

Part – A

AQAR for the Year:

2015 – 2016

I. Details of the Institution

- 1.1 *Name of the Institution* : Dr. N.G.P. Institute of Technology
- 1.2 *Address Line 1* : Dr. N.G.P. Kalapatti Road
- City/Town* : Coimbatore
- State* : Tamil Nadu
- Pin Code* : 641 048
- Institution e-mail address* : info@drngpit.ac.in
- Contact Nos.* : 0422 2369105
- Name of the Head of the Institution* : Dr. K. Porkumaran
- Tel. No. with STD Code* : 0422 2369102
- Mobile* : +91 9894101804
- Name of the IQAC Co-ordinator* : Dr. F.Mary Magdalene Jane
- Mobile* : +91 9843075111
- IQAC e-mail address* : iqac@drngpit.ac.in
- 1.3 *NAAC Track ID* : TNCOGN19836
- 1.4 *NAAC Executive Committee No. & Date* : EC(SC)/05/A&A/007 dated 03-03-2015
- 1.5 *Website address* : www.drngpit.ac.in
- Web-link of the AQAR* : www.drngpit.ac.in/aqar2015-16.pdf

1.6 *Accreditation Details*

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	I	B	2.81	2015	Upto 2 nd March 2020

1.7 *Date of Establishment of IQAC* : 14/03/2014

1.8 *Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC* : Nil

*This is the first submission of AQAR after the accreditation of NAAC in March 2015

1.9 *Institutional Status*

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution (eg. AICTE, BCI, MCI, PCI, NCI) Yes No

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

Grant-in-aid + Self Financing Totally Self-financing

1.10. **Type of Faculty / Programme**

Arts Science Commerce Law PEI (Phys Edu)
TEI(Edu) Engineering Health Science Management

1.11 **Name of the Affiliating University** : Anna University, Chennai

1.12 **Special status conferred by Central / State Government-- GC/CSIR/DST/DBT/ICMR etc** : Nil

2. IQAC Composition and Activities

- 2.1 **No. of Teachers** : 11
- 2.2 **No. of Technical staff** : 01
- 2.3 **No. of Students** : 01
- 2.4 **No. of Management representatives** : 02
- 2.5 **No. of Alumni** : 01
- 2.6 **No. of any other Stakeholder and Community representatives** : 01
- 2.7 **No. of Employers/ Industrialists** : 01
- 2.8 **No. of other External Experts** : 01
- 2.9 **Total No. of members** : 19
- 2.10 **No. of IQAC meetings held** : 08

2.11 *No. of meetings with various stakeholders:*

Faculty	4
Non-Teaching Staff /Students	2
Alumni	1
Others	1

2.12 *Has IQAC received any funding from UGC during the year? :* No

2.13 *Seminars and Conferences (only quality related)*

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos: 7 International : - National : - State : - Institution Level : 7

(ii) Themes

- Strategies for Effective Teaching Learning
- Teaching Adult Learners
- Outcome Based Education
- Learning Management System
- Communication Skills for Effective Teaching Learning
- Teaching Technologies in Higher Education

2.14 *Significant Activities and contributions made by IQAC*

- Formulation and Release of Academic Calendar
- Orientation for new students to familiarize with the policies and activities of the College
- Orientation program for newly inducted faculty and staff by Principal and Heads of Departments
- Faculty development program by academic experts from reputed institutions like NITTTR, Chennai, PSG College of Technology, Coimbatore Institute of Technology and Amrita University, Coimbatore, etc.,
- Academic Audit committee was constituted comprising the Principal, IQAC Coordinator and few senior faculty members. Extensive audit was conducted with Dr. S. Prabakar as the convener.
- New policies for Internal assessment and valuation introduced through Academic Development Cell
- Research Advisory Committee constituted by Research and Development Council to screen project proposals submitted to funding agencies

- Publication of IQAC News letter once in a year
- Analysis of feedback from stake holders
- Participated in National Institutional Ranking Framework (NIRF) by MHRD
- A repository of E-learning resources made available at centre for E-learning
- Faculty recognised and awarded for their research contribution

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality Enhancement and the outcome achieved by the end of the year *

(Details in Annexure – I Refer Pg.No:33)

2.16 Whether the AQAR was placed in statutory body : Yes

Management Syndicate any other body

Provide the details of the action taken: Management approved the AQAR.

Part – B
Criterion – I

1. CURRICULAR ASPECTS

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
Ph.D		3		
PG	6			2
UG	7			18
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	13	3		20
Interdisciplinary				
Innovative				

1.2 (i) Flexibility of the Curriculum: Elective option

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	13
Trimester	-
Annual	-

1.3 Feedback from stakeholders*

Alumni : Parents : Employers : Students :
 Mode of feedback : Online : Manual : Co-operating schools (for PEI):

- 1.4 *Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.*

Not Applicable

- 1.5 *Any new Department/Centre introduced during the year. If yes, give details.*

Departments of Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering have been recognized as Research Centres by Anna University, Chennai.

