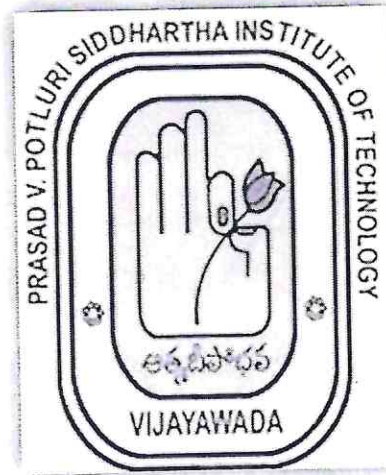


Prasad V. Potluri Siddhartha Institute of Technology (Autonomous)

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with
A+ grade by NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of the Principal: Dr. K. Sivaji Babu

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|---------------------------|--|---------------------|-----------------|
| UG (Engineering) | | | |
| 1 | B.Tech. in Civil Engineering | 46+14 | 45+14 |
| 2 | B.Tech. in Computer Science & Engineering | 193+18 | 193+17 |
| 3 | B.Tech. in Electronics and Communication Engineering | 128+12 | 127+12 |
| 4 | B.Tech. in Electrical and Electronics Engineering | 120+12 | 102+18 |
| 5 | B.Tech. in Information Technology | 120+8 | 120+8 |
| 6 | B.Tech. in Mechanical Engineering | 120+12 | 115 |
| UG TOTAL: | | 803 | 771 |
| PG (Engineering) | | | |
| 1 | M.Tech. (Computer Science & Engineering) | 18 | 0 |
| 2 | M.Tech. (Power System Control & Automation) | 18 | 1 |
| 3 | M.Tech. (Machine Design) | 18 | 1 |
| 4 | M.Tech. (Microwave and Communication Engineering) | 18 | 4 |
| 5 | MBA | 64 | 64 |
| PG TOTAL | | 136 | 70 |
| UG & PG TOTAL: | | 939 | 841 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni, Employers and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per AICTE and APSICHE guidelines |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: 2020-21 | A | All the Departments have conducted a number of training programs and certification courses. Some of the programs |

| | | | |
|---|--|----------------------------|--|
| | | | were organized in collaboration with Industry. |
| 1.4 | Total No. of teaching days during the AY: 2020-21: 183 | A | A minimum of 90 Teaching days per semester excluding examinations is ensured |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise, Teacher student ratio, Non-teaching staff strength | A | Teacher Student ratio across departments is within 15-19. However at Institute level, the teacher student ration is within 1:15. |
| 1.8 | Class rooms, program specific labs, computing facility and other labs availability | A | The laboratory equipment is upgraded every year in each department with Rs. 10-15 lakhs. All the Class rooms have been equipped with LCD projectors. |
| 1.9 | Attainment levels of the POs of the programme | PO attainment level | |
| | B.Tech in Civil Engineering (90) | A | In all the Departments, attainment of POs exceeded the set targets. It is observed that the targets are also increased in the subsequent years. |
| | B.Tech in Computer Science & Engineering (~80%) | | |
| | B.Tech in Electronics and Communication Engineering (~90%) | | |
| | B.Tech in Electrical and Electronics Engineering (~80%) | | |
| | B.Tech in Information Technology (~ 88%) | | |
| B.Tech in Mechanical Engineering (~70%) | | | |
| 1.10 | New courses introduced -Courses upgraded and percentage of up gradation in course content | A | The PVP-2020 curriculum incorporated 5 Skill oriented courses and 2 job-oriented courses. The syllabus content is also upgraded. For the first time, Minors and Honours programs are introduced. |
| 1.11 | Lab Component -New Labs added | A | A few laboratories were introduced using |

| | | | |
|------|--|---|--|
| | -No of new experiments introduced -New Hardware /software developed | | MODROB. For upgradation of laboratory equipment an amount of Rs. 10-15 lakhs is spent every year in all the Departments. |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | Available in Institute website |
| 1.13 | Number of students undertaken -full time field projects -full time internships | A | Clearly defined roles |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 2.1 | Faculty Awards and recognitions | | |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: $70/198 = 35\%$ a. Faculty awarded with PhD: 13 b. Faculty submitted their PhD: c. Faculty pursuing PhD: d. Faculty registered for PhD | B | At the Institute level 35% of the faculty are with PhD. Almost 90% of the faculty are pursuing PhD. The remaining faculty also may be motivated to register for PHD. |
| 2.3 | Faculty guiding /guided PhDs: | B | All the Professors are guiding few external research scholars. However, the number of scholars allotted are lower. Efforts may be made to increase this number. |
| 2.4 | e-Content development / Lectures added to Web-resources | A | During the pandemic, all the courses were taught online. All the video lectures are shared with students. |
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | A huge participation by all faculty across all departments is observed. This is due to the support from the management. |

| | | | |
|-----|---|---|---|
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | Interaction outside world is limited to a few faculties in each department. Visibility has to be increased. |
|-----|---|---|---|

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 3.1 | Mechanism and activities for slow learners Outcome | A | Remedial classes are conducted, resulting in higher pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | Advanced learners are divided in to different functional groups and specific training, certification courses are organized in order to get higher pay packages and Higher studies. |
| 3.3 | Value added courses Outcome | A | Certification programs and Training programs have been conducted in each programs. Some of the programs are organized with the help from industry experts. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | B | A few departments are promoting students to do mini and major projects in industries. |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | All the faculty are encouraged to participate in FDPs/Webinars and also publishing patents by providing necessary financial support by the management. |
| 3.7 | Development Programmes for supporting staff | B | Some departments have conducted training programs to the supporting staff. |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|---|
| 4.1 | Research ambiance, activity and innovation (quality & quantity) | A | The quantity of quantity publications are observed to increase in every Department. Most of the Departments have established QC on R&D and concerted efforts are in place to further improve. |
| 4.2 | Sponsored Research Projects and Consultancy | C | All the Departments have been applying for sponsored projects. In the whole Institute there are only one or two ongoing projects. This is a concern, which need to be addressed. |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching. |
| 4.4 | Faculty publications in journals: Scopus indexed: 49 SCI / SCIE (Not ESCI): 12 Total: 60 h-index: Dept & Highest in the faculty. | A | A consistent increase in the quality and quantity of publications. The incentives provided the management is found to yield good results. |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent): 7 - International (Scopus, SCI equivalent) : 97 - Total: 104 | A | A consistent increase in the number of publications in conferences is observed. |
| 4.6 | Faculty contribution in:books: 14book chapters: 25 (Books/Chapters with ISBN only are considered) | A | It has been observed that reputed publishers such as Academic press have published some of the books. |
| 4.7 | Government: Funded R&D projects Applied:....., Total Amount:..... Ongoing:..... Total Amount:..... Completed:..... Total Amount:..... | C | All the Departments have been applying for sponsored projects. In the whole Institute there are only one or two ongoing projects. This is a concern, which need to be addressed. |
| 4.8 | Non- Government: Applied:....., Total | C | All the Departments |

| | | | | |
|------|--|--|---|---|
| | Funded R&D projects / Industry sponsored projects | Amount:..... Ongoing:..... Total Amount:..... Completed:..... Total Amount:..... | | have been applying for sponsored projects. This is a concern, which need to be addressed. |
| 4.9 | Faculty involved in Consultancy & amount earned | | B | The consultancy is limited to few departments and few faculty. Need improvement. |
| 4.10 | Faculty intellectual property rights / Patents: | Filed: 10 Published: 60 Granted: 12 | A | A good culture of publishing patents is in place. Financial support provided by the management is observed to show positive results. It is heartening to note that the Institute has 13 patents granted so far to its credit. |
| 4.11 | In-house R&D grants & projects and their outcomes | | A | A research seed money to the extent of Rs. 300 lakhs is provided by the management, resulting in improving publications, filing patents and apply for sponsored research projects. |
| 4.12 | New research facilities/ laboratory facilities added | | B | A few departments have established new laboratories utilizing the funds received through MODROB. |
| 4.13 | MOU's with industries/ R&D/ Premier Institutes Details of activities | | A | All the departments have functional MOUs resulting in increased internships, Mini and major projects. A number of training programs and certification courses are being organized with the help of such organizations. |
| 4.14 | Research centers of excellence established: Outcome in research centers | | C | There is no COE to promote R&D. |
| 4.15 | Skill development centers established: outcome: | | B | At present a number of skill development |

| | | | |
|------|---|---|---|
| | | | programs are being organized in collaboration with APSSDC. Dassaults Systems Lab is established by APSSDC in Mechanical Engineering department. |
| 4.16 | Incubation centers: - Established with outside Industries: -Status of incubation: | B | Incubation centers have been initiated by few departments. Efforts have resulted in registering for a start-up and filing a patent. |
| 4.17 | Start-ups & Entrepreneurships: No of Start-ups & status: Awards from outside platforms: | B | Only start-up is registered so far. |

(5) STUDENT SUPPORT AND PROGRESSION:

| S.No. | ITEM | GRADE | COMMENTS |
|-------|---|-------|---|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt) 75.5% | A | First year pass% is observed to be reasonably good. |
| 5.2 | Professional society/Chapter activities | A | The following professional chapters are active: ISTE, IETE, IEEE, IE, ASHRAE, CSI, INTEL. |
| 5.3 | Number of capability enhancement and development schemes | A | Activities such as Soft Skills, Language and Communication Skills, Life Skills, Awareness in latest technologies are conducted benefitting 3112 students. |
| 5.4 | Support for competitive examinations and career counselling: GATE - 19; CAT - 3; GRE - 29; TOEFL - 3; IELTS - 21; Civil Services - 14 and State / Central Govt. examinations - 28 | A | It is good in overall perception. However, the culture shall further enhance. |
| 5.5 | Number of students who opted for higher studies: 45 | B | The number seems to be reasonable. However, further motivation for higher studies is required. |

| | | | | | |
|---|--|---------------|---|--|--|
| 5.6 | Student pass percentage | | A | Though the pass percentage in a few departments is not up to the mark in the first 4 semesters, it is observed that the pass percentage at the end of 4 years is close to 90%. | |
| | First Year | I SEM 79.78% | | | |
| | First Year | II SEM 79.19% | | | |
| | Second Year | I SEM 65.40% | | | |
| | Second Year | II SEM 72.08% | | | |
| | Third Year | I SEM 78.50% | | | |
| | Third Year | II SEM 82.75% | | | |
| | Final Year | I SEM 91.46% | | | |
| | Final Year | II SEM 98.21% | | | |
| | Pass percentage of the outgoing batch 88.58% | | | | |
| No of students who have graduated without backlogs in any semester of study 365 | | | | | |
| 5.7 | Placements | | | B | <p>CRT programs, Company Specific Trainings and Training programs on Resume Building are regularly conducted.</p> <p>Though the % placements are good, efforts may be put in to get core companies and improve the average and highest packages.</p> |
| | Total No of Final Year Students(N): 708 | | | | |
| | No of students placed in the companies (X) (headcount only): 522 | | | | |
| | Percentage of Placements (X/N): 77.97 | | | | |
| | No of students placed: | | | | |
| | (Pay Package \geq 10 Lakhs): 02 | | | | |
| | No of students placed | | | | |
| | (Pay Package $<$ 10 Lakhs and \geq 5 Lakhs): 43 | | | | |
| | No of students placed | | | | |
| | (Package \leq 5 Lakhs): 477 | | | | |
| | Highest pay Package: Rs. 12 LPA | | | | |
| | Minimum Pay Package: Rs. 1.50 LPA | | | | |
| | Average pay package: Rs. 3.54 LPA | | | | |
| Median pay package: Rs. 3.50 LPA | | | | | |

