# The Annual Quality Assurance Report (AQAR)

# 2017-2018

# Submitted to



# National Assessment and Accreditation Council (NAAC)



PACE INSTITUTE OF TECHNOLOGY & SCIENCES (Approved by AICTE, NEW DELHI & Permanently Affiliated to JNTUK, Kakinada, A.P.) ACCREDITED BY NAAC WITH 'A' GRADE | ACCREDITED BY NBA

NH-16, Near Valluramma Temple, ONGOLE - 523 272, Contact No.: 9581456310 | www.pace.ac.in

To The Deputy Advisor National Assessment and Accreditation Council (NAAC) P.O.Box.No.1075 Opp: NLSIU, Nagaribhavi, Bangalore-560 072

## Sir, Subject: Submission of (AQAR) for the year 2017-2018-Reg. Reference: Track ID APCOGN 23502

Greetings from PACE Institute of Technology and Sciences,

PACE Institute of Technology & Sciences was established under Srinivasa Educational Society, 2007 at Valluru Village, Ongole, and started its march from the academic year 2008-09 with a vision and a mission to develop it as an incubator of innovation and knowledge creation in the field of Science and Technology. It was accredited by NAAC with 'A' grade in 2016 and accredited by NBA in 2018 for three UG Programs besides recognition ISO 9001-2008 certified institution.

As a NAAC accredited institution, we are here by submitting the Annual Quality Assurance Report (AQAR) for the academic year 2017-2018. We request your good office to kindly consider our AQAR submission and acknowledge the same.

Thanking you

With regards

Principal (Dr. M.Sreenivasan)

## I. Details of the Institution

1.1Name of the Institution	PACE Institute of Technology & Sciences
1.2 Address Line 1	NH-5, Near Valuramma Temple
Address Line 2	Ongole, Andhra Pradesh - 523272
City/Town	Ongole
State	Andhra Pradesh
Pin Code	523272
Institution e-mail address	principal@pace.ac.in
Contact Nos.	+91-9703020577
Name of the Head of the Institution:	Dr. M. Sreenivasan
Tel. No. with STD Code:	08592 278314
Mobile:	+91-7997992725
	Dr. Culturnor Duhon

Name of the IQAC Co-Ordinator:

Dr. Sukumar Puhan

Mobile:

+91-7997992725

iqac@pace.ac.in

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHCOGN 18879): APCOGN23502

1.4 Website Address:

www.pace.ac.in

Web-link of the AQAR:

http://pace.ac.in/iqac.php

For ex. http://www.ladykeanecollege.edu.in/AQAR201213.doc

#### 1.5. Accreditation Details

	Sl. No.	Cycle	Grada	CCDA	Year of	Validity
	SI. INU.	Cycle	Grade CGPA		Accreditation	Period
ĺ	1	1 <sup>st</sup> Cycle	А	3.05	2016	2021
ĺ	2	2 <sup>nd</sup> Cycle				
ĺ	3	3 <sup>rd</sup> Cycle				
ľ	4	4 <sup>th</sup> Cycle				

1.6. Date of Establishment of IQAC : DD/MM/YYYY

10-06-2016

1.7. AQAR for the year (for example 2010-11)

1.8. Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((*for example AQAR 2010-11submitted to NAAC on 12-10-2011*)

i.	AQAR	2016 – 17 submitted to NAAC on (16/08/2017)	
----	------	---	--

ii.	AQAR_	(DD/MM/YYYY)
iii.	AQAR_	(DD/MM/YYYY)
iv.	AQAR_	(DD/MM/YYYY)



