



# **INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)**

**Accreditation - (Cycle - 1)**

## **PEER TEAM REPORT ON INSTITUTIONAL ACCREDITATION OF ATHARVA COLLEGE OF ENGINEERING**

**Malad west Mumbai  
400095**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL  
An Autonomous Institution of the University Grants Commission  
P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA**

**Section I:GENERAL INFORMATION**

|  |   |
|--|---|
| 1.Name & Address of the institution:   | ATHARVA COLLEGE OF ENGINEERING<br>Malad west Mumbai<br>Maharashtra  |
| 2.Year of Establishment  | 1999  |
| 3.Current Academic Activities at the Institution(Numbers):                                 |   |
| Faculties/Schools:   | -   |
| Departments/Centres:   | 5   |
| Programmes/Course offered:   | 5   |
| Permanent Faculty Members:   | 51  |
| Permanent Support Staff:   | 175   |
| Students:  | 2056  |
| 4.Three major features in the institutional Context (Asperceived by the Peer Team):        | <ol style="list-style-type: none"><li>1. Engineering college affiliated to University of Mumbai offering only UG Programs in engineering</li><li>2. Mainly catering to the students from suburb areas of Mumbai</li><li>3. Committed Management</li></ol> |
| 5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure): | Visit Date From : 02-04-2018<br>Visit Date To : 03-04-2018  |
| 6.Composition of Peer Team which undertook the on site visit:                              |   |
| Chairman:  | L K   |
| Member Co - ordinator:   | Pratosh   |
| Member:  | K M   |
| NAAC Co - ordinator:   | DR. RUCHI THIRIPATI   |

## Section II: CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion (This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

| Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrics(QIM) in Criterion1) |   |
|--|---|
| 1.1  | Curricular Planning and Implementation  |
| 1.1.1<br>QIM   | The institution ensures effective curriculum delivery through a well planned and documented process   |
| 1.2  | Academic Flexibility  |
| 1.3  | Curriculum Enrichment   |
| 1.3.1<br>QIM   | Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum |
| 1.4  | Feedback System   |

### Qualitative analysis of Criterion 1

Atharva College of engineering is affiliated to University of Mumbai, hence the institute implements the curriculum prescribed by University. College offers only UG programs in Engineering. College is catering to mostly suburbs of Mumbai. Teaching plans are prepared by faculty members according to the academic calendar. Various teaching methods such as Presentations, Virtual Lectures, MOOCS, NPTEL, Industrial Visits, Group Discussions, Case Studies, Projects, Quiz etc. are used to implement and supplement the curriculum. CBCS has been implemented from the session 2016-17. Effective course implementation of CBCS will require efforts in term of making students aware of the same and clash free centralized time table system.

It has been observed that College provides ample opportunities to faculty members to update their knowledge and improve their teaching practices. Also the College motivates its faculty members to participate in STTP, Orientation/ Refresher Courses/ Workshops/ Seminars / Conferences organized by the different colleges and Universities. The college library has sufficient number of books and other reference materials, e-journals, journals and magazines. College has also few MOUs with the industries and institutions for its curriculum enrichment. Internal Quality Assurance Cell (IQAC) helps to monitor academic activities according to the schedule and improve overall aspects to bridge the gap of quality education. College has arrangements of Mentoring and counselling of the students by forming batches of 20 students to individual faculty members. The performance of the students is regularly monitored by the mentors. These help to improve the overall performance of the students. Courses on English language and Mathematics are offered for the first year students and lateral entry students to help them understand basic concepts.

The curriculum provided by university has different courses such as Environmental Studies, Business Communication and Ethics, Project Management etc. which addresses cross cutting issues relevant to Environment and Sustainability, Human Values and Professional Ethics. No specific course on gender sensitization is offered. Though College has 97 female teachers out of 129 teachers in total but female students are only 29%. Feedback is being collected from various stake holders on curriculum.

| Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2) |   |
|--|---|
| 2.1  | Student Enrollment and Profile  |
| 2.2  | Catering to Student Diversity   |
| 2.2.1 QIM  | The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners                                      |
| 2.3  | Teaching- Learning Process  |
| 2.3.1 QIM  | Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences                              |
| 2.3.4 QIM  | Innovation and creativity in teaching-learning  |
| 2.4  | Teacher Profile and Quality   |
| 2.5  | Evaluation Process and Reforms  |
| 2.5.1 QIM  | Reforms in Continuous Internal Evaluation(CIE) system at the institutional level  |
| 2.5.2 QIM  | Mechanism of internal assessment is transparent and robust in terms of frequency and variety  |
| 2.5.3 QIM  | Mechanism to deal with examination related grievances is transparent, time-bound and efficient  |
| 2.5.4 QIM  | The institution adheres to the academic calendar for the conduct of CIE   |
| 2.6  | Student Performance and Learning Outcomes   |
| 2.6.1 QIM  | Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students |
| 2.6.2 QIM  | Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution  |
| 2.7  | Student Satisfaction Survey   |

#### Qualitative analysis of Criterion 2

The institute follows the Admission process of DTE through the Common Entrance test conducted by government of Maharashtra for the first year of engineering. Reservation policy as laid down by the state govt. is followed. Mostly, students of Maharashtra prefers this college. Only 6 students took admission from outside of the state. Also, 3 differently abled students are on roll. The institute organises the induction program for the students and parents to understand the curriculum. College identifies the advance learners and slow learners and pays attention to them. College provides opportunities to advance learners by sending them for industrial visits, workshop, seminars, projects, symposiums etc. Special care is taken care of the slow learners by providing them remedial classes, special extra coaching and reference material.

Multimedia teaching aids like PPTs, Video Lectures, Virtual Lectures are used to supplement the teaching. Virtual class sessions of the experts from other institution and industries also helps the students. Industrial visits gives real exposure and Language Laboratory helps in improving communication skill of the students in English. MOOCS, NPTEL, SWAYAM videos are also available. Group discussion, seminars, workshops, case studies, projects help students for better understanding of the concepts.

College also uses Learning Management System - Course Networking and Moodle for course management and progress monitoring.

Real time, interdisciplinary and sponsored projects and mini projects are allocated to the students which lead

to critical thinking. Students are given opportunities to participate in R&D activities. To promote talents in innovation, the institute has a branch of IEDC.

The institute develops the tradition of continuous internal evaluation by setting certain measures. The institute has exam committee which takes care for smooth conduction of examination. Exam coordinators for each department meet exam committee periodically to discuss and solve the matters, if any. Opportunity is given to the students to see their evaluated papers for their improvement. Practical/ Oral exams, Multiple choice questions, Quizzes, Unit tests prepared with the relevant academicians and industry persons to give the exposure to the students of various disciplines.

The internal assessment system of the students is transparent. The blue print of the marks and the model answers are discussed with the students. The duration of examinations and paper corrections are clearly decided. Internal and External examiners are appointed for conduction of the Practical and Oral exams. Revaluation and Moderation is done as per the university guidelines. Grievance cell helps students to satisfy their queries. Continuous Feedback is taken to improve the evaluation methods of the students.

The institute has grievance cell to deal with the various grievances of the students like Poor quality assessment, less marks, casual approach in assessment. Cell has given all freedom to the students to express themselves freely and absolute transparency is maintained. Evaluation methods and weightage are discussed with the students. Exam incharge forwards the grievances to the university and follow-ups are displayed on the notices boards.

Institute prepares academic calendar according to the university. Institute plans curricular and extracurricular activities according to the available working days. Faculty members along with student council prepare the academic calendar and get approval from the principal.

Institution vision and mission are defined with emphasis on promoting value education. PEO, PO, and CO have been defined by every department and discussed with faculty and students. POs are not displayed on the college website. All POs and COs are evaluated by all the departments by using tools like tutorial and midterm results, online exam results, Industry and Alumni feedback.

Faculty Members use assessment outcomes as an indicator for evaluating student's performance. The performances of the students in tests, practical, orals, quizzes, attendance are calculated for the evaluation. Online exams, Quizzes help to evaluate the performance and corrective actions are taken care. Faculty members modify the teaching methodology to attain the course objective.

| Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3) |  |
|---|--|
| 3.1   | Resource Mobilization for Research   |
| 3.2   | Innovation Ecosystem   |
| 3.2.1<br>QIM  | Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge                        |
| 3.3   | Research Publications and Awards   |
| 3.4   | Extension Activities   |
| 3.4.1<br>QIM  | Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years |
| 3.5   | Collaboration  |

#### Qualitative analysis of Criterion 3

Some college teachers are involved in research. However out of 129 teachers 08 are Ph D. Some teachers have published research papers also.