The following centres have been established:

- Dr. N.G.P. IT - Aosta Technology Incubation Centre in association with Aosta Software Technologies India Limited, Coimbatore
- Centre for Medical Equipments and Systems in association with KMCH, Coimbatore
- Dr.N.G.P. Medical Equipment Calibration Centre in association with KMCH, Coimbatore

Criterion – II

2. TEACHING, LEARNING AND EVALUATION

- 2.1 *Total No. of permanent faculty*

Total	Asst. Professors	Associate Professors	Professors	Others
193	161	11	20	1

- 2.2 *No. of permanent faculty with Ph.D.* : 31

- 2.3 *No. of Faculty Positions Recruited (R) and Vacant (V) during the year*

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
53	0	3	0	1	0	-	-	57	-

- 2.4 *No. of Guest and Visiting faculty and Temporary faculty:* NIL

2.5 ***Faculty participation in conferences and symposia:***

Conference:

No. of Faculty	International level	National level	State level
Attended	27	33	-
Presented papers	37	9	-
Resource Persons	3	-	-

2.6 ***Innovative processes adopted by the institution in Teaching and Learning:***

- VALUE Virtual Lab Nodal Centre established to provide Remote laboratory access in Science and Engineering and to create real world environment for problem solving
- Webinars and online lectures by eminent persons from Industry and Academia
- Curriculum enrichment through value added programs in association with MoU partners
- E-learning resources such as A-VIEW, NPTEL, EDUSAT, IIT B Spoken Tutorial, Eklavya Technology Channel, etc., made available for easy access.
- Projects, Factory Visits, In-plant trainings and Internships arranged through IIPC
- Slow learners identified and Remedial classes conducted
- Students are encouraged to develop innovative projects, working models and research publications
- Students choose electives based on career prospects and industry demands
- Subject mentoring system introduced

2.7 ***Total No. of actual teaching days during this academic year:*** 182

2.8 ***Examination / Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)***

- The end semester examinations are conducted by Anna University
- Feedback on the question papers is obtained from the faculty and deviations are reported to the controller of examinations, Anna University
- Centralised internal assessment system implemented
- Question papers scrutinised by subject mentors and heads of the departments

2.9 ***No. of faculty members involved in curriculum restructuring / revision / syllabus development as member of Board of Study / Faculty / Curriculum Development workshop :*** 01

2.10 ***Average percentage of attendance of students:*** 91 %

2.11 *Course/Programme wise distribution of pass percentage:*

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B.E. - Bio Medial Engineering	53	0	79	6	0	85
B.E. - Civil Engineering	65	0	31	37	0	68
B.E. - Computer Science Engineering	54	2	59	13	0	74
B.E.- Electronics & Communication Engineering	121	0	58	15	0	73
B.E. - Electrical & Electronics Engineering	69	0	63	12	0	75
B.E. - Information Technology	49	0	80	8	0	88
B.E. - Mechanical Engineering	141	0	65.2	9.2	0	75.5
M.E. - Computer Science and Engineering	5	0	80	0	0	80
M.E. - Embedded System Technologies	6	0	100	0	0	100
M.E. - Power Electronics and Drives	4	25	75	0	0	100
MBA -Master of Business Administration	61	2	98	0	0	100
MCA - Master of Computer Applications	28	28.57	71.43	0	0	100

2.12 *How does IQAC Contribute / Monitor / Evaluate the Teaching & Learning processes:*

The IQAC along with established cells in the college contributes to effective teaching learning:

- Faculty development programs organized to enhance teaching learning skills
- Subject experts are invited from industries and reputed organizations
- Monitors the conduct of internal examination through ADC
- Encourages students to participate in technical competitions
- Organizes induction programs and bridge courses for the new entrants
- Learning Management System (LMS) to support the access of learning materials
- Analyses internal and university examination results
- Ensures portion coverage before every internal test
- Collects feedback from students to evaluate the teaching learning process

2.13 *Initiatives undertaken towards faculty development*

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses (In house)	-
UGC – Faculty Improvement Programme	-
HRD programmes	-
Orientation programmes	56
Faculty exchange programme	-
Staff training conducted by the university	61
Staff training conducted by other institutions	50
Summer / Winter schools, Workshops, etc.,	56
Others (FDPs Conducted In-house)	193

2.14 *Details of Administrative and Technical staff*

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	33	0	9	0
Technical Staff	56	0	14	0

Criterion – III

3. RESEARCH, CONSULTANCY AND EXTENSION

3.1 *Initiatives of the IQAC in Sensitizing / Promoting Research Climate in the institution*

- The research and development council conducts workshops and seminars to promote research activities
- Students and faculty have jointly published research papers in national/ international conferences and journals
- An internal panel comprising of experts from various departments have been framed to screen the research proposals and 24 minor and major research proposals have been submitted to various funding agencies during the academic year 2015-2016
- Student project reports are compiled based on the guidance of external and internal reviewers, which helps students to compete in competitions and publish papers in journals / conferences
- Faculty and students are encouraged and motivated to submit proposals for innovative project awards and grants
- Faculty are rewarded for research publications.

3.2 *Details regarding major projects*

	Completed	Ongoing	Sanctioned	Submitted
Number	-	-	-	15
Outlay in Rs.	-	-	-	2,55,00,000

3.3 *Details regarding minor projects*

	Completed	Ongoing	Sanctioned	Submitted
Number	-	-	-	9
Outlay in Rs.	-	-	-	25,00,000

3.4 *Details on research publications*

	International	National	Others
Peer Review Journals	49	-	-
Non-Peer Review Journals	-	-	-
e-Journals	-	-	-
Conference proceedings	37	09	-

3.5 **Details on Impact factor of publications:**

Range Average h-index Nos. in SCOPUS

3.6 *Research funds sanctioned and received from various funding agencies, industry and other organizations*