5 STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|----------|
| 5.8 | Activities of Grievance redressal mechanism | | |
| 5.9 | Scholarships and Financial support | | |

(6) INFRASTRUCTURE AND INTERNET CONNECTIVITY

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 6.1 | Availability of band-width of connectivity: 240 Mbps | A | The band width has been increased to 500 Mbps wef. 1-4-2021 |
| 6.2 | Usage of digital library and computing facilities | | |
| 6.3 | Availability of information on college web-site | | |
| 6.4 | Available facilities like class rooms/seminar halls/LCD /Wifi/ICT/vedio center/courts/ equipment etc | A | The whole campus is WiFi enabled with 35 access points. All the |

| | | | |
|--|--|--|--|
| | | | class rooms are equipped with LCD projectors apart from 1 e-CR and 1 Seminar Hall shared by two every two departments. The Equipment is regularly upgraded every year. |
|--|--|--|--|

(7) CENTRAL LIBRARY FACILITY

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 7.1 | <p>Services: (Please rate the following services in the library)</p> <ul style="list-style-type: none"> • Circulation services • Clipping Services • Information display services • Reference/referral services <ul style="list-style-type: none"> • Photocopy and printing services • User Orientation / Information Literacy • Resource sharing • Internet/digital resources • Suggestion Box | A | Library is automated with Libsys and barcoding. The digital resources can be accessed within the campus. All the services given in the first column are in place. The library has 3 qualified Asst. Librarians and 7 supporting staff. |
| 7.2 | <p>Usage:</p> <p>Average number of visitors to the library per day, books issued / returned per day, visitors to the digital library per day</p> | B | On an available average the number of visitors per day is around 250. 5,763 e-books are available. A total amount of Rs. 25.69 lakhs have been spent in procuring Books, Journals etc. |

(8) EXAMINATION SECTION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|---|
| 8.1 | Availability of space and staff security measures | A | Adequate space with single entry Biometric authentication and CC cameras are in place |
| 8.2 | <p>Maintenance of records: (Please rate the maintenance of the following records)</p> <p>Register for Answer booklet (Used/unused),</p> <p>Register for Marks memos (used / unused),</p> <p>Availability of Answer scripts of earlier semesters/years,</p> <p>Preparation and adherence to time tables)</p> | A | Impressive Automation system with all security features in place. Answer books are being stored since the Institute attained Autonomous status. |

| | | | |
|-----|---|---|---|
| 8.3 | Adherence to Procedures (Question paper setting, conduct of examinations, Declaration of results, Revaluation) | A | All procedures are scrupulously maintained. |
|-----|---|---|---|

(9) AMINITIES AND SPORTS/ OTHER FACILITY

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|---|
| 9.1 | Extra Curricular Activities /Activities during the period | A | The activities were limited to intra-mural competitions in sports and games due to pandemic. A total of 907 students have participated in these competitions. |
| 9.2 | Special recognitions / prizes/ achievements during the period: NIL | B | Due to pandemic events were not held. |
| 9.3 | Hostels | A | 3 own buildings with a boarding and lodging capacity for 250 girls and 80 boys is available. Hostels are equipped with WiFi, Solar Water Heating and RO Purification system. |
| 9.4 | Additional facilities available on campus like bank / post office / etc., | A | A Post office, a full-fledged Syndicate bank are available within the campus. |
| 9.5 | First aid doctor facility | A | First aid facility with availability of a Doctor for a period of 2 hours every day. |
| 9.6 | Other facilities | A | A canteen, cooperative stores are available within the campus. A solid waste management for converting to manure is available. Yoga Center, Transport Facility for students and Staff, Waiting Halls for Boys and Girls, Gym for Boys and Girls and an Auditorium are available. Necessary facilities such as ramps, lifts are in place to take care of PwD students and staff. |

(10) PLACEMENT CELL:

| SNO | ITEM | GRADE | COMMENTS |
|------|---------------------------|-------|---|
| 10.1 | Campus placement activity | B | 61 companies visited for placement. 881 offers for 522 students out of 707 eligible students. Average/Median/Highest |

| | | | |
|------|---|---|--|
| | | | Salary: 3.54/3.50/12.00 LPA |
| 10.2 | Industry Institute collaborations | B | Being handled by respective Departments. |
| 10.3 | Details of programmes conducted by the placement cell for personality development / communication skill / entrepreneurship development etc. | A | A number of CRT programs, Company Specific Trainings and Training programs on Resume Building are regularly conducted. |

(11) SOCIAL SERVICE AND EXTENSION ACTIVITIES:

| SNO | ITEM | GRADE | COMMENTS |
|------|---|-------|---|
| 11.1 | Functioning of recognized units available | A | Full fledged NSS & NCC units in place. NCC is being headed by a Lieutenant rank officer. The admission is limited to a total 50 cadets. |
| 11.2 | Activities during the year in the sphere of extension activities and Institutional Social Responsibility | A | 15 out of 51 events organized online by NSS unit. 10 activities were conducted by NCC unit. |
| 11.3 | Details of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government- | A | Appreciation certificates from REDCROSS, LIONS club, Youth Welfare Services and American Oncology Institute recd. 3 awards recd. At state level from Rotaract Club of AP. 1 NCC cadet has been selected for the Republic day parade at the National level. 15 cadets were awarded C certificate (7 cadets with A grade) and 21 cadets were awarded B certificate. |

(12) ADMINISTRATIVE MATTERS:

| SNO | ITEM | GRADE | COMMENTS |
|------|--|-------|--|
| 12.1 | Financial allocation and expenditure | A | Budget proposals from each Department will be consolidated and sent to Management. Full sanction is always granted by the Management. Expenditure is in the order of 80-85%. |
| 12.2 | Procedures and implementation of faculty and staff related matters | A | All staff related procedures and service rules are available in the Institute website. 6 th CPC is fully implemented. Promotions are regularly implemented as per AICTE norms |
| 12.3 | Support to socially backward students | A | SC/ST, OBC and Minority Cells are in place. Under Book Bank students are issued upto 6 books per semester. |

| | | | |
|------|---|---|--|
| 12.4 | Support to differently abled students | A | Lift and Ramps are available at all entries. |
| 12.5 | Support to foreign students on campus | | No foreign students. |
| 12.6 | General Campus maintenance | A | Campus is clean and green and the maintenance is good. |
| 12.7 | Faculty and staff grievance redressal mechanism | B | In place. |

(13) GOVERNANCE, LEADERSHIP AND MANAGEMENT

| SNO | ITEM | GRADE | COMMENTS |
|------|---|-------|---|
| 13.1 | Pursuit of the vision and Mission of the Institution | B | IQAC cell as per norms in place. All Quality aspects are continuously monitored. An advisory committee is also in place. Quality Circles have been created at the department level to address the deficient issues such Research and Development, Placements in core companies and higher pay packages, Student progression, and Industry Institute Interaction. |
| | Quality improvement strategies adopted by the institution for | | |
| | Curriculum Development Teaching Learning Examination and Evaluation Research and development Library, ICT and Physical Infrastructure / Instrumentation Human Resource Management Industry Interaction/Collaboration Admission of students | | |
| 13.2 | Activities and support from the Alumni Association | C | Limited visibility of Alumni. Can be improved. |
| 13.3 | Activities and support from the Parent - Teacher Association | B | Two meetings organized every year. |
| 13.4 | Interaction and support from the Industry | B | Functional MOUs in all departments resulting in student and Faculty training, student internships & projects. A few of them getting converted into placements. Capacity building programs and Certification courses are being organized with the help of Industry experts. |
| 13.5 | Description of administration | A | Employee friendly Management with financial incentives for Publishing Patents, Quality Journal Publications, Research seed grant, Deputing Faculty for FDPs and conferences. |

14 Quality Circles and Outcome

Quality circles such as Research and Consultancy, Industry Institute Collaboration, Skill Development, Students' progression and Quality Placements at department level are established with a focus to improve the performance.

15 Best Practices of the Institution

1. Research seed grant being sanctioned to each Department in order to promote research culture.
2. Faculty are being encouraged by providing fully financial support for Patenting, which is resulting in the grant of patents.
3. Employee friendly working environment with good retention
4. Incentives for quality research publications is further increased by the management resulting in substantial improvement in quality and quantity of publications.
5. Merit Scholarships, Gold medals, Best project, Innovative project are supported by Management.
6. Curriculum has recently been revised by introducing skill development and job-oriented courses. For the first time, Minors and Honours programs also introduced to promote cross disciplinary learning based on the students' interest.

SUGGESTIONS FOR IMPROVEMENTS:

1. Best practices followed in a particular department may be shared at the institute level so that other departments can also implement the same.
2. Research output can increase in the presence of M.Tech. programs. M.Tech. programs can be revised by developing the curriculum in cutting edge technologies. It is also recommended to start with at least one M.Tech. program in each department.
3. Explore the possibility of hosting Full Time research scholars in each department in collaboration with a higher-level institute by providing scholarship for a period of at least 3 years.
4. Sponsored research and consultancy are very poor. The Institute may take steps such as: conducting training/workshops on how to write good research proposals by inviting eminent researchers. Management may award cash incentives (up to 5% of the sanctioned grant) to faculty for Professional Development.
5. Consultancy activity is absent. A liaison Cell may be created with the objective of identifying problems faced by the nearby industries.
6. Alumni visibility is poor. Alumni contributions by way of offering Gold Medals, Scholarships, Internships and Placements need to be pursued.