Institution has started working on creating eco system for innovations including incubation centre for creation and transfer of knowledge. College has IEDC which nurture, guide and promote ideas of student entrepreneurs. Some start ups of the students have got appreciation in real world and attracted funding. College has dedicated Innovation LAB i.e. i-LAB with 50 touch screen computers and 3D Idea generator for generating breakthroughs. Institute has established some specialised labs such as Robotic Centre, i-Mac Lab, IOT Lab, Remote Embedded Lab, Satellite Tracking Ground Station and 3d Printer Lab.

A NSS unit has been established in the institute since 2012-13. The NSS unit of Atharva College conducts many activities throughout the year such as Leadership Training Camp (LTC), Tree Plantation, National Flag Respect Programme, Stress Management Seminars, Crowd Management, Beach Clean Drive, Cyber Crime Awareness Workshop, Eye Check-up Camp, Blood Donation Camp, Program on Save Girls - Save Nature, Anti-Drugs activities, Vote for better India, National Days Celebration, disaster management etc. College also received the recognition and awards from some of the recognised bodies for extension activities. As the NSS unit size is of 50 only and all the activities are done by the NSS only hence very less percentage of students involved in social activities. Cultural committee also focusses on societal issues through skits, street plays etc.

College has linkages with the industries for providing internship and training to the students. However, College has no significant functional MoUs.

| Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4) |  |
|---|--|
| 4.1   | Physical Facilities  |
| 4.1.1<br>QIM  | The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.  |
| 4.1.2<br>QIM  | The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities   |
| 4.2   | Library as a Learning Resource   |
| 4.2.1<br>QIM  | Library is automated using Integrated Library Management System (ILMS)   |
| 4.2.2<br>QIM  | Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment   |
| 4.3   | IT Infrastructure  |
| 4.3.1<br>QIM  | Institution frequently updates its IT facilities including Wi-Fi   |
| 4.4   | Maintenance of Campus Infrastructure   |
| 4.4.2<br>QIM  | There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. |

#### Qualitative analysis of Criterion 4

College is affiliated to Mumbai University and approved by AICTE, DTE. Institute has well equipped infrastructure that facilitates the effective teaching learning in proportion to student intake. The college has infrastructure which provides modern amenities. The institute has 24 class rooms, 48 laboratories, 6 tutorial rooms, 3 seminar halls, Auditorium, Cafeteria, Sports/Gym, Boys and Girls common room. Besides central library each department has departmental library with reference and text books. 80 Mbps internet facility is available.

College has culture to nurture the students in extracurricular activities also. The college has some success stories in cultural and sports activities. Students participated in indoor and outdoor sports events at state and university level. Modern Auditorium facilitates students to show their talent in different cultural activities. College celebrates International Yoga Day every year and conducts yoga sessions for students and faculty periodically.

Library and reading room of college is well equipped with text books, standard Reference books, e-journals, magazines, print journals, Newspapers and Competitive exams preparation materials etc. The library has ILMS software named as MICM library management software. Software for complete automation and RFID based system is missing.

The institution has maintained well structured IT facilities with 607 computers with internet facility for the students. Computers are connected in LAN. The internet speed has been upgraded to 80MBPS from 20MBPS in the year 2014. Along with high Speed internet the institute takes extra step to secure the internet with Firewall and Antivirus software. Laboratory uses the licensed as well the open source softwares. Internet lines are available in all the academic venues and seminar rooms. Moreover all the seminar rooms can also be digitally connected in the broadcasting mode. All licenses of software are updated on regular basis.

The college follows ISO manual and prepare different procedures to maintain the quality in different aspects. Maintenance section regularly monitors and controls the facilities of the infrastructure. Dead stock registers

are maintained on regular basis. Calibration of the equipments is done periodically by internal, external or AMC team. College is highly secured with the facilities of CCTV installed in the campus. All classrooms, Laboratories, seminar halls are maintained clean on regular intervals in a day.

