VIDARBHA YOUTH WELFARE SOCIETY'S
PROF RAM MEGHE COLLEGE OF
ENGINEERING & MANAGEMENT
BADNERA-AMRAVATI

STRATEGIC PLAN
2015 - 2020
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President's Foreword

The aim of higher education in India is to provide access, equity, and quality education to all the aspirants with transparency and accountability so as to ensure sustainable economic development of the nation. It is achieved through creation, transmission and dissemination of knowledge. Vidarbha Youth Welfare Society, Amravati has been contributing to the national development by providing education to the masses through facilities at all the institutes under its aegis since its inception in July, 1965.

Today, while the Society is celebrating its golden jubilee and marching into the sixth decade of service to education, it has to its missionary credit a plethora of forty three institutions in the districts of Amravati and Wardha of the region of Vidarbha.

Prof Ram Meghe College of Engineering & Management-PRMCEAM, one of the constituent professional institutes of the Society started in the year 2009. The institute within a short span of six has earned a repute of a college having student-centric and technology-driven learning environment that fosters budding aspirants to become confident and competent engineering professionals.

The tenets of this Strategic Plan 2015–2020 are driven by the institute's core principles of developing human resources to serve the region, recognizing teaching as a unifying activity, nurturing integrity, creativity and academic freedom and retaining a willingness to experiment with new paradigms. The Plan 2015–2020 has been thought through well, and keeping in mind the college’s robust ecosystem and dedicated team, I am confident that PRMCEAM will make rapid progress towards achieving its vision of becoming an Autonomous Institute by 2020.

Dr. Nitin Dhande
President,
Vidarbha Youth Welfare Society,
Amravati.

Wednesday, 1st July, 2015
Principal's Perspective

Prof Ram Meghe College of Engineering & Management- PRMCEAM, is a premier institute in the state of Maharashtra established and started in the year 2009, under the auspices of Vidarbha Youth Welfare Society, Amravati. The college with the tagline "Feel the Difference. Be the Difference." strives to engage its students in a different learning experience by providing the conventional teaching methodology strongly supported by the state-of-the-art education technology.

PRMCEAM undertook a comprehensive planning exercise starting in the year 2008 that led to strategic plan document titled as DPR 2009-2010. This exercise was mainly guided by the then norms and requirements of AICTE for starting a new engineering college. Most of the objectives as outlined in the DPR have been successfully accomplished well before the end of the decade. Taking a cue from this experience, the institute launched an exercise for developing the Strategic Plan for the next six years guided by the Perspective Plan for Technical Education in Maharashtra State.

The Strategic Plan 2015-2020 has been developed in the context of the capacity expansion of the Institute as mandated by the AICTE norms. Given this setting, the broad objectives for the next spell are clear before us. These include the creation of the requisite infrastructure for the expansion, increasing the faculty strength and increasing the number of research activities and the research output. These goals have been formulated in a manner that builds on the strengths of the institute and the aspirations of the faculty, staff and students.

The vision for PRMCEAM laid out by Strategic Plan 2015–2020 is to be in the top 10 private institutes, by being a regional leader in research and education, which will benefit society around us and the environment. The key pillars that will help the institute achieve this vision are course programmes, research, engagement with industry and entrepreneurial activity.

Through this plan, PRMCEAM aims to offer a wider spectrum of facilities in order to meet the various education, innovation and research interests. In terms of its research capabilities, the college will incubate nationally recognized Centers of Excellence and nurture research capabilities that cater to the technology needs of the region. Industry and academia engagement is also a key pillar where the institute plans to enhance industry institute interaction. Another key focus is to incubate ‘startup’ companies that will create high-value intellectual property.

PRMCEAM within a very short span of six years, has earned a repute of an institute with discipline, committed to excellence and innovation in teaching. This Strategic Plan aims at providing the college a vision and direction for the next few years and strategizes collective efforts to realize the plan culminating into autonomy. True to its vision statement, the college aims to consistently provide and sustain an invigorating work environment that fosters a culture of excellence, innovation and entrepreneurship.

Wednesday, 1st July, 2015

Dr. M. S. Ali
Principal.
1.1 Introduction

The Vidarbha Youth Welfare Society (VYWS) Amravati, now a well-known society in the region came into being in 1965. It was established and registered by Late Prof Ram Meghe an eminent professor-turned-politician distinguished for his significant contribution to the educational reforms in the state of Maharashtra. Today, Vidarbha Youth Welfare Society is managing several institutions of higher professional education in Vidarbha in the state of Maharashtra. VYWS with the vision to be a world class premier organization for technical, professional and management education, works with the mission to be a radiant source of energy for building national manpower through professional education to masses.