Name and Signature of the IQAC Coordinator

Dr. S. Madhavi, Professor,
CSE Department, PVPSIT, Vijayawada

Name and Signature of the External Auditor:

A. S. Balaji
11/12/21

A. S. Balaji
11.12.21

A. S. Babu
11/12/21

Dr. A. Sarat Babu,
Professor,

Department of Chemical Engineering,
NIT Warangal

V. Gopal
11.12.21

Dr. A. Venu Gopal,
Professor,

Department of Mechanical Engineering,
NIT Warangal


Name and Signature of the Principal

PRINCIPAL

PRASAD V. POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY

KANURU, VIJAYAWADA-520 007

Dr. K. Sivaji Babu

Principal, PVPSIT,

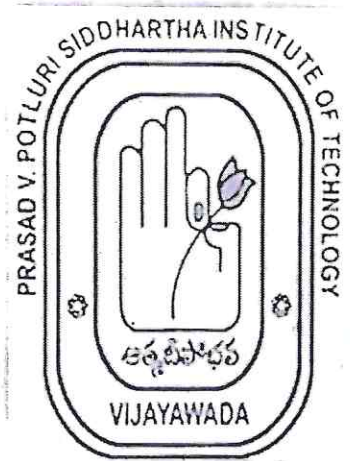
Vijayawada

**Prasad V. Potluri Siddhartha Institute of Technology
(Autonomous)**

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with
A+ grade by NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of Head of the Department: Dr. K. Ramesh

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|------------------|-----------------------------|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech in Civil Engineering | 60 | 59 |
| Total | | 60 | 59 |

(I) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|---------------------|---|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per CBCS and APSCHE |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: 2020-21 | A | Students have participated in 825 events which include webinars, training programs and certification courses. |
| 1.4 | Total No. of teaching days during the AY: 183 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise: Professors: 2; Associate Prof.: 1; Assistant. Prof.: 8 Teacher student ratio: 1:19.09 Non-teaching staff strength: 5 | A | Teacher Student ratio is satisfactory |
| 1.8 | Class rooms; program specific labs, computing facility and other labs availability 3CR+ 1 Tut. +1 Seminar Hall Program specific labs: 8 | A | Well equipped laboratories and Class rooms |
| 1.9 | Attainment levels of the POs of the programme | PO attainment level | |

| | | | |
|------|---|------------|--|
| | B.Tech in Civil Engineering | ~ 90% A | Attainment levels are more than the set targets |
| 1.10 | New courses introduced: -Courses upgraded and percentage of up gradation in course content | A | In PVP-2020 regulations 5 skill oriented and 2 job oriented courses are introduced. In addition Minors and Honours programs are introduced for the first time. The changes in the curriculum content is around 33.25% |
| 1.11 | Lab Component -New Labs added: Nil -No of new experiments introduced: 6 -New Hardware developed: 3 | A | |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | 5 Skill Development courses are introduced. |
| 1.13 | Number of students undertaken -full time field projects: 3 -full time internships: NIL | B | Provision for FT internships is introduced in R20 regulations. |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|---|
| 2.1 | Faculty Awards and recognitions: | B | One of the faculty members is awarded Distinguished Professor by Amaravathi Research Academy. |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: 5/11 = 45.5% a. Faculty awarded with PhD: NIL b. Faculty submitted their PhD: Nil c. Faculty pursuing PhD: 02 d. Faculty registered for PhD: 01 | A | Remaining 3 faculty may be motivated to register for PhD. |
| 2.3 | Faculty guiding /guided PhDs: 07/01 | B | The Department has been recognized by the University as a Research centre. |

| | | | |
|-----|---|---|--|
| 2.4 | e-Content development / Lectures added to Web-resources | B | All the online video lectures are posted in the Institute website. |
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Faculty have participated in 193 events |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | A few faculty are involved in FDPs, Guest lectures, BOS members, Governing bodies, reviewer for journals and PhD evaluation. |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 3.1 | Mechanism and activities for slow learners Outcome | A | Remedial classes are conducted, resulting in increased pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | GATE coaching provided. |
| 3.3 | Value added courses Outcome | A | 50% fee for students to participate in training programs is supported by management resulting in 9 placements 5 internships. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | A | Students were involved in live construction projects |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | Faculty were |

| | | | |
|-----|---|---|---|
| | | | encouraged to attend FDPs/Online webinars/ NPTEL courses by providing financial support |
| 3.7 | Development Programmes for supporting staff | B | 2 training programs on total station and Primavera are conducted. |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 4.1 | Research ambience, activity and innovation (quality & quantity) | A | Increase in the number of publications. |
| 4.2 | Sponsored Research Projects and Consultancy | B | Consultancy: Rs.5.68 lakhs One ongoing research project |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching |
| 4.4 | Faculty publications in journals: Scopus indexed: 01 SCI/ SCIE (Not ESCI): 03 Total: 4 h-index: Dept & Highest in the faculty: 6 | B | Needs improvement in quality publications |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent): Nil - International (Scopus, SCI equivalent): 8 - Total: 8 | B | Needs improvement in quantity |
| 4.6 | Faculty contribution in:books: 1book chapters: Nil (Books/Chapters with ISBN only are considered) | B | |
| 4.7 | Government: Funded R&D projects Applied: 4, Total Amount: Rs. 93.85 lakhs Ongoing: NIL Total Amount: Nil..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.8 | Non- Government: Applied: 01..... | C | It is a concern. A |

| | | | | |
|------|---|--|---|---|
| | Funded R&D projects / Industry sponsored projects | Total Amount: Rs. 15 lakhs Ongoing: Total Amount: Completed: Total Amount: | | problem that need to be addressed |
| 4.9 | Faculty involved in Consultancy & amount earned: 2 Rs. 5.68 lakhs | | A | |
| 4.10 | Faculty intellectual property rights / Patents: | Filed: Nil; Published: Nil Granted Nil | C | Needs improvement |
| 4.11 | In-house R&D grants & projects and their outcomes. | | A | one ongoing project worth Rs. 2.06 Lakhs resulted in one paper publication and 2 communicated |
| 4.12 | New research facilities / laboratory facilities added | | A | In concrete lab and Environmental lab, new facilities are added worth Rs. 6.0 lakhs. |
| 4.13 | MOU's with industries / R&D Premier Institutes Details of activities | | A | 7 Functional MOUs, resulting in internships |
| 4.14 | Research centers of excellence established: Nil Outcome in research centers | | C | |
| 4.15 | Skill development centers established: outcome: | | B | In collaboration with APSSDC, skill development programs organized |
| 4.16 | Incubation centers: - Established with outside Industries: -Status of incubation: | | C | |
| 4.17 | Start-ups & Entrepreneurships: Nil No of Start-ups & status: Awards from outside platforms: | | C | |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt): 32.2% | B | Poor pass % |
| 5.2 | Professional society/Chapter activities: | A | Number of activities: 15 Resulted in 2 awards for students. |

| | | | |
|---|--|---|---|
| 5.3 | Number of capability enhancement and development schemes: 2 | A | 30 students trained in Primavera and 47 students in using Total station. |
| 5.4 | Support for competitive examinations and career counselling | A | Support for GATE coaching through PRERANA scheme |
| 5.5 | Number of students who opted for higher studies: 7 MS (abroad) | A | |
| 5.6 | Student pass percentage | B | Pass % in first two years needs to be addressed. |
| | First Year I SEM: 64.41% | | |
| | First Year II SEM: 32.20% | | |
| | Second Year I SEM: 29.09% | | |
| | Second Year II SEM: 40% | | |
| | Third Year I SEM: 67.69% | | |
| | Third Year II SEM: 60% | | |
| | Final Year I SEM: 90.32% | | |
| | Final Year II SEM: 100% | | |
| | Pass percentage of the outgoing batch: 80.95% | | |
| 5.7 | Placements | B | The % placements are good. Efforts may be put in to improve the average and highest packages. |
| Total No of Final Year Students(N): 63 | | | |
| No of students placed in the companies (X) (headcount only): 18 | | | |
| Percentage of Placements (X/N): 28.57% | | | |
| No of students placed | | | |
| (Pay Package >= 10 Lakhs): Nil | | | |
| No of students placed | | | |
| (Pay Package < 10 Lakhs and >=5 Lakhs): Nil | | | |
| No of students placed | | | |
| (Package <=5 Lakhs): 18 | | | |
| Highest pay Package: Rs.4.50 L | | | |
| Minimum Pay Package: Rs. 1.20 L | | | |
| Average pay package: Rs. 2.47 L | | | |
| Median pay package: Rs. 2.5 L | | | |

Quality Circles and Outcome

1. The Department has established a quality circle on Consultancy.

A. S. Bhatia
11/12/21

Sh. P. L.
11.12.21

2. Outcomes:

1. The increase in consultancy amount has been observed.

Best Practices in the Department;

1. Students associations at department and college level
2. National Level technical event and project exhibition.

SUGGESTIONS FOR IMPROVEMENTS:

1. Improve publications, Faculty Cadre Ratio.
2. Students may be attached to the department right from first year.
3. Conscious efforts must be made to get sponsored research projects.

K.V.SUBASH K.V. Subash
Name and Signature of the Departmental IQAC Coordinator

Name and Signature of the Head of the Department — K. Ramesh
(Dr. K. RAMESH)

Name and Signature of the External Auditor:

A. S. Babu
11/12/21
Dr. A. Sarat Babu,
Professor,
Department of Chemical Engineering,
NIT Warangal

A. V. Gopal
11-12-21
Dr. A. Venu Gopal,
Professor,
Department of Mechanical Engineering,
NIT Warangal

Name and Signature of the IQAC Coordinator
11/12/21

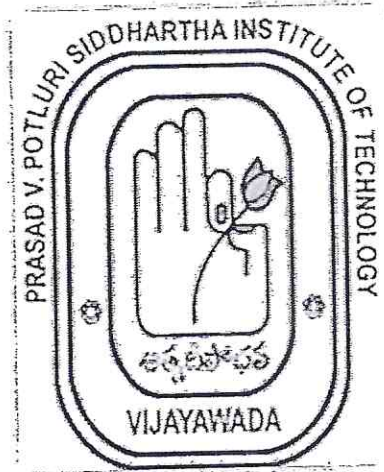
Name and Signature of the Principal
PRINCIPAL
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

Prasad V. Potluri Siddhartha Institute of Technology (Autonomous)

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with A+ grade by
NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of Head of the Department: Dr. A. Jayalakshmi