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	-	-	-	-
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	2016	Dr.N.G.P IT	Rs.1,05,000	Received
Students research projects (other than compulsory by the University)	2016	IEEE	Rs.10,000	Received
Research Grant: Conference/Workshop	2015	ICMR	Rs.80,000	Received
		ISRO	Rs.25,000	Received
		ISTE	Rs.10,000	Received
		Others	Rs.4,05,500	Received
Total			Rs.6,35,500	

3.7 **No. of books published** : i) With ISBN No: 1 Chapters in Edited Books: 2
 ii) Without ISBN No: 1

3.8 **No. of University Departments receiving funds from**

UGC-SAP CAS DST-FIST
 DPE DBT Scheme/funds

3.9 **For colleges**

Autonomy CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)

3.10 **Revenue generated through consultancy** : Rs. 75,000 /-

3.11 **No. of conferences organized by the Institution**

Level	International	National	State	University	College
Number	1	2	-	-	-
Sponsoring agencies	-	ICMR ISTE	-	-	-

3.12 **No. of faculty served as experts, chairpersons or resource persons:** 31

3.13 **No. of collaborations:**

International National Any other

3.14 **No. of linkages created during this year** : 7

3.15 **Total budget for research for current year:**

From funding agency From Management of University/College:
 Total

3.16 *No. of patents received this year*

Type of Patent		Number
National	Applied	Nil
	Granted	
International	Applied	
	Granted	
Commercialized	Applied	
	Granted	

3.17 *No. of research awards / recognitions received by faculty and research fellows of the institute in the year*

Total	International	National	State	University	Dist	College
NIL						

3.18 *No. of faculty from the Institution who are Ph. D. Guides:*
and students registered under them:

3.19 *No. of Ph.D. awarded by faculty from the Institution*

3.20 *No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)*

JRF SRF Project Fellows Any other

Note: * Dr.T.Arun Kumar, Assistant Professor, Physics has been selected for the UGC - Dr. D. S. Kothari Post Doctoral Fellowship from July 01, 2015 to June 30, 2017 at Anna University, Chennai

3.21 *No. of students Participated in NSS events:*

University level State level
 National level International level

3.22 *No. of students participated in NCC events:* Nil

3.23 *No. of Awards won in NSS:* Nil

3.24 *No. of Awards won in NCC:* Nil

3.25 **No. of Extension activities organized**

University forum College forum
 NCC NSS Any other

3.26 **Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility**

- The NSS unit of the institution organized a Blood Donation Camp in association with Coimbatore Medical College Blood Bank on 21.09.2015. About 150 students and faculty participated
- An Energy Conservation Awareness programme was organized at Kalapatti on 10.10.2015
- As a part of the National Digital Library Mission, a Digital India Pledge in association with ICTACT was organized at V.K. Government Higher Secondary School, Angeripalayam, Tirupur, from 28.10.2015 to 30.10.2015
- A Vehicle Safety Awareness Campaign for the general public was organized at SITRA on 18.02.2016
- With a view to create Voter Awareness, a Road Rally was organized by the NSS unit of the institution in collaboration with Friends of Police, on 05.03.2016. The rally started from SITRA, Kalapatti and culminated at Dr.N.G.P. Institute of Technology campus. About 1000 students participated.
- In connection with INTERNATIONAL DAY AGAINST DRUG ABUSE AND ILLICIT TRAFFICKING, a road rally was organized in collaboration with Coimbatore District Administration, Tamil Nadu Police Narcotics Intelligence Bureau and Friends of Police, on 27.06.2016, to create awareness about drug abuse and its illicit trafficking. The rally started from Collector's Office, Coimbatore and culminated at Nehru Stadium, Coimbatore.

Criterion – IV

4. INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	18.93 acre	-	MANAGEMENT	18.93 acre
Class rooms	58 Nos.	-		58 Nos.
Laboratories	52 Nos.	1		53 Nos.
Seminar Halls	5	-		5
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	24	6		30
Value of the equipment purchased during the year (Rs.)	Rs.3,47,57,573	Rs.34,37,078.00		Rs.3,81,94,651.00
Others	UPS : 15 Nos			

4.2 *Computerization of administration and library*

- Integrated Campus Management System automates all academic and administrative processes.
- OPAC provides bibliographic details about the library resources
- All In-house activities of the library like purchase, circulation and cataloguing are automated
- The library also subscribes DELNET which is a major resource sharing library network
- College magazine, newsletters, placement brochure and exam question papers are uploaded on the web portal

4.3 *Library services:*

	Existing (Till June 2015)		Newly added (July 2015 – June 2016)		Total	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
Text Books	27033	1,02,29,791.29	1136	7,08,418.00	28169	1,09,38,209.29
Reference Books	5957	37,99,601.05	301	3,99,905.05	6258	41,99,506.10
e-Books*	6830	4,15,565.00	2269	11,500.00	9099	4,27,065.00
Journals	883	22,87,913.00	91	2,11,983.00	974	24,99,896.00
e-Journals*	6657	47,23,919.00	1924	11,94,693.00	8581	59,18,612.00
Digital Database*	1	8,47,619.00	1 (Renewal)	2,63,815.00	1	11,11,434.00
CD & Video	3041	---	89	---	3130	---
Others (Project Reports)	1573	---	384	---	1957	---

