



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

**Accreditation - (Cycle - 1)**

## **PEER TEAM REPORT ON INSTITUTIONAL ACCREDITATION OF JAYAPRAKASH NARAYAN COLLEGE OF ENGINEERING C-19643**

**Mahabubnagar  
Telangana  
509001**

**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:                                                       | JAYAPRAKASH NARAYAN COLLEGE OF ENGINEERING<br>Mahabubnagar<br>Telangana<br>509001                                                        |                                                 |
| 2.Year of Establishment                                                                    | 1997                                                                                                                                     |                                                 |
| 3.Current Academic Activities at the Institution(Numbers):                                 |                                                                                                                                          |                                                 |
| Faculties/Schools:                                                                         |                                                                                                                                          |                                                 |
| Departments/Centres:                                                                       | 8                                                                                                                                        |                                                 |
| Programmes/Course offered:                                                                 | 9                                                                                                                                        |                                                 |
| Permanent Faculty Members:                                                                 | 89                                                                                                                                       |                                                 |
| Permanent Support Staff:                                                                   | 68                                                                                                                                       |                                                 |
| Students:                                                                                  | 1090                                                                                                                                     |                                                 |
| 4.Three major features in the institutional Context (Asperceived by the Peer Team):        | 1. Sufficient infrastructure to cater academic needs of existing programmes<br>2. Good faculty student ratio<br>3. Good library facility |                                                 |
| 5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure): | From : 24-07-2023<br>To : 25-07-2023                                                                                                     |                                                 |
| 6.Composition of Peer Team which undertook the on site visit:                              |                                                                                                                                          |                                                 |
|                                                                                            | Name                                                                                                                                     | Designation & Organisation Name                 |
| Chairperson                                                                                | DR. ANAND BHALERAO                                                                                                                       | Vice Chancellor,Central University of Rajasthan |
| Member Co-ordinator:                                                                       | DR. UGRASEN SUMAN                                                                                                                        | Professor,SCSIT Devi Ahilya University Indore   |
| Member:                                                                                    | DR. PROF VISWANATHAIAH M                                                                                                                 | Director,IFIM College                           |
| NAAC Co - ordinator:                                                                       | Dr. Wahidul Hasan                                                                                                                        |                                                 |

## 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                                                                               | <b>The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment</b> |
| 1.2                                                                                        | Academic Flexibility                                                                                                                                                                              |
| 1.3                                                                                        | Curriculum Enrichment                                                                                                                                                                             |
| 1.3.1<br>QIM                                                                               | <b><i>Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum</i></b>                      |
| 1.4                                                                                        | Feedback System                                                                                                                                                                                   |

### Qualitative analysis of Criterion 1

Institute is affiliated to the JNTU, Hyderabad and follows curriculum and academic calendar of the university. Institute is currently running 6 UG and 2 PG programs. A feedback system is in place for effective teaching learning and evaluation. Parent-Teacher meeting is conducted once in a semester. Remedial classes are conducted for slow learners who perform poorly in first midterm exams. CBCS is implemented as per the guidelines of JNTUH.

Classroom teaching includes traditional 'chalk and talk' along with ICT and on-line platform. Over head projectors are used for delivery of syllabus. Industry visits are arranged for understanding of implementation of theory.

Departmentwise time tables are prepared and workload is distributed among faculty members. Institute should augment review of coverage of syllabus. Further, innovation in teaching need improvement.

Courses such as Constitution of India, Environmental Science, Gender Sensitization, Human Values & Professional Ethics and IPRs are taught to students to sensitize towards society. To bridge the gap between curriculum and industry, value added enrichment courses, seminars guest lectures and workshops are conducted regularly.

| Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2) |                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.1                                                                                                      | Student Enrollment and Profile                                                                                                                                                                                                                                                |
| 2.2                                                                                                      | Student Teacher Ratio                                                                                                                                                                                                                                                         |
| 2.3                                                                                                      | Teaching- Learning Process                                                                                                                                                                                                                                                    |
| 2.3.1<br>QIM                                                                                             | <b>Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT-enabled tools including online resources for effective teaching and learning process</b> |
| 2.4                                                                                                      | Teacher Profile and Quality                                                                                                                                                                                                                                                   |
| 2.5                                                                                                      | Evaluation Process and Reforms                                                                                                                                                                                                                                                |
| 2.5.1<br>QIM                                                                                             | <b>Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient</b>                                                                                                                                              |
| 2.6                                                                                                      | Student Performance and Learning Outcomes                                                                                                                                                                                                                                     |
| 2.6.1<br>QIM                                                                                             | <b><i>Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website</i></b>                                                                                                                            |
| 2.6.2<br>QIM                                                                                             | <b><i>Attainment of POs and COs are evaluated.</i></b><br><br>Explain with evidence in a maximum of 500 words                                                                                                                                                                 |
| 2.7                                                                                                      | Student Satisfaction Survey                                                                                                                                                                                                                                                   |

#### Qualitative analysis of Criterion 2

Student teacher ratio is good to cover the running courses. Laboratory experiments, internships, industrial visits and field visits are part of experiential learning observed in the institute. Workshops, seminars, group discussions, professional activities are done as a participative learning. student-centric approach.

Limited activities regarding Problem solving methodologies are mentioned

Institute follows transparent mechanism of internal Assessment process for mid-term examination, assignments and laboratory work are done according to the university guidelines. The institute follows time bound system to address the grievances raised by the students in the internal and external examinations.

Methodology for segregating students into slow and advance learners need modifications. Institute conducts special programs for advanced and slow learners considering the assessment of students based on internal and external exam performance.

Evaluated answer sheets are made available to students and marks are also communicated to parents. Institute claims robust and transparent system is adopted for evaluation process in delivering seminars. No justification in support of it found.

OBE process is implemented up to some extent in order to impart quality education. PEOs, POs and PSOs of all the programs are displayed in the Institute website and at other prominent places in the institute. Using direct and indirect assessment methods attainment of CO/PO are done.

|                                                                                                             |                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                | <b>Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident</b> |
| 3.3                                                                                                         | Research Publications and Awards                                                                                                                                                                                                                                                            |
| 3.4                                                                                                         | Extension Activities                                                                                                                                                                                                                                                                        |
| 3.4.1<br>QIM                                                                                                | <b>Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.</b>                                                                                           |
| 3.4.2<br>QIM                                                                                                | <b>Awards and recognitions received for extension activities from government / government recognised bodies</b>                                                                                                                                                                             |
| 3.5                                                                                                         | Collaboration                                                                                                                                                                                                                                                                               |

#### Qualitative analysis of Criterion 3

As a part of promotion of research faculty members are encouraged to register for MOOC/NPTEL courses. However, this number is very limited. Faculty members get TA/DA for attending conferences and workshops. However, it is case to case and number is limited. Additionally institute organises guest lectures and engages alumni for the development of the institute. However, no financial contribution of alumni observed.

Institute encourages to take innovative projects and extends financial support for the same. Students are also encouraged to take part in Telangana State Innovative Cell to pitch their ideas encouraging them towards entrepreneurship. Institute established Centre for Robotics and Embedded System Technologies (CREST) for the benefit of the students to carry out Projects related to Robotics. Tuition fees of students getting awarded in CREST is waved off to motivate them. TECHutsav is organised to provide platform to express ideas of students.

Institute has NCC wing, which carries out social activities such as Blood donation, Swachata Abhiyan, COVID 19 awareness, Vaccination, Observing days to commemorate work of contributors, Voters' day, International Yoga day, Shramadanam, Women's day, National Earth day, Haritha Haram etc. extension activities are also conducted. Institute adapted five villages. Institute manages logistics for giving training on activities for self employment and entrepreneurship to Self Help Groups from adapted villages.

Students are involved in the extension activities.

The institute was awarded with gold medal for highest number of blood donations and enrollments for Youth Red Cross(YRC). NCC Officer received certificate of commendation.

