2-3 PM every Wednesday

After implementing this activity plan, positive results were found i.e., all 9 students passed in the immediate supplementary exams. It is implicity stated that there was an increase in pass percentage of weak students.

So, as a result of these programmes students are benefited to make their skills and abilities stronger than earlier. Students are transformed with the positive intention and had a chance to prove them.

### 4.1.2.3 Strategic plan for improvement

**a) Teacher Feedback:** The present practice of issuing class participation marks at the end of the course does nothing to improve the skills of the students if they discover too late that their performance was not satisfactory. For assessment to be effective, teachers must give feedback, mostly on weekly basis, to students on their work so that students have the opportunity to take remedial measures where necessary and teachers can reinforce positive behavior.

**b) Class Participation:** 'Although attendance at tutorials is compulsory, marks are not awarded for mere attendance—participation in the discussion in all tutorials is the basis for the class participation mark'. The absence of clear criteria in previous years may have resulted in this mark simply assessing a student's record of attendance at tutorials and not

really assessing 'participation' at all. The final criteria for assessment of class participation were as follows:

1. **Preparation:** the extent of student's reading, analyzing and understanding of the material, demonstrated by contribution to discussion.
2. **Contribution to discussion:** the extent to which student volunteered answers, asked relevant questions, expressed his/her own opinion and analyzed contributions of others.
3. **Group skills:** the extent to which student allowed others to contribute, avoided class domination, shared ideas with others, assisted others, provided positive feedback to others and exhibited tolerance and respect for others.
4. **Communication skills:** the quality of student's expression, clarity, conciseness, use of appropriate vocabulary, confidence.
5. **Attendance:** includes punctuality.

**c) Workshops on Teaching methodology:** To improve class participation, institute needs to send its teachers to attend workshops on teaching methodologies.

**d) Recruiting high quality teachers:** Recruiting enthusiastic teachers, who are teaching passionate about different technical domains, is the best way to produce quality outcomes.

**e) Attracting high quality teachers:** Institute needs to develop some measures to attract high quality teachers who are capable implementing best practices in improving class participation. The following are some measures which institute needs to think of:

**f) Budget for faculty development activities:** Right amount of budget should be allocated towards faculty development activities like sending faculty members to national or international conferences to present papers by paying all expenses, and providing funds to interested faculty members to improve or exhibit their research talents.

**g) Internal Seminars:** Regular faculty seminars on new topics should be conducted in each department of the institute to which senior students are allowed to attend and get the knowledge on latest topics and the best way of presentation.

**h) Counseling Students:** In the students counseling scheme followed in SVECW is class is divided in to 3 groups. Each group ( 20 students) is assigned to a faculty, who monitors their performance and suitably advises / delegates to the concerned faculty / authority for the performance enhancement.

**g) Counseling Teachers:** Heads of departments should take regular feedback from students and arrange an expert counselor to guide teachers who lack positive attitude. Besides having a formal Counselor, institute needs to develop a method to form senior-junior pairs of teachers – the better teacher can help the weaker one, the more 'expert' can help the other improve their knowledge, etc. These pairs can sit in on each other's classes, interact with the other's students, and provide 'real time' feedback and advice.

#### 4.1.2.4 Projected Outcome

By implementing the above strategic plan the weak students will get good support from staff members, counsellers and management and hence the Pass Percentage of weak students will be increased, the weak students will get placement in on campus and off campus interviews, Equity among the students will be maintained and all the students from our organization will be employable.

### 4.1.3 Employability of Graduates

**Introduction:** Nowadays employability of graduate students by recruiting organizations through effective selection process is very critical. To improve employability of graduates, we need to improve the capability levels of students that is generally observed by corporations during hiring process.

So there is a need for curriculum reform directed at the following:

*Teacher centered instruction* → *Student determined learning*

*Input orientation* → *Outcome measurement*

*Discipline – defined knowledge* → *Operational knowledge & holistic development of learner*

**Employability:** ***"To be employed is to be at risk, to be employable is to be secure."*** This suggests that in a dynamic and increasingly competitive economic environment, business organizations are becoming progressively more focused on what they require as human

capital – being employed alone is not sufficient, one must be employable (or effective) throughout one's career.

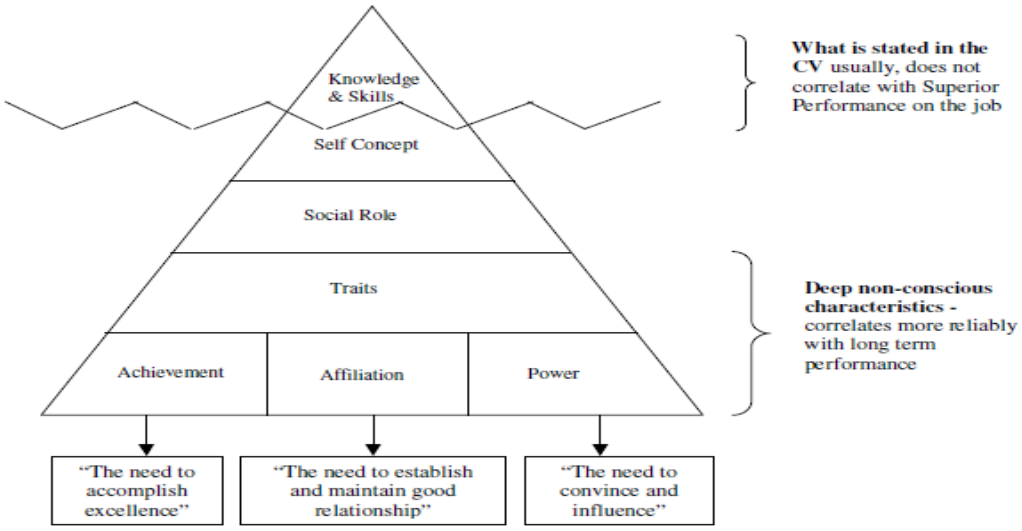
In addition to Technical skills required for every student to get employed, the following aspects are also reasons for unemployment:

a) Weak English and communication skills
b) Bad Social Etiquette
c) Demand too much pay
d) Degrees not relevant
e) Fresh graduates too choosy
**f)** Lack of vacancies

**How our Students can get Employed:** In addition to conventional teaching, if we incorporate the real need of industry or employer to the students during their study period, then we can improve employability of graduate students. For this we can focus on following aspects:

- Make students as active learners in classes by providing innovative teaching methodologies
- Improving Trainer's focus on background, culture, gender and other aspects of students.
- Guidance to weak students to improve their level of understandability and learning. So that it leads to improvement in technical ability.
- Effective feedback system in Teaching Learning process between students and faculty for their individual development (Win-Win process ).
- Training students in groups by their interest. It may be based on their interesting technical domain or other aspect relevant to students.
- Enhancing planning ability of students right from their first year to final year to acquire needed skill set for next year.
- Communication & Presentation skills improvement
- Soft Skills improvement

**Figure 4.1: Overall Perspecive of a graduate to get employed**




Students and their parents generally opt an institute which has good track record of campus recruitment of its students by various renowned companies. Therefore, it is the primary task of the institute to improve the employability of their students and also to have good interaction with companies and inviting them to campus for recruitment of its students.

**4.1.3.1 System in Practice**

The following system is implemented in our institute towards better employability of our students**.**

**Soft Component Training:**

1) **APSSDC**: APSSDC is an initiative of AP state govt to deliver a structured, sustainable & scalable framework to impart state of the art skills to the unemployed, underemployed, uncertified and un-benchmarked and to address the lack of relevant skills amongst the current and potential Skill workforce in the state of A.P. and to increase employability in sync with Industrial growth of the State.

**2)** **Infosys** conducts practice tests on soft skills and aptitude training. Students are encouraged to attend such tests more often to enhance their skills.

**3)** **GATE Forum** visits campus thrice in the first semester of every year and provides Aptitude training to IV BTech students for at least one week duration in every visit.

**4)** **Mock Interviews:** Mock Interviews are conducted every year for the students in III and IV B.Tech.

5) **Motivational Classes by Alumni:** Alumni are invited to campus every year to encourage existing students by sharing their experiences in the interview process and working fields.
6) **Training in Foreign Languages:** Training in Foreign Languages (Spanish, Japanese, French, German) is available in the campus. Students whoever are interested can attend the classes of training in the foreign languages.
7) **Internship:** Class toppers are got chance in doing internships in IITs, Synopsis, and MindTree.

#### 4.1.3.2 Outcome of Present System

**Placements:** The following reputed companies have visited our campus to recruit the students from 2007-2011

TCS, Microsoft, IBM, InfoSys, WIPRO, Mahindra Satyam, Tech Mahindra, Miracle Software systems Ltd, Rofous Software Pvt Ltd, LEISUX, Solar Semi Conductor, CSC, Infotech Enterprises, NTPC, Virtusa, Kanbay, Convergys, Birlasoft, Syntel, CA, Synopsis, Elico, NetEnrich, Computech,Efftronics

#### 4.1.3.3 Strategic plan for improvement

To meet the objective institution plans to improve in the following aspects:

**a) Developing Employability Skills:**

- Develop curriculum of undergraduate studies in such a way that it provides fieldwork, industry-based learning.
- Develop interaction with more number of companies and see that every student gets internship.
- Invite more number of companies for the campus recruitment.

**b) Personality development :**

- Develop department-wise as well as inter-disciplinary research centers and absorb students into them by providing stipend and also some credits to the course they are studying.
- Plan department-wise workshops and conferences and encourage students to take up volunteer work in workshops, conferences.
- Develop some programs in which students get an opportunity for community participation.

**c) Assessing Employability Skills:**

- Good assessment practice is underpinned by proper curriculum and course design which makes explicit the requirements for employability skills and describes how and at what point in the course they will be addressed.

**d) Employability Skills Profiler (ESP):**

- Offer support to students for self-assessment
- To encourage students to take responsibility for reviewing or assessing their own skills
- Addressing gaps and then pursuing appropriate ways to report or present relevant information about their skills to employers, so that they could better manage their own learning and development.

**4.1.3.4 Projected Outcome**

By implementing the above plan by the training provided in Soft skills, Personality development, Mock Interviews, Foreign Language Training and Internships will improve better performance in on-campus and off-campus interviews.
All our students will become employable in reputed Institutions, National and International Companies etc.

The percentage of placements will be raised to 100 by the end of the project period.

**Resource & Financial Requirements: It is provided in section 4.4**

**Beneficiaries**

The students are the real Beneficiaries with good Academic excellence in demonstrating ability to perform, achieve, and/or excel in scholastic activities. With the various learning outcome, employability of graduates and indicators like Counseling, Customization, ICT Methods, Co Curricular methods and placement training they have been identified with achieving high grades and superior performance.

It is the maximum development of intellectual capacities and skills in service to humanity. Achieving academic excellence is a process of both formal and informal education. Indeed, education is a limitless and unending process to be enjoyed for a lifetime.

**Preparedness**

The level of preparedness is summarized in the table below:

| S.No. | Description of activity | Brief description of preparations made for implementation |
|---|---|---|
| 1 | Counseling and Customization | Counseling and Customization Service are provided in gaining student insights and actions are enabled on student choices |
| 2 | Bridge Courses | Weak students are identified and remedial classes, soft learning courses, pre mid examinations and assignment, mentoring is arranged |
| 3 | Guest Lectures | Guest Lecture are arranged to enrich our students with the latest updates of the Industries and Technicalities. Our Students are bestowed with knowledge about Industry needs |
| 4 | Center for Teaching & Learning(CTL) for students | Students are made a part of CTL where an intensive training is given to them in Communication Skills, Soft Skills & Personality Development. |
| 5 | Center for Teaching & Learning ( CTL) for Faculty | Faculty are motivated to attend technical seminars, workshop via CTL to enrich skills in Innovative Teaching methodologies |
| 6 | Placement and Training | Our students are molded to meet the corporate expectation and place them in reputed companies based via the campus placement training |

**Sustainability**

The systems in practice clearly indicates that the organization has the capacity to initiate all the actions and continue to do so the same to improve the learning outcome, weak student

progress and to improve the employability of the graduates. It shows the commitment of the management towards quality education and its importance in the women empowerment and the nation building.

SVECW has clear vision and is well prepared to organize the funds throughout the project period of TEQIP-II and also to continue further to achieve the academic excellence.

## 4.2. Improving the Post graduate Programmes

### 4.2.1 Strengthening of Existing Courses

**Background:** With the Government encouragement in technical education, both number of students and number of Engineering institutions have grown. With an urge to promote Post-Graduate education for women students SVECW has started M. Tech courses in' Power Electronics and 'VLSI Design' in the year 2008 with an intake of 18 each. Subsequently in the year 2009 the intake in the above courses were increased to 36 and a new course M. Tech in Software Engineering was also introduced.

Institutions are required to serve not only a larger but also an increasingly diverse system. With the concept of the knowledge economy, an even wider range of expectations of the functions and missions of Engineering institutions emerged, in relation to their contribution to regional development, innovation and more generally to economic growth. In order for engineering education systems to respond effectively to these trends, more diversity in high education systems is needed. As part of that, institutions need to develop plans for strengthening PG and Research Enrollments.

**4.2.1.1 System in Practice:** At present, the following system is followed in the institute:

1. **Effective Teaching:** Faculty member adapts Power Point Presentations using audiovisual equipment.
2. **Improved Faculty Qualifications**:

   Faculty members with only a Bachelor degree as their highest degree are encouraged to enroll in a Master degree. This institute offers Master degree programme for last two years. The faculty members who joined with Bachelor degree have registered for Masters Degree in the first batch and obtained their degrees.

- Faculty members with Masters Degree are encouraged to enroll in Doctoral degree. The faculty members with M .Tech degree are registered for Doctoral degree in reputed universities with the support of SVECW.

3. **Strengthening Academic Quality and Reputation**: Our faculty members are delivering quality instruction as indicated by end-of-semester student evaluations of course and instructor. Such evaluations are consistently improving year by year. In addition, the department is instituting a peer-review process to supplement student evaluations.

4. **Research Activities:** The institute has initiated research teams and centers that will integrate faculty's expertise and involve graduate students in interdisciplinary research projects. Assistive Technologies Lab is producing results. This lab provides services for individuals with disabilities to improve their quality of life.

5. **Grants:** Faculty members benefit from funds provided by the Institute supporting their scholarly productivity. For example, management provides grants to faculty members, depending on their active role in research activities, to visit Universities in US to learn advances in laboratory facilities and research activities.

6. **Conducting Outreach and Partnerships**: Although most outreach activities are planned and conducted at the college level, department faculty members are willing to participate whenever possible. Department encourages faculty members by providing travel grants to attend faculty training programs, workshops and conferences conducted by other institutes and universities. Also, department encourages faculty members to conduct workshops by sanctioning grants. Faculty member's effort to interact with local educators has been greatly appreciated and will continue in the future.

7. **Establishment of new Laboratories:** New laboratories Front-End (Verilog/VHDL Coding), Back-End (Mixed Signal Laboratory), Power electronics lab with computational facilities to meet the requirements of PG courses.

8. **Additional Lab Facilities:** To improve practical knowledge of PG students, apart from regular labs, additional labs on core subjects are conducted.

9. **Seminars:** For the present students, the academic courses have been conducted as per the curriculum. Along with this, Seminars on latest topics are assigned to students to motivate them to refer academic resources like textbooks, digital library, journals and internet.

10. **Provision of Books:** Prescribed books are provided in all Class Rooms.

11. **Digital Library:** To assist students for publishing papers and for developing projects, College Library provides facility to access IEEE Digital Library.

12. **Special attention on Students:** The class tests and assignments are conducted after completion of each unit so that they can achieve good academic scores. The weak students and lately joined students are given proper guidance in coping up with the syllabus.

13. **Projects Laboratory:** This laboratory consists of systems with internet facility. It is open for 24 hours. In this laboratory, each M.Tech student is assigned with a system so that they can access internet and prepare for seminars and also can develop projects.

14. **Publicity:** Publicity of courses offered by our institute is done through Print and Electronic media.

**4.2.1.2 Outcome of Present System:**

With the present system, pass percentage and aggregate marks achieved by M. Tech students of present batch is increased as compared to that of previous batch.

Some of the PG students got internship in core companies like Synopsis and MindTree.

**4.2.1.3 Strategic Plan for Improvement:**

- **Strengthening Academic Quality and Reputation**: Institute needs to develop a commercial software solution which helps in organizing and tracking student learning outcomes as part of Program Assessment Plans. The implementation of such assessment procedures will further enhance the quality of programs, by providing data that indicate strengths and weaknesses, and using the data to make improvements.
- **Strengthening Enrollments:** To provide teaching assistantships through TEQIP-II to increase the enrollments.
- **Evaluation Strategy:** Departments are conducting evaluation of graduate students' progress towards completion of the academic programs annually as per University norms. However, the evaluation tends to be brief and lacking of specific strategies and consequences for those who do not make satisfactory progress. The departments have to create an evaluation system that regularly

monitors students' progress in their academic pursuit for which institution is prepared to bring academic reforms.

- **Expanding and Enhancing Research:** Faculty member's scholarly productivity has increased significantly in recent years, especially in terms of publishing in refereed journals and conferences. Still this productivity is not meeting the global requirements to attain a status to get funded research and hence faculty are encouraged by providing facilities and benefits to have more no of research publications.
- **Research Activities:** Institute needs to develop research programs in collaboration with industries. Such research programs will play an important role to produce knowledge and procure researcher funding.
- **Grants:** Even though institute is supporting research activities of faculty members by granting funds, it should develop plans to achieve grants from Government agencies like AICTE, DST etc. Also, institute has to recognize a budget system so that funds may be better targeted to support grants activities.
- **Maximizing Efficiency of Resources:** Personnel and finance resources are centralized at the institute level. Institute needs to develop a strategy which can be used to guide the distribution and allocation of the resources to reinforce productive faculty members and programs so that the limited resources will be used strategically to achieve high priority goals.

**4.2.1.4 Projected Outcome:**

- The students will be more abreast of latest technology and global. It encourages other good rank national as well as international students to join the courses in SVECW.
- This strategic plan will enable the faculty to be retrained to suit the new and emerging needs.
- It changes the mindset of faculty and encouraged them to apply for and obtain patents based on their Research findings and Innovations.
- Improvement in collaboration between SVECW and local industries.
- Industry sponsored students will enroll in all PG programmes.
- PG courses will get the accreditation.
- All PG courses will have full enrollment.

**Resource & Financial Requirements: It is provided in section 4.4**

**Beneficiaries:**

The following segments of the society will benefit from this activity:

- The girl students from rural background.
- Industry with enlightened and skilled manpower, with social consciousness.
- The faculty with satisfaction of fulfilling the goal of intellectual development which will be reflected in increased publications, patents, new technologies, consultancy assignments, industrial projects and special opportunities to serve the society at large.

**Preparedness:**

The level of preparedness for this activity is as summarized in the table below:

| S.No. | Description of activity | Brief description of preparations made for implementation |
|---|---|---|
| 1 | Modernization of Laboratory | The instruments required, their cost and supplier in most of the cases have been identified and places to install them have also been decided. |
| 2 | Staff Training | Training requirements and programs for the first year have been finalized and two staff have been selected for training |
| 3 | Identify Projects | ♋☽ Discussions have been held with the formal and non-formal sectors of the industry.<br>♌☽ On the basis of this focused projects have been identified in all areas<br>♍☽ Research teams are being created for the identified projects |

**Sustainability:**

The recurring expenditures for this activity include consumables, operations and maintenance and the PhD fellowships. In the period of four years, sufficient infrastructure and proven capability will be developed to enable SVECW to earn projects from the formal industry sector and government agencies. Thus the sustainability of recurring expenses will be obtained through research projects after the completion of the project.

## 4.2 Improving the Quality of Faculty

**Introduction:**

- By improving the knowledge of faculty over the latest technology and their usage will be exposed not only to them but also to the students' community
- Hands on training will improve their technical skills on par with students from premier institutions
- They can bring up innovative and excellent ideas and could solve even real time problems.
- Students can identify problems with help of faculty and execute them in best possible way in line with industrial requirements
- Industry requirements can be fulfilled by improving the technical abilities of both faculty and students and they may show faith on our students
- Gaining such a name in the market will boost up not only income of the institution but it will bring quality students towards the courses and the same can be maintained forever.
- The faculty members will also be having job satisfaction as they witness the improvement in the quality of students and at the same the institution will also be.
- As our institute is exclusively for women the context of women empowerment and updating their technical knowledge and skills to make the independent in the modern society
- Community oriented services can also be started by making students to be heavily involved in the process

### 4.3.1 Training Need for staff

**4.3.1.1 Background:** Training for all stake holders is an important context so that their level of quality can be upgraded and to make them survive against all the latest trends in their respective fields. Based on the TNA forms training is divided in to three sections. In this section, training need of non teaching staff is discussed. Whereas training for subject and pedagogy are discussed in section 4.3.2. & 4.3.3 respectively.

**4.3.1.2 System in Practice:**

Specific Proforma given in the guidelines for TNA of PIP for TEQIP –II has been supplied to all Technical and Supportive Staff to get their requirements and to come up with training plan that suits their interest.