* *E-Journal Package Includes IEEE, Elsevier Science Direct, Springer*

* *E-Books includes DELNET*

* *Digital Database includes EBSCO*

4.4 *Technology up gradation (overall)*

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres / Laboratory	Office	Departments	Others
Existing	1010	11 labs	16Mbps	All labs are provided with internet facilities	879 computers	69 computers	62 computers	Accessories : 294 Nos
Added	20	Nil	8 Mbps		20 computers at Dr NGPIT-Aosta technology incubation centre	Nil	Nil	Accessories : 39 Nos
Total	1030	11	24 Mbps		899	69	62	333

4.5 *Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)*

- Exposure to Learning Management System and Campus Management System is given to newly appointed faculty during the orientation program
- Guidelines on the resources available and their usage is given by the centre for E-learning
- The library organizes a program every year separately for the new faculty and students on the usage of library software OPAC and IP based online access

4.6 *Amount spent on maintenance:*

i) ICT	:	Rs.4,19,716
ii) Campus Infrastructure and facilities	:	Rs.33,22,227
iii) Equipments	:	Rs.1,75,487
iv) Others	:	Rs.68,575
Total	:	Rs. 39,86,005

Criterion – V

5. STUDENT SUPPORT AND PROGRESSION

5.1 *Contribution of IQAC in enhancing awareness about Student Support Services*

- **Academic:** Value added programmes, Guest lectures, Workshops, Conferences, Project Expo organized are informed to students through the college website and student notice board
- **Placement / Higher Education and Entrepreneurship:** The respective convenors convey information through the department coordinators
- **Scholarship:** Details of Government, Management and Other Scholarships are informed to the students through notice board, website and induction programs
- **Management Support:** The support extended by the management such as Medical Insurance and concession at KMCH is informed to students during their induction programs
- **Clubs & Committees, Sports:** Details of technical clubs, professional societies and various committees are conveyed to students during their first year of study and students are invited for enrolment
- **Industry Support:** Avenues for factory visits, internships, industrial projects etc., are communicated through IIPC
- **General:** Information regarding Passport, Educational Loan, etc., are conveyed through circulars

5.2 *Efforts made by the institution for tracking the progression*

- Analysis of results after every internal evaluation, helps to determine the academic standard of the student and take remedial measures
- Each student is assigned a faculty tutor who monitors the academic and personal development of the student
- Class test and internal assessments helps to identify Slow learners and take remedial measures
- Advanced learners are identified and special tasks are assigned
- Class committee meetings and End semester meetings help to track the academic progress
- Academic audits are conducted to ensure effective curriculum delivery
- Interim audit for laboratories are organized
- Regular feedback from students, parents and alumni assist in tracking the progression
- Performance of the students in co-curricular and extra-curricular activities are monitored and encouraged by presenting awards
- Performance of the faculty is evaluated through staff appraisal system
- The following parameters are closely observed:
 - Overall placement
 - Pass percentage
 - Cut off of students admitted

5.3 (a) **Total Number of students**

UG	PG	Ph. D.	Others
2021	263	-	-

(b) **No. of students outside the state** :

(c) **No. of international students** :

Men	No	%	Women	No	%
	1480	65%		804	35%

First year admission details

Last Year(2014-2015 I st year Admission)						This Year(2015-2016 I st year Admission)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
123	47	0	454	0	624	194	52	0	477	0	723

2014- 2015 Dropout ratio: 4.7 %

2015- 2016 Dropout ratio: 4.3%

5.4 **Details of student support mechanism for coaching for competitive examinations (If any)**

- Dr.N.G.P. IAS Academy prepares students for civil service and other competitive examinations.
- Career Guidance Cell - Orientation programs are arranged for preparation of the GATE, CAT , GRE, TOEFL, TNPSC, etc.,
- An exclusive Department of Communicative English is functioning to improve the communication skills of the students.
- Business English Certification (BEC) coaching classes are organized.
- Experts from overseas are invited to create awareness among the students on avenues for higher education abroad.
- Special coaching classes conducted to strengthen fundamental concepts.

No. of students beneficiaries:

5.5 **No. of students qualified in these examinations**

NET	<input type="text"/>	SET/SLET	<input type="text"/>	GATE	<input type="text" value="1"/>	CAT	<input type="text"/>
IAS/IPS etc	<input type="text"/>	State PSC	<input type="text"/>	UPSC	<input type="text"/>	Others	<input type="text" value="NCAT - 1"/>

5.6 *Details of student counseling and career guidance*

Counselling

- a) The Mentoring system that assigns 20:1 student - tutor ratio helps identify students with adjustment problems.
- b) Tutors, Heads of the departments and Principal counsel students facing difficulty in adapting to the engineering stream
- c) The student who requires psychological help is given counselling by trained professionals from KMCH.
- d) Additional psychiatric assistance is provided for the required students.

No. of students benefitted:

122

Career guidance

- e) Training in aptitude and soft skills are organized with professional trainers.
- f) Company Specific Training was organized based on the expectations of the recruiters.
- g) Training on technical skills and fundamental subjects are given by internal members.
- h) Entrepreneurship development cell conducts programs for interested students. National level youth entrepreneurship program was organised in association with ICT Academy of Tamil Nadu.
- i) Career day is scheduled for every discipline which gives an opportunity to meet with potential employers to discuss opportunities.