1.9. Institutional Status

Affiliated College	Yes								
Regulatory Agency Approved Institution	Yes								
(eg. AICTE, BCI, MCI, PCI, NCI)									
Type of InstitutionCo-education	V								
Rural	V								
Financial Status Grant-in-aid	UGC 2(f) $\checkmark$ UGC 12B $\checkmark$								
Grant-in-aid + Self Financing	Totally Self-financing								
1.10. Type of Faculty/Programme									
Arts Science Commerce Law PEI (Phys Edu)									
TEI (Edu) Engineering $\checkmark$ Health Science Management									
Others (Specify)									
1.11. Name of the Affiliating University (for	the Colleges) Jawaharlal Nehru Technological University, Kakinada								
1.12. Special status conferred by Central/ Sta GC/CSIR/DST/DBT/ICMR etc Autonomy									
University with Potential for Excellence	No UGC-CPE No								
DST Star Scheme	No UGC-CE No								
UGC-Special Assistance Programme	No DST-FIST No								
UGC-Innovative PG programs	No         Any other (Specify         No								
UGC-COP Programs	No								

## 2. IQAC Composition and Activities

2.1. No. c	of Tea	chers				0	8			
2.2. No.	of Adı	ministrative/Techn	ical st	aff		0	4			
2.3. No. of Students						0	1			
2.4. No. o	of Ma	nagement Represe	ntativ	es		0	1			
2.5. No. o	of Alu	mni				0	2			
2.6. No. o	of any	other stake holder	•			0	2			
and Con	muni	ty representatives				0	5			
2.7. No. o	of Em	ployers/ Industrial	ists			0	1			
2.8. No. 0	of othe	er External Experts	8			0	1			
		of Members				2	1			
2.10. No.	of IQ	AC meetings held	_			0				
Non-7	Teachi s IQA	eetings with varioung Staff Students C received any fun amount		04	Alumı	ni (	)1	Facu Othe ? N		
Seminar	s and	Conferences (only	quali	ty relate	d)					
2.13. No. o	of Sen	ninars/Conferences	s/ Wo	rkshops	/Symp	oosia	organiz	ed by	the IQAC	
Total No's	2	International		Na	tional		State	1	Institution Level	1

(i) Themes Enhancing quality education and environment consciousness through iqac in higher education institutions

#### 2.14. Significant Activities and Contributions made by IQAC

The IQAC played a vital role in internalizing a culture of quality improvement within the institution. This culture was maintained and sustained by several initiatives taken by the Cell throughout the year. Quality Orientation sessions were conducted for the faculty and Audits. Meetings/ discussions with the faculty of the department were held to collect the information pertaining to various activities of the departments. IQAC encouraged the research based work and recommended student-centric core procedures.

#### 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

Plan of Action	Achievements
<ol> <li>To Focus and Monitor on Result analysis given target.</li> <li>To train the students to be selected in Campus Placements.</li> </ol>	<ol> <li>90% of the set target is achieved</li> <li>85% of the set targeted is achieved</li> </ol>
<ol> <li>To Encouraged Online Certification courses.</li> </ol>	3. 329 of the students received NPTEL Elite certificates, another 8 of the students got Toper certificates, and one of the faculty members achieved the Gold medal.
<ul> <li>4. To Focus on Students Higher Education Studies and Development</li> </ul>	<ul><li>4. 63 students from the set target have been selected to get their higher education in abroad.</li></ul>
5. To Encourage R&D and consultancy	5. One of the faculty members has submitted research proposal to DST and sanctioned 22, 95,000/ And through consultancy revenue generated 25, 94,166.

2.16 Whether the AQAR v	ody `	Yes v	No			
Management	V	Syndicate		any other	body	GB

Provide the details of the action taken

The AQAR was placed before Governing Body for the approval. The members of the body went through the proposals made by IQAC to strengthen the Academics and approved.