**i) Trainings undergone by support staff in last two years:**

| S.No. | Name Of Support Staff Member | Area Of Training/ Development | Duration (Days) | When (Date) |
|---|---|---|---|---|
| 1 | S.Muralikrishnam Raju | Attending a workshop on "Capacity building training program " at Residency Hotel, Mysore | 4Day | 16/09/2014to 19/09/2014 |
| 2 | Bh.Devendra Varma | | | |

**ii) Previous trainings the technical staff have undergone in last two years:**

| S. No | Name of technical staff member | Area of training/ development | Duration (Days) | When (Date) |
|---|---|---|---|---|
| 1 | ASNND Prasad, | Attended workshop on Communication and Behavioral skills by RV college of Eng, Bangalore by | 5Day | 02-06/12/2013 |
| 2 | S Naga Raju, | | | |
| 3 | T.Sunil Kumar | | | |
| 4 | R.Srinath | | | |
| 5 | P.Narasimha Rao, | | | |
| 6 | KVSSSNRL Varma | | | |

**iii) Previous trainings the administrative/finance staff have undergone in last two years:**

| S.No | Name of administrative/finance staff member | Area of training/ development | Duration (Days) | When (Date) |
|---|---|---|---|---|
| 1 | P. Subba Raju | Attend an training programme on Accounting &Office procedures | 5Day | 26/05/2014 to30/05/2014 |

### 4.3.1.3 Outcome of the present Training

Once after collecting data from all the members of the institute from top to bottom the areas in which they got trained has been noted down and it is given below. From the TNA collected training needs for Non-Teaching is identified. Most of the staff have undergone training programmes and subsequently they have upgraded their knowledge in their respective streams.

### 4.3.1.4 Strategic plan for improvement

To improve the skill levels of supporting and technical staff (Tentative) Training plan has been prepared from the TNA forms received which is given below.

**i) Short term (up to three months) training/development plan for Class IV Staff, Support/Technical Staff:**

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ | Duration (Days) | Tentative date of training/ development | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | CSE | MCSA | S.Naga raju | 1 month | May-June 2015 | ESCI,Hyd |
| 2 | CSE | Networking | Durga Rao | 1 month | Dec 2015 | Hyd |
| 3 | IT | Basic Networking Technologies | K.Chandra Sekhar | 1 month | May-June 2015 | ZOOM Technologies, Hyderabad |
| 4 | Mechanical | CAD/CAM | J.V. NARASIMHA RAJU | 1 month | June 2015 | Naresh Technologies Ltd, Hyderabad |

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|---|---|---|---|---|---|---|
| 4 | ECE | How to Rectify Problems in Digital Millimeters, | Chiranjeev Varma | 15 days | May 2015 | Hi-Q Electronic System - Hyderabad |
| 5 | CSE | Middle Ware Technologies | M.Chaitanya | 1 month | July 2015 | Naresh Technologies Ltd, Hyderabad |

**D. Long term (above three months) training/development plan for Class IV Staff, Support/ Technical Staff:**

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ developmen | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | CSE | CCNA | N.B.N.V. DURGA RAO | 3 months | May - 2015 | ZOOM Technologies Hyderabad |
| 2 | IT | Multimedia & web Design | M.Chinna Appanna | 3 months | Dec 2015 | Naresh Technologies, Hyderabad |
| 3 | ME | CAD | N.Kalyan Chakravarthi | 1 month | June 2015 | ZOOM Technologies Hyderabad |
| 4 | CSE | Networking | K.V.N.Ravi | 1 month | Nov 2015 | ZOOM Technologies Hyderabad |

**4.3.1.5 Projected Outcome**

- Our staff can gain knowledge by attending the training and workshop programmes so that the systems that suits SVECW can be implemented.

- It will help in bringing reforms both Academic and non-academic to improve the efficiency and transparency of the system.
- Administrative staff will be improving their skills in office automation, document preparation and maintenance and so on.

### 4.3.2 Training in Subject Domain

#### 4.3.2.1 Background

Training programs which are going to be conducted by premier institutions like IISc, IITs, NITs have been identified for the next two academic years to come and from that topics which are under the interest of our faculty have been picked and the corresponding faculty members given priority to attend the respective program as the schedule.

#### 4.3.2.2 System in practice

Faculty members are encouraged to attend training and workshops in their respective subjects as per their choice or interest. They are given special financial compensation to take part in such programmes. On-duty is offered for them to encourage more and more faculty members to go for such workshops in the future.

i) **Previous trainings the HOD/Dean have undergone in last two years:**

| S.No | Name of HOD/Dean | Area of training/ development | Duration (Days) | When (Date) |
|---|---|---|---|---|
| 1 | Y.S.S.R.Murthy<br>P.V.V.Rama Rao | Attended TEQIP Conclave on "Enhancing Quality of Technical Education and Research" at Indian Institute of Technology ,Hyderabad | 2Day | 30-31/08/2013 |
| 2 | PVV Rama Rao | resent a Paper in National Conference on Innovations in Engineering & Technology Organized by Gudlavalleru | 2Day | 27-28/12/2013 |

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|---|---|---|---|---|
| 3 | PVV Rama Rao | EEE Sponsored National Level workshop on Congnitive sciences and Neuro-Signal Processing at OU College of Engineering, Hyderabad | 1Day | 24/12/2013 |
| 4 | Y.S.S.R.Murthy | Attended "Continuing Professional development Programme - VM ware Administration" at Engineering staff college of India(ESCI) - Hyderabad by y.s.s.r. murthy | 4Day | 15-18/05/2013 |
| 5 | V.Purushotham Raju | Attended Training program on Research Methodology in computer Sience at Vidyanikethan Engg College, Tirupathi by V. Purushotham Raju | 3Day | 28-30/06/2013 |
| 6 | PVV Rama Rao. | Attended DST Sponsored International Workshop on "Advanced & Integrated Energy Systems and Energy Conservation,at Vignan University Guntur | | |
| 7 | P.V.V.Rama Rao, | Attended A Present a Paper on "Maximum Loadability of Radial Distribution System" in National Conference on Advances in Communications & Electrical Engineering,NCACE 2K13,at Mallareddy Engineering College ,Hyderabad. | 2Day | 6-7/09/2013 |
| 8 | P.V.V Rama Rao | IEEE Sponsored National Level workshop on Congnitive sciences | 1Day | 24/12/2013 |

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|---|---|---|---|---|
| | | and Neuro-Signal Processing at OU College of Engineering, Hyderabad | | |
| 9 | PVV Rama Rao | Presented a Paper in International Conference on "Advances in Engineering & Technology -2014"organized by Anjuman College of Engineering and Technology,Nagpur | 2Day | 8-9/01/2014 |
| 10 | V.Purushothama raju | Attend an International conference on communication and computing at Bangalore | 3Day | 12/6/2014 to14/6/2014 |
| 11 | v.purushothama raju | Attending the workshop on GUP Programming andApplications(GPA2-2014) at IIT Madras | 3Day | 17/07/2014 to19/07/2014 |
| 12 | G.Subbaraju | Attending a conference on "ALUMNI"at ISB,HYD | 1Day | 01/11/2014 |
| 13 | SSR Murthy | attended“QIP Short Term Course on Engineering Pedagogy and Curriculum Development” at Centre for Continuing Education Indian Institute of Science, Bangalore | 5Day | 21-25/10/2013 |
| 14 | PVV Rama Rao | | | |
| 15 | YSSR Murthy | Attended Management development program,Govt of A.P at ISB Gachibowli, Hyderabad | 2Days | 01-02/12/2013 |

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| 16 | YSSR Murthy | ttending Study tour to Amrutha University,Avinash Lingam University,at Coimbatore | 2Days | 23-24/12/2013 |
| 17 | P.V.V.Rama Rao | Attending NBA Training /Workshop Phase -I & Phase II Conducted by VRSEC, Vijayawada | 4Days | 13/09/2013,& 26-28 /09/2013 |
| 18 | P.Venkata Rama Raju | | | |
| 19 | S.Hanumanth Rao | | | |
| 20 | V.V.R. MaheswaraRao | | | |
| 21 | G.Subbaraju | Attended One day TEQIP - II Workshop on EFMRS at Osmania University Hyderbad | 1Day | 15/05/2013 |
| 22 | P.venkataRama Raju | attended 48th Annual Covention on "ICT and Critical Infrastructure" Conducted by Computer Society of India, Visakhapatnm | 3Days | 13/12/2013to 15/12/2013 |
| 23 | Dr.P.srinivasa Raju, | Attending 3rd Periodic State level workshop at JN Auditorium,JNTUH Campus Hyderabad | 1Day | 05/02/14 |
| 24 | Dr.YSSR Murthy | | | |

**ii) Previous trainings undergone by faculty in the last two years:**

| S.No | Name of faculty member | Area of training/ development | Duration (Days) | When (Date) |
|---|---|---|---|---|
| 1 | P.Sridhar | Attended National Conference at Bits, Hyderabad | 2Days | 4/04/2013to5/04/2013 |
| 2 | S.Adinarayana | Attended Three day national workshop on AOTEM - 2013 at GMRIT,Rajam | 2Days | 5-7Apr2013 |
| 3 | J.V.KrishnaKumar | Attended The National Conference on Recent Trends in Nanoscience and Technology for Device Applications at KL University-Vaddeswaram. | 2Days | 4-5Apr-2013 |
| 4 | S.Srivathsava | | | |
| 5 | K.Jagadeesh, | | | |
| 6 | K.V.VSatyanarayana | | | |
| 7 | T.Bheemesh | | | |
| 8 | G. Lakshmi | Attended One Day Workshop on Energy Conservation & Audit at KL University | 1Day | 4Apr-2013 |
| 9 | B. Kali Prasanna | | | |
| 10 | P.RaviKumar | Attended a workshop on Embedded systems & VLSI Design in Robotics Conducted by IIIT pune | 5Day | 1-5Mar2013 |
| 11 | M.V.Ganeswara Rao | | | |

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| 12 | K. Murthy Raju | Attended three day Workshop on Xilinx FPGA Solutions for image & signal processing applications at VIT, Vellore | 2Day | 4-6Apr2013 |
| 13 | M.Prema Kumar | Attended Two day National Conference on Emerging Trends in Information Technology (NCETIT 2013)Organized by The Dept of IT, GITAM University | 2Day | 29-30/04/2013 |
| 14 | Y.Ramu | WS on Advanced Data Analysis for Management Research Decision making at VIT University, Vellore | 3Day | 29-31/04/2013 |
| 15 | D. Murali krishna, | Attended three day Workshop on Xilinx FPGA Solutions for image & signal processing applications at VIT, Vellore. | 3Day | 4-6/04/2013 |
| 16 | G. kishore kumar | | | |
| 16 | M..pradeep | | | |
| 17 | S.Ravi kumar | Attended a five day workshop on Advances in web Technologies using java Organized by CUSAT,at Kochi | 5Day | 8-12/04/2013 |
| 18 | ,K.Ramu | | | |
| 19 | K. Ashok kumar | Attended One day workshop 0n SIEMENS PLM conducted by SIEMENS Hyderabad | 1Day | 26/04/2013 |
| 20 | G. Satish | | | |
| 21 | K.Suresh | Attended Two day workshop on Recent Technologies in Renewable Energy System at GMR institute of Technology. | 2Day | 13-14/04/2013 |
| 22 | D.Ravi Kiran | Multivariate data analysis at Nagpur | 3Day | 22-24/04/2013 |
| 23 | R.Subba Rao | | | |
| 24 | S.Srivathsava | Attended The National Conference on Physics and | 2Day | 12-13/04/2013 |

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| | | chemistry of Solids at SR & BgNR College Khammam | | |
| 25 | L.Balaji | Attended Four day workshop on Safety data Analysis at IIT Karagpur | 5Day | 8-12/04/2013 |
| 26 | T.Veeranna | | | |
| 27 | s.ravi chandra | | | |
| 28 | ch. Vijaya krishn | | | |
| 29 | y.s.s.r. murthy | Attended "Continuing Professional development Programme - VM ware Administration" at Engineering staff college of India(ESCI) - Hyderabad | 4Day | 15-18/05/2013 |
| 30 | A. Jagadeesh | | | |
| 31 | P.Janaki Rama Raju | Attended National Conference on Futuristic Innovations & Developments in Civil Engineering at MEPO SCHLENK Engg. College, Sivakasi | 3Day | 18-20/04/2013 |
| 32 | L. Harish | | | |
| 33 | S.Ravi Kumar,V.Pavan | Attended Workshop on Web Application Security Conducted by VIT Chennai | 1Day | 20/04/2013 |
| 34 | V.Pavan Kumar | | | |
| 35 | B.Venkatesh | | | |
| 36 | M.Gowtham | | | |
| 37 | P.Janaki Rama Raju | Attended Training program on National Natural Resources Management System (NNRMS) at Dehradun,Uttarakhand | 52Days | 06/05/2013 to 28/06/2013 |
| 38 | K. Anil | | | |
| 39 | P.R.S.S Venkatapathi Raju | Attended Workshop on CS Teachers Workshop Conducted by IIT Hyderabad | 5Day | 16-20/05/2013 |

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|---|---|---|---|---|
| 40 | S,Dileepkumar varma | Attended Audit Course and Credit Course Conducted by JNTU Kakinada | 1Month | 01-15/05/2013,16-30/05/2013 |
| 41 | U.Sunil Kumar, | | | |
| 42 | MV Ganeswara Rao, | | | |
| 43 | V. Srinivas Rao | | | |
| 44 | s.Ravi Kumar | Attended Workshop on Network Security and Computer Forensics Organized by V.R.Siddahartha Engg.College Vijayawada | 5Day | 30/04/2013to 04/05/2013 |
| 45 | M.Gowtham | | | |
| 46 | K.Ramu | | | |
| 47 | ,b.venkatesh | | | |
| 48 | V.Pavan Kumar | | | |
| 49 | P.Aravind | Attended Workshop on Real time DSP and its Applications using OMAP l-138 at JNTU Hyderabad. | 2Day | 24-25/06/2013 |
| 50 | V. Vijaya Kumar Raju | | | |
| 51 | D.V. Rama Krishna | Attended Workshop on Communications,Signal and Image Processing at JntuK Vijayanagaram. | 2Day | 28-29/06/2013 |
| 52 | K.Ramesh | Attended Workshop on Recent Research Trends in Computer Science & Information Technology Conducted by JNTU Vijayanagaram. | 2Day | 21-22/06/2013 |
| 53 | V. Purushotham Raju | Attended Training program on Research Methodology in computer Sience at Vidyanikethan Engg College, Tirupathi | 3Day | 28-30/06/2013 |
| 54 | V. Purushotham | Attended Training Program on | 3Day | 12-14/07/2013 |

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|---|---|---|---|---|
| | Raju | Research Methodology and IBM-Spss at JNTUH | | |
| 55 | Y.Ramu | | | |
| 56 | M.Narasimha Raju | | | |
| 57 | M.Premkumar | Attended FDP on Embedded Image Processing at Sinhgad College of Engg Pune. | 5Day | 6-10/05/2013 |
| 58 | V.Vijaya Kumar Raju, | | | |
| 59 | K.Omkar | Attended Iternational Workshop on "Trends in power System Protection and Control (TIPSPAZ-2013)at JNTU,Vijayanagaram | 2Day | 19-20/07/2013 |
| 60 | V.Pavankuma | Attended Workshop on Active learning and Project based learning conducted by BVBCET,IUCEE Hubli,Karnataka. | 3Day | 07-09/08/2013 |
| 61 | G.Tejvarma | | | |
| 62 | B.Venkatesh | Attended Workshop on Android Application Development Organized by VIT Vellore | 2Day | 27-28/07/2013 |
| 63 | S.Ravikumar | | | |
| 64 | S.Adinarayana | Attended workshop on Data analysis using SPSS conducted by Dept of Statistics,Andhra University | 1Day | 22/08/2013 |
| 65 | E.Venkateswara Rao | Attending Five day Training program on Network Administration:Configuring and Securing LANs & WANs at ESCI,Hyderabad by E.Venkatesw | 5Day | 22-26/07/2013 |
| 66 | V.Srinivas Rao, | Attended National Workshop on Advances in Signal Processing (NWASP-13),AU College of | 2Day | 30-31/08/2013 |

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| 67 | M.Prema Kumar | Engineering,Visakhapatnam | | |
| 68 | K.P Swaroop | Attended Workshop on Soft Computing Techniques in Electrical Engineering at Anna University,Tiruchiropalli | 7Day | 19-25/8/2013 |
| 69 | B.Ravindhar | | | |
| 70 | MV Ganeswara Rao | Attending training program on Pedagogy Training (Basic Module) Conducting by NITTTR, Chandigarh | 5Day | 30/09/2013to 04/10/2013 |
| 71 | S.Ravikumar | Attended ICICSE - 2013 International Conference at GNI Hyderabad | 2Day | 20-21/09/2013 |
| 72 | V.Pavan Kumar | | | |
| 73 | G.Tejvarma | | | |
| 74 | M.Gowtham | | | |
| 75 | B.K.Prasanna | Attending Workshop on Power Electronic Applications at NIT,Warangal by B.K.Prasanna & G.Lakshmi | 5Day | 14-18/10/2013 |
| 76 | G.Lakshmi | | | |
| 77 | S.A Mangatayaru, | Attending FSIR Master training Programme in Soft skills at Osmania university Conducted by SPFU,AP | 5Day | 7-11/10/2013 |
| 78 | J.Swarnajyothi | | | |
| 79 | S.Ravi Chandra | Attended short term training program on Applications of Artificial Intelligence Techniques in Engineering and Research Conducted by BIT MESRA | 5Day | 23-27/09/2013 |
| 80 | A.NarayanaKiran | Attended three day "IEEE and pundue University joint workshop on EPICS" at | 3Day | 29-31/10/2013 |

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| | | hyderabad by A. Narayana Kiran(ECE) | | |
| 81 | M.Narasimha raju | Attended Five day workshop on Pedagogical Training(Module-1) at NITTTR, Chandigarh | 5Day | 28-/10/2013to 01/11/2013 |
| 82 | M.S.Sudheer | Attended workshop program on " Mobile Learning" Organized by CDAC hyderabad | 1Day | 30/08/2013 |
| 83 | S. Ravi Kumar | Attended FSIT Traning Programme Conducted by Nasscom at Osmania University College of Eng Hyderabad | 1Day | 28/10/2013 |
| 84 | K.V. Narayana Rao | | | |
| 85 | P. Akhendra Kumar(ECE) | Attended FDP on "EMI, EMC and RF Circuit Design" Organized by the Dept of ECE, Government College of Eng,Salem. | 7Day | 21-27/10/2013 |
| 86 | D.Vikram(ECE) | Attended FDP on "Recent Advances in Microwave Eng and Its Applications" Oraganized by the Dept of ECE, PVP Sidhardha Institute of Technology, Vijayawada | 1Day | 28/10/2013 |
| 87 | M.Gowtham | Attended FDP on Information Security and Cyber Forensicsb at Gitam University, Vishaka patnam | 3Day | 3-5/10/2013 |
| 88 | S.Adinarayana | Attended TEQIP Sponsored one week FDP on Wireless Sensor Network-Issues & Challenges at Pondicherry ENG College, Puducherry. | 5Day | 11-15/11/2013 |
| 89 | M.Gowtham | | | |

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| 90 | s.Veerababu | Attending National Workshop on " Photo voltaic Energy sources in the power sector"(PVWEPS-2013)at AUCollegeof Engg,Visakhapatnam | 3Day | 22-23/11/2013 |
| 91 | S.Adinarayana | Attending International conference on RAMSA -13 at GVP college of Eng Visakhapatnam | 4Day | 19-22/12/2013 |
| 92 | A.Mohan | | | |
| 93 | R.Anuj | Attended TEQIP Sponsored FDP on Research issues on Heterogeneous wirless network at Pondicherry Eng College,Pondicherry | 5Day | 2-6/12/2013 |
| 94 | B.kiran kumar | | | |
| 95 | M.S.Sudheer | Attended workshop program on Image and Speech processing Organized by IIT Guwahati | 2Day | 13-14/12/2013 |
| 96 | K.Omkar | Attended Workshop on Pedagogical Training Module-II, NITTR, at Chandigarh | 5Day | 25-29/11/2013 |
| 97 | S.Dileep Kumar Varma | Attended Workshop on Center for wind Energy Technology held at Chennai | 3Day | 27-29/11/2013 |
| 98 | P.Prasanthi | Attended UGC Sponsored International Conference on Teaching English for Employability (TEE2013) conducted by Annammal College of education for Women a Thoothukudi | 3Day | 21-24/11/2013 |
| 99 | S.A.Mangathayaru | | | |
| 100 | T.Gayathri | Attended National Workshop on Emerging research trends in data mining for bioinformatics in India Conducted by Au,Visakhapatnam | 3Day | 21-24/11/2014 |

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| 101 | G.Tej Varma | Attended Pedagogical Training Programme (Moudle-1) for faculty of Eng colleges,at NITTTR, Chandigarh | 5Day | 16-20/12/2013 |
| 102 | S.Ravi Kumar | Attended Data Science and Eng workshop at Rajiv gandhi Institute of Technology (RIT), Kottayam | One Week | 16-21/12/2013 |
| 103 | V.pavan kumar | | | |
| 104 | K.P Swaroop | Attended 2nd International Conference on Recent Advances in Design,Development and Operation of Micro Air Vechicles(ICRAMAV-2013) at JNTUH,Hyderabad | 3Day | 21-23/11/2013 |
| 105 | M.V.Srikanth | | | |
| 106 | Ch.Anudeep | National Seminor on Role of Knowledge Management in Modern Era,at Vasavi Eng College, Tadepalligudem | 2Day | 27-28/12/2013 |
| 107 | Priyadarshini | Attending a Work shop on IssuesIntegrated Circuit design organized by ECE Dept f Gudlavalleru College of Eng, Gudlavalleru by Priyadarshini, | 2Day | 13-14/12/2013 |
| 108 | ,V.Rajasree | | | |
| 109 | M.V.GaneswaraRao | Attended the seminar on Mathematical Challenges in Medical Image Processing, conducted by PVPSIT Vijayawada by MVGaneswara Rao | 2Day | 27-28/12/2013 |
| 110 | S.Adinarayana | Attended text Mining Workshop | 3Day | 6-8/01/2014 |