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|---------------------------|--|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech in Computer Science and Engineering | 193+18 | 193+17 |
| PG (Engineering) | | | |
| | M.Tech in Computer Science and Engineering | 18 | Nil |
| UG & PG TOTAL: | | 229 | 210 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per CBCS and APSCHE |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: | A | NPTEL-5, Coursera:11, Certification courses: 4; WS:3; FDPs: 5; Webinars: 15 |
| 1.4 | Total No. of teaching days during the AY: 183 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise: Professors: 4; Associate Prof.: 2; Assistant. Prof.: 30 Teacher student ratio: 1:15.66 Non-teaching staff strength: 11 | A | Teacher Student ratio is good |
| 1.8 | Class rooms; program specific labs , computing facility and other labs availability 7CR+ 1 Tut. +1 Seminar Hall + 1 Incubation Centre Program specific labs: 5 | A | Well equipped laboratories and Class rooms |

| | Attainment levels of the POs of the programme | PO attainment level | |
|------|---|---------------------|--|
| 1.9 | B.Tech in CSE | ~ 80% A | Attainment levels are more than the set targets |
| 1.10 | New courses introduced: 3 -Courses upgraded and percentage of up gradation in course content | A | AI tools, Design Thinking and Product Innovation and Problem Solving techniques introduced |
| 1.11 | Lab Component -New Labs added: 5 -No of new experiments introduced -New Hardware /software developed | A | New labs in Life Sciences for Engineers, Design Thinking and Product Innovation, AI tools, Design and Analysis of algorithms and Python programming are introduced |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | Employability: 60/73 Entrepreneurship: 4/73 Skill Development: 9/73 |
| 1.13 | Number of students undertaken -full time field projects: -full time internships: 104 | B | Need to encourage students to take up field projects |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 2.1 | Faculty Awards and recognitions: | B | |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: 10/36 = 28% a. Faculty awarded with PhD: 1 b. Faculty submitted their PhD: 2 c. Faculty pursuing PhD: 13 d. Faculty registered for PhD: 3 | A | Remaining 7 faculty may be motivated to register for PhD. |
| 2.3 | Faculty guiding /guided PhDs: 03 | B | The Department has been recognized by the University as a Research centre. |

| | | | |
|-----|---|---|--|
| 2.4 | e-Content development / Lectures added to Web-resources | B | All the online video lectures are posted in the Institute website. |
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Faculty have participated in 8 conferences, WS: 12; FDPs 53 and 12 webinars |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | A few faculty are involved in FDPs, Guest lectures and BOS members. The faculty need to show better visibility outside |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 3.1 | Mechanism and activities for slow learners Outcome | A | 2 – 4 hrs/week Remedial classes are conducted, resulting in increased pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | Significant rise in selections in coding competitions and increased no. of placements |
| 3.3 | Value added courses Outcome | A | Students have been trained on latest technologies from CISCO, AWS, Palotio, Blueprism and Celonies academies. 135 students obtained certifications |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | A | Students were encouraged to |

| | | | |
|-----|--|---|---|
| | | | select mini projects from AICTE suggested website: pactpub.com. Major projects are research oriented. |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | Faculty were trained on latest technologies and inturn they train students. |
| 3.7 | Development Programmes for supporting staff | B | Appropriate training programs for Supporting and non-teaching staff may be organized |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 4.1 | Research ambiance , activity and innovation (quality & quantity) | A | Increase in the number of publications and publishing patents |
| 4.2 | Sponsored Research Projects and Consultancy | B | Consultancy: Rs. 1.40 l No ongoing research projects |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching |
| 4.4 | Faculty publications in journals: Scopus indexed: 03 SCI / SCIE (Not ESCI): 02 Total: 5 | B | Needs improvement in quality publications |

| | | | |
|------|---|---|--|
| | h-index: Dept & Highest in the faculty: 3 | | |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent): Nil - International (Scopus, SCI equivalent): 4+4 - Total: 8 | B | Needs improvement in quantity |
| 4.6 | Faculty contribution in:books: 2book chapters: 5 (Books/Chapters with ISBN only are considered) | A | Both Books are published by Academic Press publishers |
| 4.7 | Government: Funded R&D projects Applied: 4, Total Amount: Rs.118.64L Ongoing: NIL Total Amount: Nil..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.8 | Non- Government: Funded R&D projects / Industry sponsored projects Applied: Nil....., Total Amount:..... Ongoing: Total Amount:..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.9 | Faculty involved in Consultancy & amount earned: 2; Rs. 1.4 lakhs | B | Needs improvement |
| 4.10 | Faculty intellectual property rights / Patents: Filed: 2; Published: 9 Granted: 1 | A | Granted with 1 patent |
| 4.11 | In-house R&D grants & projects and their outcomes: Rs. 1.06 L seed grant is awarded by the Management | A | Resulted in projects on new technology |
| 4.12 | New research facilities/ laboratory facilities added | A | Rs. 13.04 L sanctioned under MODROBS is being utilized to setup a new AI & ML lab |
| 4.13 | MOU"s with industries/ R&D/ Premier Institutes Details of activities | A | 12 Functional MOUs, resulting in organizing certification programs and internships |
| 4.14 | Research centers of excellence established: Nil Outcome in research centers | C | |
| 4.15 | Skill development centers established: outcome: | B | In collaboration with APSSDC, skill development programs organized |

| | | | |
|------|---|---|--|
| 4.16 | Incubation centers: - Established with outside Industries : -Status of incubation: | C | |
| 4.17 | Start-ups & Entrepreneurships: Nil No of Start-ups & status: Awards from outside platforms: | C | |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|---|---|-------|---|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt): 80.82% | A | Good pass% |
| 5.2 | Professional society/Chapter activities: A number of activities: 6 | A | |
| 5.3 | Number of capability enhancement and development schemes: 2 activities are organized | A | |
| 5.4 | Support for competitive examinations and career counselling | A | Support for GATE coaching, GRE, Softskills and personality development in place |
| 5.5 | Number of students who opted for higher studies: 6 MS (abroad) | A | |
| 5.6 | Student pass percentage | A | Improvement in Pass % is consistently increasing. |
| | First Year I SEM: 94.81% | | |
| | First Year II SEM: 87.05% | | |
| | Second Year I SEM: 89.09% | | |
| | Second Year II SEM: 85.64% | | |
| | Third Year I SEM: 90.98% | | |
| | Third Year II SEM: 96.24% | | |
| | Final Year I SEM: 90.15% | | |
| | Final Year II SEM: 97.73% | | |
| | Pass percentage of the outgoing batch: 93.18% | | |
| No of students who have graduated without backlogs in any semester of study: 88 | | | |
| 5.7 | Placements | B | The % placements are good. Efforts may be put in to |
| | Total No of Final Year Students(N): 132 | | |
| | No of students placed in the companies (X) (headcount only): 107 | | |
| | Percentage of Placements (X/N): 81.06% | | |
| No of students placed | | | |

| | | |
|---|--|---|
| (Pay Package \geq 10 Lakhs): 0 | | improve the average and highest packages. |
| No of students placed | | |
| (Pay Package $<$ 10 Lakhs and \geq 5 Lakhs): 42 | | |
| No of students placed | | |
| (Package \leq 5 Lakhs): 65 | | |
| Highest pay Package: Rs.7.00 L | | |
| Minimum Pay Package: Rs. 2.50 L | | |
| Average pay package: Rs. 4.07 L | | |
| Median pay package: Rs. 3.8 L | | |

Quality Circles and Outcome

The Department has established 4 quality circles namely: Skill training, Industry Institute Interaction, Semester Readiness program and Research and Consultancy.

Outcomes:

1. Advanced Skill training resulted in obtaining higher pay packages
2. Improved Industry Institute Interaction is facilitating the partial delivery of course content.
3. Through Semester readiness program, faculty are given proper inputs in the beginning of the semester to improve the T-L processes.
4. Efforts are underway to improve quality publications, research projects and consultancy.

Best Practices in the Department;

1. Semester readiness program at the beginning of the semester.
2. Partial delivery of course content in most of the courses by industry experts is being implemented
3. A systematic review of the quality of Question papers is in place.

SUGGESTIONS FOR IMPROVEMENTS:

1. Improve publications.
2. Conscious efforts must be made to get sponsored research projects and Consultancy works.

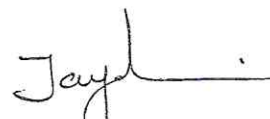
Name and Signature of the Departmental IQAC Coordinator

Mrs. D. Sree Lakshmi



Name and Signature of the Head of the Department

Dr. A. Jayalakshmi



Name and Signature of the External Auditor:

HEAD
Department of
Computer Science & Engineering
V.P. Singhania Institute of Technology
Kanuru, J.S. ... 2007.

A. S. Babu
11/12/21

Dr. A. Sarat Babu,
Professor,
Department of Chemical Engineering,
NIT Warangal

A. Venu Gopal
11.12.21

Dr. A. Venu Gopal,
Professor,
Department of Mechanical Engineering,
NIT Warangal

M. J.
11/12/21

Name and Signature of the IQAC Coordinator

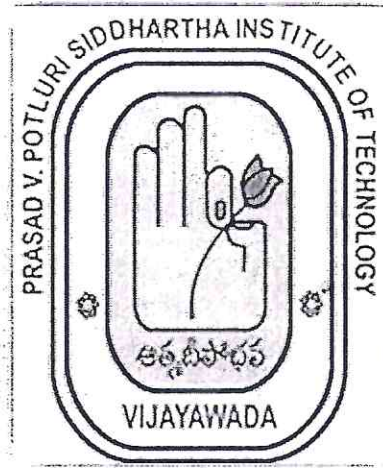
K

Name and Signature of the Principal
PRINCIPAL
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

**Prasad V.Potluri Siddhartha Institute of Technology
(Autonomous)
Kanuru, Vijayawada – 520 007**

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with
A+ grade by NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of Head of the Department: Dr. Ch. Subba Rao