No. of students benefitted:

1560

5.7 *Details of campus placement*

On Campus			Off Campus	
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Organizations Attended	Number of Students Placed
50	575	385	32	75
Total No. of Students Placed : 460				

5.8 *Details of gender sensitization programmes*

Themes

- 1. Life style management for women engineers
- 2. Women-health and hygiene
- 3. Work life balance for women professionals

5.9 **Students Activities**

5.9.1 **No. of students participated in Sports, Games and other events**

Sports

State/ University level National level International level

Other Events

State/ University level National level International level

5.9.2 **No. of medals /awards won by students in Sports, Games and other events**

Sports: State/ University level National level International level

Others: State/ University level National level International level

5.10 **Scholarships and Financial Support**

	Number of Students	Amount
Financial support from institution	102	Rs.26,82,000.00
Financial support from government	639	Rs.92,13,885.00
Financial support from other sources	50	**
Number of students who received International/National recognitions	34	Rs.6 2,692.00

** Students apply to other agencies and receive scholarships directly.

5.11 **Student organized / initiatives**

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 **No. of social initiatives undertaken by the students:**

5.13 **Major grievances of students (if any) redressed :**

Criterion – VI

6. GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 *State the Vision and Mission of the institution*

VISION

We at Dr. N.G.P. Institute of Technology empower our students to succeed in a changing world through innovative teaching and experiential learning, fostering relevant research leading to productive and responsible citizenship.

MISSION

- To produce graduates with sound technical knowledge who become innovators, entrepreneurs and pioneers in their profession and society
- To collaborate continuously with Industries, Professional and Research organizations for knowledge exchange, skill enrichment, research and development
- To promote outreach programs which inculcate ethical standards both societal and personal in the minds of young professionals

6.2 *Does the Institution has a Management Information System*

Yes, the campus management system is an integrated system which automates all aspects of the academic and administrative functioning.

6.3 *Quality improvement strategies adopted by the institution for each of the following:*

6.3.1 *Curriculum Development*

Being an affiliated institute, the curriculum prescribed and academic schedule issued by Anna University, is strictly followed. However, the Academic Development Cell (ADC) constituted in the college prepares a plan for effective curriculum implementation.

Efforts taken for Curriculum enrichment:

- E-learning centre is established which transacts resources from NPTEL, Eklavya Technology Channel, EDUSAT, VALUE Virtual Lab, A-VIEW and other E-learning resources
- Invited talks by eminent professionals from industry and academia are organized
- Case studies, Industry visits, In-plant training etc. are given

- Value additions provided through industry powered laboratories.
- Students choose their electives based on industry demands and employability
- Alumni lecture series are organized
- Industrial virtual tours are organized

6.3.2 *Teaching and Learning*

The IQAC continuously reviews teaching, learning and assessment procedures and strategies for improvement are identified, and implemented. A comprehensive action plan is developed by the ADC.

1. *Academic Calendar*

An academic calendar for the institution is prepared by the IQAC taking into account working days for the semester, test schedule and evaluation period. Schedules for guest lecturers, seminars, workshops, conferences, association activities, field visits and internships are charted. The individual departments design their academic calendar in line with the institution's academic calendar.

2. *Instructional Planning*

Course plan is framed as per the stipulated working days and credits allotted by the University. Detailed course plan in line with the prescribed syllabus for every theory course and a separate lab cycle for laboratory subjects is charted out

3. *Instructional Delivery*

Faculty development programs are conducted regularly, and faculty members are also encouraged to attend FDPs at other institutions. Library, E- Learning resources and Industry powered labs are available to meet individual learning needs. Value added programs, Webinars, guest lectures, seminars, conferences, case studies, projects, Factory visits and internships are organized.

4. *Assessment and Evaluation of Student Learning*

Assessment and evaluation is centralized by the Academic Development Cell (ADC) in accordance with the University schedule.

5. *Quality Checks of Academic Progress*

Tutor ward meetings, Class Committee meetings are conducted to ensure effective curriculum delivery, syllabus coverage and evaluation. Academic audits are conducted to check for deviations. Corrective measures are suggested and action taken. Curriculum evaluation by students and feedback from industry and academic experts visiting the campus is also obtained.

6.3.3 *Examination and Evaluation*

- The faculty submits two sets of question papers which are scrutinized by the subject mentor and respective heads.
- The Principal / ADC Convener chooses one question paper from the 2 sets for each course and sends it to ADC for further processing.
- The list of evaluators is prepared by the respective departments and submitted to ADC.
- ADC organizes the central evaluation on specified dates.
- Result analysis is consolidated and submitted to the Principal.
- Result Review meeting is organized for improving the academic performance.

6.3.4 *Research and Development*

- Research and Development council functions under the Chairperson and Director-Research
- The departments of EEE, ECE and Mechanical Engineering have received Research Centre recognition from Anna University, Chennai.
- An internal research advisory board comprising experts from various departments has been framed to screen the Research proposals and 24 proposals have been submitted to various funding agencies.
- Twenty nine faculty have been rewarded for publications in peer reviewed journals.
- Proposals were submitted for seeking grants for organizing Conference, Seminar and Workshop are encouraged.
- Faculty are motivated to pursue research and five faculty have completed doctoral programme.
- IEEE student project funding (SPF 2015-16) has granted funds for two research projects done by students.
- Journal clubs assist the students to review journal articles and 23 research articles have been published by students.
- Professional societies like IEEE, ACM, ISTE, SAE, CSI, BMESI, IETE and CMA provide a forum to inculcate research culture among faculty and students.
- The Centres of Excellence set up in the campus such as National Instruments Lab VIEW Academy, Oracle Workforce Development Program, Texas Instruments Centre, EMC² Academic Alliance, Cisco Networking Academy, SAP U Academy and Dr. N.G.P Institute of Technology - Aosta Technology Incubation Centre provide facilities to carry out research projects.
- MoUs are signed with Wayne state University and Florida Atlantic University, USA to foster research and education.