Two of students and one faculty member have received Rs.25,000 cash prize for their innovative idea presented during the Grand Finale of "Startup India Telangana Yatra".

| Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.1                                                                                                           | Physical Facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4.1.1<br>QIM                                                                                                  | <p><b>The Institution has adequate infrastructure and other facilities for,</b></p> <ul style="list-style-type: none"> <li>• teaching – learning, viz., classrooms, laboratories, computing equipment etc</li> <li>• ICT – enabled facilities such as smart class, LMS etc.</li> </ul> <p><b>Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)</b></p> |
| 4.2                                                                                                           | Library as a Learning Resource                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4.2.1<br>QIM                                                                                                  | <b><i>Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students</i></b>                                                                                                                                                                                                                                                  |
| 4.3                                                                                                           | IT Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4.3.1<br>QIM                                                                                                  | <p><b>Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection</b></p> <p><b><i>Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words</i></b></p>                                                                                                                                                                                                     |
| 4.4                                                                                                           | Maintenance of Campus Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

#### Qualitative analysis of Criterion 4

The campus of the institute is spread across 27 acres 20 guntas with a built-up area of 15648.66 sqm. Institute has a classrooms, Seminar Hall, Auditorium, library and equipment such as computers, hardware and laboratories are available. Few class rooms are provided with internet and overhead projectors.

Indoor game facility is limited to carrom and chess games, Ground for cricket and volley ball games exists , however its maintenance is need attention. Gymnasium of the institute is placed in very small room and need to add more intruments. Outdoor facility, laboratories and gymnasium are shared with polytechnic college situated in the same campus of the society.

The Institute has a Central Library , with reading hall capacity of 300 students, digital library with 30 PCs connected with LAN and Wi-Fi to stream NPTEL lectures and using e-Resources.

Library is automated using OPAC software for limited to issue and return of books and to know availabilty of books. It has a total collection of 64564 Volumes with 9957 titles and subscribes 6766 e-Journals, 95 National and 80 Intl. journals and access to DELNET, J-Gate and k-Nimbus, NDL, NPTEL videos, e-Shod Sindhu etc. Limited availabilty of Domain specific e journals and e books .

ICT facility to support teaching is limited to overhead projectors and availability of internet in classrooms.

Campus is wifi enabled and has 1500 MbPs leased line. Campus is under cc tv survillience. Domain specific computers especially in computer science are made available.

| 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                                                                                                                                 |
| 5.4                                                                                                     | Alumni Engagement                                                                                                                                                    |
| 5.4.1<br>QIM                                                                                            | <b>There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services</b> |

#### Qualitative analysis of Criterion 5

Institute has registered alumni association with competent authority. Alumni especially entrepreneurs contributes in institute development by way of guest lectures, guide for preparing competitive examinations, mentoring and framing vision and mission statements of departments. However there is no financial contribution from the alumni association. Alumni meet takes place once in a year.

| Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6) |                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1                                                                                                           | Institutional Vision and Leadership                                                                                                                                                                                                                                                                                                                                               |
| 6.1.1<br>QIM                                                                                                  | <b><i>The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.</i></b> |
| 6.2                                                                                                           | Strategy Development and Deployment                                                                                                                                                                                                                                                                                                                                               |
| 6.2.1<br>QIM                                                                                                  | <b><i>The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc</i></b>                                                                                                                                   |
| 6.3                                                                                                           | Faculty Empowerment Strategies                                                                                                                                                                                                                                                                                                                                                    |
| 6.3.1<br>QIM                                                                                                  | <b>The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression</b>                                                                                                                                                                                                            |
| 6.4                                                                                                           | Financial Management and Resource Mobilization                                                                                                                                                                                                                                                                                                                                    |
| 6.4.1<br>QIM                                                                                                  | <b>Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)</b>                                                                                                                                               |
| 6.5                                                                                                           | Internal Quality Assurance System                                                                                                                                                                                                                                                                                                                                                 |
| 6.5.1<br>QIM                                                                                                  | <b>Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures &amp; methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities</b>                                   |

#### Qualitative analysis of Criterion 6

Institute has established various committees such as SC/ST grievances cell, women's cell, Anti ragging Entrepreneurship Development Committee (EDC) Research and Development Committee (R & D) Alumni Committee Career Guidance Committee (CGC) Training and Placement Cell (T&P) National Cadet Corps (NCC) Internal Complaint Committee Grievance Redressal Committee Institute Industry Committee cell for better functioning. Faculty members participate in decision making process as a member of BOG and IQAC.

The institute has its own Governing Body, which is instrumental for overall administration .

Institute has prepared a prespective plan.