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|---------------------------|---|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech in Electronics and Communication Engineering | 128+12 | 127+12 |
| PG (Engineering) | | | |
| | M.Tech (Microwave and Communication Engineering) | 18 | 4 |
| UG & PG TOTAL: | | 158 | 143 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|---------------|--|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per CBCS and APSCE |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: 2020-21 | A | About 7 programs in collaboration with ApplyVolt, NI, APSSDC and Texas University were conducted, involving 15,117 man hours of training |
| 1.4 | Total No. of teaching days during the AY: 183 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise: Professors: 3; Associate Prof.: 7; Assistant. Prof.: 18 Teacher student ratio: 1:16 Non-teaching staff strength: 7+2 | A | Teacher Student ratio is good. |
| 1.8 | Class rooms; program specific labs, computing facility and other labs availability 7CR+1 E-CR+1 Tut + 1 Seminar Hall (IT+ECE) Program specific labs with computing facility: 6 Other labs: 2 (Hardware) | A | Well equipped laboratories and Class rooms |
| 1.9 | Attainment levels of the POs of the programme | PO attainment | |

| | | | |
|------|--|---------------------|---|
| | B.Tech in Electronics and Communication Engineering | level ~ 90% A | Attainment levels are more than the set targets |
| 1.10 | New courses introduced -Courses upgraded and percentage of up gradation in course content 4 Skill oriented and 2 Job oriented courses are introduced | A | The syllabus is updated in 2020 by giving emphasis to Skill and Job oriented courses |
| 1.11 | Lab Component -New Labs added: 1 -No of new experiments introduced -New Hardware /software developed | A | Laboratory equipment purchased with Rs. 13.62 L, Rs. 12.84 L sanctioned under MODROB is being utilized to set a new lab |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | In 2020 curriculum 4 skill based and 2 job oriented courses are introduced. Seven Value added courses are conducted |
| 1.13 | Number of students undertaken -full time field projects: 31 (Mini projects) -full time internships: 207 students | A | 31 mini projects, and 207 students have taken full time internship |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 2.1 | Faculty Awards and recognitions: 1 | B | M/s Capricot Technologies offered Rs. 54,000/- as Fellowship to one faculty |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: 7/28 = 25% a. Faculty awarded with PhD: 1 b. Faculty submitted their PhD: 2 c. Faculty pursuing PhD: 12 d. Faculty registered for PhD: 3 | A | Only 3 faculty have to register for PhD. Out of the 12 faculty pursuing PhD, 3 to 4 faculty are in advanced stage and likely to submit in the next year. |
| 2.3 | Faculty guiding /guided PhDs: 04/02 | A | The Department has been recognized by the University as a Research centre. |
| 2.4 | e-Content development / Lectures added to Web-resources | B | All the online video lectures are posted in the Institute Server |

| | | | |
|-----|---|---|---|
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Faculty have participated in 116 programs totalling 1349 man days |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | The faculty need to show better visibility outside |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 3.1 | Mechanism and activities for slow learners Outcome | A | 2 – 4 hrs/week Remedial classes are conducted, resulting in increased pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | GATE coaching, training in CLAD, HFSS, IOT, Python programming and MSP430. |
| 3.3 | Value added courses Outcome | A | The above resulted in improved placements. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | A | A number of students have done their major projects using MSP430. |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | Faculty are encouraged and supported for participation in WS/FDPs resulting in 1349 man days of participation |
| 3.7 | Development Programmes for supporting staff | A | All 8 members have been trained on Labview for AI |

A

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|------|-------|----------|
|-----|------|-------|----------|

| | | | |
|------|--|---|--|
| 4.1 | Research ambiance , activity and innovation (quality & quantity) | A | Increase in the number of publications and publishing patents |
| 4.2 | Sponsored Research Projects and Consultancy | C | No ongoing research projects on hand. This concern need to be addressed |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching |
| 4.4 | Faculty publications in journals: Scopus indexed: 6 SCI / SCIE (Not ESCI): 3 Total: 9 h-index: Dept & Highest in the faculty: 5 | B | Needs improvement in quality publications |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent) - International (Scopus, SCI equivalent): 2 - Total: 2 | B | Needs improvement |
| 4.6 | Faculty contribution in:books: NILbook chapters: 3 (Books/Chapters with ISBN only are considered | B | Needs improvement |
| 4.7 | Government: Funded R&D projects Applied: NIL, Total Amount: NIL Ongoing: NIL Total Amount: Nil..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.8 | Non- Government: Funded R&D projects / Industry sponsored projects Applied: Nil....., Total Amount:..... Ongoing:..... Total Amount:..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.9 | Faculty involved in Consultancy & amount earned: Rs. 24,500/- through two works | B | Needs improvement |
| 4.10 | Faculty intellectual property rights / Patents: Filed: 20; Published: 20 Granted: Nil | A | Publishing patents is good. |
| 4.11 | In-house R&D grants & projects and their outcomes: Rs. 3.0L seed grant is awarded by the Management | A | Resulted in few publications and applied for funding R&D projects |
| 4.12 | New research facilities/ laboratory facilities added | A | A new lab "SDR" is being setup utilizing the MODROBS |

| | | | |
|------|---|---|---|
| | | | project |
| 4.13 | MOU"s with industries/ R&D/ Premier Institutes Details of activities | A | Functional MOUs with NI And TI, resulting in organizing training programs |
| 4.14 | Research centers of excellence established: Nil Outcome in research centers | C | |
| 4.15 | Skill development centers established: outcome: | B | In collaboration with APSSDC, skill development programs organized |
| 4.16 | Incubation centers: - Established with outside Industries: Nil -Status of incubation: | C | |
| 4.17 | Start-ups & Entrepreneurships: Nil No of Start-ups & status: Awards from outside platforms: | C | |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt): 85% | A | Good pass% |
| 5.2 | Professional society/Chapter activities: | A | A number of activities under ISTE: 2; IETE: 10 and IEEE:1 are conducted |
| 5.3 | Number of capability enhancement and development schemes | A | 7 activities are organized |
| 5.4 | Support for competitive examinations and career counselling | A | Support for GATE coaching, GRE, Softskills and personality development in place |
| 5.5 | Number of students who opted for higher studies: | A | 11 took up M.Tech and 1 MBA |
| 5.6 | Student pass percentage | A | Pass % is consistent except in II year I sem. |
| | First Year I SEM: 84.25% | | |
| | First Year II SEM: 85.04% | | |
| | Second Year I SEM: 56.52% | | |
| | Second Year II SEM: 84.06% | | |
| | Third Year I SEM: 82.17% | | |
| | Third Year II SEM: 92.97% | | |
| | Final Year I SEM: 89.21% | | |
| | Final Year II SEM: 100% | | |
| | Pass percentage of the outgoing batch: 93.25% | | |
| | No of students who have graduated without backlogs in any semester of study: 66 | | |

| 5.7 | Placements | |
|---|------------|---|
| Total No of Final Year Students(N): 139 | B | The % placements are good. Efforts may be put in to improve the average and highest packages. |
| No of students placed in the companies (X) (headcount only): 98 | | |
| Percentage of Placements (X/N): 70.5% | | |
| No of students placed | | |
| (Pay Package >= 10 Lakhs): 01 | | |
| No of students placed | | |
| (Pay Package < 10 Lakhs and >=5 Lakhs): 3 | | |
| No of students placed | | |
| (Package < =5 Lakhs): 94 | | |
| Highest pay Package: Rs.12.0 L | | |
| Minimum Pay Package: Rs. 1.8 L | | |
| Average pay package: Rs. 3.78 L | | |
| Median pay package: Rs. 3.8 L | | |

Quality Circles and Outcome

Quality Circle-1: R&C

Outcome: To publish more quality papers in SCI and Scopus journals. Increase the revenue in consultancy

Quality Circle-2: Infrastructure

Outcome: To provide sophisticated infrastructure both physical and computing

Quality Circle-3: Faculty Improvement

Outcome: To encourage faculty by delivering FDPs and to participate in various workshops and conferences.

Quality Circle-4: Language Enhancement

Outcome: To improve the communication skills among the student community.

Best Practices in the Department;

1. Efficient usage of online and offline resources for academic administration.
2. Practical projects for students through institute-industry interaction.

SUGGESTIONS FOR IMPROVEMENTS:

1. Improve publications.
2. Conscious efforts must be made to get sponsored research projects.

Name and Signature of the Departmental IQAC Coordinator

[Signature]
11/12/21
C.M. SRINIVASA RAO

A.S. Bala *[Signature]*
11/12/21 11.12.21

Name and Signature of the Head of the Department

for *K. Ramarajayulu*
HEAD

Electronics & Communication Engg. Dept.
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

Name and Signature of the External Auditor:

A. S. Babu
11/12/21

Dr. A. Sarat Babu,
Professor,
Department of Chemical Engineering,
NIT Warangal

Dr. A. Venu Gopal
11.12.21

Dr. A. Venu Gopal,
Professor,
Department of Mechanical Engineering,
NIT Warangal

M. B.
11/12/21
Name and Signature of the IQAC Coordinator

Prasad V. Potluri
PRINCIPAL

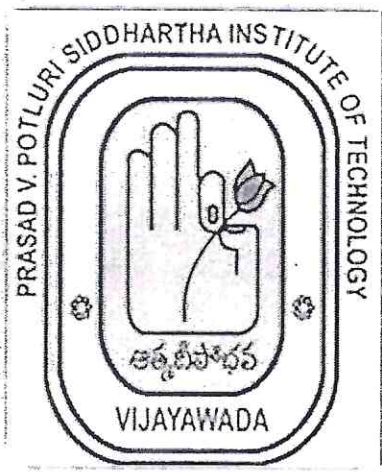
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

**Prasad V. Potluri Siddhartha Institute of Technology
(Autonomous)**

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with A+ grade
by NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of Head of the Department: Dr. M. Venu Gopala Rao

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|-------------------------|--|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech in Electrical and Electronics Engineering | 120+12 | 102+18 |
| PG (Engineering) | | | |
| | M.Tech (Power System Control and Automation) | 18 | 1 |
| Total | | 150 | 121 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per CBCS and APSICHE 20% Change in the content |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: | A | Skill development programs were organized in collaboration with APSSDC benefitting 89 students. Online events resulting in 37 certifications involving 15 students. |
| 1.4 | Total No. of teaching days during the AY: 183 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise: Professors: 3; Associate Prof.: 5; Assistant Prof.: 19 | A | Teacher Student ratio is satisfactory |

| | | | |
|------|--|--|---|
| | Teacher student ratio: 1:19.04 Non-teaching staff strength: 11 | | |
| 1.8 | Class rooms; program specific labs, computing facility and other labs availability 8 CR+ 6 Tut. + 1 Seminar Hall (EEE & CSE) Program specific labs: 12 | A | Well equipped laboratories and Class rooms |
| 1.9 | Attainment levels of the POs of the programme B.Tech in Civil Engineering | PO attainment level ~ 80% A | Attainment levels are more than the set targets |
| 1.10 | New courses introduced: 17 -Courses upgraded and percentage of up gradation in course content | A | 20% change in the content |
| 1.11 | Lab Component -New Labs added: Nil -No of new experiments introduced: Nil -New Hardware developed. | A | Upgraded equipment worth Rs. 13.20 lakhs under MODROB |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | 5 Skill Development courses are introduced. |
| 1.13 | Number of students undertaken -full time field projects: 13 -full time internships: 44 | A | |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 2.1 | Faculty Awards and recognitions: NIL | C | |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: 37% (10/27) a. Faculty awarded with PhD: 2 b. Faculty submitted their PhD: 1 c. Faculty pursuing PhD: 12 d. Faculty registered for PhD: 4 | A | Remaining 4 faculty may be motivated to register for PhD. |
| 2.3 | Faculty guiding PhDs: 3 Ongoing PhD students: 13 | A | The Department is recognized by the University as a Research centre. |
| 2.4 | e-Content development / Lectures added to Web-resources | B | All the online video lectures are posted in the Institute website. |