6.3.5 *Library, ICT and physical infrastructure / instrumentation*

- The library advisory committee recommends the up gradation of facilities in the library
- The library is automated and the database is available on OPAC (Online Public Access Catalogue) for bibliographical search.
- The college library has a collection of 34427 Volumes of books with 9358 titles and Digital library contains 3170 CD / DVDs.
- Digital library is equipped with 16 computers and has access to journals and reference materials with the institutional subscriptions of IEEE, Elsevier Science Direct, Springer Link, EBSCO Database and DELNET.
- Library subscribes to 130 Journals, Magazines and Newsletters.
- Centralized Management System for E-learning promotes E-learning facilities like NPTEL, EDUSAT, IIT B Spoken tutorial, NPTEL online certification, etc.,
- Campus is equipped with Wi-Fi facilities and 24 Mbps Band width internet facilities
- Classrooms, Seminar Halls and Conference Rooms are equipped with Computers and Video Projectors
- Uninterrupted power supply is made available
- All departments are equipped with computers, printers and internet access.
- A well equipped gymnasium, sports area for indoor and outdoor facilities, halls for club activities are available.
- Separate hostels for male and female students.
- Transportation facilities for students and staff.

6.3.6 *Human Resource Management*

Chief Executive Officer, Principal and Office of the Human Resources along with Heads of Departments of the college provide guidance, leadership and able administration.

6.3.7 *Faculty and Staff Recruitment*

AICTE norms are followed during recruitment. The vacancies are notified in news papers and applications are received. Shortlisted candidates are intimated to appear before the selection committee. The selection panel consists of the Principal, Members of the Management, Head of the concerned department and external subject experts. Competency based selection is done.

6.3.8 *Industry Interaction / Collaboration*

The Industry Institute Partnership Cell (IIPC) was established with a grant of Rs.9, 96,000 from All India Council for Technical Education (AICTE), New Delhi. The purpose of this venture is to create a freeway for exchange of knowledge between academia and industry. The Cell enables free consultation and diffusion of information on new technology. Students are assisted in taking up internships, Industrial visits, Industrial Projects, In plant Training (Summer & Winter) Programme and factory visits 28 MoUs have been signed with industries.

6.3.9 *Admission of Students*

The admission is purely governed by the norms of the affiliating University. The institution follows the norms laid down by the Tamil Nadu state government through Directorate of Technical Education (DOTE) under the Unified Single Window Admission System for Undergraduate Engineering Programmes. Admission into the Post Graduate programs like MBA, MCA and ME is based on the Tamil Nadu Common Entrance Test (TANCET) conducted by the Anna University.

A Consortium of Self Financing Professional, Arts and Science Colleges in Tamil Nadu have been granted permission to admit students into private professional colleges under the Management Quota. Students are admitted based on the consortium ranking.

6.4 *Welfare schemes*

Students are provided with Merit scholarships by the management. Financial assistance is given to students for project presentations outside the city and participation in professional events. Students avail Medical concession at the Kovai Medical Centre and Hospital (KMCH). Facilities provided to students for off campus placement drive.

Faculty are provided Sabbatical leave, medical leave, and maternity leave. Fee concession for their awards at The NGP School is provided. Faculty are covered under accidental insurance and Medical concession at KMCH is made available.

Non-teaching staff are provided free transport facilities. Provident Fund and accident insurance are provided along with earned leave benefits. Concession at The NGP School and KMCH is available.

6.5 *Total corpus fund generated* :

6.6 *Whether annual financial audit has been done* : Yes No

6.7 ***Whether Academic and Administrative Audit (AAA) has been done?***

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	-	-	Yes	IQAC
Administrative	-	-	Yes	Trust Office

6.8 ***Does the University / Autonomous College declare results within 30 days?***

Not Applicable, since the college is affiliated to Anna University, Chennai.

6.9 ***What efforts are made by the University / Autonomous College for Examination Reforms?***

Any discrepancies in university question papers and examination is reported to the Controller of Examinations, Anna University, Chennai.

6.10 ***What efforts are made by the University to promote autonomy in the affiliated / constituent colleges?***

Not Applicable

6.11 ***Activities and support from the Alumni Association***

- The Alumni give feedbacks on the utility of the value added programmes and electives opted in their current employment. The recommendations are useful in conducting skill development courses by the industry.
- The Alumni mentor students through a social media group where they share opportunities for internships and placements.
- Alumni are invited to give talks and they also deputed experts in their industry to address our students.
- Alumni abroad guide students on the procedures for higher studies in foreign universities
- Alumni are members of departmental advisory board.

6.12 ***Activities and support from the Parent – Teacher Association***

An active parent teacher association functions where parents share their views to improve the infrastructure, other facilities and academic activities. Annual Parents meetings are conducted after declaration of results of the university examination. Parents are members of departmental advisory board.