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| | | at ISI kolkata | | |
| 111 | S.Ravi Chandra | Short Term Course on MATLAB Programming and Its Engineering Applications(MPEA2013)Organized by NIT Raipur. | 5Day | 26-30/12/2013 |
| 112 | Ch.Vijaya krishna | Attended a workshop program on MATLAB and its Applications in Computational intelligence Organized by SRM University, chennai | 2Day | 8-9/01/2014 |
| 113 | A.Mohan | | | |
| 114 | Ch.Smbasiva Rao | Attended FDP on Trends in soft Computing and its Tools organized by VIT BVRM,Ch.Smbasiva Rao,K.Pavan Raju,T.Kesava,K.Bhadrachalam,G. Mohan Ram,M.S.Sudheer,M.Ramesh Babu,h.Vijayakrishna,(CSE),S.Adinarayana | 2Day | 15-16/02/2014 |
| 115 | K.Pavan Raju | | | |
| 116 | T.Kesava | | | |
| 117 | ,K.Bhadrachalam | | | |
| 118 | G.MohanRam | | | |
| 119 | M.S.Sudheer, | | | |
| 120 | M.Ramesh Babu | | | |
| 121 | H.Vijayakrishna | | | |
| 122 | S.Adinarayana | | | |
| 123 | S,Veerababu | Attended national Workshop on Recent Innovative trends in electrical motors and its industrial applications(RITEMIA-2014) at PVP Siddhartha college of Institute | 2Day | 20-21/02/2014 |
| 124 | P.Sricharani | Attended national workshop on FRDIWST - 2014 conducted by ESCI,Hyderabad by | 2Day | 5-7/02/2014 |
| 125 | T.Madhavi | | | |

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| 126 | Ch.Trinayani | P.Sricharani.T.Madhavi,Ch.Trinayani,V.Priyadharsani,D.N.S.B.Kavitha,D.Divyabhargavi | | |
| 127 | D.N.S.B.Kavitha | | | |
| 128 | D.Divyabhargavi | | | |
| 129 | V.Priyadharsani, | | | |
| 130 | K.Mohan Kumar | attended pedagogical training Organized by ESCI,at hyderabad | 2Day | 20-25/01/2014 |
| 131 | R.Subba Rao | Attended International Conference ICRASTAT -13 paper presentation paper title "Hybrid group Acceptance Sampling plan based on size Biased Lomax Model"at Aurangabad | 2Day | 26-28/12/2013 |
| 132 | K.S.N.Raju | Attended Workshop on VLSI & EDA tools (VLSI 2014) Conducted by by JNTUK Vizianagaram | 2Day | 6-7/02/2014 |
| 134 | G.MohanRam,& Ch.VijayaKrishna,& B.Kiran Kumar | Attended the workshop on Video Analytics &Image Processing Applications Conducted by VR Siddhartha Engineering College by G.Mohan Ram(CSE),Ch.Vijaya Krishna,B.Kiran Kumar | 1Day | 21/02/2014 |
| 135 | S.Adinarayana | Attended International Conference On Click-14 at Sri Sankara Arts and Science College,Enathur,Tamilnadu, | 2Day | 12-13/02/2014 |
| 136 | P.Raju & K.Ramesh | Attended FDP on Trends in soft Computing and its Tools organized by VIT BVRM, | 2Day | 15-16/02/2014 |

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| 137 | N.sarath chandra | Attended National workshop on Recent trends in Renewable energy sources(RTET) at JNTU Vizianagaram | 2Day | 21-22/03/2014 |
| 138 | G.Mohamn Ram<br>Ch Vijaya krishna | Attended a workshop program on Realization of automotive sensors using Adriano Organized by VIT university | 2Day | 21-22/03/2014 |
| 139 | M.Pradeep | Attended Multiple Conference and workshops (Multiconw-2014) Organized by thakur college of Eng &Technology, Mumbai. | 2Day | 28/02/2014to 01/03/2014 |
| 140 | K.Omkar<br>B.Ravindhar | Attended National workshop on Solar Photovoltaic power plants: Opportunities & challenges at Albertan Institute of Engineering and Technology, Kochiby B.Ravindhar(EEE),K.Omkar(EEE) | 2Day | 20-21/03/2014 |
| 141 | Y.Ramu | Attended National Workshop on cloud Computing in Academics and research at department of CSE,JNTUA, Pulivendula | 3Day | 4-6/04/2014 |
| 142<br>143 | P.Prasanthi<br>,G.J.V.Prasad | Attended a workshop on making english classes learner centered at JNTUK university college of engineering vizianagaram. | 2Day | 10-11/03/2014 |
| 144 | G.Satish | Attended workshop on 2014 | 2Day | 7-8/03/2014 |

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| 145 | N.Srinivasa Rao | TEQIP Conclave at IIT Hyderabad | | |
| 146 | K.Omkar(EEE) | Attended IEEE International conference on Green Computing Communication and electrical engineering at Dr.N.G.P. Institute of technology, coimbatore | 3Day | 6-8/03/2014 |
| 147 | V.VijayakumarRaju | Attended IEEE International Conference on Communication and Signal processing ICCSP-14,Adhiparasakhti Engineering college, Melmaruvathur,Tamilnadu | 3Day | 3-5/04/2014 |
| 148 | S.Veera babu | Attended short term course on control of permanent magnet AC machines at Indian Institute of Technology (IIT),Chennai. | 3Day | 03-05/04/2014 |
| 149 | R.Vasu babu | Attended International conference ICAAm -2014 conducted by AU, Visakhapatnam by R.Vasu babu(BS) | 4Day | 29/04/2014 to 01/05/2014 |
| 150 | G.V.Subhash | Attended National workshop on Solar Photovoltaic Energy technology at Albertan Institute of Engineering and Technology (AISAT), kalamassery,Kochi | 2Day | 20-21/03/2014 |
| 151 | V.pavan kumar | Attended an International Conference ICSE 2014 at hyderabad | 1Day | 02/06/2014 |
| 152 | G.tej varma | | | |
| 153 | K.pavan raju | | | |
| 154 | P.devikiran(EEE) | Attended national conference on Teaching Learning & Leadership and 2014 Aerospace & Defense Symposium Organized by | 1Day | 18/04/2014 |

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| | | brinfeed & Education toda, Hyderabad. | | |
| 155 | S. Dileep kumar varma | Attended a workshop on administration and Accounting procedures at Dr. MCR HRDIAP hyderabad | 3Day | 21-23/05/2014 |
| 156 | D.narasimha raju | Attended the conference for paper presentation at cloud valley leisure hotel,munnar,kerala | 2Day | 26-27/04/2014 |
| 157 | v. pavankumar | Attend a workshop conducted by IITmabras at chennai | 3Day | 17/07/2014 to19/07/2014 |
| 158 | s.ravikumar | | | |
| 159 | M.V.Srikanth | **Attended** national conference on POWER SYSTEMS(NCPS-2014) Aat vishakhapatnam | 2Day | 02/05/2014 to03/05/2014 |
| 160 | M.GOWTHAM | Attended a workshop on**"INDO-CHILE WORKSHOP ON BIG DATA"**Conducted by BITS Pilani at hyd | 2DAY | 04/06/2014 to 06/06/2014 |
| 161 | B.VENKATESH | Attended a workshop on"INDO-CHILE WORKSHOP ON BIG DATA"Conducted by BITS Pilani at hyd. | 2Day | 04/06/2014 to 06/06/2014 |
| 162 | M.Narasimha RAJU | Attended an work shop on" Environmental Management Frame work"at coimbatore | 2Day | 21/08/204 to 22/08/2014 |
| 163 | S.Deelipkumar varma | | | |

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| 164 | K.N.R.K.Raju | Attended an work shop on" 3dPRINTING &RAPID PROTOTYPING" at ESCI ,Hyderabad | 3Day | 24/07/2014 to 26/07/2014 |
| 167 | V.V.Vidyadhara raju | | | |
| 168 | Padmanabha raju | | | |
| 169 | V.S.R.Pavan kumar | | | |
| 170 | P.Devi kiran | | | |
| 171 | A.Phani kumar | | | |
| 172 | K.Ashok Kumar | | | |
| 173 | B.N.Malleswararao, | | | |
| 174 | J.T.V.Satish | | | |
| 175 | D.V.Shekar | | | |
| 176 | G.V. Subhash | Attended a work shop on "Additive/Generative Manufacturing tecnologes" at IIT,Hyderabad by G.V. Subhash | 2Day | 07/07/2014 to 08/07/2014 |
| 177 | K.Pushpa | Attended a work shop on GNSS Signals & Reciever Algorihams" at Osmania University, Hyderabad | 5Day | 05/08/2014 to 09/08/2014 |
| 178 | G.J.V Prasad | Attended a one day work shop on "Investigating professional practice- 'Exploring teachers' metaphors' and learning styles-Multiple intelligences'. At Chennai | 1Day | 11/07/2014 |
| 179 | A.kaladhar | Attended a workshop on "Innovative &Emerging | 5Day | 04/08/2014 to |

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| | | Technologies for Library professionals" at INMAS, New delhi | | 08/08/2014 |
| 180 | G.DurgaPrasad | Attended a national workshop on "Role of power electronics converters for renewable energy sources-RPECRES"at coimbatore | 2Day | 07/08/2014 to 08/2014 |
| 181 | V.Pavan kumar | Attended an international conference on "ICICSE2014"at Hyderabad | 2Day | 08/08/2014 to09/08/2014 |
| 182 | J.V.Narasimha raju | Attended a 3 day program on CNC programming &Maintenance for Faculty at NTTF Bengluru | 2Day | 24/07/2014 to 26/07/2014 |
| 183 | S.Ravi chandra | Attended a 5- day short term Training Progrmme on "Audio &Speech Signel Processing (ASSP-2014)" S.V.National Institute of Technology ,Surat | 5Day | 07/07/2014 to11/07/2014 |
| 184 | G.V.Subhash | Attended " A 3-day FDP on Train the Trainer program for engineering Faculty " at Bosch Training Centre ,Bangalore | 2Day | 04/08/2014 to 06/08/2014 |
| 185 | K.Mohan kumar | | | |
| 186 | N.Srinivasa rao | | | |
| 187 | G.Durga prasad | Attended a work shop on "Research Challenges in special Electrical Machines" at Karunya University ,coimbatore | 2Day | 11/09/2014 to 12/09/2014 |
| 188 | P.Ravi kumar | Attended a one day work shop on "Design and Development of Ornithopter" at ESCI,Gachibowli,Hyderabed | 1Day | 06/08/2014 |

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| 189 | D.Lakshman kumar | Attended a 3 day workshop on"Modren Trends in HVDC & FACTS "at CBIT,Hyderaded | 3Day | 18/09/2014 to 20/09/2014 |
| 190 | S.K.D.Varma | Attended a 2 day work shop on "Recent trends in power transmission and protection " at CPRI,Bangalore | 2Day | 18/09/2014 to 19/09/2014 |
| 191 | A.Mohan | Attended a 2 day international conference on innovations in computer science &Engineering (ICICSE-2014) at Gurunanak institute of Technology, Hyderabad | 2Day | 08/08/2014 to 09/08/2014 |
| 192 | A.Mohan | Attended a 2 day conference on "Technological Advancement in Computing "at R.V.College of engineering ,Bangalore | 2Day | 25/07/2014 to 26/07/2014 |
| 193 | D.Lakshman kumar | Attended a 3Day Training program on “Introduction To Industrial Electrical Systems(LT14)"at Pune | 3Day | 1/10/2014 to 3/10/2014 |
| 194 | G.Lakshmi, | | | |
| 195 | P.Devikiran | | | |
| 196 | K.Omkar | | | |
| 197 | B.K.Prasanna | | | |
| 198 | P.Devi kira | Attended a 2 day workshop on "Intelligent Autonomous Unmanned Systems(IAUS) at NIMHANS ,Bangalore | 2Day | 21/08/2014 to 22/08/2014 |
| 199 | D.V.Shekar | | | |

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|---|---|---|---|---|
| 200 | K.Omkar | Attended an international conference on"Electrical,Electronics,Engineering Trends,Communication ,Optimization and Sciences" at vijayawada | 2Day | 11/10/2014 to 12/10/2014 |
| 201 | M.Gowtham | Attended an international conference on "Innovations in Computer Science and Engineering "at Guru Nanak Institute of Technology,Hydrebad | 2Day | 08/08/2014 to 09/08/2014 |
| 202 | Y.Ramu | Attended a workshop on"Big Data Analytics "at IIT,Chennai | 3Day | 09/10/2014 to11/10/2014 |
| 203 | G.Subbaraju | Attended a conference on "ALUMNI"at ISB,HYD | 1Day | 01/11/2014 |
| 204 | D.V.Nagaraju | Attended a regional workshop on"Student,Facualty&Non-Teaching staff Satisfaction Survey" at M.S.R/I/T ,Banglore | 1Day | 22/09/2014 |
| 205 | R.Subbarao | | | |
| 206 | Y.T.R.Palleswari | Attended a 5day FDP on"Research Tools in Electrical Engineering"at LBRCE,Mylavaram | 5Day | 20/11/2014 to 025/11/2014 |
| 207 | B.K.Prasanna | | | |
| 208 | A.Kaladha | Attended an international conference on"Scholary Communication &Knowledge Management in Higher Educational Institutions(ICSKH-2014)"at KL University,Vijayawada | 2Day | 28/11/2014 to29/11/2014 |

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|---|---|---|---|---|
| 209 | Y.Ramu | Attended a workshop on "Teacher Effectiveness "at IIT,Hyderabad | 2Day | 05/12/2014 to06/12/2014 |
| 210 | v.leela krishna, | | | |
| 211 | K.Poul, | | | |
| 212 | N.Praveen kumar | | | |
| 213 | V.Srinivasa rao | | | |
| 214 | V.Vijaya kumar raju | Attended an 2Day national workshop on "Wireless Sensor Networks for Health Care &Environmental Monitoring" at GMR Institute ,Srikakulam | 2Day | 14/11/204 to15/11/2014 |
| 215 | Venkatarama krishna durga | | | |
| 216 | G.bharathi | Attended a International workshop on "Advances in Renewable Energy Technologies" at IIT,Madras | 2Day | 09/12/2014 to10/12/2014 |
| 217 | V.V.L.Usha Ramani | Attended a National seminar on "Mother Tongue Vs English" at KGRL College, Bhimavaram | 1Day | 10/12/2014 |
| 218 | P.Prashanti, | | | |
| 219 | S.A.M.Tayaru, | | | |
| 220 | K.Poul | | | |
| 221 | P.Sreehari raju | | | |
| 222 | V.Leela krishna | | | |
| 223 | G.J.V.Prasad | | | |
| 224 | S.M.Padmaja | Attended a workshop on "Research and Teaching Methodologies in Electrical Engineering" at IIT, Hyderabad | 2Day | 11/12/2014 to12/12/2014 |
| 225 | A.Phani kumar | | | |
| 226 | J.Teja Venkata Satish | Attended a workshop on "National Convention of Aerospace Engineers"at | 2Day | 14/11/2014 to 15/11/2014 |

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| | | IEI,Bangalore | | |
| 227 | K.Omakar | Attended a workshop on "Recent Trends in Power Systems Protection "at NIT ,Warangal | 3Day | 27/11/2014 to29/11/2014 |
| 228 | A.Seenu | Attended a IEEE conference at KL University, Vijayawada | 3Day | 11/09/2014 to13/09/2014 |
| 229 | P.R.Sudha rani | | | |
| 230 | K.Ashok kumar | Attended a work shop on "Future Trends on Powder Metallurgy & Sizing" at IIT, Hyderabed | 2Day | 01/12/2014to 02/12/2014 |
| 231 | P.S.Prakash varma | | | |
| 232 | R.Vasubaabu | Attended a national conference ON "Recent Development in Mathematics &its Applications" for paper presentation on "Associate elements in ADL'S" at Acharya Nagarjuna university ,Guntur | 2Day | 22/12/2014 to23/12/2014 |
| 233 | P.Devi kiran | Attended a 2-Day national conference for paper presentation on "SPWM Controlled Hydride Grid for Multiple Power Supplies" at vizag | 2Day | 07/11/2014 to08/11/2014 |
| 234 | K.Ramachandra rao | Attended a international conference on "COMPUTETION INTELIGENCE::HEALTH&DISEASES " at vizag | 2Day | 27/12/2014 to 28/12/2014 |
| 235 | G.V.Subbhash | Attended a 5-Day workshop on "Additive/Generative Manufacturing Technologies " at IIT,Hyderabad | 5Day | 01/12/2014 to05/12/2014 |
| 236 | J.T.V.SATISH | | | |

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|---|---|---|---|---|
| 237 | G.Durgaprasad | Attended a international conference on "Transmissions in Engineering Education" for paper presentation on "Simulation Based Teaching of Power Electronics "at BMS College, Bangalore. | 4Day | 05/01/2015 to 08/01/2015 |
| 238 | P.Kiransree, | | | |
| 239 | M.V.Ganeswara rao | | | |
| 240 | Mohan ram | | | |
| 241 | G.Ratnakanth | | | |
| 242 | P.R.S.S.V.Raju | | | |
| 243 | S.Veera babu | Attended a one-week training program on “Intensive Training Program on Solar PV based Power Generation Technologies” at BV RAJU Institute of engineering &Technology, Medak distic | One week | 27/01/2015 to 02/02/2015 |
| 244 | J.T.V.Satish | Attended 2-day faculty training program on "Fuel Injection Parts" at Bangalore | 2Day | 08/01/2015 to09/01/2015 |
| 245 | D.V.Sekhar | | | |
| 246 | S.Adinarayana | Attended International Conference "NCIC-2015"at Pondicherry College of Engineering, Pondicherry by S.Adinarayana | 3Day | 29/01/2015 to31/01/2015 |

**4.3.2.3 Outcome of the present Training**

Training programmes in the respective domain will certainly the knowledge of the faculty members who have taken part and it may also be stepping stone to start doing their research projects inside the campus.