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| Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrics(QIM) in Criterion5) |  |
|---|--|
| 5.1   | Student Support  |
| 5.2   | Student Progression  |
| 5.3   | Student Participation and Activities   |
| 5.3.2<br>QIM  | Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution   |
| 5.4   | Alumni Engagement  |
| 5.4.1<br>QIM  | The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years |

#### Qualitative analysis of Criterion 5

The college has various academic and administrative bodies which seeks students participation. Institute has formed the student council according to the provision of Maharashtra university act. Student council includes the students from different years and branches. Students are selected through interviews and group discussion on the basis of the knowledge of the student past experience, dedication, productivity, creativity, and merit and leadership quality. Student council consist of General Secretary, Vice General Secretary, Academic head, Treasurer, Cultural Secretary, Sports head, Marketing, Documentation heads, Registration heads. The students participate in various College committees like IEEE, Techithon, NSS, Ecell, ICC, SC/ST, CDC, EESA, CSI, Code strike, Rhythm, Ganesh festival, Sports, Eyantra etc.

Alumni Association of college is not registered. College has developed a system to interact with alumni and take the feedback on various issues like Syllabus and curriculum. The training and placement cell collects feedback from senior executives and industry experts of students performances. The feedbacks are circulated in the respective departments for necessary corrective action. The feedback of alumni helps to improve teaching learning methods. College has organised internship programs and started entrepreneurship cell to make the students industry ready. Informal Alumni group has organized many guest lectures, hands on workshop and seminars for grooming the students.

| Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6) |  |
|---|--|
| 6.1   | Institutional Vision and Leadership  |
| 6.1.1<br>QIM  | The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution  |
| 6.1.2<br>QIM  | The institution practices decentralization and participative management  |
| 6.2   | Strategy Development and Deployment  |
| 6.2.1<br>QIM  | Perspective/Strategic plan and Deployment documents are available in the institution   |
| 6.2.2<br>QIM  | Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism |
| 6.2.4<br>QIM  | Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions  |
| 6.3   | Faculty Empowerment Strategies   |
| 6.3.1<br>QIM  | The institution has effective welfare measures for teaching and non-teaching staff   |
| 6.3.5<br>QIM  | Institution has Performance Appraisal System for teaching and non-teaching staff   |
| 6.4   | Financial Management and Resource Mobilization   |
| 6.4.1<br>QIM  | Institution conducts internal and external financial audits regularly  |
| 6.4.3<br>QIM  | Institutional strategies for mobilisation of funds and the optimal utilisation of resources  |
| 6.5   | Internal Quality Assurance System  |
| 6.5.1<br>QIM  | Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes   |
| 6.5.2<br>QIM  | The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms   |
| 6.5.5<br>QIM  | Incremental improvements made during the preceding five years ( <i>in case of first cycle</i> )<br><br>Post accreditation quality initiatives ( <i>second and subsequent cycles</i> )  |

| Qualitative analysis of Criterion 6  |
|--|
| <p>College management is committed to its Vision and Mission. The institute has laid emphasis on all round development of the students. College also has started taking measures on all the different aspects to achieve its vision. However concentrated efforts with strong and consistent leadership shall be required for excellence. Leadership qualities and ability to work in a team are encouraged by motivating students to participate in various activities. Various committees have been formed to look after routine academic and administrative issues. Students also participates in these committees. Hierarchal structure reflects the practice of participative management in college but poor cadre ratio affects the quality of decision making.</p> <p>The Governing Body is a group of five trustees. The Principal is also a special invitee at the Governing Body meetings. The management and the Principal are also members of College development committee (CDC). The role of the top management is to provide effective leadership to enhance quality and performance of the institution. The college has different committees such as, Internal Complaint Committee, Women Cell, NSS,</p> |

Anti-Ragging, Grievance Cell, SC/ST committee.