The Society has currently two engineering college, one dental, one polytechnic, one pharmacy and several arts, science colleges being run under its aegis. Taking into account the growth in Indian economy after liberalization in the last two decades and the increasing demand for higher technical and engineering personnel in coming years; it was only thought prudent and timely to establish another engineering college. The institution titled “Prof Ram Meghe College of Engineering & Management” (PRMCEAM) started functioning from June 2009 onwards.

Currently there are over 4,450 engineering colleges in India with approximately 18 million enrolled students. Similarly, there are over 558 engineering colleges in Maharashtra with approximately 0.18 million enrolled students across the state. In the region of Sant Gadge Baba Amravati University, there are 27 engineering colleges with an annual intake of approximately 11 thousand.

PRMCEAM is located 13 kms off Amravati city at the New Express Highway in the amiable and well developed college campus sprawling over 9.57 acres of land, well connected with road and railways. The environment and garden are beautifully maintained to refresh the minds of the students and faculty. PRMCEAM is catering to the core streams of Civil Engineering, Computer Engineering, Electrical Engineering and Electronics Engineering with both the UG (Sanctioned Intake 480) as well as PG (Sanctioned Intake 96) programmes as follows.
<table>
<thead>
<tr>
<th>S.N.</th>
<th>Name of Program / Course</th>
<th>Start Year</th>
<th>Sanctioned Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Civil Engineering</td>
<td>2009</td>
<td>120</td>
</tr>
<tr>
<td>2</td>
<td>Computer Science &amp; Engineering</td>
<td>2009</td>
<td>120</td>
</tr>
<tr>
<td>3</td>
<td>Electrical &amp; Electronics Engineering</td>
<td>2009</td>
<td>120</td>
</tr>
<tr>
<td>4</td>
<td>Electronics &amp; Telecom. Engineering</td>
<td>2009</td>
<td>120</td>
</tr>
</tbody>
</table>

**UNDERGRADUATE B.E. PROGRAMME**

**POSTGRADUATE M.E. PROGRAMME**

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Name of Program / Course</th>
<th>Start Year</th>
<th>Sanctioned Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Computer Science &amp; Engineering</td>
<td>2012</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Electrical &amp; Electronics Engineering</td>
<td>2012</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Computer Engineering</td>
<td>2013</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Construction Engineering &amp; Management</td>
<td>2013</td>
<td>24</td>
</tr>
</tbody>
</table>

**Vision**
To become a centre of excellence in engineering education by providing the standard academics that connects knowledge, practice and research.

**Mission**
To foster engineering graduates by providing a continuously improving academic environment that promotes the advancement of engineering knowledge both in creation and dissemination.

**Objectives**

* To develop institute as an excellent learning centre in engineering education.
* To enhance the industry institute interaction and the placement services.
* To provide excellent infrastructure facilities for teaching, learning and research.
* To instill in the students the spirit for research, innovation and entrepreneurship.
* To foster students as responsible techno-citizens with moral and social values.
CHAPTER 2

THE PROMOTING BODY

2.1 The Society

Vidarbha Youth Welfare Society was established and registered in 1965 under the dynamic presidentship of late Prof Ram Meghe, an eminent professor-turned-politician who had a distinction for educational reforms in the state of Maharashtra. The society was formed with the aim to educate the rural masses, started its first residential hostel for rural boys at Amravati and slowly but steadily got established as a major force in educational field in the region.

Under the dynamic leadership of Dr Nitin Dhande, Vidarbha Youth Welfare Society is presently managing several institutions of technical & professional education in Vidarbha region in the state of Maharashtra. Vidarbha Youth Welfare Society with the vision to be a world class premier organization for technical, professional and management education, works with the mission to be a radiant source of energy for building national manpower through professional education to masses.

2.2 The Executive Council

The list and details of promoters are given below. Suffice it to state that this body of promoters and the predecessors have successfully commissioned all the institutions for the past fifty years.