6.13 ***Development programmes for support staff***

- Encouraged to pursue higher studies
- Skill development programs are organized.
- Orientation programs are organized by institution and individual departments.
- Programs on basic Fire Fighting and Evacuation
- Programs on Yoga and Meditation
- Training on Computer literacy

6.14 ***Initiatives taken by the institution to make the campus eco-friendly***

- Lamps which consume less power like LED lights are installed.
- Solar powered lights are used in the college and hostel premises
- Energy Audit is being conducted every year and measures to conserve energy are advocated.
- An exclusive gardening team takes care to maintain a green campus.
- Rain Water harvesting facility is available in the campus.
- An initiation to conduct Environmental Audit

Criterion – VII

7. INNOVATIONS AND BEST PRACTICES

7.1 ***Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.***

- Learning Management System (LMS) made available for the access of learning materials.
- E-learning centre is strengthened with Amrita Virtual Interactive Engineering world (A-VIEW – Video Conferencing facility), VALUE Virtual Lab (V LAB), EDUSAT, along with NPTEL, Eklavya Technology Channel, IIT B spoken tutorial and other E-learning resources.
- Research has been strengthened and the departments of EEE, ECE and Mechanical Engineering have received Research Centre recognition from Anna University, Chennai
- Technical meets, industry connect events, career day programs, internships, industrial projects, In plant training industrial visits have been organized through AICTE – Dr.NGP IT IIPC.

- MoUs have been signed with industrial organizations and foreign universities for knowledge exchange. The institute has partnered with Coimbatore Productivity Council, Coimbatore, UTL Technologies Ltd., Bangalore, Aosta Software Technologies India Ltd., Coimbatore, Pantech Prolabs India Pvt. Ltd., Chennai and Florida Atlantic University, USA during 2015- 2016. Students are invited for internships abroad through MoUs with foreign universities.
- Internal audits have been strengthened to monitor the academic progress.
- Faculty development programs are organized with the support of Anna University, ISTE, ICT ACT, ICMR and other Industrial organizations.
- Research advisory committee formed to strengthen the Research proposals submitted to funding agencies
- Course is being offered through Cambridge University to improve proficiency in English (BEC).
- Personality development programs for students through Placement Cell to ensure industry readiness.
- To provide industry-relevant skill training to students, a tie-up with Pradhan Mantri Kaushal Vikas Yojana (PMKVY), scheme of the Ministry of Skill Development & Entrepreneurship (MSDE) has been initiated.
- A proposal has been submitted to AICTE - CII Survey of Industry-Linked Technical Institutes 2015
- National creativity aptitude test conducted to sensitize the students in the domain of creative thinking and 4 students secured All India ranking and Sivasankari.M secured all India 15th rank .

7.2 ***Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year***

(Details in Annexure –I Refer Pg.No:33)

7.3 ***Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)***

Best Practice - I

1. Title of the Practice

Create a Learning Environment through utilization of E-learning resources.

2. Goal

The goal is to promote self learning, provide additional resources and interact with experts in premium institutions.

3. *The context*

- Assimilation of the subject and application to real world
- To look beyond the curriculum
- Interaction with subject experts from renowned institutions like IITs, Anna University, Amrita University
- Virtual environment and remote laboratory access through VALUE Virtual Lab.

4. *The Practice*

- The requirements for lectures by experts either a part of the curriculum or beyond the syllabi are identified before the commencement of classes.
- Individual departments send their collective request to the centre for e-learning.
- The centre schedules online, recorded video lectures, webinars and maintains a log.
- The centre intimates the EDUSAT schedule to the respective departments where they register for required lectures.
- The centre conducts awareness programs. A Team from Amrita University addressed our faculty on 27.06.2016 about VALUE Virtual Labs, an initiative of the Ministry of Human Resource Department under National Mission on Education through ICT.
- The labs in various science and engineering disciplines are hosted for open access where our institute is a nodal centre. Faculty prepare a list of experiments to be remotely carried out and forward them to the Centre for e-learning.
- The centre maintains a learning management system and designates privileges to various users. Lecture notes, question bank, assignments and course plan are made available to students.

5. *Evidence of Success*

- Exposure to the expertise of eminent faculty has a marked effect on students
- Students carried out innovative projects and obtained awards and grants

6. *Problems Encountered and Resources Required*

Students are accustomed to interacting face to face with instructors. While passive listening and taking notes were a routine in online lectures, it took some time to get accustomed to interacting online.

Best Practice - II

1. *Title:*

Industrial Alliances and Partnerships to bridge the skill gap

2. *Goal:*

To strengthen industrial collaboration and industry institute interaction.

3. *The context:*

To create industry ready engineers and keep faculty updated with recent technologies

4. *The Practice:*

- AICTE - Dr.N.G.P. Institute of Technology IIPC has been constituted with an advisory board comprising members from corporate and Academia with the Principal as the chief coordinator.
- Linkages have been created with industries and formal MoUs have been signed.
- 20 value added courses have been conducted in association with MoU partners during 2015-2016.
- Training programs on industry practices and recent advancements has been organised for faculty
- Industry powered laboratories have been established to provide industry specific training.
- Internships, Industrial projects and factory visits are arranged with leading industrial and research organisations.

5. *Evidences of Success*

- Placement opportunities have been increased.
- Students completed internships at Defence Avionics Research Establishment DARE- (DRDO), New Delhi, Hindustan Aeronautics Limited, Bangalore, ISRO, Hassan, Bharat Heavy Electrical Ltd (BHEL), Trichy, Bharat Sanchar Nigam Limited, Ford India Pvt. Ltd., Chennai.
- Students received prestigious awards for their innovative projects.