### 4.3.2.4 Strategic plan for improvement

1. To improve the institutional management capacity enhancement
2. To improve the level of heads and chairs of the institute in realizing modern standards of education and management
3. To strengthen the existing UG & PG courses
4. To get training in proposed new courses
5. To develop the research capabilities

**i) Tentative training plan for Chairs/Principal/HODs:**

| S.No. | Department / Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| 1 | Chairs/ Principal / HODs / and Administration Staff | Developing a Culture of Evaluation and support for Faculty Success | Chairs & Heads | 1 | Dec 2015 | IIT/NIT |
| 2 | | MS-Office Custom Workshop | Office Staff | 5 | May 2015 | IIT/NIT |
| 3 | | 19th Annual Administrative Professionals Conference | Office /Administration staff | 4 | October 2015 | IIT/NIT |
| 4 | | Diversity Management in Organizations | Principal/ Administration Staff | 1 | Sep 2015 | IIT/NIT |
| 5 | | Effective Skills for office administration | Principal/ AO/HODs | 2 | April 2015 | IIT/NIT |
| 6 | | Strategic Management Society Research Workshop | Office Administrators | 3 | March 2015 | IIT/NIT |

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|---|---|---|---|---|---|---|
| 7 | | Stress Management | Administration staff /HODS | 7 | October 2015 | IIT/NIT |

**ii) Tentative training plan for faculty members in subject domain:**

| S.NO | Names of staff members | Areas of training/ development | Duration (Days) | Trainer Organizations |
|---|---|---|---|---|
| 1 | K.N.V. Satya Naresh | Cloud computing | 4 | - |
| | | Web technology | 2 | - |
| 2 | K. Pavan Raju | Network Security | 5 | CISCO |
| 3 | P.J.R. Shalem Raju | Computer graphics | 7 | IIT/NIT |
| 4 | A.Seenu | Neural networks | 7 | IBM |
| | | Artificial Intelligence | 5 | UO Hyderabad |
| | | Speech recognition | 7 | C-DAC |
| | | Network Security | 5 | CISCO |
| 5 | P.R.Sudha Rani | Guidance for research | 2 | IIT |
| | | Speech recognition | 2 | IIT or NIT |
| | | Voice recognition | 2 | IIT or NIT |
| | | Speech synthesis | 2 | IIT or NIT |
| | | Speech communication | 2 | IIT or NIT |
| 6 | K.Ramesh | Data Mining | 7 | IIT or NIT |
| | | Information Retrieval system | 7 | IIT or NIT |
| | | Image processing | 7 | IIT or NIT |
| 7 | K.V.Narayana Rao | Data Mining | 7 | IIT |
| | | Java | 7 | ORACLE |

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|---|---|---|---|---|
| | | .Net | 7 | Microsoft |
| 8 | Y.Ramu | Data mining | 7 | IIT |
| | | Cloud computing | 10-15 | VNRVJ,HYd |
| | | Pedagogy Skills | 7 | IIT |
| | | Managerial skills | 3-4 | IIM |
| 9 | T.Gayatri | Workshops | - | IIT |
| 10 | M.S.Sudheer | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 11 | R.Anuj | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 12 | G.Mohan Ram | Machine learning | 3 | IIT |
| | | Software technology and theoretical computer science | 5 | IIT |
| 13 | D.N.S.B.Kavitha | Cloud computing | 3 | - |
| | | Computer networks | 3 | - |
| | | UNIX & LINUX | 4 | - |
| 14 | M.Narasimha Raju | Programming | 10 | IIT |
| | | Network Security | 6 | IIT |
| | | Data mining | 6 | IIT |
| 15 | V. Purushotam Raju | MAT lab | 6 | Math works |
| | | Java | 6 | ORACLE |

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|---|---|---|---|---|
| 16 | Ch.Vijaya Krishna | MAT lab | 5 | - |
| | | Data mining | 5 | IIT |
| | | Safety data analysis | 4 | IIT |
| 17 | G.Vani jayasri | Artificial intelligance | 2 | - |
| | | LINUX | 3 | - |
| 18 | P. Raju | Network security | - | - |
| | | Data warehousing & Data Mining | 4 | IIT |
| 19 | G.V.S.S.P.Raju | Data Mining | 4 | IIT |
| | | Network security | - | - |
| | | Cloud computing | - | - |
| | | Newral networks | - | - |
| 20 | Ch. Samba Siva Rao | Data mining | 5 | Any reputed Organization |
| | | Cryptography | 5 | Any reputed Organization |
| 21 | Dr. K Pushpa | Wireless Communication | 5 days | |
| 22 | S Hanumanta Rao | Antenna design and simulation | 5 days | FEKO |
| 23 | V Srinivasa Rao | VLSI and Image processing | 15 days | |
| 24 | K Murthy Raju | Computer Networks | 5 days | |
| 25 | M Prema Kumar | Image Processing | 5 days | |
| 26 | Dr. M. Sudheer | Image Processing | 5 days | |
| 27 | M Pradeep | Image processing | 5days | Mathworks and any IIT |

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|---|---|---|---|---|
| 28 | K Padmavasavi | Image processing | 4 days | |
| 29 | M V Ganswara Rao | Image Processing, Embedded systems | 7 days | |
| 30 | S. Ravi Kumar | Speech Signal Processing | 5 days | IITS |
| 31 | P Ravi Kumar | Wireless communication | 5 days | |
| 32 | V Vijaya kumar Raju | Image processing | 7 days | Taxas instruments |
| 33 | G kishor Kumar | Bio medical Image Processing | 4 | IITS |
| 34 | R Sushmitha | DSP Processors | 5 days | |
| 35 | R Viswanadham | Embedded systems | 5 days | |
| 36 | M Padmanabha Raju | Digital Signal Processing | 5 days | |
| 37 | D V Rama Krushna | Image Processing & communications | 6 days | |
| 38 | Padmanabha Raju | Digital Image ProcessignI | 5 days | |
| 39 | K S N Raju | MATLAB | 5 days | |
| 40 | E R Praveen | MATLAB | 5 days | |
| 41 | P.Venkata Rama Raju | Data Mining Tools | 5 | |
| 42 | S.Sreenivasu | Research Methodologies | 2 | |
| 43 | S. Adi Narayana | Advanced Topics in Network Security | 2 | |
| | | Data Mining Tools<br>Statistical Workshop | 5<br>3 | |
| 44 | P.Syamala Rao | Cloud Computing | 3 | Any Reputed Organization |
| 45 | Dr. D.V. Naga Raju | Cloud Computing | 3 | Any Reputed Organization |

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|---|---|---|---|---|
| 46 | G.Ratnakanth | Cloud Computing | 3 | Any Reputed Organization |
| 47 | S.Ravi Kumar | Cloud Computing | 5 | Any Reputed Organization |
| 48 | S.Ravi Chandra | Web Application | 5 | Any Reputed Organization |
| | | Advanced Topics in Network Security | 2 | |
| 49 | B.Venkatesh | Research Methodologies<br><br>Data Mining Tools<br><br>Web Application | 2<br><br>5<br><br>5 | Any Reputed Organization |
| 50 | A.Mohan | Image Processing | 2 | |
| 51 | T.Madhavi | Cyber Security<br>Image Processing<br>Social Networking<br>Parallel Computing | 2<br>3<br>2<br>4 | Any Reputed Organization |
| | | Wireless Networks<br>Data Mining Tools<br>Network Security<br>Open Source Softwares<br>Advanced Technologies<br>Cloud Computing | 2<br>2<br>2<br>2<br>2<br>2 | |
| 52 | V. Pavan Kumar | Architectural Frameworks | 5 | Any Reputed Organization |
| | | Cryptography | 5 | Any reputed Organization |
| 53 | M.Gowtham | Cloud Computing | 5 | Any Reputed Organization |
| 54 | P.R.S.S.V.Raju | Web Application | 5 | Any Reputed Organization |
| | | Web Application | 5 | Any Reputed Organization |
| 55 | K.Ramu | Cryptography | 5 | Any reputed Organization |
| | | Advanced Topics in Network | 2 | |

| | | | | |
|---|---|---|---|---|
| 56 | G.Devi Priya | Security | | |
| | | Image Processing<br>Parallel Computing | 3<br>4 | Any Reputed Organization |
| 57 | V.Leela Prasad | | | |
| | | Data Mining Tools<br>Network Security<br>Recent Trends in IT | 4<br>3<br>5 | Any Reputed Organization |
| 58 | G.Tej Varma | Image Processing | 2 | |
| 59 | Mr. P. Srihari Raju | 1) Faculty Development<br>2) Proficiency in English<br>3) Communication about in English | 2<br>3<br>3 | EFLU<br>EFLU<br>EFLU |

**4.3.2.5 Projected outcome**

- Faculty members will be focused towards Attended such programmes as they have financial help towards that and it fine tune their skills in in-house R&D projects. Students will also be benefited from this.
- Teaching / Inter and Intra personal skills of the all the faculty members will be improved once they go through such training and workshop programmes and that will be reflected in the students mind also which is simultaneously going to improve the understanding standards of them and others as well.
- It is also an effective way for the staff and administrators to get exposure to such workshops in premier institutions.

**4.3.3 Training in Pedagogical Skills**

**4.3.3.1 Background**

Teaching is an art that too teaching technical subjects to the students over a course will be really difficult. So that's why we have identified interesting teaching methods that would make both teaching and learning process more interesting and enjoyable. Programs such as Wipro Mission10X, NITTTRs and IUCEE Workshops on engineering pedagogy have been arranged in the past and will be continued in the future also.

**4.3.3.2 System in practice**

Before the commencement of every academic year i.e. during June our institutes use to have a workshop for all faculty members from NITTTR school especially to improve the teaching skills of all dept faculty. Wipro mission10x workshops also conducted in every year for selected band of faculty members.

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| **1** | Pedagogical Training | Development of Competency Based Curriculum in Technical Courses | M.v.Ganeswara rao | 5 | Oct 2013 | NITTTR, Chandigarh |
| **2** | Pedagogical Training | Developing Innovation & Creativity in Teachers | M.Narasimha Raju | 5 | Nov 2013 | NITTTR, Chandigarh |
| **3** | Pedagogical Training | Developing Innovation & Creativity in Teachers | Y.Ramu | 5 | Dec 2014 | ECSI,Hydearbad |

**4.3.3.3 Outcome of the present training**

Faculty student relationship can improve a lot better as the students are experiencing a different teaching methodology due to the training programmes.

**4.3.3.4 Strategic plan for improvement**

1) To improve the teaching abilities of faculty
2) To enhance interaction between members of the teaching community
3) To understand the problems of students and develop effective teaching.

| S.No | Department or Section | Area of training/ development | Name of suitable staff member for training/ development | Duration (Days) | Tentative date of training/ development programme | Trainer organization |
|---|---|---|---|---|---|---|
| **1** | Pedagogical Training | Development of Competency Based Curriculum in Technical Courses | ALL Dept. Faculty | 2 | May 2015 | NITTTR, Chandigarh |
| **2** | Pedagogical Training | Developing Innovation & Creativity in Teachers | ALL Dept. Faculty | 5 | Aug 2015 | ESCI,Hyderabad |

**4.3.3.5 Projected outcome**

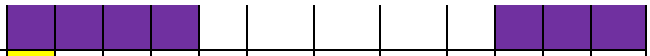
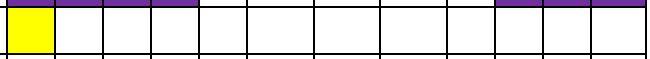
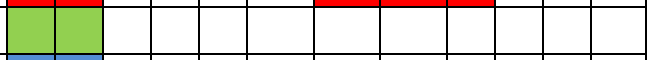
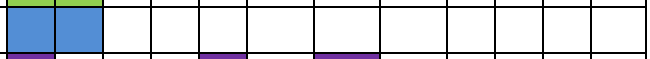
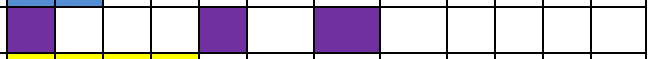
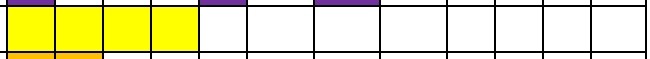
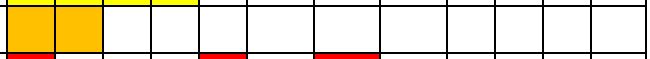
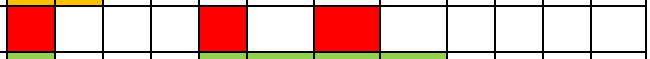
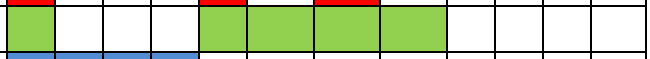
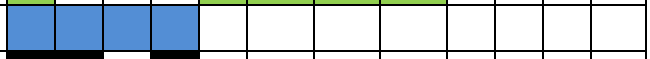
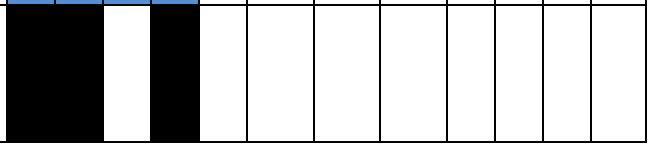
Teaching / Inter and Intra personal skills of the all the faculty members will be improved once they go through such training and workshop programmes and that will be reflected in the students mind also which is simultaneously going to improve the understanding standards of them and others as well. Students will be more inclined towards projects and research work as they get more experience.

**4.3.4 Resource & Financial Requirements: It is provided in section 4.4**

**4.3.5 Activity Schedule**

Refer the following chart for activity schedule

| S. No | Activity | Sub activities | Number of Months (from May 2015 to April 2016) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Description | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 |
| 1 | Training | For Principal / HODs | | | | | | | | | | | | |
| | | For Administrative Staff | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| 2 | Training for Technical /Supporting Staff | CSE |  |
| | | ECE |  |
| | | EEE |  |
| | | IT |  |
| | | ME & CE |  |
| | | BS |  |
| 3 | Training for faculty in subject domain | CSE |  |
| | | ECE |  |
| | | EEE |  |
| | | IT |  |
| | | ME & CE |  |
| | | BS |  |
| 4 | Training for faculty in pedagogic skills | Common for all Dept |  |

### 4.3.6 Beneficiaries

Possible list of people getting benefited from this programme

i. Faculty of our institute
j. Administrative and Technical staff
k. Obviously student community
l. Research component of the institute will certainly get lot of improvements due to this
**m.** Industry and entrepreneurs of the society

### 4.3.7 Preparedness

To identify the problems and to fix them in the best possible way by involving all stake holders

| SNo | Description of activity | Brief description of preparations made for implementation |
|---|---|---|
| 1 | Training for Principal /HODs/Adminis | Training and workshops for top management team is very important and necessary as it would bring awareness about modern trends and happenings |

| | | |
|---|---|---|
| | trative<br><br>And office staff | <br><br>By getting trained in the concerned filed they would be having more confidence while dealing such work in the future |
| 2 | Training for Faculty | Training needs of faculty and staff are identified and the tentative plan to attend to those all finalized.<br><br>Wipro Mission10x, IUCEE ,ATL workshops are conducted once in a while. |
| 3 | Training for Technical and Supporting staff | As they are the backbones of transferring technology in the practical shape to the students their training needs also identified and scheduled for the next academic year |
| 4 | Training for Faculty in Pedagogical skills | Teaching technical subjects in an interesting manner will be exposed to the teaching community to attract the thought process of all students as well as improve their own skill levels<br><br>Institutes such as NITTTRs offering workshops and trainings. We provide such workshop in every academic year commencement |

**4.3.8 Sustainability**

This activity is about improving the technical, teaching, management skills for all stake holders so it would not generate any recurring cost. Teaching skills of all the faculty members as well their interest towards R&D work will be gradually improving mean while it upgrades the standard of the institution also. By encouraging more no of faculty members to take part in such training programmes we can make them feel satisfied, comfortable, and efficient in their respective subject domain.

**4.4 Resource & Financial Requirements**

**Point 1 : Infrastructure improvements for teaching, training and learning through the following activities:**

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Infrastructure improvements for teaching, training and learning through | | | | |
| | i | Modernization and strengthening of laboratories * | 10.00 | 5.00 | 5.00 |
| | ii | Establishment of new laboratories for existing UG and PG programmes and for new PG programmes | 100.00 | 50.00 | 50.00 |
| | iii | Modernization of Classrooms * | 12.00 | 8.00 | 4.00 |
| | iv | Updation of learning Resources | 4.00 | 2.50 | 1.50 |
| | v | Procurement of furniture | 10.00 | 5.00 | 5.00 |
| | vi | Establishment / Up gradation of central and departments * | 5.00 | 3.00 | 2.00 |
| | vii | Modernization / improvements of supporting departments * | 3.00 | 2.00 | 1.00 |
| | viii | Modernization and strengthening of libraries and increasing access to knowledge resources | 15.00 | 8.00 | 7.00 |
| | ix | Refurbishment (Minor Civil Works) * | 4.00 | 2.00 | 2.00 |
| 2 | Providing teaching and research assistantships to increase enrolment in existing and new PG programmes in engineering disciplines | | 44.40 | 30.00 | 14.40 |
| 3 | Enhancement of R &D and institutional Consultancy Activities * | | 5.0 | 3.50 | 1.50 |
| 4 | Faculty and Staff Development (Including Faculty qualification up gradation, pedagogical training, and organizing / participation of faculty in workshops, seminars and conferences) for improved competence based on TNA | | 106.30 | 73.60 | 32.70 |

| | | | | |
|---|---|---|---|---|
| 5 | Enhanced interaction with Industry | 25.00 | 17.00 | 8.0 |
| 6 | Institutional management capacity enhancement | 14.00 | 9.50 | 4.50 |
| 7 | Implementation of Institutional reforms | 23.00 | 18.50 | 4.50 |
| 8 | Academic support for weak students under the aegis of finishing school | 11.50 | 7.00 | 4.50 |
| 9 | Technical assistance for procurement and academic activities | 40.00 | 40.00 | - |
| 10 | Incremental Operating Cost | 25.00 | 17.50 | 7.50 |
| ****Total** | | 432.20 | 277.1 | 155.10 |

* Not applicable for private unaided institutions

****** Total Institutional Project Budget – **432.20** Lakhs

Fund utilization from TEQIP – **269.3** Lakhs

Fund utilization from IRG & Trust - **262.9** Lakhs

**Point 1 – i) Modernization and strengthening of laboratories**

| S.No | Financial Year | Restructuring of Departmental Laboratories | Renovation of Workshops | Renovation of Computer Labs | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 1 | 1 | 1 | **3** |
| 2 | 2016-17 | 1 | 1 | 1 | **3** |

**Point 1 – iii) Modernization of Classrooms**

| S.No | Financial Year | No of Class rooms | Cost of Projector & other Accessories | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 1 | 100000 | **100000** |
| 2 | 2016-17 | 1 | 100000 | **100000** |

**Point 1- iv) Updating of learning Resources**

| S.No | Financial Year | IUCEE learning Material | QEEE | Multimedia learning ware | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 200000 | 200000 | 200000 | **600000** |
| 2 | 2016-17 | 200000 | 200000 | 200000 | **600000** |

**Point 1 – v) Procurement of furniture**

| S.No | Financial Year | No of Labs | Cost of Furniture | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 1 | 150000 | **150000** |
| 2 | 2016-17 | 1 | 150000 | **150000** |

**Point 1 : vi) Up gradation of central and departmental Computer Centers**

| S.No | Financial Year | No of Systems to be upgraded | Unit Cost | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 20 | 20000 | **400000** |
| 2 | 2016-17 | 20 | 20000 | **400000** |

**Point 1 : viii) Part – 1 :Modernization and strengthening of libraries and increasing access to knowledge resources**

| S.No | Financial Year | No of Volumes | Unit Cost | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 100 | 800 | **80000** |
| 2 | 2016-17 | 100 | 1000 | **100000** |

**Point 1 : viii) Part – 2: Modernization and strengthening of libraries and increasing access to knowledge resources**

| S.No | Financial Year | Cost of Printed Journals | Cost of E-Journals | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 2.5 | 22 | **24.5** |
| 2 | 2016-17 | 2.5 | 22 | **24.5** |

**Point-2 : Part –a) :: Teaching & Research Assistantship (Non GATE)**

| S.No | Activity | Project Life Allocation Rs.Lakhs | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Teaching Assistantship | **39.00** | 30.00 | 14.4 |

| | | | | | |
|---|---|---|---|---|---|
| 2 | Incremental Operating Cost | Training Materials & Consumables | **2.00** | 1.50 | 0.50 |
| ***Total** | | | **41.00** | **31.50** | **14.90** |

* Total Budget allocated **41.0** Lakhs
Fund utilization from TEQIP -a) Teaching & Research Assistantship- **39.00** Lakhs
b) From Incremental Operating Cost - **2.0** Lakhs
Fund utilization from IRG & Trust - **Nil**

**Point-2 : Part – B) :: Teaching Assistantship for Non GATE qualified PG (Existing & New) Students**

| S.No | Financial Year | No of Students | Amount | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 19 | 30.0 | 50.00 |
| 2 | 2016-17 | 20 | 14.4 | 64.40 |

**Point - 9. Technical assistance (TA) for procurement and academic activities**

| S.No | Financial Year | TA for Equipment Establishment | TA for Pedagogical Training | TA for Mentoring | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | -- | 8 | | |
| 2 | 2016-17 | -- | 6.5 | | |

**Point 4 – Part – A) :: Faculty & Staff Development**

| S.No | Activity | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Laks (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Faculty Quality Upgradation | **2.40** | 1.80 | 0.60 |
| 2 | Subject Knowledge & Research Computence | **4.00** | 2.50 | 1.50 |

| | | | | |
|---|---|---|---|---|
| | upgradation | | | |
| 3 | Pedagogical Training | **14.50** | 10.00 | 4.50 |
| 4 | Training Technical Staff | **4.00** | 2.80 | 1.20 |
| 5 | Expenditure for participation in workshops & Seminars | **7.40** | 5.00 | 2.40 |
| ***Total** | | **32.30** | **22.10** | **10.20** |

* Total Budget Allocated – **32.30** Lakhs
Fund utilization from TEQIP – **32.30** Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point 4 – Part – B-1) ::Faculty Quality Up gradation**

| S.No | Financial Year | No of Faculty | Course Fees | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 9 | 1.80 | |
| 2 | 2016-17 | 3 | 0.60 | |

**Point 4 – Part – B-2) :: Subject Knowledge & Research Competence up gradation**

| S.No | Financial Year | No of Faculty | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 50 | 2 | 10000 | 500000 |
| 2 | 2016-17 | 50 | 2 | 10000 | 500000 |

**Point 4 – Part – B-3) :: Pedagogical Training**

| S.No | Financial Year | No of Faculty | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 50 | 10 | 2000 | 10.00 |
| 2 | 2016-17 | 45 | 05 | 2000 | 4.50 |

**Point 4 – Part – B-4) :: Training Technical Staff**

| S.No | Financial Year | No of Staff | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 25 | 2 | 2000 | 100,000 |
| 2 | 2016-17 | 25 | 2 | 2000 | 100,000 |

**Point – 6- Part-A):: Institutional Management Capacity Enhancement**

| S.No | Activity | Project Life Allocation | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Training of Institutional Officials Senior Faculty | 14.00 | 9.50 | 4.50 |
| | ***Total** | **14.00** | **9.50** | **4.50** |

* Total Budget allocated - **14**Lakhs
Fund utilization from TEQIP -**14**Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point – 6- Part-B-1):: Training of Institutional Officials Senior Faculty**

| S.No | Financial Year | Frequency of Training | No of Persons | Course Fee & Expenditure | Total | Trainer Fee & Overheads | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2015-16 | 08 | 14 | 5000 | 70000 | 10000 | 9.50 |
| 2 | 2016-17 | 04 | 08 | 5000 | 40000 | 10000 | 4.50 |

**Point – 6- Part-B-2) :: Orientation of BOG Members**

| S.No | Financial Year | Frequency of Meeting | Expenditure | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 2 | 50000 | 100,000 |
| 2 | 2016-17 | 2 | 50000 | 100,000 |

**Point – 6- Part-B-2) :: Study Tours**

| S.No | Financial Year | Frequency of Tours | No of Persons | Expenditure | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 1 | 5 | 10000 | 50,000 |
| 2 | 2016-17 | 1 | 5 | 10000 | 50,000 |

**Point -8 : Part – A) Academic support for weak students under the aegis of finishing School**

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Laks (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Bridge Courses | | 3.00 | 1.50 | 1.50 |
| 2 | Remedial Teaching | | 3.00 | 2.00 | 1.00 |
| 3 | Soft Components Training | | 2.75 | 2.50 | 0.25 |
| 4 | Incremental Operating Cost | Training Materials & Consumables | 2.75 | 2.50 | 0.25 |
| **Total *** | | | **11.50** | **8.50** | **3.00** |

* Total Budget allocated **11.50** Lakhs
Fund utilization from TEQIP - **11.50** Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point – 8 Part-B- 1) Budget Allocation for Bridge Courses**

| S.No | Financial Year | No of Hours | No of Subjects | Honorarium per Hour | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 20 | 5 | 500 | 150,000 |
| 2 | 2016-17 | 20 | 5 | 500 | 150,000 |

**Point – 8 Part-B- 2) Remedial Teaching**

| S.No | Financial Year | No of Hours | No of Subjects | Honorarium per Hour | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 34 | 20 | 500 | 200000 |
| 2 | 2016-17 | 25 | 15 | 500 | 100000 |

**Point – 8 Part-B- 3) Soft Components Training**

| S.No | Financial Year | No of Hours | No of Persons | Honorarium per Hour | Total | TA & DA to Experts |
|---|---|---|---|---|---|---|
| 1 | 2015-16 | 40 | 3 | 1000 | 250000 | 20000 |
| 2 | 2016-17 | 10 | 3 | 1000 | 25000 | 20000 |

## Section – 5: Action Plan for Institutional Reforms

Four main activities are considered in the area of institutional reforms:

- Structural Reforms
- Organizational Development
- Promotion of Women and Socio-economically backward groups
- Support & Development of **Differently-abled people**

Each one of these is described below in the format followed in the earlier sections.