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Name</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Nitin Ramdas Dhande</td>
<td>President</td>
</tr>
<tr>
<td>2.</td>
<td>Prof. Vinay Pundlikrao Gohad</td>
<td>Vice-President</td>
</tr>
<tr>
<td>3.</td>
<td>Shri. Pankaj Surendra Deshmukh</td>
<td>Treasurer</td>
</tr>
<tr>
<td>4.</td>
<td>Shri. Yuvrajsingh Vasantrao Choudhary</td>
<td>Secretary</td>
</tr>
<tr>
<td>5.</td>
<td>Prof. Hemant Muralidhar Deshmukh</td>
<td>Member</td>
</tr>
<tr>
<td>6.</td>
<td>Adv. Uday Shashikumar Deshmukh</td>
<td>Member</td>
</tr>
<tr>
<td>7.</td>
<td>Shri. Nitin Baburaoji Hiwase</td>
<td>Member</td>
</tr>
<tr>
<td>8.</td>
<td>Prof. Gajanan Shankarrao Kale</td>
<td>Member</td>
</tr>
<tr>
<td>9.</td>
<td>Mrs. Ragini Hemantrao Deshmukh</td>
<td>Member</td>
</tr>
</tbody>
</table>
2.3 Major Educational Institutions

The Vidarbha Youth Welfare Society presently has one Dental, two Engineering, one Polytechnic, one Pharmacy, several Arts and Science Colleges running under its aegis all over the Vidarbha region. Taking into consideration the need of higher education in the region, the society started high schools, science colleges, art colleges and commerce colleges in the first decade and then engineering, pharmacy, dental and polytechnic courses. Catering to the need of women, two women colleges were also started which are functioning successfully.

The Society at present has the following major professional institutions;

Dental College & Hospital, Amravati:
The Institute runs a four-year B.D.S. course.

Institute of Pharmacy & D.P. Borgaon (Meghe) Dist - Wardha:
The Institute runs a four-year B.Pharm course.

VYWS Polytechnic, Badnera – Amravati
The Institute runs various three-year engineering diploma courses.

Prof. Ram Meghe Institute of Technology & Research, Badnera - Amravati
The Institute runs various four-year engineering degree, MBA, MCA and two-year engineering PG programmes.

Prof. Ram Meghe College of Engineering & Management, Badnera - Amravati
The Institute runs various four-year engineering degree and two-year engineering PG programmes.

2.4 Vision of the Promoting Body
To be a world class premier organization for general, technical, medical and professional education.

2.5 Mission of the Promoting Body
To establish and promote high quality education and research facilities so as to foster professionals of world class competence with an aim to build a strong India.
CHAPTER 3
THE MAHARASHTRA STATE TECHNICAL EDUCATION PLAN

3.1 Vision 2020

Vision 2020

A Vision is not a project report or a plan target. It is an articulation of the desired end results in broader terms.

A. P. J. Abdul Kalam

By 2020, the Proposed Vision of Technical Education in Maharashtra is to strive to

- Increase the Gross Enrolment Ratio in Higher Education (GER) to 35%
- Enhance the quality of Technical education institutions, programs and systems towards achieving international standards
- Broaden access of Technical education to those who seek it irrespective of caste, gender & financial background
- Efficiently and effectively manage the Technical education system ensuring transparency and integrity
- Elevating research levels in Technical Education system