| | | | |
|-----|---|---|--|
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Faculty have participated in 361 events. |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) : 12 activities | B | A few faculty are involved in FDPs, Guest lectures, BOS members, Governing bodies, reviewer for journals and PhD evaluation. |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|--|
| 3.1 | Mechanism and activities for slow learners Outcome | A | Remedial classes are conducted, resulting in increased pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | GATE coaching provided resulting in 3 qualified ranks. |
| 3.3 | Value added courses Outcome | A | A certificate course on FPGA is conducted for 30 students. Seven students received certifications. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty : Nil | C | Need to be initiated |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | Faculty were encouraged to attend FDPs/Online webinars/ NPTEL courses by providing financial support |
| 3.7 | Development Programmes for supporting staff | B | 6 members were deputed for advanced training. The full fee is paid by the institute. |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 4.1 | Research ambiance, activity and innovation (quality & quantity) | B | Quality publications need improvement. |

| | | | |
|------|---|---|--|
| 4.2 | Sponsored Research Projects and Consultancy | C | Research projects and consultancy are not present. Need a substantial effort. |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching |
| 4.4 | Faculty publications in journals: Scopus indexed: SCI / SCIE (Not ESCI): 20+6 Total: 26 h-index: Dept & Highest in the faculty: 10 | B | The publications are limited to few faculty |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent): Nil - International (Scopus, SCI equivalent): 7 - Total: 7 | B | Needs improvement in quantity |
| 4.6 | Faculty contribution in:books:book chapters: 5 (Books/Chapters with ISBN only are considered) | B | |
| 4.7 | Government: Funded R&D projects Applied: 4, Total Amount: Rs. 180.9 lakhs Ongoing: NIL Total Amount: Nil..... Completed:..... Total Amount:..... | C | It is a concern. A problem that need to be addressed |
| 4.8 | Non- Government: Funded R&D projects / Industry sponsored projects Applied: Nil Total Amount: Ongoing: Total Amount: Completed Total Amount: | C | It is a concern. A problem that need to be addressed |
| 4.9 | Faculty involved in Consultancy & amount earned: Nil | C | |
| 4.10 | Faculty intellectual property rights / Patents: Filed: Nil; Published: 10 Granted: 01 | B | Needs improvement |

| | | | |
|------|---|---|--|
| 4.11 | In-house R&D grants & projects and their outcomes: | A | Three ongoing projects worth Rs. 2.25 Lakhs supported by Institute |
| 4.12 | New research facilities/ laboratory facilities added: Nil | C | |
| 4.13 | MOU"s with industries/ R&D/ Premier Institutes: 2 Details of activities: | | Applied for 2 SERB projects in collaboration with industries under MoU |
| 4.14 | Research centers of excellence established: Nil Outcome in research centers | C | |
| 4.15 | Skill development centers established: outcome: | B | In collaboration with APSSDC, skill development programs organized |
| 4.16 | Incubation centers: Nil - Established with outside Industries: -Status of incubation: | C | |
| 4.17 | Start-ups & Entrepreneurships: Nil No of Start-ups & status: Awards from outside platforms: | C | |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt): 46.07% | B | Poor pass % |
| 5.2 | Professional society/Chapter activities: Solar System of India, ISTE | C | Guest Lectures are arranged and awareness is created |
| 5.3 | Number of capability enhancement and development schemes: | B | Students have undergone 15 certification courses and 19 skill development programs |
| 5.4 | Support for competitive examinations and career counselling | A | Support for GATE coaching through PRERANA scheme |

| | | | |
|-----|---|---|---|
| 5.5 | Number of students who opted for higher studies: 7 | B | |
| 5.6 | Student pass percentage | B | Pass % needs improvement in the first 4 semesters. |
| | First Year I SEM: 53.92% | | |
| | First Year II SEM: 68.63% | | |
| | Second Year I SEM: 44.53% | | |
| | Second Year II SEM: 51.59% | | |
| | Third Year I SEM: 71.43% | | |
| | Third Year II SEM: 67.91% | | |
| | Final Year I SEM: 91.10% | | |
| | Final Year II SEM: 94.81% | | |
| | Pass percentage of the outgoing batch: 81.48% | | |
| | No of students who have graduated without backlogs in any semester of study: 50 | | |
| 5.7 | Placements | B | The % placements are good. Efforts may be put in to improve the average and highest packages. |
| | Total No of Final Year Students(N): 135 | | |
| | No of students placed in the companies (X) (headcount only): 85 | | |
| | Percentage of Placements (X/N): 62.96 | | |
| | No of students placed | | |
| | (Pay Package \geq 10 Lakhs): Nil | | |
| | No of students placed | | |
| | (Pay Package $<$ 10 Lakhs and \geq 5 Lakhs): Nil | | |
| | No of students placed | | |
| | (Package \leq 5 Lakhs): 85 | | |
| | Highest pay Package: Rs. 4.50 L | | |
| | Minimum Pay Package: Rs. 1.80 L | | |
| | Average pay package: Rs. 3.13 L | | |
| | Median pay package: Rs. 3.5 L | | |

Quality Circles and Outcome

- Quality Circle-1:** The Department has established a quality circle in R&D.

Outcomes:

- 6 SCIE and 20 Scopus papers were published.
- 10 patents were published and 1 patent was granted
- 4 funded projects were applied.

- Quality Circle-2:** Department has also established another Quality Circle for Skill Development.

Outcomes:

- 44 internships in various reputed organisations.
- 130 certificate courses through Course era, GUVI and APSSDC

Best Practices in the Department;

1. Industry Institute interaction resulted in core placements and projects related to problems in industry.
2. Encouraging students to register for online courses on NPTEL to promote advanced learning.

SUGGESTIONS FOR IMPROVEMENTS:

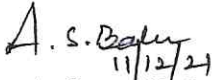
1. Senior faculty shall handle Second year courses to monitor the progress of the students.
2. To establish a centre of excellence for promoting research activities.



Name and Signature of the Departmental IQAC Coordinator



Name and Signature of the Head of the Department


HEAD
Dept.of Electrical & Electronics Engg.
PRASAD V.POTLURI

Name and Signature of the External Auditor:
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520007


Dr. A. Sarat Babu,
Professor,
Department of Chemical Engineering, NIT
Warangal


Dr. A. Venu Gopal,
Professor,
Department of Mechanical Engineering,
NIT Warangal


Name and Signature of the IQAC Coordinator
11/12/21

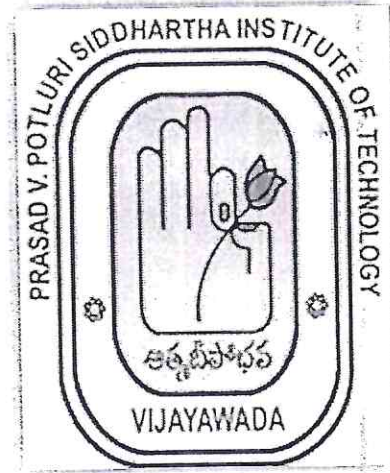

Name and Signature of the Principal
PRINCIPAL
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

Prasad V. Potluri Siddhartha Institute of Technology
(Autonomous)

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with A+ grade by
NAAC, ISO 9001:2015 Certified Institute)

INTERNAL QUALITY ASSURANCE CELL (IQAC)



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)

(The activities are to be graded on the following scale)

| Excellent | Good | Satisfactory | Need Improvement |
|-----------|------|--------------|------------------|
| A | B | C | D |

Name of Head of the Department: Dr. B. V. Subba Rao

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|------------------|----------------------------------|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech in Information Technology | 120+12 | 120+8 |
| UG & PG TOTAL: | | 132 | 128 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|---------------------|---|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Feedback from students, alumni and parents is collected regularly |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised in 2020, as per CBCS and APSCHE |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY: 2020-21 | A | A number of programs were conducted |
| 1.4 | Total No. of teaching days during the AY: 183 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available in Institute website |
| 1.6 | Academic, administrative set up and functioning | A | Clearly defined roles |
| 1.7 | Faculty strength cadre-wise: Professors: 3; Associate Prof.: 1; Assistant. Prof.: 19 Teacher student ratio: 1:18.66 Non-teaching staff strength: 6 | A | Teacher Student ratio is reasonable. |
| 1.8 | Class rooms; program specific labs , computing facility and other labs availability 7CR+ 1 Seminar Hall (IT+ECE) + 1 Incubation Centre Program specific labs: 10 | A | Well equipped laboratories and Class rooms |
| 1.9 | Attainment levels of the POs of the programme | PO attainment level | |
| | B.Tech in Information Technology | ~ 88% | Attainment levels are |

| | | | |
|------|--|---|---|
| | | A | more than the set targets |
| 1.10 | New courses introduced -Courses upgraded and percentage of up gradation in course content 4 Skill oriented and 2 Job oriented courses are introduced | A | The syllabus is updated in 2020 by giving emphasis to Skill and Job oriented courses |
| 1.11 | Lab Component -New Labs added: Nil -No of new experiments introduced -New Hardware /software developed | A | |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | In 2020 curriculum 4 skill based and 2 job oriented courses are introduced. Certification course on RPA is conducted |
| 1.13 | Number of students undertaken -full time field projects: -full time internships: 82 | B | Need to encourage students to take up field projects |