### 5.1 Structural Reforms

**Introduction:** Among the major obstacles to improve quality of technical education, as recognized by all the assessments of the technical education system in India, are the multiple control mechanisms and controlling regulations that stifle innovative initiatives in recruitment of faculty, admission of students, revision of curricula and responsible financial management.

The traditional recruitment and promotional policies make it very difficult to attract and retain high quality faculty, to provide incentives for quality performance, and to adopt effective staff performance evaluation and development policies.

It is recognized that to bring improvement in quality of education requires a congenial environment to bring in changes in policies and also a provision to get required support and encouragement for institutions to reach academic excellence.

To achieve the institutional objectives, the restrictions imposed by external agencies shall be restricted to induct the operational freedom to improve the quality of technical education and administrative efficiency. It also increases institution's capacity to meet the global standards to survive in the competitive world.

#### 5.1.1 Autonomy:

SVECW has granted Autonomous Status by UGC.

#### Management of Examinations

At present, the evaluation system is limited to a mid-term and a final examination in each semester. As mentioned above, with full academic autonomy, all academic matters of the Institute will be handled by Board of Academics, operating from the same campus. This will

gear up matters related to student evaluation and provide room for flexibility and innovation in the system of evaluation.

SVECW proposes to make the examination system creative by introducing continuous assessment processes and taking corrective measures throughout the semester.

The examination system will be managed by an examination committee consisting of the senior faculty members and outside academic experts to monitor the examination system of the Institute.

Efforts will be made to finalize and declare the results through the internal network and the internet. Appropriate software applications are already available in the institution which was developed by our students as in-house projects. This will maintain a high level of confidentiality and speed up the whole process. It will also feed into the institute's information system, so that analysis of performance and corrective measures can be taken.

**Managerial Autonomy**

Managerial autonomy implies evolving a clear system of institutional governance and nurturing the development of strong responsive linkages of the institution to its main stakeholders as described below.

**Increased Responsiveness**

Several initiatives will be taken to reinforce the Institute's external linkages and make it more responsive to its constituency, mainly the industry, the alumni and the students. These include the following:

- A separate cell (like a I-I-I-Cell) will be established to have greater and better interaction with the industry; in the form of identifying their needs and suggesting solutions, looking after IPR issues, and patenting innovations.
- The Alumni Association will be activated to help the Institute in many ways, such as resource mobilization, academic suggestions, students' development, employment of students and extension activities.
- Existing placement cell functionalities can be enhanced.
- Remedial courses will be arranged for weak students and they will be provided with a flexible pattern of curriculum.

- Existing ERP cell can extend its scope with the autonomy.

All actions of the principal in connection with continuing education programmes, faculty consultancy, faculty development programmes, Industrial consultancy, and organization of seminars and conferences of SVECW are reported to the BoG.

**Financial Autonomy**

SVECW is engaging in the path of autonomy with the understanding and assurance of a continued supportive and positive role played by the University and the Government, which is essential for creating the right conditions for autonomy to yield its fruits and achieve and sustain excellence in teaching and research.

#### 5.1.1.4.1 Government Financial Support and Sources of Funding

All financial projections and all activities proposed in this document are based on the assumption that the entire grant will come from Government, with no reduction, and that this grant will come in the form of a Block Grant.

With such an assurance, SVECW is confident in its capacity to generate all recurring expenditures through student fees, consultancies, overheads on research projects, interest earned on endowments, etc., provided that the freedom to raise fees within some agreed upon limits is also granted under the autonomy arrangements. SVECW has already demonstrated its capacity to do so at current operating levels. This capacity can progressively be increased through well-conceived financial targets and cost-reduction measures.

An effort will be made to generate additional student fees through an increased number of NRI increase the level of donations from alumni, through better public relations and their greater involvement in the life and governance of the Institute.

#### 5.1.1.4.2 Cost-Reduction Measures

These will involve cost-reduction measures through computerization, hiring some specialized

services, avoiding duplication increased recycling and various energy saving and cost-cutting measures.

**5.1.1.4.3 Endowment funds**

SVECW will operate all four of the Funds required under TEQIP Phase-II, namely a Corpus Fund, a Maintenance Fund, a Renewable/Depreciation Fund and a Staff Development Fund. The fund attainment process is underway.

For day to day functioning adequate financial powers to the Principal and other functionaries are to be delegated by the BoG. The suggested minimum financial powers to be delegated are as under:

- Principal of SVECW -- Rs. 50.00 lakh for single purchase order
- Head of the Department or equivalent -- Rs.1.00 lakh for single purchase order
- All single item expenditure above Rs. 50.00 lakh will need to be approved by the BoG. Similarly, all single item expenditure above Rs.1.00 lakh by a Head of the Department will need approval from the Principal.

**5.1.2 Accreditation:**

- NAAC Peer Team visited the College during 27$^{th}$ to 29$^{th}$ April 2015 and result is awaited.
- All the eligible undergraduate courses at SVECW are accredited by NBA for five years in 2008 portraying the strength of the departments to meet the quality benchmarks given by NBA. Visit of NBA Expert Committee for renewal of accreditation is scheduled from 15$^{th}$ to 17$^{th}$ May 2015.
- All the staff are fully competent and dedicated with clear vision and working towards the institutional mission.
- The Institution developed monitoring procedures and performance indices to maintain the quality continuously.

**5.1.3 Academic & Non-academic reforms**

Academic reforms include:

- Curricular reforms
- Evaluation procedures
- Performance appraisal
- Faculty quality improvement
- Accreditation.

Plan for accreditation is already discussed in section 5.1.3.

Non-academic reforms include :

- Autonomy
- Establishment of funds
- Revenue generation through a variety of activities
- Filling up vacancies
- Delegation of decision making powers
- Academic support to weak students.

Strategic plans to achieve the above-said reforms are clearly given below.

**5.1.3.1 Strategic plan for curricular reforms**

The following curricular reforms are being planned to get exercised once the autonomous status is obtained and the same is under process:

- Innovations in teaching and students evaluation methodologies
- Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking and leadership skills
- Problem solving projects from industry
- Elective courses
- Extensive use of media
- Invited expert lectures from industry and field
- Visit to training in industry and
- Multi-level and multi-background background entry credit exemptions

**5.1.3.2 Improved students' performance evaluation**

Partly fulfilled by the existing partial autonomy and fully effective once autonomy is obtained. The action plan for the Improving student's performance should involve both formative and summative evaluation for marked improvement.

- Internal examinations, though not present in the university evaluation pattern, are conducted with a proper schedule twice in the middle of the semester to assess the student reflecting the faculty performance as well.
- Marks are disclosed to the students and are suitably counseled for their performance enhancement.
- Remedial classes are conducted for the weak students; special counseling is given to them and are closely monitored by the facilitators.
- Currently self assessment is done by the faculty on a yearly basis and planned to be more frequent viz., at the beginning, middle and end of each semester.

**5.1.3.3 Performance appraisal of faculty by students**

Faculty is given the motivation for a regular self-assessment to meet the needs and expectations of students. Subsequently the performance is monitored by taking feedback from students at the end of every semester in standard format with important teaching parameters viz. use of teaching aids, development of course file, accessibility of faculty, summary, syllabus covered, beyond syllabus efforts , types of tests given etc.
However a more frequent feedback is planned. Confidentiality of the feedback is maintained by sharing it only to the head of the department who in turn can appoint a senior faculty to counsel and help the faculty member to achieve the individual as well as the organizational objectives. The subsequent performance is monitored and shared with him on a regular basis.

**5.1.3.4 Faculty incentives for continuing education**

Academic and career progression needs of the faculty are collected the management in the Training Need Analysis explained in section 4.3. Faculty once joined the organization are given initial orientation programme by experienced faculty in terms of student needs, teaching methodologies etc..

Management gives faculty the opportunity of attending conferences, workshops, seminars, etc., activities like consultancy etc. by providing allowances.

Self evaluation of the finished semester and plan for various activities, goals, objectives during each year coupled with peer evaluation for various levels of faculty members done at SVECW help in systematic assessment of faculty teaching commitments and his/her expected involvement in administration, Continuing Education, network activities, etc.

**5.1.3.5 Accreditation of UG&PG programmes**

Accreditation status is explained in section 5.1.2

**5.1.3.6 Exercise of autonomy**

Practicing Autonomy.

**5.1.3.7 Generation, retention and utilization of revenue generated through a variety of activities**

SVECW, in collaboration with IDEA LABS and Anjani Portland Cements Ltd. does
Industrial projects. The Assistive Technology lab developed tools for differently-abled people as explained in the section 5.4 generate income for SVECW. Sponsored project funds are planned to be used for personal academic research and travel for attending conferences as per rules of the sponsoring organization.

**5.1.3.8 Establishments of funds**

SVECW is planning to establish the following funds: Corpus Fund, Staff Development Fund, Depreciation/Renewable Fund and Maintenance Fund.

**5.1.3.9 Procedure for filling up Faculty Vacancies**

Currently a committee of Academic experts, management with the approval from the BoG recruits staff members by selection process including test/ interview. The appointment is further ratified by the university. This can be improvised and explained in administrative autonomy i.e. section 5.1.1.3. The current faculty to student ratio is as recommended by AICTE i.e. 1:15. and planned to be increased to 1:12 for UG programmes.

**5.1.3.10 Delegation of decision making powers to senior institutional functionaries with accountability**

HODs have responsibilities including:

- Overseeing smooth conduction of regular and remedial classes.

- Deputing faculty for trainings, workshops, seminars etc.
- Delegating weak students to counselors.
- Allocation of academic and non academic responsibilities to the staff members.
- Encouraging R & D activities among faculty members.

**5.1.3.11 Academic support for weak students**

It is clearly explained in section 4.1.3 to identify weak students and taking the suitable measures to bring them up on par with the other students. The equity plan is also clearly discussed.

**5.1.11 Resource Requirements**

All resources required for this activity will be supported from the Institute's general fund, as they are ongoing activities.

**5.1.12 Projected Outcome**

The projected and main expected outcome is successful implementation of **the autonomous status.**

Streamlining all the documents and processes related to autonomy will also remove the current uncertainties and uneasiness in the staff and provide the required organizational and financial clarity. This clarity, coupled with a new sense of ownership, will spur all staff on to higher levels of performance because there will now be more incentive to take responsibility. With autonomy comes greater responsibility and accountability and this will have a beneficial impact on the whole Institute in terms of staff commitment, involvement and willingness to take risks and assume increased responsibility.

It will also create the required environment for the implementation of all the organizational development activities described in Section 5.2 below. These processes will be difficult to implement in the absence of such a policy framework and institutional environment.

## 5.2 Organizational Development

### 5.2.1 Introduction

In the multi-dimensional excellence, SVECW has achieved a certain level of academic excellence.

With the advent of globalization, the increased interactions with multi-national firms and the opening up of the Indian economy to the scrutiny of the international community, the inherent weaknesses in traditional Indian forms of management and administrative and institutional patterns are increasingly being exposed. Businesses and institutions all over India are therefore making new efforts to assess and improve their management systems and procedures. There is growing interest in meeting the standards of various forms of institutional certification and a greater boom in educational institutions and organizations dedicated to management improvement. It is therefore imperative that lead educational institutions take an honest and critical look at their institutional culture and their management and administrative systems and procedures, and make them conform to global standards of good institutional performance.

SVECW has received the IMC Ramakrishna Bajaj National Quality Award, which has highlighted the quality of its leadership and of its results. Moreover, SVECW has also bagged the Global Performance Award from Asia Pacific Quality Organization.

There are some stages in the life of an organization, as it grows and matures, where critical organizational transitions must be made to allow for the next stage of growth. SVECW currently finds itself in one of these stages. There are a large number of internal adjustments to its systems and procedures and to its organizational culture that SVECW must now affect.

### 5.2.3 Strategic plan for organizational development

SVECW's Vision of organizational excellence is one of a culture of efficiency, cooperation and teamwork, sustained by the smooth operation of a number of organizational processes. The design of TEQIP-II, with its focus on institutional development, offers SVECW the opportunity to engage fully in the path of achieving its organizational vision over the next few years.

It is imperative that this organizational development process proceeds vigorously and systematically under this project.

There are two main processes in organizational development:

- Achieving increased motivation, initiative, personal responsibility, cooperation and team work among the staff at all levels resulting in a positive change of behavior in them.
- Developing or refining institutional systems and procedures that will support individual efforts at performance.

These processes reinforce each other: 'Motivated people without system cannot channel their energies; an improved system with unmotivated users, is futile'.
The main sub-activities considered in the process of organizational development are therefore staff mobilization, training and the development of systems and procedures in the following areas:

- Planning and budgeting
- Information collection and utilization
- Staff recruitment, training and performance evaluation
- Procurement, maintenance and utilization of equipment
- Public relations and marketing

Each of these is described briefly below:

**5.2.3.1.1 Staff Mobilization and Training**

A high level of participation and motivation can be achieved among various groups of faculty, non-teaching staff and students. This process will continue with a series of workshops focusing on personal and collective growth in an organizational context.

**5.2.3.1.2 Planning and Budgeting**

Participation is an important factor in effective implementation of plans. Hence, systematic and participatory strategic and annual collective planning processes will be developed and implemented. The institution now has a clear set of institutional targets to achieve. A system of annual, quarterly and monthly planning and budgeting procedures will be established involving groups of staff at various levels.

**5.2.3.1.3 Information Collection and Utilization**

SVECW currently has a good system for tracking academic and research outputs. The current

level of utilization of internal information at SVECW needs great improvement. Standardization of the following is needed:

- System for collecting data for the annual report
- Student records and data
- Financial information

A great deal of effort must however be invested in developing and implementing the information systems that will allow the tracking and effective utilization of these indicators in decision making. In light of the level of effort required, a full-time Monitoring and Evaluation Officer is planned to be added under this project to manage all these. An information systems development consultancy will also be required here to assist SVECW in developing the appropriate systems and procedures.

**5.2.3.1.4 Staff recruitment, Training and Performance Evaluation**

Systematic procedures need to be implemented for recruitment of all types of staff such as

- Clear description of job responsibilities
- Orientation and training
- Developing a code of conduct
  Developing and implementing performance measures

All staff will participate in the development of performance criteria and these will become the criteria used for personal self-assessment and formal evaluation.
The dimensions of evaluation will include:

- Academic performance
- Classroom teaching
- Research performance
- Consultancy
- Involvement in the internal life of the organization
- Community service
- General role modeling for the students
- Extension activities

Once these performance measures are developed, all staff will use them periodically through the implementation of a system of self-assessment, peer assessment, and supervisor and

subordinate feedback. This will result in the development of personal improvement plans.

**5.2.3.1.5 Procurement, maintenance and utilization of equipment**

The system needs to be clarified and finalized for:

- Identification of needs
- Receipt
- Inventory control

Also a systematic maintenance, utilization and responsibility of common equipment and resources by various teams is needed and can be done internally through a committee.

**5.2.3.1.6 Public relations and marketing**

SVECW needs to involve itself in an image -building enhancement exercise which will be useful for attracting quality faculty and students as well as generating resources. This may involve the further development of

- SVECW website
- Promotion of the Institute in India and abroad
- Increased admission of students from other states of India
- Systematic utilization of the alumni network within India and internationally,
- Donations
- Public events
- Management of the relations with community and industry.

Various committees may be assigned some of the required tasks, and marketing and public relations consultancy is required.

**5.2.4 Resource Requirements**

The above description involves a large number of activities and processes that must be coordinated and managed. The level of effort here, as well as in all the other activities under this project, requires a dedicated group under an able project coordinator. The desired profile is a HOD of Computer Sciences background, with management and human resource development experience in the industry. The functions of the coordinator would be to ensure the successful implementation of all project activities and

to internally spearhead the organizational development process, with the assistance of outside expertise. This will also guarantee that focused attention will be given to achieving all project objectives and meet all the financial and narrative reporting requirements.

### 5.2.5 Projected outcome

This set of organizational development activities will have a tremendous impact on the life of the institution. Through it, new quality faculty and staff will be recruited, adding new blood to the institution and helping achieve all of its programmatic goals. It will relieve current faculty of some administrative duties which they handle currently to compensate for administrative deficiencies. It will increase the efficiency and effectiveness of the organization. It will provide better information for management, improve the quality of student intake through better public information, increase the possibilities of financial self-sufficiency through the generation of more income, and improve connections with industry alumni and communities.

But above all, it will create a permanent culture of organizational performance that will allow SVECW to face its future challenges.

## 5.3 Promotion of Women and Sociologically Backward Groups

### 5.3.1 Introduction

#### 5.3.1.1 Empowerment of Women:

Women Empowerment refers to increasing the spiritual, political, social or economic strength of Women. Empowerment is the one of the key factors in determining the success of development i.e., the status and position of women in the society. A special focus on empowering women and girls should be given, because they hold the key to long-lasting social change in communities.

Empowering women must be a unified approach, a cause that requires continued attention and stewardship by all. We need to augment our efforts for empowering women and enhance their progress. It is our moral, social and constitutional responsibility to ensure their progress by providing them with equal rights and opportunities.

Empowerment is the totality of the capabilities as below:

- Having decision-making power of their own.
- Having access to information and resources for taking proper decision.
- Having a range of options from which you can make choices (not just yes/no, either/or.)
- Ability to exercise assertiveness in collective decision making.
- Having positive thinking on the ability to make change
- Ability to learn skills for improving one's personal or group power.
- Ability to change others' perceptions by democratic means.
- Involving in the growth process and changes that is never ending and self-initiated.
- Increasing one's positive self-image and overcoming stigma.

Most of these capabilities can be achieved by providing women proper education.

**5.3.1.2 Sociologically Backward Groups:**

The Sociologically backward Groups viz., the Scheduled Castes (SCs), the Other Backward Classes (OBCs) and the Minorities continues to be on the priority list of country's developmental Agenda, as they still lag behind the rest of the society due to their social and economic backwardness.

**5.3.1.3 Social Responsibility of SVECW:**

One of SVECW's core values is social responsibility. The institute has therefore always made an effort to cater to the needs of women and of sociologically backward groups and admit students from all the states of the country on the all-India quota.

As SVECW is an Engineering College for Women, it promotes women to excel in technical fields by filling 100% seats by only girl students. And also, National and State reservation policy for sociologically backward groups is strictly in effect at SVECW.

Specific efforts for accommodating girls have been made, with the addition of a special ladies hostel, although the accommodation is still short of the requirements. Our current plan calls for increasing our capacity to accommodate women, is already implemented.

SVECW's experience is that here the performance is totally by women and it is committed to ensuring their full participation in its activities.

SVECW's strategic planning process has identified special efforts to understand the needs of these two groups and to develop special programs to cater to them as one of its main strategic directions.