Directorate of Technical Education, Maharashtra

3.2 Industrial Scenario

Industry Demand

<table>
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<tr>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total jobs in India*</td>
<td>397</td>
<td>411</td>
<td>424</td>
<td>438</td>
<td>453</td>
<td>468</td>
<td>464</td>
<td>460</td>
<td>457</td>
<td>455</td>
<td>451</td>
</tr>
<tr>
<td>Total jobs in Maharashtra*</td>
<td>47.34</td>
<td>48.92</td>
<td>50.55</td>
<td>52.24</td>
<td>53.99</td>
<td>55.79</td>
<td>57.65</td>
<td>59.53</td>
<td>61.57</td>
<td>63.62</td>
<td>65.75</td>
</tr>
<tr>
<td>Jobs for people with Higher Education in Maharashtra*</td>
<td>5.48</td>
<td>5.80</td>
<td>6.27</td>
<td>6.70</td>
<td>7.17</td>
<td>7.67</td>
<td>8.20</td>
<td>8.77</td>
<td>9.38</td>
<td>10.03</td>
<td>10.73</td>
</tr>
<tr>
<td>Additional Jobs</td>
<td>0.36</td>
<td>0.38</td>
<td>0.41</td>
<td>0.44</td>
<td>0.47</td>
<td>0.50</td>
<td>0.53</td>
<td>0.57</td>
<td>0.61</td>
<td>0.65</td>
<td>0.70</td>
</tr>
<tr>
<td>Vacancies created in existing jobs</td>
<td>0.11</td>
<td>0.12</td>
<td>0.13</td>
<td>0.13</td>
<td>0.14</td>
<td>0.15</td>
<td>0.16</td>
<td>0.18</td>
<td>0.19</td>
<td>0.20</td>
<td>0.21</td>
</tr>
<tr>
<td>Therefore Total Jobs in Higher Education Added year on year</td>
<td>465395</td>
<td>490246</td>
<td>525809</td>
<td>567883</td>
<td>609636</td>
<td>650249</td>
<td>697411</td>
<td>745928</td>
<td>797522</td>
<td>854325</td>
<td>912690</td>
</tr>
<tr>
<td>Total Jobs in Technical Education</td>
<td>123494</td>
<td>132085</td>
<td>141724</td>
<td>151102</td>
<td>161615</td>
<td>172858</td>
<td>184883</td>
<td>197740</td>
<td>211703</td>
<td>226217</td>
<td>241954</td>
</tr>
</tbody>
</table>

Therefore, I take capacity to meet these demands in Technical Education

492,220 417,325 432,374 448,287 464,787 481,804 499,631 516,020 554,462 593,935

* Source: Employment and Unemployment Survey, NSSO (2009-2010)
Directorate of Technical Education, Maharashtra
Amravati

Amravati district occupies an area of 12,235 sqkm and has total population of 26,06,063 as on 2001

Technical Education Overview

<table>
<thead>
<tr>
<th>No. of Institutes*</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake Capacity*</td>
<td>9853</td>
</tr>
<tr>
<td>Admitted*</td>
<td>8696</td>
</tr>
<tr>
<td>Vacancy*</td>
<td>12%</td>
</tr>
</tbody>
</table>

* Excluding Non - AICTE Diploma Courses

Industry View & Skills Requirements

The key industries in Amravati include: Textile, Sugar, Power Generation, Electronics, IT - ITES among others

Amravati - Degree

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering Group</td>
<td>780</td>
<td>780</td>
<td>711</td>
<td>-</td>
</tr>
<tr>
<td>Electronics Engineering Group</td>
<td>1020</td>
<td>1020</td>
<td>908</td>
<td>-</td>
</tr>
<tr>
<td>Electrical Engineering Group</td>
<td>480</td>
<td>540</td>
<td>442</td>
<td>-</td>
</tr>
<tr>
<td>Computer Engineering Group</td>
<td>1530</td>
<td>1440</td>
<td>1180</td>
<td>-</td>
</tr>
<tr>
<td>Civil Engineering Group</td>
<td>420</td>
<td>420</td>
<td>438</td>
<td>60</td>
</tr>
<tr>
<td>Instrumentation Engineering Group</td>
<td>60</td>
<td>60</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td>Miscellaneous Group</td>
<td>60</td>
<td>60</td>
<td>61</td>
<td>-</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>120</td>
<td>120</td>
<td>110</td>
<td>60</td>
</tr>
<tr>
<td>HMCT</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Architecture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Amravati – Post Graduate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering – Post Graduate</td>
<td>483</td>
<td>865</td>
<td>NA</td>
<td>-</td>
</tr>
<tr>
<td>Pharmacy – Post Graduate</td>
<td>90</td>
<td>90</td>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>Management (MBA/MM/M/PGDM)</td>
<td>800</td>
<td>800</td>
<td>845</td>
<td>120</td>
</tr>
<tr>
<td>MCA</td>
<td>420</td>
<td>480</td>
<td>389</td>
<td>60</td>
</tr>
<tr>
<td>Architecture – Post Graduate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
3.3 Status at Level Issues

Issues in equity / inclusiveness

While the GER continues to be low for the overall population of the state, there are large variations among the various categories of population based on urban or rural habitation, gender, reach and poor.