(2) Faculty information and their contribution

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 2.1 | Faculty Awards and recognitions: 1 | B | One faculty was awarded Young Scientist Award by IJIEMR - Elsevier |
| 2.2 | Faculty qualifications: Percentage of existing faculty with PhD: 52.17% a. Faculty awarded with PhD: 12 b. Faculty submitted their PhD: 0 c. Faculty pursuing PhD: 7 d. Faculty registered for PhD: 1 | A | Only 3 faculty have to register for PhD. |
| 2.3 | Faculty guiding /guided PhDs: 01 | B | The Department has not been recognized by the University as a Research centre, as there is no M.Tech program. |
| 2.4 | e-Content development / Lectures added to Web-resources | B | All the online video lectures are posted in the Institute website |

| | | | |
|-----|---|---|--|
| 2.5 | List of conferences/seminars/ webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Faculty have participated in 121 WS/FDPs |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | A few faculty are involved in FDPs, Guest lectures and BOS members. The faculty need to show better visibility outside |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 3.1 | Mechanism and activities for slow learners Outcome | A | 2 – 4 hrs/week Remedial classes are conducted, resulting in increased pass %. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | GATE coaching, training for securing higher pay packages |
| 3.3 | Value added courses Outcome | A | A certification course on RPA, resulted in securing 2 internships. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | B | Selection of 5 best projects is in place and a merit certificate is awarded. |
| 3.5 | Monitoring of Teaching Learning Process | A | A systematic procedure is in place to monitor T-L process |
| 3.6 | Initiatives undertaken towards faculty development | A | Faculty are encouraged and supported for participation in |

| | | | |
|-----|---|---|--|
| | | | WS/FDPs resulting in huge participation |
| 3.7 | Development Programmes for supporting staff | B | Appropriate training programs for Supporting and non-teaching staff may be organized |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 4.1 | Research ambiance , activity and innovation (quality & quantity) | A | Increase in the number of publications and publishing patents |
| 4.2 | Sponsored Research Projects and Consultancy | C | No ongoing funded research projects on hand. |
| 4.3 | Innovative processes adopted in teaching & learning | A | All the faculty have been using modern teaching methods suitable for online teaching |
| 4.4 | Faculty publications in journals: Scopus indexed: 12 SCI / SCIE (Not ESCI): 0 Total: 12 h-index: Dept & Highest in the faculty: 2 | B | Needs improvement in quality publications |
| 4.5 | Publications in conferences: - National (Scopus, SCI & equivalent): Nil - International (Scopus, SCI equivalent): Nil - Total: 10 | B | Needs improvement in quality |
| 4.6 | Faculty contribution in:books: 4book chapters: 5 (Books/Chapters with ISBN only are considered) | A | All 4 Books are published by reputed publishers |
| 4.7 | Government: Funded R&D projects Applied: 4, Total Amount: Rs.60.69L Ongoing: NIL Total Amount: Nil..... Completed:..... | C | It is a concern. A problem that need to be addressed |

| | Total Amount:..... | | |
|------|--|--|--|
| 4.8 | Non- Government: Funded R&D projects / Industry sponsored projects | Applied: Nil....., Total Amount:..... Ongoing: Rs. 35,000/- Total Amount:..... Completed:..... Total Amount:..... | C It is a concern. A problem that need to be addressed |
| 4.9 | Faculty involved in Consultancy & amount earned: Nil | | C Needs improvement |
| 4.10 | Faculty intellectual property rights / Patents: | Filed: 0; Published: 11 Granted: Nil | B Publishing patents is good. |
| 4.11 | In-house R&D grants & projects and their outcomes: Rs. 35000/- seed grant is awarded by the Management | | B Resulted in 1 publication and filing 3 patents. Other faculty shall be motivated. |
| 4.12 | New research facilities/ laboratory facilities added | | B |
| 4.13 | MOU"s with industries/ R&D/ Premier Institutes Details of activities | | A 5 Functional MOUs, resulting in organizing training programs for faculty and students |
| 4.14 | Research centers of excellence established: Nil Outcome in research centers | | C |
| 4.15 | Skill development centers established: outcome: | | B In collaboration with APSSDC, skill development programs organized |
| 4.16 | Incubation centers: - Established with outside Industries : -Status of incubation: 1 | | B One start up registered and 1 patent filed |
| 4.17 | Start-ups & Entrepreneurships: Nil No of Start-ups & status: Awards from outside platforms: | | C |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|----------------------------------|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt): 89.84% | A | Good pass% |
| 5.2 | Professional society/Chapter activities: | A | 6 number of activities organized |
| 5.3 | Number of capability enhancement and development schemes: | A | 2 activities are organized |
| 5.4 | Support for competitive examinations and career counselling | A | Support for GATE |

| | | | |
|-----|---|---|---|
| | | | coaching, GRE, Softskills and personality development in place |
| 5.5 | Number of students who opted for higher studies: | A | 10 (1 MBA in IIM, 9 MS abroad) |
| 5.6 | Student pass percentage | A | Pass % is consistently increasing. |
| | First Year I SEM: 89.84% | | |
| | First Year II SEM: 76.56% | | |
| | Second Year I SEM: 88.57% | | |
| | Second Year II SEM: 89.29% | | |
| | Third Year I SEM: 86.57% | | |
| | Third Year II SEM: 90.37% | | |
| | Final Year I SEM: 100% | | |
| | Final Year II SEM: 100% | | |
| | Pass percentage of the outgoing batch: 99.11% | | |
| | No of students who have graduated without backlogs in any semester of study: 79 | | |
| 5.7 | Placements | B | The % placements are good. Efforts may be put in to improve the average and highest packages. |
| | Total No of Final Year Students(N): 113 | | |
| | No of students placed in the companies (X) (headcount only): 93 | | |
| | Percentage of Placements (X/N): 82.3% | | |
| | No of students placed (Pay Package >= 10 Lakhs): 0 | | |
| | No of students placed (Pay Package < 10 Lakhs and >=5 Lakhs): 12 | | |
| | No of students placed (Package < =5 Lakhs): 78 | | |
| | Highest pay Package: Rs.7.60 L | | |
| | Minimum Pay Package: Rs. 3.0 L | | |
| | Average pay package: Rs. 4.01 L | | |
| | Median pay package: Rs. 3.8 L | | |

Quality Circles and Outcomes

1. Department has established two quality circles namely, Knock-out backlogs and Quality placements.

Outcomes:

1. Improvement in success rate of academically weak students is observed.
2. Specific training given to students through various coding platforms to improve quality placements.


Best Practices in the Department;

1. Attention to secure high package placements by offering certification courses through various coding platforms
2. Number of certification of programs on Python, Tableau, Infosys Campus connect foundations are organised for the students

SUGGESTIONS FOR IMPROVEMENTS:

1. Improve publications.
2. Conscious efforts must be made to get sponsored research projects and consultancy.

Name and Signature of the Departmental IQAC Coordinator.

De A. Halitha 

Name and Signature of the Head of the Department.

Dr. B V Subbalaxmi 
HEAD

Information Technology Department
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

Name and Signature of the External Auditor:

A. S. Babu
11/12/21
Dr. A. Sarat Babu,
Professor,

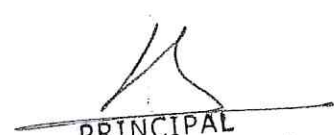
Department of Chemical Engineering,
NIT Warangal

Dr. A. Venu Gopal
11.12.21
Dr. A. Venu Gopal,
Professor,

Department of Mechanical Engineering,
NIT Warangal

Name and Signature of the IQAC Coordinator

[Signature]
11/12/21

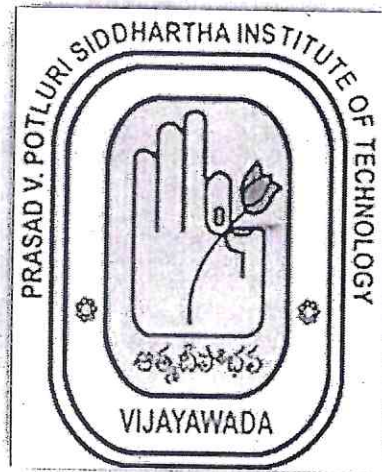

PRINCIPAL
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

**Prasad V. Potluri Siddhartha Institute of Technology
(Autonomous)**

Kanuru, Vijayawada – 520 007

(Permanently Affiliated to JNTUK, KAKINADA, Accredited by NBA, Accredited with A+ grade by NAAC, ISO 9001:2015 Certified Institute)

**INTERNAL QUALITY ASSURANCE CELL (IQAC)
MECHANICAL ENGINEERING DEPARTMENT**



EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT

(ACADEMIC YEAR 2020-21)

**(EXTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT REPORT)
FOR AY: 2020-2021**

(The activities are to be graded on the following scale)

| | | | |
|-----------|------|--------------|------------------|
| Excellent | Good | Satisfactory | Need Improvement |
| A | B | C | D |

Name of Head of the Department: Dr. B. Raghu Kumar

| SNO | Name of the Program | Sanctioned Strength | Actual Strength |
|---------------------------|-----------------------------------|---------------------|-----------------|
| UG (Engineering) | | | |
| | B.Tech. in Mechanical Engineering | 120+12 | 115 |
| PG (Engineering) | | | |
| | M.Tech. (Machine Design) | 18 | 01 |
| UG & PG TOTAL: | | 150 | 116 |

(1) ACADEMIC ACTIVITIES

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 1.1 | Feedback on curricular and other aspects from stakeholders | A | Student Feedback-Available Faculty Feedback -Available Parents -Available Employer Feedback Forms-Available Alumni feedback Forms- Available |
| 1.2 | Revision / Update of regulation or syllabi | A | Syllabus is revised as PVP20 for the academic year 2020-21 following CBCS and APSCHE guidelines |
| 1.3 | Academic activity conducted beyond the prescribed curriculum during the AY:20-21 | A | Certification Programmes: 03 *Applications of Non-Destructive Testing *Advanced Manufacturing Processes such as 3D printing, CNC and EDM *CATIA, DELMIA, SIMULIA Coursera: Students:46 Faculty:26 NPTEL: Students:02 Faculty:14 |
| 1.4 | Total No. of teaching days: 183 during the AY:2020-2021 | A | |
| 1.5 | Preparation, distribution and availability of time-tables, Academic Calendar, Curriculum and syllabi | A | Available on the institute website |
| 1.6 | Academic, administrative set | A | Academic, administrative set up available |

| | | | |
|------|---|----------------------------|--|
| | up and functioning | | with well defined rules. |
| 1.7 | Faculty strength cadre-wise, Teacher student ratio, Non-teaching staff strength | A | Faculty strength :31 Professor: 4 Associate Professor: 5 Assistant Professor: 22 Teacher student ratio : 16.78 Non-teaching staff strength:11 |
| 1.8 | Class rooms, program specific labs, computing facility and other labs availability | A | Class rooms :9 Tutorial Rooms :2 Labs :15 Research Labs: 3 resulted in publications and patents |
| 1.9 | Attainment levels of the POs of the programme | PO attainment level | |
| | B.Tech in Mechanical Engineering | A | All PO's are attained for AY 20-21 set above the target level of 70% |
| 1.10 | New courses introduced -Courses upgraded and percentage of up gradation in course content | A | B.Tech- 29 Percentage-32.9% |
| 1.11 | Lab Component -New Labs added -No of new experiments introduced-60 -New Hardware /software developed | A | New Labs added: 3 1.Design Thinking Lab 2.Life Sciences for Engineers 3.AI tools lab *Software license was renewed in CAD Lab |
| 1.12 | Number of and % of courses focusing on employability /entrepreneurship skill development | A | B.Tech.-73 M.Tech.-19 Percentage-100% |
| 1.13 | Number of students undertaken -full time field projects -full time internships | A | Field projects: 12 students [03 Projects] Internships:108 |