Institution has perspective plan with following key areas: Academic expansion to Introduce new programmes, to get permanent affiliation, to get NAAC Accreditation, to get NBA Accreditation, to sign MOUs with different industries. College also have plans to collaborate with IITs and NITs, to arrange FDPs, Workshop and International Conferences. Perspective plan has been discussed in the meeting of BOG. The policy statements and action plans are formulated. Higher authorities of the college delegate their authority to others to ensure good governance. Faculty members are involved in providing inputs to plan the exams. At operational level, the principal of the institution is a member secretary of the Board of Governors. The BOG gives suggestions and monitors the procurement, introduction of new programs and welfare activities. The department heads are normally appointed on seniority and capability of the employee. Appraisal system is established in the college through different levels. Recruitment, service rules and promotion policies are as per University and Govt norms.

The college follows the policy of AICTE and Mumbai University for recruitment and promotion. All the staff submits their self appraisal to their higher authorities. Self appraisal is done on the basis of teaching, learning, special duties, evaluation, awards, rewards, contribution in curricular and extracurricular activities, research, publications etc. The management revises the salary structure on the basis of appraisal.

Welfare schemes are available for teaching and non-teaching staff associated with the Institute like Casual leaves, Medical Leaves, Extended Maternity Leaves and permission to leave early for ladies staff members. Uniforms are given to Class IV employees every year. Apron, footwear and uniforms are provided to workshop staff every year. College has supported non teaching staff to upgrade their education.

College has appointed auditors for internal audit. The accounts of the College are audited regularly as per the Government rules .The internal auditor checks receipts with fee receipts and payments with vouchers and necessary supporting documents. The external auditor conducts statutory audit at the end of financial year.

The majority of the funds in the college are obtained from the tuition fees collected from the students. The Atharva Educational trust contributes resources from time-to-time to take up various major infrastructure development projects. Funding from external sources is nominal.

College has established Internal Quality Assurance Cell to maintain and assure the quality in all the different aspect. IQAC emphasizes on teaching learning and assessment strategies for the betterment of quality education. As this is first cycle of NAAC A&A, there is a need to establish IQAC as per the NAAC Guidelines.

| Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrics(QIM) in Criterion7) |  |
|---|--|
| 7.1   | Institutional Values and Social Responsibilities   |
| 7.1.2<br>QIM  | <p>1. Institution shows gender sensitivity in providing facilities such as:</p> <ol style="list-style-type: none"> <li>1. Safety and Security</li> <li>2. Counselling</li> <li>3. Common Room</li> </ol>   |
| 7.1.5<br>QIM  | <p>Waste Management steps including:</p> <ul style="list-style-type: none"> <li>• Solid waste management</li> <li>• Liquid waste management</li> <li>• E-waste management</li> </ul>   |
| 7.1.6<br>QIM  | Rain water harvesting structures and utilization in the campus   |
| 7.1.7<br>QIM  | <p>Green Practices</p> <ul style="list-style-type: none"> <li>• Students, staff using               <ol style="list-style-type: none"> <li>a) Bicycles</li> <li>b) Public Transport</li> <li>c) Pedestrian friendly roads</li> </ol> </li> <li>• Plastic-free campus</li> <li>• Paperless office</li> <li>• Green landscaping with trees and plants</li> </ul> |
| 7.1.18<br>QIM   | Institution organizes national festivals and birth / death anniversaries of the great Indian personalities   |
| 7.1.19<br>QIM   | The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions   |
| 7.2   | Best Practices   |
| 7.2.1<br>QIM  | Describe at least two institutional best practices (as per NAAC Format)  |
| 7.3   | Institutional Distinctiveness  |
| 7.3.1<br>QIM  | Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust   |

#### Qualitative analysis of Criterion 7

The institute focuses on gender equality to ensure that Men and Women enjoy the same status and equal opportunities. College provides facilities to exercise their human rights and realise their potential. Different activities are conducted through NSS and Women Cell to ensure the safety precautions. Girls and Boys common room are available in the campus. Counselling and mentoring are done on a regular basis.

College has developed waste management system. Solid waste is collected and converted into fertilizers through machines. The ready fertilizers are used for the gardening. Liquid waste management treats waste water from washrooms to garden usable water. The old Computers are repaired and distributed in the remote area schools. The e-waste from the laboratories are given to the e-waste management companies to recycle it.

College has set-up rain water harvesting. Water is collected through different ducts and channels and stored in a tank with capacity of 20,000 litres of storage. The stored water is treated and circulated for gardening in the campus. The college has culture of green practices. Campus is very well maintained with decent greenery.