- As seen in the previous sections, the urbanized districts have far more enrolments when compared to rural districts.
- Further the disparity in terms of enrolment by Gender is shown below:

<table>
<thead>
<tr>
<th>(2011-12) Admitted</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Degree</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>Engineering Diploma</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>HMCT</td>
<td>18%</td>
<td>82%</td>
</tr>
<tr>
<td>Pharmacy degree</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

- Enrolment Disparities due to poor financial background is also high. Poor families often expect children to contribute to family income either by working in the field or engaging in child labor. The main cost of sending a child to school is forgone earnings.

Recommendation for Improving quality

Curriculum and Program
1. Curriculum update frequency should be more regular with large amount of industry inputs.
2. Need for curricula reform to include compulsory exposure and engagement with different kinds of work, in the form of summer jobs or internships, and should include a certain minimum set of occupational exposure compulsory for all students, irrespective of discipline.
3. Cross discipline learning should be possible and should be encouraged and education should allow the student to study subsidiary subjects other the major one that the student is studying.
4. Scope to enter/exit into the technical education system through multiple channels.
5. Curriculum should also focus on soft skill development including ethics, social responsibility, leadership and personality development.
6. Colleges with proven record to be given more autonomy in academic self governance.
7. Look at opportunities for Financial and Administrative autonomy.
8. Accreditation of institute and courses to be taken up on priority.
Recommendation for Improving quality

Learning Resources and Research
- Establishment of Learning Resource Development Centers
- Provide facility for one to one usage of LRs
- Development/procurement of learning resources such as video films, multimedia packages
- Training of teachers/faculty in development of learning resources
- Creation of LRs storage facility for ready access to teachers and students and acquisition and installation of appropriate hardware for classroom projection and self learning from audio-visual resources
- Provision of Internet, campus networking and networking between institutions for enhancing access to and sharing of LRs available in a cluster
- Focus on Research and Consultancy, with development of Center of Excellence or School for research and study in specific areas in lead institutions

Recommendation for Improving quality

Establishment of Quality Assurance Cell
- Each institute should have a quality assurance cell for monitoring of the following, which in turn may be reported to the State Govt. on a periodic basis:
  - Regularity of academic sessions and conduct of program
  - Attendance during lecture, tutorial, and laboratory classes
  - Timeliness of the evaluation process and evaluation mechanism
  - Planning, update and implementation of curricula design
  - Student involvement and participation in research and industry interaction
  - Promoting harmonious interaction between students, faculty and management
  - Grievance redressal
  - Academic/personal counseling mechanisms
Recommendation for Improving quality

Industry Interaction
The institutes should strive to intensify the collaboration of industry & institutes for mutual benefits through following approaches:

- Collaboration in training: industry specific training in topics of interest for industry.
- Collaboration for establishment of Centre of Excellence and Industry Chair
- Collaboration through student internships
- Collaboration for Mentorship of Students
- Encouraging talent from industry to participate in teaching & research
- Collaboration for Entrepreneurship Development & Technology incubation
- Collaboration for research, Collaboration for Consultancy etc.

Diversity in Education

- Diversity in terms of student intake should be encouraged.

Research in Technical Education

Need to improve Focus on PhDs

1. The number of students who enter at the doctoral education level is still low
   1. Only 0.65% of the total number of students in higher education are enrolled at the PhD Level
   2. Only 0.25% of the total number who enrolled at the graduate level enroll at the PhD level

2. The density of research personnel in India is only 1.49 when compared to 139.5 in USA, 122.4 in China, 71.0 in Japan, 28.0 in Germany and 20.4 in France.

3. The highest number of PhDs between 1998 and 2007 has been awarded in the Natural Sciences (25.1% of the total number of PhDs) followed by Humanities (24.1%).

4. Engineering (8.6 percent of total PhDs) and Medicine (7.2 percent of total PhDs), which are important sectors of the economy show a lower performance in comparison.
Research in Technical Education

Recommendations
1. Need for Improving Productivity by Establishing Linkages between PhD Output and Changing Job Market and making the PhD program in tune with the needs of the industry
2. The State Government may study the occupational profiles of PhD holders and understand to what extent there exist a gap between demand for and supply of doctorates and fine tune the program accordingly
3. There is a need to support and enhance research in newly emerging areas of study of interdisciplinary nature through new organizational arrangements and policies
4. Application oriented research projects and consultancy centres, tuned to needs of industrial and rural development needs to be developed. The infrastructure of existing institutes may be strengthened to turn them into Center of Excellences in particular domains