(2) FACULTY INFORMATION AND THEIR CONTRIBUTION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---------------------------------|-------|--|
| 2.1 | Faculty Awards and recognitions | B | |
| 2.2 | | A | *Percentage of existing faculty with PhD :11/31=35.48% *Faculty awarded with PhD: 02 *Faculty submitted their PhD: NIL *Faculty pursuing PhD:17 |

| | | | |
|-----|---|---|--|
| | Faculty qualifications : Percentage of existing faculty with PhD Faculty awarded with PhD | | *Faculty registered for PhD :02 |
| 2.3 | Faculty guiding /guided PhDs: | A | Faculty guiding /guided PhDs:06 |
| 2.4 | e-Content development / Lectures added to Web-resources | A | *Google Class room. *Dr. B. Raghu Kumar is delivering Video lectures on Engineering Mechanics in YouTube. |
| 2.5 | List of conferences/seminars/webinars/ workshops/FDPs attended for the enrichment of teaching - learning process | A | Conferences:11 Seminars/Webinars:52 Workshops:44 FDPs:52 |
| 2.6 | Faculty interaction with outside world (BOS/NBA/Examiner for PhD evaluation / selection committee / Academic auditing / Chairperson /Chief guest /etc.) | B | <ul style="list-style-type: none"> • BOS-01 • NBA-01 • Examiner for PhD evaluation - • selection committee -1 • Academic auditing- • Chairperson- • Chief guest -04 <p>Need more visibility</p> |

(3) Teaching-Learning Process and Evaluation

| SNO | ITEM | GRADE | COMMENTS |
|-----|--|-------|---|
| 3.1 | Mechanism and activities for slow learners Outcome | A | Remedial classes, Backlog classes were conducted. |
| 3.2 | Mechanism and activities for Advanced Learners Outcome | A | *GATE classes were conducted, resulting in 4 ranks and one student admitted in IIT Kanpur. *Placement Training |
| 3.3 | Value added courses Outcome | A | 03 80% of students trained in NDT secured placements. |
| 3.4 | Initiatives taken for innovative mini and major projects -Training for students & faculty | A | *Working Models from Projects:14 Financial support is provided to an extent of Rs.5,000/- per each project. It also resulted in one patent. *Papers from Projects: 20 |
| 3.5 | Monitoring of Teaching | A | *Lesson Plans were continuously |

| | | | |
|-----|--|---|--|
| | Learning Process | | monitored |
| 3.6 | Initiatives undertaken towards faculty development | A | <u>Organized:</u> *01 FDP was organized *01 International Conference was organized *07 webinars were organized <u>Attended:</u> 29 Faculty have attended 50+ FDPs outside |
| 3.7 | Development Programmes for supporting staff: Nil | B | Appropriate training programs may be planned regularly |

(4) RESEARCH AND INNOVATION

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|---|
| 4.1 | Research ambience , activity and innovation (quality & quantity) | A | *Research Groups were formed. *3 Lakhs seed money from SAGTE was sanctioned. * Out of 23 Patents, 8 patents were filed, 5 Patents were published and 10 were granted /Registered patents. Total:40 papers Scopus indexed: 03 papers, SCI/ESCI: 03 papers Others: 34 International Conferences: 25 (03 papers are Scopus, 22 papers are Non-Scopus) |
| 4.2 | Sponsored Research Projects and Consultancy | B | Research Projects: One AICTE RPS project worth of 11,56,863 lakhs has been sanctioned to Dr. P. Phani Prashanthi. Consultancy: 2 Projects <ul style="list-style-type: none"> ▪ Dr.P.Anusha - Rs.10,000/ ▪ Dr.M.N.Swapna Sri - Rs.10,000/- Efforts shall be made to increase the participation by more faculty |
| 4.3 | Innovative processes adopted in teaching & learning | A | NPTEL, Video lectures, Google Classroom, Cut Models, Working Models, YouTube lectures, etc. |
| 4.4 | Faculty publications in journals: Scopus indexed: SCI / SCIE (Not ESCI): Total: h-index: Dept & Highest in the faculty. | B | Scopus indexed: 03 SCI / SCIE (Not ESCI): 03 Total: 06 h-index: 4 Needs to be improved |
| 4.5 | Publications in conferences: National (Scopus, SCI & equivalent) - International (Scopus, SCI equivalent) | A | Publications in conferences: 25 National: NIL International: |

| | | | |
|------|--|---|---|
| | - Total: | | Scopus:03 Non-Scopus:22 |
| 4.6 | Faculty contribution in:books:book chapters: (Books/Chapters with ISBN only are considered) | B | Book chapters: 01 Needs to be improved |
| 4.7 | Government: Applied: Funded R&D Total Amount: projects Ongoing: Total Amount: Completed: Total Amount: | C | Applied: 05 Total Applied Amount: 1,09,60,000 Ongoing: 01 Total Ongoing Amount:11,56,863 Needs to be addressed with more focus |
| 4.8 | Non- Government: Applied: Funded R&D Total Amount: projects / Industry Ongoing: sponsored projects Total Amount: Completed: Total Amount: | B | *ISHRAE Student Project has been completed worth Rs.50,000/- Needs to be addressed with more focus |
| 4.9 | Faculty involved in Consultancy & amount earned | B | Dr.P.Anusha Dr.M.N. Swapna sri Amount earned: Rs.20,000/- Needs to be improved. |
| 4.10 | Faculty intellectual property rights / Patents: Filed: Published: Granted: | A | Filed:8 Published:05 Granted:10 Total : 23 |
| 4.11 | In-house R&D grants & projects and their outcomes | A | An amount of worth Rs.3, 00,000 Lakhs was sanctioned and distributed to faculty depending on their requirement. |
| 4.12 | New research facilities/ laboratory facilities added | A | *Metallic Band Saw * Digital Viscometer * Digital Lathe Tool Dynamometer with data acquisition board * Digital Universal Testing Machine * Impact Testing Machine |
| 4.13 | MOU"s with industries/ R&D/ Premier Institutes Details of activities | B | 11 functional MoUs resulting in internships, placements and industrial visits. |
| 4.14 | Research centers of excellence established: Outcome in research centers | B | JNTU-K has recognized the department as Research center. Outcome: *2 Scholars have been allocated to our faculty. |
| 4.15 | Skill development centers established: outcome: | A | Dassaults systemes lab has been established by APSSDC where the students are getting trained. |

| | | | |
|------|---|---|---|
| 4.16 | Incubation centers: - Established with outside Industries : -Status of incubation: | C | - |
| 4.17 | Start-ups & Entrepreneurships: No of Start-ups & status: Awards from outside platforms: | C | - |

(5) STUDENT SUPPORT AND PROGRESSION:

| SNO | ITEM | GRADE | COMMENTS |
|-----|---|-------|--|
| 5.1 | Transformation rate from I year to II year (passed all subjects in first attempt) | B | 50/113 = 44.24% Low pass % and needs to be addressed. |
| 5.2 | Professional society/Chapter activities | B | Two Professional societies are enrolled, * ISTE * ISHRAE Institute of Engineers (IE) Student Chapter has been Processed |
| 5.3 | Number of capability enhancement and development schemes | A | *Remedial coaching *Bridge courses *Backlogs *Personal counselling & Mentoring. *Skill Development programs. *Certification programs. |
| 5.4 | Support for competitive examinations and career counselling | B | *Gate Classes *student training programme |
| 5.5 | Number of students who opted for higher studies | B | Opted: 13 Admitted: 6 |
| 5.6 | Student pass percentage | | |
| | First Year I SEM | | 69.0% |
| | First Year II SEM | | 46.0% Needs improvement |
| | Second Year I SEM | | 44.2% Needs improvement |
| | Second Year II SEM | | 50.8% Needs improvement |
| | Third Year I SEM | | 66.1% |
| | Third Year II SEM | | 77.4% |
| | Final Year I SEM | | 88.9% |
| | Final Year II SEM | B | 97.9% |
| | Pass percentage of the outgoing batch | | 113/144 = 78.5% |
| | No of students who have graduated without backlogs in any semester of study | | 60/144 = 41.7% |

| | | | | |
|-----|--|---|--|--|
| 5.7 | Placements | | | |
| | Total No of Final Year Students(N) | | 144 | |
| | No of students placed in the companies (X) (headcount only) | | 87 | |
| | Percentage of Placements (X/N) | | 60.41% | |
| | No of students placed (Pay Package >= 10 Lakhs) | B | 0 | |
| | No of students placed (Pay Package < 10 Lakhs and >=5 Lakhs) | | 0 | |
| | No of students placed (Package < =5 Lakhs) | | 87 (placements in core companies with higher pay packages are to improved) | |
| | Highest pay Package | | 4.5 LPA | |
| | Minimum Pay Package | | 1.8 LPA | |
| | Average pay package | | 2.86 LPA | |
| | Median pay package | | 2.50 LPA | |
| | | | | |
| | | | | |

Quality Circles and Outcome:

Following Quality circles have been established in the year 2020-21:

- Quality Circle 1: Student Performance in Examination
- Quality Circle 2: Student Placements, Higher Studies & Competitive Exams
- Quality Circle 3: Research
- Quality Circle 4: Student Participation

Outcomes:

- To improve student performance in examinations
- To get more number of placements and admissions into higher studies
- To improve quality publications, and patents.
- To improve soft skills, self-confidence, self-discipline, communication skills, interpersonal relations, broader vision, creativity, social responsibility, scientific and analytical skills, time management skills, empathy, and working habits.

Best Practices in the Department:


- A skill development center on Dassault Systems is established in collaboration with APSSDC. Students are being trained in the advanced technologies to help them in getting good placements.
- Students and staff are being continuously encouraged to do advanced courses on NPTEL and get themselves updated.

A. S. Bhat
11/12/21
SPE
11.12.21

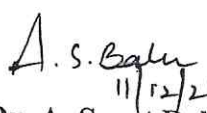
SUGGESTIONS FOR IMPROVEMENTS:


1. Improve publications.
2. Conscious efforts must be made to get sponsored research projects.


Name and Signature of the Departmental IQAC Coordinator


Name and Signature of the Head of the Department
HEAD
Mechanical Engineering Department
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

Name and Signature of the External Auditor:


Dr. A. Sarat Babu,
Professor,
Department of Chemical Engineering, NIT
Warangal


Dr. A. Venu Gopal,
Professor,
Department of Mechanical Engineering,
NIT Warangal


Name and Signature of the IQAC Coordinator


Name and Signature of the Principal

PRINCIPAL
PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007