**5.3.2 Proposed Sub-Activities:**

The sub-activities envisaged in this area include the following:

- Analysis of the requirements of women and Sociologically Backward Groups**:**
- SVECW will collaborate with a reputed institute to undertake a longitudinal survey of the needs and the performance of past students of SVECW in these two categories and understand the obstacles they face and the factors that affect their performance and their professional and life choices. This survey will also provide an opportunity of research for the institute and may include one or two more other technical institutions similar to SVECW so that some comparative analysis can be made. It therefore seeks to extend collaboration across technical institutions to solve common problems.
- Program Design**:** (Based on the findings of the above survey, SVECW will, in collaboration with its partners, develop appropriate policy responses and specific programs to meet the identified needs. These may include)
  - Special recruitment and admission procedures;
  - Adopting tailored remedial programs for weak students;
  - Offering flexible study and work options for women;
  - Special efforts to induce more female students in the post-graduate stream;
  - Special efforts to bring back some of the past students in the mainstream after unavoidable gap in their career by providing them incentives to join master /doctoral courses with the necessary flexibility;
  - Systematic Data Collection on Performance and Career **paths:** SVECW'**s** information system will be improved in order to capture required data automatically for current students and to record professional paths of a sample of students, through regular questionnaires.
  - Sensitization of Faculty and **Students:** This will include special sessions, talks, seminars on the issues and requirement of Tribal Development and the promotion of full participation of women in all spheres of life.
  - Focusing of Community Service **Activities:** Involving staff and students in this programme will have the effect of their better understanding the requirements of

such development as well as provide an opportunity to students belonging to special categories to excel in the service of their communities and derive from this an increased sense of purpose and identity. NSS students are actively participating in this activity.

**5.3.3 Resource Requirements:**

The main resource requirements in this activity are the cost of surveys and consultancies to help develop and evaluate appropriate programs.

**5.3.4 Projected Outcome:**

The expected outcomes of this activity include the following:

- Increased understanding of the issues faced by women and Sociologically Backward Groups in the technical education system
- Improved performance of Sociologically Backward Groups
- Increased participation of women in SVECW programmes
- Increased employment of women in SVECW
- Increased awareness of and sensitivity to national development goals by all staff and students

**5.4 Support & Development of Differently-abled People**

**5.4.1 Introduction**

Technology offers many different ways to help people with disabilities lead more normal lives. Devices that help them perform an activity are called Assistive Technology. Assistive technology can help people reach their personal and professional goals. The invention of the telephone might not have been very exciting to a deaf person. But it led to a way to send text messages over a phone line with the use of a teletypewriter.

Students don't develop significant learning nor important professional abilities if they only observe, listen and take notes from someone who explains them something. On the other hand, the applied approach of active learning helps students to develop creativity, innovation and other important professional skills. If students, without previous formal knowledge, are asked to solve the proposed challenge, they certainly get motivated to reach their goals and can get it on their own. For that, teachers must have social abilities to deal effectively in the world of human interactions, and to create stimulating contexts for

exploration and experimentation allowing students to develop their knowledge, abilities and professional attitudes.

**5.4.2 System in practice:**


Research Center, known as Assistive Technology Lab (ATL), is one of the unique features of Shri Vishnu Engineering College for Women. Each human life is unique, born of a miracle that reaches beyond laboratory science. Any discovery that touches upon human creation is not simply a matter of scientific inquiry. It is a matter of morality and spirituality as well. With this concept, our management has taken a step forward to add human touch to technical education. It is because of management's vision that an Assistive Technologies Lab has been established at Shri Vishnu Engineering College for Women (SVECW) in collaboration with University of Massachusetts, Lowell, USA. Prof. Alan Rux, HOD of the Assistive Technologies Lab, UMass Lowell, USA, visited SVECW twice and guided the students in developing gadgets for the disabled.

Things that are designed to help the disabled may also make life easier for people who are not disabled. The opposite is also true. Think of the millions of people who send and receive messages over cell phones and other wireless devices. This ability to communicate quickly by text messaging or e-mail is very useful. But imagine just how useful it can be to a person who is deaf. With this motivation, ATL at SVECW works for a very unique and a noble cause of designing projects by our students to benefit the **differently-abled**.

This is a small but definite step to mainstream people with disabilities into society. For example, let us consider the problem of visually challenged for walking on a road without hitting any obstruction and also enabling him to visit some important places. **I-Stick (Intelligent Stick)** using a low cost micro controller on-board, developed by students at ATL, helps in detecting the obstructions against the blind and also its E-Compass stores a maximum of 18 directions to identify different things**.**

**In Jin Kwon's words:**
"One piece of log creates a small fire, adequate to warm you up, add just a few more pieces to blast an immense bonfire, large enough to warm up your entire circle of friends, needless to say that individuality counts but team work dynamites".

This teamwork of faculty and students of ATL brought laurels to SVECW with the following achievements.

1. The following ATL projects were distributed to our clients on 3rd Dec, 2010, the International Day for Disabled People
    - E- Stick
    - Hand Gripper
    - Talking Box
    - Ball Insertion Pin ball Machine
    - Walking Track
    - Electrical Wheel Chair
2. The project "Adaptive Intelligent Stick for Visually Challenged" was one of the twelve short listed projects among fifty six entries all over Asia for Bio Asia YSR Innovation Award for the year 2011.
3. The project "An E-Compass and RFIDs Based Intelligent Module for Visually Challenged" won second runner-up prize of $ 6,500 in Texas Instruments Analog Design Contest 2010.
4. The project "An Intelligent Stick for Visually Challenged" has won the consolation prize in Imagine Cup 2010, which was conducted by Microsoft.
5. The project E-stick for Blind has won first prize in a national level project exhibition at GEC, Gudlavalleru.
6. The project "An Intelligent Stick for Visually Challenged" has been shortlisted for show casing the project at ITSAP-2010, organized by IIIT, Hyderabad.

### 5.4.3 Proposed Sub-Activities

The sub-activities envisaged in this area include the following:

1. Analysis of the requirements of differently-abled People:

2. SVECW will collaborate with an institute like the University of Massachusetts, Lowell, USA and BVRIT to undertake a longitudinal survey of the needs of disabled persons and understand the factors that affect their performance in personal and professional lives.
3. Program Design: (Based on the findings of the above survey, SVECW will, in collaboration with its partners, develop appropriate policy responses and specific programs to meet the identified needs. These may include)
4. Special recruitment and admission procedures.
5. Offering flexible study and work options for differently-abled persons;
6. Developing the electronic items to assist different-abled persons;
7. Sensitization of Faculty and Students: This will include special sessions, talks, seminars on the issues and requirements of differently-abled people in all spheres of life.
8. Focusing of Community Service Activities: Involving staff and students in this programme will have the effect of their better understanding the requirements of such development as well as to excel in the service of differently-abled people and derive from this an increased sense of purpose and identity. NSS students are actively participating in this activity.
9. Planning and Budgeting: The institution now has a clear set of institutional targets to achieve. A system of annual, quarterly and monthly planning and budgeting procedures will be established involving groups of staff at various levels.
10. Staff recruitment, Training and Performance Evaluation: Systematic procedures for recruitment of staff required for ATL Projects, orientation and training of staff, developing and implementing performance measures, all need to be evolved and implemented.
11. Procurement, maintenance and utilization of equipment: However, the system for identification of needs, receiving, inventory control, systematic maintenance, utilization of common equipment and resources by various teams, and responsibility for equipment needs to be clarified and finalized. This can be done internally through a committee.
12. Public relations and marketing: SVECW needs to involve itself in an image -building exercise which will be useful for attracting quality faculty and industries in development and industry streamlining of ATL products. This may involve the further development of the SVECW website, promotion of the Institute in India and abroad, systematic utilization of the alumni network within India and internationally, donations, public events, and management of the relations with community and industry. Various committees may be assigned some of the required tasks, and marketing and public relations consultancy is required.

### 5.4.4 Resource Requirements

The above description involves a large number of activities and processes that must be coordinated and managed. The level of effort here, as well as in all the other activities under this project, requires the employment of a high caliber project coordinator for the entire duration of the project. The desired profile is one of a dynamic senior executive with Electronics background, with management and human resource development experience in the industry.

The functions of the coordinator would be to ensure the successful implementation of all project activities and to spearhead internally the organizational development process, with the assistance of outside expertise. This will also guarantee that focused attention will be given to achieving all project objectives and meet all the financial and narrative reporting requirements.

### 5.5 Financial Requirement:

**a)Year-wise Financial Requirements for institutional reforms are as below:**

| **S.No** | **Activities** | | **Project Life Allocation** | **Year- wise budget allocation (financial year)** | |
|---|---|---|---|---|---|
| | | | | **2015-16** | **2016-17** |
| 1 | Curricular Reforms | Travel Expenditure for industry experts | **2** | 1 | 1 |
| 2 | | Hospitality & Honorarium for industry experts | **2** | 1 | 1 |
| 3 | | Sundry expenditure on holding meetings | **1.0** | 0.5 | 0.5 |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Accreditation | Fees to NBA/NAAC | **15** | 5 | 10 |
| 5 | | Hospitality to committee members | **3** | 1.5 | 1.5 |
| **Total *** | | | **23** | 9 | 14 |

*Total Fund allocated - 23 Lakhs

Fund utilization from TEQIP -23 Lakhs

**5.6 Activity Schedule**

The overall schedule is given below:

| **Activity** | **Sub-Activity** | **Q1** | **Q2** | **Q3** | **Q4** | **Q5** | **Q6** | **Q7** | **Q8** |
|---|---|---|---|---|---|---|---|---|---|
| Structural Reforms | Autonomy | | | | | | | | |
| | Accreditation | | | | | | | | |
| | Academic reforms | | | | | | | | |
| | Non-Academic Reforms | | | | | | | | |
| Organizational development | Planning and budgeting | | | | | | | | |
| | Information collection and utilization | | | | | | | | |
| | Staff recruitment, training and performance evaluation | | | | | | | | |
| | Procurement, maintenance and utilization of equipment | | | | | | | | |
| | Public relations and marketing | | | | | | | | |
| Empowerment of women | Analysis of the requirements of women and Sociologically Backward Groups | | | | | | | | |
| | Program Design | | | | | | | | |
| | Systematic Data Collection on Performance and Career paths | | | | | | | | |
| | Sensitization of Faculty and Students | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Focusing of Community Service Activities | | | | | | | | |
| Support & Development of differently-abled people | Analysis of the requirements of differently-abled People | | | | | | | | |
| | Program Design | | | | | | | | |
| | Sensitization of Faculty and Students | | | | | | | | |
| | Focusing of Community Service Activities | | | | | | | | |

5.4.7 **Beneficiaries**

1. Rural Girl students who would receive
   - A much upgraded and more flexible high quality education
   - Motivated high quality faculty members
   - Very high employability
   - All round development of the rural girl students with social responsibility and equity.
   - Uplifted financial status of the rural families by getting employed.
2. Staff Members:
   Faculty and Non-academic staff members would get a congenial working environment with
   - Academic and financial freedom given by motivated and empowered management.
   - Well aligned individual as well as institutional objectives.
   - High quality girl students making the teaching-learning process effective.
   - Immense satisfaction by working towards social upliftment.
   - Individual as well as institutional objectives
3. Disabled persons in the society
   Benefitted with the tools developed and lead a confident independent self-empowered life.

**5.4.8 Preparedness**

| SNo | Description of activity | Brief description of preparations made for implementation |
|---|---|---|
| 1 | Planning for autonomy | Applied for autonomy |
| 2 | Funds | SVECW has set itself clear targets for each of the four funds and is preparing its strategy to establish them |
| 3 | Procedures | Various procedures to be implemented under autonomy are being considered and discussed |
| 4 | Prepare terms of reference for staff to be recruited | SVECW has begun the process of determining staff needed for project implementation and their required profiles |
| 5 | Identify consultants | Preliminary needs for training and consultancy are being identified. |
| 6 | Survey of Needs and Performance | Contacts have been initiated with professional organizations |
| 7 | Data collection | Existing data is being compiled and system development requirements are being determined |
| 8 | Sensitization | SVECW Strategic objectives are being diffused throughout the institution. |

**5.4.9 Sustainability:**

The benefits initiated by this activity will be sustained by the structural, managerial and administrative as well as financial reforms .As they will become part and parcel of institutional policies and established procedures and programs.

## Section -6: Action Plan for Interaction with Industry

### 6.1 Existing Interaction & Placements

**Introduction**

Better interaction between Technical institutions and industry is the need of the hour. This will have great bearing on the Engineering Curriculum, exposure of industrial atmosphere to engineering students and subsequent placement of young graduating engineers in industries across the country. With the advent of globalization and opening up of Indian economy to outside world, competitions among industries have become stiff. To solve their engineering problems they look up now to engineering Institutions. Similarly, there is an urgent need to prepare engineering students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies. These objectives can only be achieved well by bridging the gap between industry and the academic institute.

**Academia-Industry Interaction**

- Collaboration provides industry an opportunity to grow its business by using the results of academic research
- The academic institution is in need of a partner that can take its discoveries to the market place

**Possible areas of interaction**

- Industry support to basic research
- Industry participation in technology development involving some exploratory work
- Academic intervention in solving specific industry problems

**Different Forms of Industry-Institute Interaction**

- **Industrial Research & Consultancy**
  - Industrial testing (Proofing & Calibration)
  - Sponsored industrial research
  - Use of industrial labs by University
  - Use of specialized database / lab equipment of University
  - Research guidance from industry
  - Creation of collaborative labs / testing centre at University
  - Joint research publication
  - Solutions for field problems
  - Analysis & Design problems
  - Joint patents
  - Creation of industrial chair to support research

- **Continuing Education for Industry**
  - Short-Term Training Programmes
  - Onsite Educational Programmes
  - Part time Educational Programmes
  - Collaborative Educational Programmes
- **Industry-Institute Exchange**
  - Visiting faculty from industry
  - Training programmes / Short term assignments to the faculty members in industries
  - Joint industrial projects for faculty
  - Participation of industrial experts in curriculum design
  - Sabbatical level assignments to the faculty members

### 6.1.1 Industry-Institute Interaction

In our institute entrepreneurship Development Program (EDP) cell looking after Industry Institute Interaction activities. For the Cell to function smoothly and to meet its objectives effectively we have some core staff.

**Activities under EDP:**

1. To identify and facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with Members of the Industry, outside Experts, eminent personalities at regular interval.
2. To conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students at regular intervals.
3. To facilitate joint research work, consultancy involving faculty and students.
4. To identify Continuing Education opportunities, short term programmes and training needs of the Industry, which the institution can provide.

**Outcomes:**

EDP is responsible for the following deliverables:

- Increase in collaboration with Industry
- Increased rate of campus placement of students
- Increase in industrial training for students arranged by institution
- Absorption of students by same industries providing industrial training

### 6.1.2 ANDHRA PRADESH STATE SKILL DEVELOPMENT CENTER(APSSDC)

Apssdc is an initiative of ap state govt to deliver a structured, sustainable & scalable framework to impart state of the art skills to the unemployed, underemployed, uncertified and un-benchmarked and to address the lack of relevant skills amongst the current and potential skill workforce in the state of a.p. And to increase employability in sync with industrial growth of the state.

### 6.1.3 CAMPUS CONNECT PROGRAMME:

SVECW is one of the institutes selected by Infosys for campus connect programme. Through this, specialized programmes are being organized periodically on various topics. Faculties are trained on advanced topics. Course materials are put on Acado and used extensively by the students community.

Infosys's Campus Connect programme introduced at SVECW in 2006 has its own courseware along within the existing curriculum, a 14 week capsule helping fresh recruits to be 'industry ready'. Similar programmes introduced by other software giants ensure that even the non-IT students completing the capsule are eligible for IT jobs.

### 6.1.4 IBM CENTER OF EXCELLENCE

The MOU was signed between the institute and IBM and the relationship was established to give students and faculty the opportunity to work closely with the industry and utilize both the resources in the best possible manner. Center of Excellence inaugurated by Himanshu Goyal, IBM Country Manager and Mr. Saravanan Sekar IBM Academic Initiative representative in the presence of Sri K V Vishnu Raju, Chairman, SVES, Dr. D.R Raju, Director, SVES, Principal, SVECW along with other faculty members, staff and students on 19th November 2009.

Global forces are altering the educational landscape as India faces a serious skills shortage in the technology industry.

Through the IBM Academic Initiative, IBM is working with colleges and universities across the country to teach students the open-standards skills they’ll need to compete in the ever-changing technology workplace.

This initiative offers a wide range of technology education benefits that can be scaled to meet the goals of most educational institutions, ranging from large research universities to local community colleges. What's more, it can provide the resources you need to create more competitive academic programs and more highly skilled students.

**The IBM Software Center of Excellence – Objectives:**

The IBM Software Center of Excellence aims at increasing the skill sets of the faculty and students of your college, leading to:

- Improvement in the quality of technical education
- Increase in the employability of students
- Placing your college in a leadership position

**A Win : Win choice for the College and students**

- The IBM Software Center of Excellence enables us to conduct unlimited training for our students through our faculty enabled by IBM.
- Through the IBM Software Center of Excellence, IBM will give the college all the software required for the training program free of cost.
- Further, IBM can even connect the college to an authorized IBM vendor to help you set up the IBM Software Center of Excellence at a nominal price.

**6.1.5 Training and Placements**

**The following industries are visited our campus for placements**

| | |
|---|---|
| TCS | NTPC |
| Microsoft | Virtusa |
| IBM InfoSys | Kanbay |
| WIPRO | Convergys |
| Mahindra Satyam | Birlasoft |
| Miracle Software systems Ltd | Syntel |
| Rofous Software Pvt Ltd | CA |
| LEISUX | Synopsis |
| Solar Semi Conductor | Elico |
| CSC | NetEnrich |
| Infotech Enterprises | Computech |
| John Deer | Efftronics |
| Thought Works | FMC |
| Angelique | Thermax |
| | SAP |

**Training for Staff by following Organizations:**

| Teaching Staff | Supporting Staff |
|---|---|
| IBM | Falcon Electro-TEK PVT.Ltd |
| NITTR | ESCI, Hyderabad |
| National Instruments (NI) | |
| WIPRO (MISSION 10X) | |
| Crans Software | |
| Renaissance Softlabas Hyderabad | |

**The following industries are trained faculty, supporting faculty and students**

| | |
|---|---|
| Xilinx | Productivity Reach |
| Yasashree consultancy service Ltd. | TIME |
| ENSINE consultancy | IBM |
| Renaissance Softlabs – Hyderabad. | Microsoft |
| Gateforum | Oracle |

## 6.2 Enhancing Interaction with Industry

**Background:** It has long been felt that there is a need for active linkages between industry and engineering institutions which not only enrich the curriculum contents but also add another dimension to the existing systems of continuing education programmes, extension lectures and consultancy by faculty. Technology developed through academic and R&D institutions generally falls short of the needs of the industry for design and manufacture of new products and for engineering services to meet the demands of the customers and challenges of market competition. This gap can be narrowed down through a coordinated approach ensuring closer interactions among industry, R&D institutions and the academia, through institutionalized mechanisms.

### 6.2.1 System in Practice:

The Institute encourages its faculty, technicians and students to interact with industry in all possible ways with the spirit of deriving mutual benefit. The major modes of interaction are listed below:

- **Industry Visits:** Faculty as well as students visited to SHAR, DRDO, Bangalore, Visakhapatnam Steel Plant, EFFTRONICS, Vijayawada and ISRO, Banglore for discussions on subjects of mutual interest.
- **Assistive Technologies Lab**: It was established at the institute in collaboration with University of Massachusetts, Lowell, USA. Prof. Alan Rux, HOD of the Assistive Technologies Lab, UMASS Lowel, USA, visited SVECW twice and guided the students in developing gadgets for the disabled.
- **Workshops, conferences and Symposia**: ECE department conducts at least one work shop every year. For the workshops conducted so far, a minimum of 25 faculty members from various Engineering colleges in Andhra Pradesh participated.
- **Projects in Industries:** Students are encouraged to do projects in Industries. For that faculty members act as internal guides to strengthen the theoretical background required for the project by reviewing the project details at regular intervals.
- **Visiting faculty/professors from industries**: Eminent people from industries are invited to campus to address students and faculty members and to spend a few days at campus for participating in workshops.

**6.2.2 Learning out come in subject domain:**

- **Assistive Technologies Lab**: Our Institute signed MOU with the Electronics industry EFFTRONICS, Vijayawada. ATL project has been selected as one among 9 final projects under Micro Mini Small Scale Enterprises.
- **Workshops, conferences and Symposia**: Interaction with faculty members from other institutes develops awareness of strong and weak points of system followed in the college.
- **Projects in Industries:** Some of M.Tech students are doing projects/dissertation work in industries under joint guidance of the faculty and experts from industries like Synopsis and Mindtree.

6.2.3 **Strategic plan for improvement :**

The following are the areas in which department has to concentrate for better industrial relationships:

- Industrial testing by faculty & technicians at site or in laboratory.
- Joint research programmes and field studies by faculty and people from industries
- Short-term assignment to faculty members in industries.
- Scholarships/fellowships instituted by industries at the Institute for students.

- Professorial Chairs sponsored by industries at the Institute.
- R&D Laboratories sponsored by industries at the Institute.
- Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Human resource development programmes by the faculty for practicing engineers. Utilizing Institutional resources (manpower and physical) for industrial manpower training.
- **Institute Industry Interaction Cell:** In our college institute industry interaction activities are coordinated by EDP, it is need to form full functioned IIIC need to established with following objectives
    1. To identify and facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with Members of the Industry, outside Experts, eminent personalities at regular interval.
    2. To conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students at regular intervals.
    3. To facilitate joint research work, consultancy involving faculty and students.
    4. To conduct industrial exhibitions to highlight research facilities and expertise available with the institution.
    5. To facilitate professionals from Industry to work as visiting faculty in institutions and short or long periods deployment of faculty from institutions to Industry for gaining Industrial experience and/or work on projects in Industry.
    6. To seek and associate Experts from Industry in Curriculum Development and review.
    7. To identify Continuing Education opportunities, short term programmes and training needs of the Industry, which the institution can provide.
    8. To promote revenue generating activities for the institution like Lab Testing, Calibration, consultancy and R&D etc.
    9. To assess periodically the scientific and technological scenario/ happenings in India and abroad in order to translate it into action for taking up future R&D work

- More number of workshops and conferences should be conducted in the institute so that interaction between industry professionals and faculty members and students increases.
- **R&D Units:** Research and development units should be started in association with industries.