Research in Technical Education

Recommendations
5. There is a need to Improve Women’s Representation in Research and the State Government may look at incentivizing the same
6. Research is a resource incentive exercise and to focus on that successfully, there is a need to strengthen individual institutional libraries and create a network of libraries with common access
7. The State Government may look at industry participation in the research programs
8. The State Government may look at promoting Part time PhD programs which the students can work on while doing job
9. The State Government may look at introducing lectures as part of the curriculum to sensitize the students regarding IP, patents etc. These can be introductory sessions and need not be part of evaluation process. Institutes like NIFT, Delhi has introduced the same as part of the curriculum
Research in Technical Education

Recommendations
10. The universities may appoint 1-2 staff members specializing in providing legal support in filing patents, which can help the students/faculties in filing for patents.

11. The State Government may look at a mechanism of promoting IP, patent applications from the projects undertaken by students at various technical institutes. Recently NIF has taken the lead in the same.

12. The State Government may look at industry participation in the research programs. The State may look at symbiotic tie-up of corporate bodies with academic institutions which can promote IP, Innovation etc which needs to be tapped by them.

13. The State Government may seek the help of the Office of the Controller General of Patents Designs and Trademarks to provide training to staff members in filing of patents, handling of database search etc.

Monitoring and Evaluation Framework
Present Scenario
Monitoring and Evaluation of the performance of technical institutes on a continuous basis is of paramount importance.

Presently, there are 2 organizations which look into evaluation and accreditation, as follows:

1. National Board of Accreditation (NBA), which was constituted by the All India Council for Technical Education (AICTE), as an Autonomous Body, under Section 10(u) of the AICTE Act, 1987.

2. NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC), an autonomous body established by the University Grants Commission (UGC) of India.
Monitoring and Evaluation Framework

Recommendations

1. The State Government may also propose an evaluation framework based on the following parameters to be evaluated by an independent third party on a periodic basis (after a self assessment has been completed by the institute):
   1. Curriculum
   2. Teaching and Pedagogy
   3. Physical Infrastructure and Learning Resources
   4. Organization, Governance and Management
   5. Industry Linkages, Research and Consultancy
   6. International Linkages

Monitoring and Evaluation Framework

Recommendations - Detailed Framework

1. Curriculum – 20% weightage
   1. Quality of the curriculum
   2. Regular curriculum refresh
   3. Focus on mix of theory, lab. work, case study
   4. Industry participation in curriculum design

2. Teaching and Pedagogy – 30% weightage
   1. Qualification and Competence of the Teaching Staff, including publications
   2. No. of permanent teaching staff on rolls
   3. Healthy teacher – student ratio in the institute
   4. Teaching methodology
   5. Use of modern learning aids
   6. Utilization of Feedback on teaching and pedagogy
Monitoring and Evaluation Framework
Recommendations - Detailed Framework

3. Physical Infrastructure and Learning Resources – 15% weightage
   1. Adequacy of classrooms, laboratories and other facilities
   2. Adequacy of libraries and availability of digital content
   3. Hostels
   4. Modern Learning resources
   5. Institute Publications and Case Studies

4. Organization, Governance and Management – 15% weightage
   1. Adequate Governing Board in place
   2. Appointment of staff as per AICTE and State Government norms
   3. Transparency and efficiency in functioning of the institute
   4. Maintenance of updated Financial Statements
   5. Regular Audit of Process, System and Finance

Monitoring and Evaluation Framework
Recommendations - Detailed Framework

5. Industry Linkages, Research and Consultancy – 10% weightage
   1. Industry Interaction
   2. Focus on Research, Patents and IP
   3. Focus on Doctoral education
   4. Consultancy projects for faculty

6. International Linkages – 10% weightage
   1. Faculty exchange program
   2. Student exchange program
   3. MoUs with reputed international institutions
CHAPTER 4

THE ROAD AHEAD

PRMCEAM’s current student strength for UG and PG is 1600 and is scheduled to grow to 2000 by 2016-17 after the expansion is completed for all four years of UG. The PG courses have reached their full expansion as permitted by the AICTE norms. After accreditation, new courses may be introduced.

In the next 5 years, the Post Graduate (PG) courses should be strengthened and PhD Research Centers should be introduced to further the research & consultancy culture in PRMCEAM.

Introduction of a number of certification courses and market friendly soft skills and entrepreneurship development courses and introduction of new AICTE schemes, would definitely improve the employability of PRMCEAM graduates besides generating revenue for sustaining PRMCEAM’s infrastructural growth and maintenance plans. Simultaneously, implementation of MOUs with foreign universities would be necessary to improve PRMCEAM’s branding at the national and international level.