## Part – B

## **Criterion – I**

## **<u>1.</u>** Curricular Aspects

1.1. Details about Academic Programs

Level of the Program	Number of existing Programs	Number of programs added during the year	Number of self-financing programs	Number of value added / Career Oriented programs
PhD				
PG	06			
UG	07			
PG Diploma				
Advanced				
Diploma				
Diploma				
Certificate				12
Others				
Tot al	13			12
Interdisciplinary				
Innovative				

1.2. (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options(ii) Pattern of programs:

Pattern	Number of programs
Semester	08
Trimester	00
Annual	00

 1.3. Feedback from stakeholders\* Alumni (On all aspects)
 V
 Parents V
 Employers V
 Students V

 Mode of feedback: Online
 V
 Manual V
 Co-operating schools (for PEI)
 Image: Concentration of the school o

#### \*Please provide an analysis of the feedback in the Annexure (See Annexure B)

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

1.5. Any new Department/Centre introduced during the year. If yes, give details. No

## **Criterion – II**

## 2. Teaching, Learning and Evaluation

2.1. Total No. of	Total	Asst. Professors	Associate Professors	Professors	Others
permanent faculty	267	223	25	19	

44

2.2. No. of permanent faculty with Ph.D.

2.3. No. of Faculty Positions Recruited (R) and	Asst. Professors		Associate Professors		Professors		Others		Total	
Vacant (V) during the year	R	V	R	V	R	V	R	V	R	V
	13	01	00	29	00	14	00	00	13	44

2.4 No. of Guest and Visiting faculty and Temporary faculty 00

03	00

2.5. Faculty participation in conferences and symposia:

No. of Faculty	International level National level		State level
Attended	07	05	0
Presented Papers	10	05	0
Resource Persons	0	0	0

- 2.6. Innovative processes adapted by the institution in teaching and learning
- a) Moodle enabled teaching, learning and evaluation process and created a new learning ambiance and opportunity to students.
- b) Enabled students to revise the topics and get clarification of doubts while preparing for examinations.
- c) Extensive use of online course material like NPTEL etc. by faculty.

d) Commencement of Research forum- a platform for researchers to brain storm on the contemporary issues.

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



2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions) Moodle Online multiple choice Quiz questions 2.9 No. of faculty members involved in Curriculum Restructuring / Revision/Syllabus Development

00	00	00

as member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students

86%	

Title of the	Total no. of	Division				
Programme	students appeared	Distinction %	I %	II %	III %	Pass %
B.Tech- Civil	168	43.5	16.1	00	00	59.52
B.Tech- EEE	61	44.3	23.0	00	00	67.21
B.Tech- ME	107	14.0	15.9	00	00	29.91
B.Tech- ECE	185	28.6	17.3	00	00	45.95
B.Tech-CSE	116	47.4	10.03	00	00	57.76
B.Tech- IT	54	33.3	9.3	00	00	42.59
B.Tech- AME	49	10.2	12.2	00	00	22.45
M.Tech- Structural Engg.	15	46.67	00	00	00	46.67
M.Tech- Power Electronic	02	50.00	00	00	00	50.00
M.Tech- Machine Design	14	50.00	00	00	00	50.00
M.Tech- VLSI & ES	06	50.00	00	00	00	50.00
M.Tech- CSE	11	36.36	00	00	00	36.36
MBA	116	28.4	19.8	-	-	48.28

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

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

Extensive effort had been put up by IQAC not only to ensure an environment to achieve excellence in all aspects of teaching and learning but also to improve the quality of education and evaluation. The IQAC academic audit is carried out by the principal. This was done at various stages.

a). All the teaching staff members submitted semester plan to their respective head of the departments for conducting theory and practical classes.

b). Monthly reports were collected from the teaching staff wherein teachers had given information regarding coverage of syllabus during that particular month. If the syllabus was not covered as per schedule, the teachers were advised accordingly.

c). At the end of the semester (during the internal audit), the internal auditors submitted the monitoring sheets to the principal who examined whether the entire syllabus had been completed as per the initial planning and appropriate steps were initiated to complete the syllabus within the scheduled time.

d) The IQAC continuously monitored the quality of teaching learning process by way of conducting Academic staff Appraisal Process at the end of every academic year. The periodic reports that were submitted by the IQAC to the Institutional Heads and the review meetings that were conducted regularly helped the institute significantly to monitor the progress and to initiate the kind of measures that can be taken to improve the quality of teaching and learning process.

e) An online feedback mechanism was developed to collect the student feedback on the faculty.