- **Coordination or course advisory Committees:** The stronger the link between institutes and businesses, the greater the opportunities will be to integrate and develop employability skills in undergraduates. Therefore, institute needs to run focus groups with employers, surveying employers to measure satisfaction with graduates, or involving employers and industry leaders to work through professional bodies to help shape and inform up-to-date curriculum and course design.
- **Industry training to Academic Staff:** The development of employability skills in higher education students requires academic staff to have informed knowledge of current industry practice and an awareness of how different workplaces are structured and function. Teaching skills, as well as knowledge, means that academic staff are required to move beyond traditional lecturing and use a range of teaching methods. As well as teaching 'about' particular skills, academic staff can model those skills and develop them through the teaching methodologies they use. For this institute needs to make arrangements for faculty members to have frequent visits to industries to understand current industry practice.
- **Communication Skills:** Institute needs to encourage all students in the areas like writing and presenting written and verbal reports, role plays, demonstrations and working in groups.
- **Problem Solving Activity:** Students should be encouraged in using various problem solving tools and techniques, developing or designing models, problem solving in teams and networks, or in decision making activities
- **Initiative and enterprise:** Students should be made active by brainstorming activities like designing innovative and creative practices and solutions, initialing change/designing change processes and simulation activities.

- **Self-management:** Students should be encourage in development of portfolios, work plans, using log books to record time management skills and monitor own performance and also career planning exercises.

### 6.2.4 Projected outcomes

- Increase in collaboration with Industry
- Increased rate of campus placement of students
- Increase in industrial training for students arranged by institution
- Absorption of students by same industries providing industrial training
- Increase in IRG by collaborating with Industry
- Increase in utilization of institutional resources by Industry
  - Increase in solving the real life problems of the region

### 6.2.5 Budget

**Enhanced Interaction with Industry**

| S.No | Activity | Project Life Allocation | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Expert Lecturers & Curriculum Development | 4.5 | 2.5 | 2.0 |
| 2 | Campus Interviews | 16.0 | 8.0 | 8.0 |
| 3 | Arranging Industry Experts | 4.5 | 2.5 | 2.0 |
| ***Total** | | **25.0** | **13.0** | **12.0** |

* Total Fund allocated - **25** Lakhs

Fund utilization from TEQIP - 25 Lakhs

**Expert Lecturers & Curriculum Development**

| S.No | Financial Year | Frequency of Visits | TA, Hospitality & Honorarium | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 3 | 50000 | 250,000 |
| 2 | 2016-17 | 3 | 50000 | 200,000 |

**Campus Interviews**

| S.No | Financial Year | No of Companies | Expenditure | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 20 | 10000 | 800,000 |
| 2 | 2016-17 | 20 | 10000 | 800,000 |

**Arranging Tutoring by Industry Experts**

| S.No | Financial Year | Frequency of Visits | No of Persons | Honorarium | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 2 | 2 | 25000 | 2,50,000 |
| 2 | 2016-17 | 2 | 2 | 25000 | 2,00,000 |

### 6.2.6 **Activity Schedule**

The projected outcomes are achieved with series of actions which are shown in activity Schedule

| **Activity** | **Sub Activity Description** | **Even Semester (From Dec-2010 – April 2011)** | | | | |
|---|---|---|---|---|---|---|
| | | **12** | **1** | **2** | **3** | **4** |
| **JKC Training (To All branches of B.Tech)** | Computer Science Modules | | | | | |
| | Soft Learning | | | | | |
| | Personality Development | | | | | |
| | Aptitude, Reasoning | | | | | |
| **Info Sys Campus Connect** | All Technical modules | | | | | |
| | Project | | | | | |
| **IBM Center For Excellence** | Tool training and Projects | | | | | |
| **Renaissance Soft labs** | Projects | | | | | |
| **NITTTR** | Training to Staff Members | | | | | |
| **Mission 10x (Wipro)** | Training to Staff Members | | | | | |

### 6.2.7 **Beneficiary**

The Outgoing batch ie IV B.Tech Students are benefitted with the entrusted with the duty of interacting with the Industry because of their employment opportunities with "real world" awareness by eminent industrialists and technical experts, and collaborations.

The Academic Industry Interaction with Oracle under their Work force Development Programme, Campus connect" status by Infosys have given good result in shaping the overall development and improve women empowerment and employability.
The young faculty members are indulged with NITTR and Mission 10x training to give quality teaching and exposure the ICT Teaching Methodologies and work towards the organization needs and vision.

It is concluded that academia-industry interactions are vital for economic development of developing countries. The appreciation of the mutual benefit concept and initiation of action and orientation at both ends are suggested for effective integration of research results with production

### 6.2.8 Preparedness

It is imperative for schools to bring Academia and Industry closer and build strong collaborative relationship. Instruction-or education-can be defined as the means by which we systematize the situations, conditions, tasks materials, and opportunities by which learners acquire new or different ways of thinking, feeling, and doing. This systematization can be brought about in Engineering education only through right synergy between Academia and the Industry.

There are a number of avenues, through which our Organization collaborate with industry. Some of the commonly used avenues for which the organization is prepared are:

1. Guest Lectures by industry representatives.
2. Suggestions in curriculum and content designing.
3. Joint seminars by academia and industry both for executives and students.
4. Industry providing software Tools in support to Advanced Labs for students and faculty development.
5. Funding academic and applied research.

### 6.2.9 **Sustainability**

The concept of university-industry collaboration is an important social experiment in the nation's innovation system. The collaborative experience focuses on the actual "give-and-take" outcomes between university faculty members and industrial firms.

The most significant benefit realized by firms is an increased access to new university research and discoveries, and the most significant benefits by faculty members is complementing their own academic research by securing funds for graduate students and lab equipment, and by seeking insights into their own research.
Overall, Effective Academia Industry Interaction leads to strengthening competitiveness, promoting innovation and new technology development and ensure quality and quantity of the human resource base

## Section -7: Action Plan for Research & Consultancy

### 7.1 Existing Research

**Background :** Institutions need to encourage UG students to get associated with industry oriented/sponsored research programmes under the guidance of senior faculty. It increases interest of students in higher education and research. Research helps in producing quality manpower capable of taking up R&D functions.

#### 7.1.1 System in practice

The following system is followed in our institute.

- **Support Structure to Foster Individual**: ATL faculty members and technicians always assist the students in doing projects even after college timings and non-working days. Internet is provided for 24 hours in ATL. IEEE access is available for downloading research papers. Assistive Technology lab projects are very useful to the students at the time of placements.
  - **Collaborative and Multi-disciplinary Research:** Students from all departments can involve in Assistive Technology Laboratory projects. The Projects are coordinated jointly by faculty members from all departments of our institute as well as other institutes in Vishnu Educational Society. A well-defined and transparent revenue sharing mechanism is implemented to motivate faculty members to increasingly participate in such activities.
  - **Travel Grants:** Institute provides travel grants to the students participating in competitions or project exhibitions conducted by other colleges or industries at distant locations.

#### 7.1.2 Learning Outcome of Subject Domain

**i) ATL Lab Projects:** The following ATL projects were distributed to our clients on 3rd Dec, 2010, the International Day for Disabled People

- E- Stick
- Hand Gripper
- Talking Box
- Ball Insertion Pin ball Machine
- Walking Track
- Electrical Wheel Chair

- The project "An Intelligent Stick for Visually Challenged" has been shortlisted for show casing the project at ITSAP-2010, organized by IIIT, Hyderabad.
- Centre for Visually Challenged, Bhimavaram ordered 10 E-Sticks for blind.
- Swachandda Seva Samithi, Visakhapatnam ordered 5 talking boxes for speech challenged.

**ii) Recognition and Awards** :

- The project "Adaptive Intelligent Stick for Visually Challenged" was one of the twelve short listed projects among fifty six entries all over Asia for Bio Asia YSR Innovation Award.
- The project "An E-Compass and RFIDs Based Intelligent Module for Visually Challenged" was selected to round 2 of Texas Instruments Analog Design Contest 2010 and has won prize money of $1500 USD. The prize money will be received by the students in the Award Ceremony at Bangalore on 15th April, 2011.
- The project "An Intelligent Stick for Visually Challenged" has won the consolation prize in Imagine Cup 2010, which was conducted by MicroSoft.
- The project E stick for Blind has won first prize in a national level project exhibition at GEC, Gudlavalleru.

## 7.2 Enhancing Research & Consultancy Activities

R&D, being an integral part of higher education, helps students gain first-hand knowledge of the field besides equipping themselves to face the emerging challenges in their career, so it is need to improve R& D Activities in the college

### 7.2.1 Strategic plans for improvement

- The SVECW shall establish a Committee for Research which will administer and oversee all research activities at SVECW. This Committee will be chaired by the Dean R&D.
- Institute needs to secure industry sponsored research Projects.
- Research for development should focus on improving present technologies, developing indigenous ones and enhancing production and productivity.

- Visits of industry executives and practising engineers to the Institute for seeing research work and laboratories, discussions and delivering lectures on industrial practices, trends and experiences.
- Teachers will have multiple roles to perform such as teaching, research, and development of learning resource material, extension and managing the institution. Initial and inservice training will be mandatory for faculty and adequate training reserves will be provided.
- The SVECW shall establish a Committee for Consultancy Services. The role of this Committee shall be: To receive and solicit Consultancy assignments on behalf of the University and direct them to the appropriate departments or Faculties
- Encourage links with other Higher Education Institutions in order to allow individuals the opportunity to participate in searching for new knowledge
- Encourage cross-disciplinary cooperation.

- Professional consultancy by the faculty to industries.
- Encouraging faculty members to participate in joint R&D activities by industries as well as Government research organizations.
- Inviting Industry senior personnel as adjunct faculty to utilize their expertise in research activities.
- Incentive support to students participating in Research projects encourages them to involve in other research projects and also attracts more students to join research activities.

**7.2.2 Projected outcomes**

- Publications of paper in national and international journals by the students and faculty
- Developing innovative products and applying for patents
- Awareness towards cutting edge technology in faculty and students
- Diverting some students to R&D companies like DRDO etc.

**7.2.3 Budget: Enhancement of R&D and Institutional Consultancy**

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Laks (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Expenditure for securing projects | | **4** | 2 | 2 |
| 2 | Expenditure for publication of research papers | | **2** | 1 | 1 |
| 3 | Expenditure of patenting of research products | | **6** | 3 | 3 |
| 4 | Hospitality and honorarium paid to consultant | | **2** | 1 | 1 |
| 5 | Expenditure including travel and meetings | | **1** | 0.5 | 0.5 |
| 6 | Expenditure for sponsored projects | | **3** | 1.5 | 1.5 |
| 7 | Expenditure for consultancy assignments | | **2** | 1 | 1 |
| 8 | Incremental Operating Cost | Training Materials & Consumables | **1** | 0.5 | 0.5 |
| *** Total** | | | **21** | **10.5** | 10.5 |

* Total Fund allocated – **21** Lakhs

Fund utilization from TEQIP –

a)Enhancement of R&D and Institutional Consultancy - **Nil**

b) From Incremental Operating Cost – **1** Lakh

Fund utilization from IRG & Trust – **20** Lakhs

### 7.2.4 Activity Schedule

The projected outcomes are achieved with series of actions which are shown in activity Schedule

| **Activity** | Sub Activity Description | **(From May-2015 – Dec 2015)** | | | | |
|---|---|---|---|---|---|---|
| | | **12** | **1** | **2** | **3** | **4** |
| **Establishment of Research Committee** | Formation of committee | | | | | |
| | Framing rules and regulations | | | | | |
| | R&D orientation program for faculty | | | | | |
| | R&D orientation program for students | | | | | |
| **Procurement of R&D requirements** | Identifying requirements & inviting quotations | | | | | |
| | Receiving quotations & finalizing orders | | | | | |
| | Demonstration programs by companies | | | | | |
| **Projects** | Start of R&D Projects by the students and faculty | | | | | |

### 7.2.5 Beneficiary

With enhanced R&D activities, the student community and the faculty will be benefited in several ways, such as Students will be motivated to placed in R&D companies, A good no of papers will be published in reputed journals which strengthens the CV Of students and faculty, Faculty has opportunity to complete Doctoral Degree and post Doctoral Degree. Finally institute also benefited financially through consultancy works.

### 7.2.6 Preparedness

Shri Vishnu Engineering College for Women, has a fine blend of experienced as well as young and dynamic personalities as faculty, is involved in providing quality education at both Undergraduate (UG) and Postgraduate (PG) levels.

It is because of our institute vision that an Assistive Technologies Lab has been established in collaboration with University of Massachusetts, Lowell, USA.

**Prof. Allan Rux**. - HOD of the Assistive Technologies Lab at University of Massachusetts visited SVECW twice for about a fortnight each time and guided, mentored and trained the students of SVECW in developing gadgets for the disabled.

During his second visit he came along with one of his lab instructor and four students under the faculty and students exchange program between our institute and UMASS, Lowell. The Programme, in fact, touched the hearts of every one, both the students and staff involved and the spectators as these devices started materializing into concrete forms. A walking stick working with infrared and ultrasonic paralyzed, a robotic hand for a person who lost his hand were realities that materialized in the hands of the excited, rather, thrilled students.

### 7.2.7 Sustainability

The department is expected to receive grants from many sources for the new project proposals. We will start employment generated new PG courses to generate internal resources. It is also expected to receive consultancy works from different companies by displaying our R&D capabilities to industry people.

## Section – 8: Project Implementation

### 8.1 Participation of faculty in IDP preparation

The preparation of IDP and action plan for implementation for TEQIP would not have been in its present stage but for the complete and heart-felt efforts put in by the erudite and dedicated faculty of SVECW.

For this, a committee of 5 nodal officers under the leadership of a senior professor as the coordinator, is constituted by the head of the institution as per the resolution by the BOG to prepare the IDP with the help of 10 more faculty members of the institute, one from each department, and to prepare complete action plan for implementation of the TEQIP project.

The details of constitution of the committee of nodal officers are as follows:

| S.No. | Head and Nodal officer | Name of the Faculty member | Present Designation |
|---|---|---|---|
| 1. | Head of the institution | Dr.G.S.Rao | Principal |
| 2. | TEQIP Coordinator | Dr. P Srinivasa Raju | Professor & HOD |
| **Project Nodal Officers** | | | |
| 3. | Academic Activities | Prof. R.Subba Rao | Vice Principal |
| 4. | Civil works including Environment management | Mr. V.Kesava Raju | Campus Civil Engineer |
| 5. | Procurement | Prof. M.Narasimha Raju | Professor & HOD |
| 6. | Financial aspects | Dr. G. Subba Raju | Professor & HOD |
| 7. | Equity Assurance plan Implementation | Dr. K. Pushpa | Professor |
| **Preparation of IDP** | | | |
| 8. | Member | Mr. M.V.Ganeswara rao | Associate Professor |
| 9 | Member | Mr. Y.Ramu | Associate professor |
| 10 | Member | Mr. D.V.Naga Raju | Associate Professor |
| 11 | Member | Mr. D. Ravi Kiran | Associate Professor |
| 12 | Member | Mr. K. Rama Chandra rao | Asst. Prof (Sr.) |
| 13 | Member | Mr. A.Chandra Sekhar | Assistant professor |
| 14 | Member | Mr. K.P.Swaroop | Assistant Professor |

The **Background information of institution**, right from the geographical location of the state, Technical education in state to state's development plan, are discussed in Section-1.

For this, the geographical information of the state of Andhra Pradesh, Five year plan of the state and also that of the country are collected from many sources like the web sites of government, maps of India and AP and some more private web sites.

**Institutional basic information** is discussed in Section-2.The entire academic information, like the identity of the institution, Persons in the management, details of faculty and spatial details, is given.

In the second part of this section, **The Capabilities of SVECW** is discussed. In this, the strengths of SVECW like connections with industry, special qualities, infrastructural facilities, financial resources, linkages with national and international institutes are gathered from various sources in the campus.

This committee prepared a questionnaire of SWOT analysis, as per the guidelines in Annexure -V and circulated it to all the stake holders (Management, Staff, Students, Parents and Employers) involved to collect their views. The summary of this SWOT analysis was presented in detail in Section 3.4 of IDP.

With the elite panel of members including BOG, academic experts ,Heads of the departments, Industry experts, Strategic plan and Project Objectives are derived.
After detailed discussions within the members of the committee and also with the people of academic expertise within and outside the institute, **Action plan for the Promotion of Academic excellence** is prepared by the committee, which include improving the quality of education and improving post graduate programs.

Four new inter disciplinary P.G. Programs were identified by consulting academic and industrial experts. The curricula, eligibility and laboratory requirements were also framed by the same members. The suppliers of equipment for the labs were asked to submit their quotations. Based on that, financial requirements were arrived.

As a part of improving the quality of faculty, the committee has taken up the Training Needs Analysis (TNA). As per the guidelines given in Annexure-VI, pro forma was circulated to all the staff members (Principal/Director, Administrative staff, HoD s and Deans , Faculty , Technical staff, Support staff and Class IV staff) and their requirements were collected. These details are attached in section 4.

The training schedules given by reputed academic institutes and industries were collected. Based on that training schedule for staff members and details of resource requirement are arrived.

Action Plan for institutional reforms is presented in Section 5. In this, Structural reforms, Organizational development, Empowerment of Women and Support & Development of Differently-abled people.

The action plan for implementing different modes of autonomy like academic, Managerial, Financial and Administrative autonomies, are presented in Structural reforms.
Also the plan to get the post graduate programs accredited is discussed.

Empowerment of women as part of the mission statement of the institute which is linked to the policy of the state and central governments is discussed.
Based on the feedback obtained from the SWOT analysis from the steps are taken to enhance existing interaction with industry and also to improve student placements this is given as part of **Action plan for Interaction with Industry** in section 6.

Based on the information gathered to improve the quality of faculty, in section 4.3 an **Action plan for Research and Consultancy** is prepared and prese4nted in Section 7.
Project Implementation

**Sustainability plan:**

In this, Continuation of commitment to excellence, Ensuring adequate fund flow and Risk analysis are discussed.

## 8.2. Implementation Arrangements

**Committees for the implementation arrangements:**

Institutional TEQIP Unit has been formed with the following representation:

- Academic officials of the Institution,
- Faculty,
- Senior administrative officers,
- Technical and non-technical support staff
- Students.

The nodal officers will operate through committees involving all the committee & staff for procurement of Goods, Works and Services; financial management; implementation of faculty and staff development activities and programs; monitoring project implementation, achievement of targets for all indicators as proposed and keeping MIS updated; ensuring compliance with EAP, EMF and DMF requirements; ensuring implementation of Institutional reforms; organizing efficient conduct of monitoring and performance audits, etc.