Technical higher education system in India is likely to undergo rapid transformation in the coming decade to keep pace with the imperatives of a booming national economy which necessarily has to ride on a sound technological foundation. There is likely to be much greater competition amongst the premier educational institutions to be counted amongst the first twenty. Corporate and foreign universities are likely to enter this field introducing their corporate governance norms and practices with fast decision-making systems. Adoption of full corporate norms and practices at PRMCEAM are likely to enable a more incentive oriented governance system and more effective teaching learning system.

The government of Maharashtra has published a Perspective Plan for technical education identifying certain facts and figures and accordingly Vision 2020 document has been prepared. The Vision 2020 document is indeed the guiding force along with the DPR 2009-2010 document to finalize strategies for the Plan 2015-2020 for PRMCEAM. Following goals and targets are envisioned for next spell of six years till 2020.
1. **UG Education and Skill Development**

**Goal** Create a collegiate experience that encourages intellectual rigor and productive teamwork, and results in the graduation of total quality engineers who are well prepared to succeed in the global workspace.

- **Strategies and Tasks**:

  - **Strategy 1**: Attract higher score merit students and provide a campus environment for producing highly motivated and successful engineers:
    - Interactive classes and tutorials with strong IT support
    - Well equipped labs: supervised projects from SE onwards
    - Technical seminars and workshops
    - Participation in national competitions and conferences
    - Credit based system of continuous performance evaluation
    - Meaningful industry interaction and internships
    - Soft skills development through peer pressure
    - Motivational talks by eminent personalities
    - Stimulating student-centric /student-friendly learning environment, student mentors; Responsive administration.
    - Feedback mechanism for better governance.

  - **Strategy 2**: Maintain excellent teaching, learning environment to achieve Zero failures, 60% and 80 % First class in III and IV years respectively and one University rank holder in each Department:
    - 100% Faculty should be with PG degree by 2018.
    - 80% Faculty should be PhD holders by 2020.
    - 80% Students should be scholarships-holder by 2020.
    - Reward and Recognition Awards for excellence in teaching.
• Continuous evaluation of the effectiveness of Faculty.
• Continuous evaluation of the effectiveness of each course content.
• Integration of communication skills throughout curricula.

• **Strategy 3** Ensure that all PRMCEAM students graduate with strong core engineering knowledge enriched by a broad education to ensure that 20% students obtain post graduation, 100% registered / eligible students get placement, and 50% placements are in core engineering and consultancy firms with good salary package.

| Prepare students with the ability to use the techniques, skills, and modern engineering tools necessary for modern engineering practice – Value Addition Courses as extra classes. |
| Prepare students for ethical and professional leadership. |
| Prepare students to communicate effectively among diverse audiences. |
| Prepare students for lifelong learning and professional improvement. |

• **Strategy 4:**

| Introduce core discipline of Electrical Engineering by 2017. |
| Exploit the energy / digital / communication boom |

• **Strategy 5.** Achieve good branding for PRMCEAM:

| Permanent Affiliation of the University by 2016/2017. |
| Accreditation from national agencies like NAAC/NBA by 2017/2018. |
| UGC 2(f) ,12(b) status by 2017/2018. |
| Collaboration with Foreign Universities by 2018/2019 |
| Ranking by recognized rating agencies within first 10 private engineering colleges across the state by 2019/2020. |
| Autonomous Status by 2020. |

2. **PG Education and Research**

**Goal:** Build and sustain nationally recognized engineering research and PG programs of relevance to industry.

**Strategies and Tasks:**

• **Strategy 1.** Advance research and scholarly enterprise:
  
  - Recruit and retain Faculty with good research and scholarship potential.
- Enrich PG courses in a phased manner for 4 Departments by 2020.

- Identify and support programs and areas of emerging distinction (2020 target: All the PG programs to be ranked in top 10 of private research institutes across the state).

- Encourage the Faculty in pursuing new research programs.

**Strategy 2:** Initiate research culture in PRMCEAM UG students:

- Encourage students to take up industry related projects.

- Provide opportunities for UG research experience through paper publishing in high impact factor journals.

- Provide opportunities for UG research experience through publishing national or international patents.