College organises different festival and birth anniversaries of great personalities. College celebrates birth anniversaries of Mahatma Gandhi by organising cleanliness drive in the vicinity. College celebrates birth anniversaries of Dr Visvesvaraya as Engineers Day and Dr. Sarvapalli Radhakrishnan as Teachers day. College celebrates festival such as Diwali, Ganesh Festival, Navratri etc. NSS Atharva has organised special activities to show patriotism like Flag Pickup drive, clean and green drive, national pride flag hosting.

It appears that college maintains transparency in its financial, academic, administrative and auxiliary functions.

Use of LMS in the form of Campus Networking/MOODLE is the only evident best practice.

**Section III:OVERALL ANALYSIS**based on Institutional strengths.Weaknesses,Opportunities & Challenges(**SWOC**)(**up to 500 words**)

**Strength**

**Strength:**

- The college functions with a committed management, well maintained Infrastructure – Spacious, clean and airy classrooms. Well-equipped Conference Room, Examination Room, Computer Laboratories, Auditorium, Staff Rooms.
- College established some innovative labs like Robotic centre, iMac lab, Ground station and IEDC.
- College has,Committed, approachable and sincere faculty members undertaking research projects, publishing articles etc.
- A number of Professional students chapters including IEEE, ISTE, CSI and IUCEE are established and all of them are conducting a program which improve the personality of the students.
- The college conducts entrepreneurship development activities for encouraging development of entrepreneurial skills amongst the students.
- College has a strong Placement and Training Department which makes sure that most of the eligible students are placed in Tier-I companies.
- The college promotes enthusiastic students participation in social causes, through the NSS Programs.

**Weaknesses:**

- The college needs to strengthen the Alumni Association
- Shortage of faculty with Ph D
- Non availability of University Sponsored Research Center
- Non availability of Faculty members with industrial experience and research
- Cadre Ratio is not maintained

**Opportunities:**

- With the availability of a number of Centers and infrastructural facilities, faculty could contribute more towards research and consultancy
- To promote staff and student exchanges with premier institutions in India and foreign universities are possible.
- The college has required infrastructural facilities to have collaboration with more industries
- To use locational advantage of the area which is a hub for the IT, automobile, Electronics and other industries

**Challenges:**

- Getting grants through Government funded projects and consultancies
- To enhance students skills as per the continuous changing requirements of the

industry

- Employment opportunities for slow learners
- Keeping pace with changing technological advancements
- To motivate faculty for Product development, Research & Innovation
- To attract eminent researchers & academicians

#### Section IV: Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- Virtual Class rooms, Course networking and E- teaching methods to be extended to large number of courses across disciplines. Remote Laboratory experimentation method used for Embedded Systems lab be extended to other labs as well
- Bridge courses, Add-On courses, Valued added courses definitions be Standardized in the context of such offerings by the college. Reach of these courses need to be extended to a large section of students
- i-Mac , i-Lab, 3-D Printers, robotics and Ground Station for satellite tracking etc. are good efforts. These need to be extended to a large cross section of students.
- Goal settings for various projects undertaken by students and faculty members need to focus on end users of the resulting product or the process e.g. agriculture, biomedical devices, etc.
- Entrepreneurship projects besides students should encourage active participation and stakes of faculty members
- Encouragement to be given to students to opt for humanities and social science courses on credit basis. In the absence of this, Certificate courses may be offered to desirous students
- Students exchange with other institutions and R&D labs both within the country and abroad for defined periods be explored
- Faculty members need to be exposed to industries, R&D institutions and other institutions of higher learning periodically and for a reasonable time period.
- Students and faculty members need to be familiarized with the complete product life cycle
- Improve Cadre Ratio

**I have gone through the observations of the Peer Team as mentioned in this report**

**Signature of the Head of the Institution**

NAAC

| Sl.No | Name                |                       | Signature with date |
|-------|---------------------|-----------------------|---------------------|
| 1     | L K                 | Chairman              |                     |
| 2     | Pratosh             | Member Co - ordinator |                     |
| 3     | K M                 | Member                |                     |
| 4     | DR. RUCHI THIRIPATI | NAAC Co - ordinator   |                     |

Place

Date

NAAC