The BoG has approved the following committees:

| **Name of the Committee** | **Stakeholders representatives** |
|---|---|
| Academic Council/Committee | Faculty |
| Finance Committee : As per Act / MoA | Faculty |
| Building and Works Committee | Faculty |
| Purchase Committee | Faculty/Students |
| Disciplinary Committee | Faculty/Students |
| Institution Development Committee | Faculty/Students |
| Students Affairs Committee | Faculty/Students |
| Library Committee | Faculty/Students |
| Grievance Committee | Faculty/Students |
| Anti Sexual Harassment Committee (ASH) | Faculty/Students |

Apart from the above committees, institution has also formed below committees for fulfilling various needs.

| Name of the Committee | Frequency of meeting |
|---|---|
| 1. Academic Advisory Body | At least once in a semester |
| 2. College Academic Committee | At least twice in a semester |
| 3. Student Counseling / Grievances Redressal Committee( Discipline ) | Once in a Month |
| 4. Purchase/Stores | At least twice in a semester |
| 5. Public Relations/publicity & Press, Media | Once in a Month |
| 6. R&D, Consultancy | Once in a Month |
| 7. Training (Soft skills/ Communications, etc) | Once in a Month |
| 8. Career Guidance & Placements | Once in a Month |
| 9. Hostel Committee | Every 15days |
| 10. Sports & Games | Once in a Month |
| 11. Examinations | Once in a Month |
| 12. Library | Every 15days |
| 13. TEQIP – II | As per the requirement |
| 14. Alumni Committee | Twice in a semester |
| 15. Student Council | Once in month |
| 16. Internal Quality Assurance Cell (IQAC) | Every 15days |
| 17. Women welfare cell | Once in a Month |
| 18. Anti Ragging committee | As per the requirement |

## 8.3. Project Budget

### 8.3.1. Financial Requirement of the project by Category

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Infrastructure improvements for teaching, training and learning through | | | | |
| | i | Modernization and strengthening of laboratories * | 10.00 | 5.00 | 5.00 |
| | ii | Establishment of new laboratories for existing UG and PG programmes and for new PG programmes | 100.00 | 50.00 | 50.00 |

| | | | | | |
|---|---|---|---|---|---|
| | iii | Modernization of Classrooms * | 12.00 | 8.00 | 4.00 |
| | iv | Updation of learning Resources | 4.00 | 2.50 | 1.50 |
| | v | Procurement of furniture | 10.00 | 5.00 | 5.00 |
| | vi | Establishment / Up gradation of central and departments * | 5.00 | 3.00 | 2.00 |
| | vii | Modernization / improvements of supporting departments * | 3.00 | 2.00 | 1.00 |
| | viii | Modernization and strengthening of libraries and increasing access to knowledge resources | 15.00 | 8.00 | 7.00 |
| | ix | Refurbishment (Minor Civil Works) * | 4.00 | 2.00 | 2.00 |
| 2 | Providing teaching and research assistantships to increase enrolment in existing and new PG programmes in engineering disciplines | | 44.40 | 30.00 | 14.40 |
| 3 | Enhancement of R &D and institutional Consultancy Activities * | | 5.0 | 3.50 | 1.50 |
| 4 | Faculty and Staff Development (Including Faculty qualification up gradation, pedagogical training, and organizing / participation of faculty in workshops, seminars and conferences) for improved competence based on TNA | | 106.30 | 73.60 | 32.70 |
| 5 | Enhanced interaction with Industry | | 25.00 | 17.00 | 8.0 |
| 6 | Institutional management capacity enhancement | | 14.00 | 9.50 | 4.50 |
| 7 | Implementation of Institutional reforms | | 23.00 | 18.50 | 4.50 |
| 8 | Academic support for weak students under the aegis of finishing school | | 11.50 | 7.00 | 4.50 |
| 9 | Technical assistance for procurement and academic activities | | 40.00 | 40.00 | - |
| 10 | Incremental Operating Cost | | 25.00 | 17.50 | 7.50 |
| ****Total** | | | 432.20 | 277.1 | 155.10 |

* Not applicable for private unaided institutions

** Total Institutional Project Budget – **432.20** Lakhs

Fund utilization from TEQIP – **269.3** Lakhs

Fund utilization from IRG & Trust - **262.9** Lakhs

**Point 1 – i) Modernization and strengthening of laboratories**

| S.No | Financial Year | Restructuring of Departmental Laboratories | Renovation of Workshops | Renovation of Computer Labs | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 1 | 1 | 1 | **3** |
| 2 | 2016-17 | 1 | 1 | 1 | **3** |

**Point 1 – iii) Modernization of Classrooms**

| S.No | Financial Year | No of Class rooms | Cost of Projector & other Accessories | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 1 | 100000 | **100000** |
| 2 | 2016-17 | 1 | 100000 | **100000** |

**Point 1- iv) Updating of learning Resources**

| S.No | Financial Year | IUCEE learning Material | QEEE | Multimedia learning ware | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 200000 | 200000 | 200000 | **600000** |
| 2 | 2016-17 | 200000 | 200000 | 200000 | **600000** |

**Point 1 – v) Procurement of furniture**

| S.No | Financial Year | No of Labs | Cost of Furniture | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 1 | 150000 | **150000** |
| 2 | 2016-17 | 1 | 150000 | **150000** |

**Point 1 : vi) Up gradation of central and departmental Computer Centers**

| S.No | Financial Year | No of Systems to be upgraded | Unit Cost | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 20 | 20000 | **400000** |
| 2 | 2016-17 | 20 | 20000 | **400000** |

**Point 1 : viii) Part – 1 :Modernization and strengthening of libraries and increasing access to knowledge resources**

| S.No | Financial Year | No of Volumes | Unit Cost | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 100 | 800 | **80000** |
| 2 | 2016-17 | 100 | 1000 | **100000** |

**Point 1 : viii) Part – 2: Modernization and strengthening of libraries and increasing access to knowledge resources**

| S.No | Financial Year | Cost of Printed Journals | Cost of E-Journals | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 2.5 | 22 | **24.5** |
| 2 | 2016-17 | 2.5 | 22 | **24.5** |

**Point-2 : Part –a) :: Teaching & Research Assistantship (Non GATE)**

| S.No | Activity | | Project Life Allocation Rs.Lakhs | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Teaching Assistantship | | **39.00** | 30.00 | 14.4 |
| 2 | Incremental Operating Cost | Training Materials & Consumables | **2.00** | 1.50 | 0.50 |
| ***Total** | | | **41.00** | **31.50** | **14.90** |

* Total Budget allocated **41.0** Lakhs
Fund utilization from TEQIP -a) Teaching & Research Assistantship- **39.00** Lakhs
b) From Incremental Operating Cost - **2.0** Lakhs
Fund utilization from IRG & Trust - **Nil**

**Point-2 : Part – B) :: Teaching Assistantship for Non GATE qualified PG (Existing & New) Students**

| S.No | Financial Year | No of Students | Amount | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 19 | 30.0 | 50.00 |

| | | | | |
|---|---|---|---|---|
| 2 | 2016-17 | 20 | 14.4 | 64.40 |

**Point - 9. Technical assistance (TA) for procurement and academic activities**

| S.No | Financial Year | TA for Equipment Establishment | TA for Pedagogical Training | TA for Mentoring | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | | 8 | | |
| 2 | 2016-17 | | 6.5 | | |

**Point 4 – Part – A) :: Faculty & Staff Development**

| S.No | Activity | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Laks (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Faculty Quality Upgradation | **2.40** | 1.80 | 0.60 |
| 2 | Subject Knowledge & Research Computence upgradation | **4.00** | 2.50 | 1.50 |
| 3 | Pedagogical Training | **14.50** | 10.00 | 4.50 |
| 4 | Training Technical Staff | **4.00** | 2.80 | 1.20 |
| 5 | Expenditure for participation in workshops & Seminars | **7.40** | 5.00 | 2.40 |
| ***Total** | | **32.30** | **22.10** | **10.20** |

* Total Budget Allocated – **32.30** Lakhs
Fund utilization from TEQIP – **32.30** Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point 4 – Part – B-1) ::Faculty Quality Up gradation**

| S.No | Financial Year | No of Faculty | Course Fees | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 9 | 1.80 | |
| 2 | 2016-17 | 3 | 0.60 | |

**Point 4 – Part – B-2) :: Subject Knowledge & Research Competence up gradation**

| S.No | Financial Year | No of Faculty | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 50 | 2 | 10000 | 500000 |
| 2 | 2016-17 | 50 | 2 | 10000 | 500000 |

**Point 4 – Part – B-3) :: Pedagogical Training**

| S.No | Financial Year | No of Faculty | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 50 | 10 | 2000 | 10.00 |
| 2 | 2016-17 | 45 | 05 | 2000 | 4.50 |

**Point 4 – Part – B-4) :: Training Technical Staff**

| S.No | Financial Year | No of Staff | Frequency of Training | Course Fees | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 25 | 2 | 2000 | 100,000 |
| 2 | 2016-17 | 25 | 2 | 2000 | 100,000 |

**Point – 6- Part-A):: Institutional Management Capacity Enhancement**

| S.No | Activity | Project Life Allocation | Year wise Budget Allocation Rs.Lakhs (Financial Year) | |
|---|---|---|---|---|
| | | | 2015-16 | 2016-17 |
| 1 | Training of Institutional Officials Senior Faculty | 14.00 | 9.50 | 4.50 |
| | ***Total** | **14.00** | **9.50** | **4.50** |

* Total Budget allocated - **14**Lakhs
Fund utilization from TEQIP -**14**Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point – 6- Part-B-1):: Training of Institutional Officials Senior Faculty**

| S.No | Financial Year | Frequency of Training | No of Persons | Course Fee & Expenditure | Total | Trainer Fee & Overheads | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2015-16 | 08 | 14 | 5000 | 70000 | 10000 | 9.50 |
| 2 | 2016-17 | 04 | 08 | 5000 | 40000 | 10000 | 4.50 |

**Point – 6- Part-B-2) :: Orientation of BOG Members**

| S.No | Financial Year | Frequency of Meeting | Expenditure | Total |
|---|---|---|---|---|
| 1 | 2015-16 | 2 | 50000 | 100,000 |
| 2 | 2016-17 | 2 | 50000 | 100,000 |

**Point – 6- Part-B-2) :: Study Tours**

| S.No | Financial Year | Frequency of Tours | No of Persons | Expenditure | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 1 | 5 | 10000 | 50,000 |
| 2 | 2016-17 | 1 | 5 | 10000 | 50,000 |

**Point -8 : Part – A) Academic support for weak students under the aegis of finishing School**

| S.No | Activity | | Project Life Allocation Rs.Laks | Year wise Budget Allocation Rs.Laks (Financial Year) | |
|---|---|---|---|---|---|
| | | | | 2015-16 | 2016-17 |
| 1 | Bridge Courses | | 3.00 | 1.50 | 1.50 |
| 2 | Remedial Teaching | | 3.00 | 2.00 | 1.00 |
| 3 | Soft Components Training | | 2.75 | 2.50 | 0.25 |
| 4 | Incremental Operating Cost | Training Materials & Consumables | 2.75 | 2.50 | 0.25 |
| **Total *** | | | **11.50** | **8.50** | **3.00** |

* Total Budget allocated **11.50** Lakhs
Fund utilization from TEQIP - **11.50** Lakhs

Fund utilization from IRG & Trust - **Nil**

**Point – 8 Part-B- 1) Budget Allocation for Bridge Courses**

| S.No | Financial Year | No of Hours | No of Subjects | Honorarium per Hour | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 20 | 5 | 500 | 150,000 |
| 2 | 2016-17 | 20 | 5 | 500 | 150,000 |

**Point – 8 Part-B- 2) Remedial Teaching**

| S.No | Financial Year | No of Hours | No of Subjects | Honorarium per Hour | Total |
|---|---|---|---|---|---|
| 1 | 2015-16 | 34 | 20 | 500 | 200000 |
| 2 | 2016-17 | 25 | 15 | 500 | 100000 |

**Point – 8 Part-B- 3) Soft Components Training**

| S.No | Financial Year | No of Hours | No of Persons | Honorarium per Hour | Total | TA & DA to Experts |
|---|---|---|---|---|---|---|
| 1 | 2015-16 | 40 | 3 | 1000 | 250000 | 20000 |
| 2 | 2016-17 | 10 | 3 | 1000 | 25000 | 20000 |

## 8.4. Procurement Plan

Procurement Plan for the first 18 months for Goods and Civil Works in Table-31 as per IDP guidelines

**Already mentioned in 2.15 of Part-B**

## 8.5 Monitoring Arrangements and Performance Indicators:

In this section, we will focus only on the competence for monitoring and evaluation, monitoring techniques to be adopted, periodicity of monitoring and evaluation and the mechanisms to be used for auto-correction.

SVECW already has a well-established system for confine academic outputs. These are compiled analytically and published in the institution's Annual Reports. The annual reports include a detailed documentation of staffing, visiting faculty, courses, students, degrees awarded, publications (broken down into international, national, proceedings and books), awards, number and value of consultancies, research topics, sponsored projects, international and national collaborations, contributions and scholarships, etc…

The layout of the report needs to be improved in order to provide summary tabular information of all these indicators and it needs to be placed on SVECW's intranet to be accessible by all. No overall institutional targets are currently set for most of these indicators and no systematic use is made of this information for planning, and systematic performance assessment purposes. The development of a process for systematic use of internal and external performance information is one of the desired outputs of this project.

The major monitoring and evaluation improvements to be made under this project include the following:

**Setting of clear institutional performance targets along each of the priority objectives**:

**Establishment of a Monitoring and Evaluation Cell:** This cell will be responsible for the coordination of data collection, the compilation of data into summary tables and graphs and the production of required internal and external reports. It will include the hiring of a Monitoring and Evaluation Coordinator.

**Systematic data collection for each of these indicators :** Data collection formats will be developed by the M&E Cell and circulated to all divisions for quarterly data collection. Forms will be completed within 15 days of the end of each quarter.

**Establishment of a central computerized database on institutional performance:** A database will be developed for the automation of the collected data and automated production of summary tables and charts and all data will be entered from the forms quarterly .

**Upgrading of Financial Information Systems:** so that they can easily generate unit cost and other aggregates data and summaries as required by management.

**Preparation of quarterly progress reports:** These will be prepared within a month of the end of each quarter and circulated to all divisions.

**Quarterly Management Review Meetings:** Summary data will be presented, considered and discussed at quarterly division head meetings and corrective action taken at these meetings. These meetings will be followed by divisional and other team meetings where decisions about the required corrective action will be taken.

Other data, such as internal and external reviews and special studies, will be collected and analyzed as required.

**Proposed Academic Outputs Through the Project:**

The table of projected outputs presented below is based on the following assumptions about the growth of faculty, students, costs and outputs:

- UG students increased and PG students increase according to the project objectives.
- The full complement of faculty is reached year-1 and year-2 by filling vacant positions.
- This raises the faculty/student ratio for UG to 1/15 and PG 1/10.
- Total working costs assume a 6% increase in salary and 10% increase in other costs
- The productivity in terms of publications, consultancy and research project fund generation for senior faculty is grown progressively from the year-1 to year-4.
- The productivity in terms of publications, workshops and conferences have grown
- Progressively.
- The productivity in terms of number of collaborative programs with industry is
- increasing progressively.
- Enrollment of faculty with only bachelor degree
- The service to the community and non-formal sector projects will be operating
- The curriculum will be adjusted towards more co-curricular activities

## 8.6. Project Deliverables:

| S.No. | Deliverables | 2014-15 | Targets to be achieved* | |
|---|---|---|---|---|
| | | | At the end of 1 years of joining the Project | By project closing |
| 1 | Number of students registered for | | | |

| | | | | |
|---|---|---|---|---|
| | (a) Masters in Engineering programme | 51 | 63 | 126 |
| | (b) Doctoral programme in Engineering | - | - | - |
| 2 | Revenue from externally funded R&D projects and consultancies in total revenue (Rs. in lakh) | 58.57 | 35.00 | 75.00 |
| 3 | Number of publications in refereed journals | | | |
| | (a) National | 15 | 20 | 40 |
| | (b) International | 45 | 50 | 100 |
| 4 | Total annual recurring expenditure | 1862.62 | 1900.00 | 1900.00 |
| 5 | Number of co-authored publications in refereed journals | | | |
| | (a) National | 15 | 20 | 40 |
| | (b) International | 45 | 45 | 90 |
| 6 | Student credentials | | | |
| | (a) campus placement rate of | | | |
| | UG students | 50.01 | 65.00 | 65.00 |
| | PG students | 15 | 30 | 30 |
| | (b) average salary of placement package for (Rs. in lakh) | | | |
| | • UG students | 3.25 | 3.50 | 3.50 |
| | • PG students | 3.00 | 3.50 | 3.50 |
| 7 | Number of collaborative programmes with Industry | 05 | 08 | 08 |
| 8 | Accreditation status (obtained and applied for) | 100% eligible for UG | 100% eligible for UG+PG | 100% eligible for UG + PG |
| 9 | Vacancy position for faculty and staff | **Zero** | **Zero** | **Zero** |
| 10 | Percentage of regular faculty having a Masters Degree or a Doctorate Degree in Engineering disciplines | 80.00 | 100.00 | 100.00 |
| 11 | Transit rate from 1st to 2nd year for the following: | | | |

| | | | | |
|---|---|---|---|---|
| | • All Students | 79.66 | 80 | 80 |
| | • SC and ST Students | 45.94 | 50 | 50 |
| | • OBC Students | 82..48 | 84 | 84 |
| | • Women Students | 79.66 | 80 | 80 |
| 12 | Autonomy status | Autonom ous | Autonomous | Autonomous |
| 13 | Enrolment of faculty with only Bachelor Degree for qualification Upgradation (%) | 75 | -- | -- |
| 14 | Any other academic deliverables (maximum 3) | | | |
| i) | No. of. Students taken up Internships | 75 | 85 | 100 |
| ii) | No. of Workshops/ Seminars conducted | 26 | 40 | 40 |
| iii) | No. of Guest lectures arranged | 06 | 20 | 20 |

NOTE: All figures for TARGETS TO BE ACHIEVED are taken on cumulative basis

**Section 9: Sustainability Plan**

The sustainability of a project is that how an institution survives after the completion of the project period even when external funding, human recourses and support systems are withdrawn.

Measures of sustainability can be considered based on three aspects

1. Programmatic
2. Administrative
3. Financial

The above aspects are discussed in sections below

**9.1 Continuation of Commitment to Excellence**

The capabilities of SVECW are clearly mentioned in the section 2.9 and it clearly shows how SVECW is working with clear vision by following institutional objectives to reach its mission.

TEQIP-II is a timely and welcome proposal and it is an additional help for organizational development which is a must to meet global standards to empower the women of rural backgrounds. It is through an analysis of the national and international scenarios that SVECW has chosen to focus on the strategic objectives it has set for itself.

The TEQIP II project provides a significant boost in these strategic directions to reinforce several streams of activity which include:

- Academic Excellence
- Institutional Reforms
- Interaction with Industry
- Research & Consultancy

SVECW is confident that each one of these streams of activity will be sustained and even expanded beyond the life of the project. The sustainability depends up on different parameters and strategies, as briefly discussed below.

**9.1.1 Academic Excellence**

The sustainability of educational excellence implies the continuation of teaching and curriculum development practices that will have been acquired during this project. It requires, specifically that faculty continue to adopt improved educational practices and that a dynamic and systematic student development process be in place.

The design of the project in this area calls for several measures that will foster these two processes. Rather than focusing on punctual curriculum changes, one of the major objectives of this project is to systematize the process of improving the quality of education delivered to the stakeholders.

Once such a process is systematized and operating, it becomes part of the culture of the institution and will continue operating and being refined. The project also focuses on improving teaching practice and instituting a permanent system of quality control and improvement in teaching.

Attention has been paid to systematic faculty training, the establishment of a performance evaluation system that takes teaching performance into account and systematic processes of faculty development.

Thus, both continuous attention to faculty improvement and improve the learning outcome of students will become the part of the culture of the institution.

### 9.1.2 Institutional Reforms

Reforms required for the institutional development are by its very nature, a temporary activity, helping to shape a new institutional culture. Once established, systems and procedures will become part of the institutional culture and will continue operating.

Most system development efforts will occur during the first two years of the project. SVECW will therefore have three years to stabilize newly introduced behaviors, until the next set of institutional challenges come along.

But by then SVECW will have learned a new skill of managed institutional change and become a dynamic learning organization. Commitment to change and comfort with change are more important than the systems being introduced. It is for this reason that the project design pays great attention to changing attitudes and creating the right climate and dynamics for change in the first year of the project.

### 9.1.3 Interaction with Industry

The BoG of the SVECW consisting industrialist, entrepreneurs and academicians who has a clear vision of how to reach industry and also know the best possible way to establish partnership between institute and industry.

SVECW has already established good relationships with industries and got accreditation with IT companies. This project will give an opportunity to further enhance the relationship with industries. As a part of the project I-I-I cell will start its activities in the first year of the project.

By the end of this project all the members of the I-I-I Cell will get acquainted with the systematic procedures to build the industry institute interaction. This project will be instrumental in creating new capacities, networks and relationships to make SVECW's action more coherent and effective.

### 9.1.4 Research and Consultancy

SVECW has already started working towards Academic and Research excellence, and it has independently sustained it for the past few years, which is clearly mentioned in the capabilities of SVECW in section **2.9.** The continuance of research programs depends on the capacity of faculty to generate research grants.

The only real threat to the further sustenance of SVECW's is whether or not SVECW will be able to induct and train the next generation of faculty that will show the same determination, vision, motivation and drive as their predecessors. This hinges on SVECW's capacity to attract, hire, train and motivate a large number of new quality faculty.

SVECW has the capacity to conduct high quality research. It needs to develop the capacity to transfer it to a new generation. Special attention is therefore being paid to increase SVECW's capacity to do so.

The project also includes a systematic program of faculty training and development to build this capacity and a large increase in the production of well-trained students who will be prime candidates for future recruitment.

**9.2 Ensuring Sufficient Fund Flow**

The prospects for financial sustainability, with adequate core funding from the management and the right policy environment, are good.

SVECW already has demonstrated its ability to generate funds through student fees, NRI admissions, Interest on FDR, Externally funded R&D projects, consultancy, Donations, and to a certain extent, its endowments. With autonomy, it adds flexibility of increasing student fees. The new PG courses that are being started under this project are a test of that capacity.

The project will improve SVECW's networking and public relations capacity and helps to utilize its alumni and other networks, which will further increase its capacity to generate funds.

**9.3 Risk Analysis**

The main risks involved and mitigating measures identified are summarized as follows:

**Introduction:** Risk analysis should be performed as part of the risk management process in each organization. The data of which would be based on brainstorming sessions on risk factors to identify potential issues and risks ahead of time before they become negative impacts on organization.

Brainstorming sessions on risk factors are conducted with a group of people concerned to all categories of stakeholders. So that risk elements to individual categories are identified from different perspectives.

The outcome of the risk analysis would be the creation or review of the risk register (if any) to identify and quantify risk elements to the project and their potential impact.

| **S.No.** | **Main Risk** | **Risk Mitigation Measures** |
|---|---|---|
| 1 | Number of Students preferring higher education may not be at expected level. | Increase promotional efforts.<br>Increase attractiveness of the courses.<br>Trying to get Institutional Sponsorships |
| 2 | Expected demand for new courses may not be there, affecting the sustainability | Evaluate carefully and modify courses. |
| 3 | Utility costs are increasing day -by-day and thus operating cost also increases | Cost-cutting measures |
| 4 | Quality of living environment is falling drastically. | Create eco-friendly environment.<br>Conduct more workshops on stress management. |
| 5 | Fluctuations in world economy may escalate the project budget | Plan & Implement with caution |

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