**Strategy 3:** Improve research synergies with Industry:

- Stimulate long-term, mutually beneficial industrial collaborations (2020 target: 50% Faculty with at least one funded research / consulting contract per year).

- Increase appreciation of entrepreneurship among students and Faculty (Establish Entrepreneurship Development Cell).

- Encourage registration of patents (2020 target: Twenty patents per Department).

- Aggressively market, at the state and national levels, the college’s research enterprise and PG programs.

- Stimulate public involvement in conferences, lectures and seminars.

- Utilize emerging technologies and activities, such as e-learning and web based online learning.

**Strategy 4:** Obtain AICTE/DST grants from Government sources.
Apply for AICTE/UGC grants for skill development for backward class students thereby enriching social inclusion.

Apply for AICTE grants for promoting Continuing Education Programmes for own students and for establishing Learning Resource Centers (LRC) for local industry and consultancies.

Research Promotion Scheme (RPS) for innovation in established and newer technologies:-

Establish Entrepreneurship Development Cell (EDC)

Seminar Grants, Faculty Development Programmes (FDP), Entrepreneurship Development Programmes (EDP).

3. **Internal Revenue Generation (IRG) Scheme.**

**Goal** Generate income for sustaining PRMCEAM’s growth plan on a No-Profit basis to the tune of Rs 30 Million by 2020.

**Strategies and Tasks:**

i. **Strategy 1.** Introduce 20 hour/month value addition technical courses (CEPs) using PRMCEAMs infrastructure in evening sessions after regular college hours.

ii. **Strategy 2.** Introduce GATE Coaching with Faculty by adding a mini-obstacle course to achieve 10% placement of PRMCEAMians in reputed national institutes for PG studies.

iii. **Strategy 3.** Introduce Finishing School.

iv. **Strategy 4.** Offer IT lab facilities, projects and product development for other institutes and industry.

v. **Strategy 5.** Offer consultancies in Civil, Electrical, Electronics & Telecommunication and Computer Engineering to infrastructure firms, IT industry and other SMEs in surrounding areas for faculty development and internal revenue generation.
4. **Infrastructure Development Plan.**

(Estimate of Rs. 20 Cr. in a phased manner for 11500 square meter construction)

I) Construction of New buildings for Civil, Electronics, Computer and Electrical Engineering Departments as per sanctioned plan.

ii) Construction of Canteen Building and Guest House as per sanctioned plan.

iii) Landscaping Enhancement and Paved Parking Lots development.

iv) Construction of Elevated Storage Reservoir for Drinking Water.

v) Development of Auditorium and Open Air Amphitheatre.
### Strategic Plan 2015-2020 Target Timeline

**(a) Affiliation and Accreditation.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>2016-18</td>
<td>NAAC/ NBA accreditation.</td>
</tr>
<tr>
<td>2016-18</td>
<td>Permanent affiliation to SGA University, Amravati.</td>
</tr>
<tr>
<td>2018-19</td>
<td>UGC recognition under Section 2(f) and 12(b).</td>
</tr>
<tr>
<td>2019-20</td>
<td>Autonomous Status under Babasaheb Ambedkar Technological University (BATU), Lonare - Raigadh</td>
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**(b) Horizontal Expansion.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>2018-19</td>
<td>Introduce Mechanical Engineering branch.</td>
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</table>

**(c) Vertical Expansion:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>2017-18</td>
<td>Introduce PhD programmes in Computer/Electrical</td>
</tr>
<tr>
<td>2018-19</td>
<td>Introduce PhD programmes in Civil/Electronics</td>
</tr>
<tr>
<td>2019-20</td>
<td>Introduce PhD programmes in Mechanical/Management</td>
</tr>
</tbody>
</table>

**(d) Research and Consultancy / MOUs with Industry.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2016</td>
<td>Introduce AICTE / DST research promotion schemes.</td>
</tr>
<tr>
<td>2015-2016</td>
<td>Establish Entrepreneurship Development Cell.</td>
</tr>
<tr>
<td>2015-16 onwards</td>
<td>Introduce R&amp;D and MOUs with Industry.</td>
</tr>
<tr>
<td>2016-2017</td>
<td>Introduce Skill Development Courses</td>
</tr>
<tr>
<td>2016-17 onwards</td>
<td>Business Incubation Centre/ SSI Units Collaboration with Foreign Universities, Research Centers.</td>
</tr>
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**References:**