6. *Problems Encountered and Resources Required*

Constant motivation is required to manage time between regular academic schedule and industry interface programs

7.4 ***Contribution to environmental awareness / protection***

- The Go Green campaign is a manifesto to which every individual has a personal obligation. The green cover of NGP campus, lush lawns and shady bowers are witness to the green thumb efforts
- Students participated in Plantation of Saplings at Mettupalayam road, a programme initiated by VER FOUNDATION
- An extension activity titled “Energy Conservation Awareness Programme” was organized for the residents of Kalapatti locality
- Energy saving devices like Solar Lamps are installed on campus
- A campaign to save energy in classrooms was mobilized as a gentle reminder to students to Switch Off all electrical points when not in use
- The institution’s NSS team organized a plantation of saplings programme in association with Indian Bank, Kalapatti Branch
- Initiatives have been taken to install Solar Plant in the campus.

7.5 ***Whether environmental audit was conducted?*** : Yes

7.6 ***Any other relevant information the institution wishes to add.***

Our institution received the following awards:

- Education National Excellence Award 2016 - Best Upcoming Innovative Engineering College during 9th ASSOCHAM Higher Education Summit 2016 at Hotel Le-Meridien, New Delhi. The award received by Dr.O.T.Buvanewaran, Chief Executive Officer, KMCRET and Dr.K.Porkumaran, Principal, Dr.N.G.P. Institute of Technology from Prof.(Dr.) Ram Shankar Katheria Hon’ble State Minister for HRD, Government of India
- ISTE-Best Chapter Award 2015 for considering its overall leadership and quantum of activities among 566 Engineering Colleges in TamilNadu and Pondicherry by Indian Society for Technical Education, New Delhi during 45th ISTE National Annual Convention at HVPM’s College of Engineering and Technology, Amravati (Maharashtra)
- Received IEEE Best Chapter award with cash amount of Rs.2,000/- for organizing activities towards the advancement of IEEE and Engineering Professions during the year 2015
- Received Certificate of Appreciation for hosting 14 teams in IEEE Xtreme contest from IEEE Madras Section

8. *Future plans of the institution*

- To acquire accreditation from National Board of Accreditation(NBA)
- To obtain permanent affiliation status from Anna University, Chennai
- To obtain 12(B) status from University Grants Commission(UGC)
- To obtain Anna university research centre recognition for other eligible departments
- To strengthen industry alliances and partnership by signing more MoUs with leading industrial and research organisations.
- To initiate industrial accreditation process like TCS and Wipro accreditation
- To establish more Technology Incubation centres
- To obtain more research grants, patents and lab to land products.
- To apply for TIFAC CORE in healthcare and renewable energy domains
- To establish a centre for value education
- To strengthen collaboration with foreign universities for staff, student exchange programs and research related initiatives

Name: Dr. F. Mary Magdalene Jane

Name: Dr. K. Porkumaran

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

ANNEXURE – I

PLAN OF ACTION

Plan of Action	Action taken / Outcome
<i>To obtain Research Centre Recognition for three departments</i>	The departments of Electrical and Electronics Engineering, Electronics and Communication Engineering and Mechanical Engineering have been recognized as Research Centers by Anna University during May, 2016
<i>To strengthen Research Activities</i>	<ol style="list-style-type: none"> 1. Research and development council has organized 3 Conferences and 4 sensitization programs 2. Research advisory committee constituted to screen and revise the Research proposals. Twenty four proposals have been submitted to various funding agencies. 3. Five faculty received doctoral degree 4. 46 papers presented by faculty in conferences 5. 49 papers published by faculty in journals 6. 23 papers published by students in conferences and journals
<i>To develop Centralised Internal Assessment system</i>	Academic Development Cell has centralised the conduct of internal examination and evaluation.
<i>To empower students by reinforcing industrial projects</i>	<ol style="list-style-type: none"> 1. Revised guidelines for student projects 2. National level Project Expo 2016 held on 19.03.2016 3. External experts invited to review final year projects 4. Best projects sent for awards and publications 5. Industry projects and Internships arranged through Industry Institute Partnership Cell (IIPC).
<i>To Provide global exposure to students</i>	<ol style="list-style-type: none"> 1. Dr. N.G.P. Institute of Technology, Coimbatore and Florida Atlantic University (FAU), USA, signed Memorandum of Understanding in May, 2016. Five students are pursuing internship at FAU 2. Experts from Melbourne University - Australia, Concordia University-Canada, Keleenn Technology - France, University of Leeds - UK, Prince of Songkla University - Thailand, University of Nizwa - Oman, Kuwait Institute for Scientific Research - Kuwait addressed the students and faculty in various forums.

<p><i>To Strengthen Teaching Learning Process</i></p>	<ol style="list-style-type: none"> 1. Conducted 18 training programs on teaching learning and technical skill development for faculty 2. Faculty deputed to FDPs conducted by reputed institutes 3. E-Learning Resources made easily accessible to staff and students 4. Orientation Programs were organised on <ol style="list-style-type: none"> a. A-VIEW and VALUE Virtual Lab b. IIT B Spoken Tutorial and NPTEL
<p><i>To Strengthen Industry Linkages</i></p>	<ol style="list-style-type: none"> 1. Industry advisory board for each department has been constituted 2. MoUs have been signed with the following organisations during 2015-2016 <ol style="list-style-type: none"> a. Florida Atlantic University, USA, b. Aosta Software Technologies India Limited, Coimbatore c. Coimbatore Productivity Council, Coimbatore, d. Pantech Prolabs India Pvt. Ltd., Chennai e. UTL Technologies Ltd, Bangalore 3. The Industry Institute Partnership Cell supports students in securing industrial projects and internships.