There is a manual in place for the institute's staff members. The duties and responsibilities of the various kinds of Institute personnel are described in the institute manual. Included are the institute's promotion policies, wage ranges and leave regulations.

The institute evaluates the performance of the faculty based on self-appraisal, confidential input of HoDs and students' feedback. However, post appriasl actions need to be implemented.

The Welfare measures in the college include fee concession for children of Teaching and Non-teaching staff, Research leaves for faculty pursuing Ph.D.s, Group health insurance with 5,00,000/- coverage, Free transport for staff, Maternity leave for eligible women. Subsidized accommodation for staff.

The institution checks the Quality Assurance with the help of Institution Academic Council (IAC), Department Academic Committee (DAC).

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QIM) in Criterion7)

|              |                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1          | Institutional Values and Social Responsibilities                                                                                                                                                                                                                                                                                                 |
| 7.1.1<br>QIM | <b>Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.</b><br><br><i>Describe the gender equity &amp; sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words</i>                                                     |
| 7.1.4<br>QIM | <b>Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)</b> |
| 7.2          | Best Practices                                                                                                                                                                                                                                                                                                                                   |
| 7.2.1<br>QIM | <b>Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual</b>                                                                                                                                                                                                                         |
| 7.3          | Institutional Distinctiveness                                                                                                                                                                                                                                                                                                                    |
| 7.3.1<br>QIM | <b>Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words</b>                                                                                                                                                                                                                           |

Qualitative analysis of Criterion 7

The institution educates the students on moral and ethical concepts by making them aware of their constitutional rights, obligations, views, and duties to foster an inclusive atmosphere.

The college hosts cultural events to promote tolerance and racial harmony among its students. Students participate in educational programmes on the rights and obligations of citizens under the Indian Constitution. Students are motivated to contribute in community developemnt activities. Institute has following two best

practices

1. Moulding the rural talent into successfully employable professionals through Skill development programs and pedagogical initiatives.
2. Contribution to society through service-based projects and service motto activities.

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

#### **Overall Analysis**

##### **Strength:**

- Sufficient Infrastructure available to cater academic need of programmes being conducted and land for future development.
- Good faculty students ratio
- Adequate Laboratory facilities in few departments.
- free transport facility to students and faculty members
- Minimal faculty with Ph.D. qualifications.

##### **Weaknesses:**

- Limited Training, internship and placement
- Minimal Research facilities, research publications, sponsored research projects, patents and consultancy.
- Lack of entrepreneurship initiatives.
- No hostel facilities
- Inadequate sports and gymnasium facilities
- Lack of understanding of National Assessment and Accreditation Council process

##### **Opportunities:**

- Meaningful Collaboration with Industry for Industry Sponsored projects, and Collaborative Programs to improve quality and competence of Graduates

- Effective implementation of OBE as a Continuous Process.
- Contribution in community development in the adjoining area of the Institute .
- Design and implement qualification improvement programmes for faculty members in Association with Institutions of National Importance in the vicinity for Institute
- Engagement of Alumni especially Alumni Entrepreneurs for Institution Development.
- No peer competitor in the locality

#### Challenges:

- Attract quality faculty members
- Located in a rural area
- Difficulties in obtaining funded projects from Government and private organisations.
- Development of graduates to match industrial requirements
- Qualification improvement of faculty members.
- Students Response for Social and Skill Development Activities

#### 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)

- Design robust faculty qualification improvement programme.
- Promotion of research by way of seed money, sophisticated equipments and awards to faculty members
- Capacity building programmes to non teaching staff members
- Communication and personality development for students
- Enhanced interaction with industry experts and exposure of students to the industry
- Promote Startup, entrepreneurial activities and ecosystem to support ideas of students

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

**Signature of the Head of the Institution**

**Seal of the Institution**

| Sl.No | Name                     |                     | Signature with date |
|-------|--------------------------|---------------------|---------------------|
| 1     | DR. ANAND BHALERAO       | Chairperson         |                     |
| 2     | DR. UGRASEN SUMAN        | Member Co-ordinator |                     |
| 3     | DR. PROF VISWANATHAIAH M | Member              |                     |
| 4     | Dr. Wahidul Hasan        | NAAC Co - ordinator |                     |

Place

Date