Faculty / Staff Development Programs	Number of faculty benefitted
Refresher courses	00
UGC – Faculty Improvement Programme	01
HRD Programs	00
Orientation Programs	05
Faculty exchange Programme	00
Staff Training conducted by the University	08
Staff Training conducted by other Institutions	30
Summer / Winter schools, Workshops, etc.	11
Others(NPTEL CERTIFICATIONS)	111

#### 2.13 Initiatives undertaken towards faculty development

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	26	00	00	00
Technical Staff	52	00	00	00

## **Criterion – III**

## 1. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the Institution

- Sensitization programs were held by the experts for the benefit of researchers on the importance of impact factor and citation index.
- > Orientation programme on writing technical papers/articles in journals was conducted.
- Provision of analytics of the publications from various databases to the Heads of the departments of the Institute.
- FDP on research methodologies
- > Research forum is organized on every fourth Saturday to reinforce the Research Culture.
- 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	Nil	04	01	Nil
Outlay in Rs. Lakhs	Nil	Nil	22,95,000	Nil

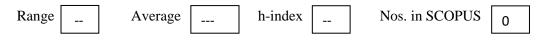
3.3 Details regarding minor projects: No minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	Nil	Nil	Nil	Nil
Outlay in Rs. Lakhs	Nil	Nil	Nil	Nil

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	56	0	0
Non-Peer Review Journals	0	0	0
e-Journals	0	0	
Conference proceedings	04	03	

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



Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2017-18	WOSA - DST	22,95,000	10,95,000
Minor Projects	2017-18	РМКҮ	12,53,880	6,94,008
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects (other than compulsory by the University)				
Any other(Specify)				
Total				17,89,008

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

3.7 No. of books publish	ned i) With ISI	BN No.	01 Cha	pters in E	dited Books	01	
<ul><li>ii) Without ISBN No.</li><li>3.8 No. of University Departments receiving funds from</li></ul>							
	UGC-SAP	00 C	AS 00	DST-F DBT S	IST 00 cheme/funds	00	
3.9 For colleges	Autonomy	00 C	PE 00 E 00	]	ar Scheme	00	
<ul><li>3.10 Revenue generated</li><li>3.11 No. of</li></ul>	through consult	ancy 25,	94,166	]			
conferences organized	T 1	<b>T</b> ( )	1	<b>G</b> ( )	<b>TT T T</b>	0.11	
-	Level	Internationa		State	University	College	
by the Institution	Number	00	01	A.P.		PACE	
	Sponsoring agencies		IETE & SES	A.P.		PACE	
3.12 No. of faculty served as experts, chairpersons or resource persons 06							
3.13 No. of collaborations International 02 National 10 Any other 00							
3.14 No. of linkages created during this year 12							

3.15 Total budget for research for current year in lakhs :

From funding agency	00		From Management of University/College	3. 25,674
Total	3.25,	674		

3.16 No. of patents received this year :

Type of Patent		Number
National	Applied	04
National	Granted	00
International	Applied	00
International	Granted	00
Commencialized	Applied	00
Commercialized	Granted	00

01

NIL

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

Total	International	National	State	University	Dist	College
36	00	00	00	00	00	36

3.18	No.	of facult	y from	the In	stitutio	n who ar	e
Р	h. D	. Guides	and stu	idents	register	ed under	them

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

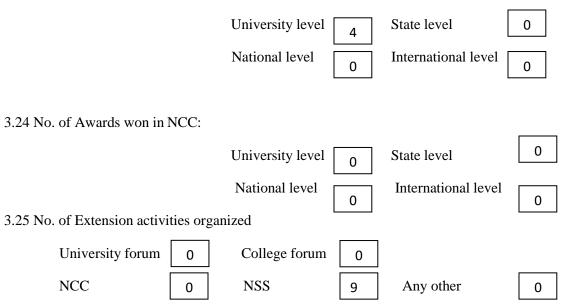
3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF	01	SRF	00	Project Fellows	00	Any other	00

3.21 No. of students Participated in NSS events:

University level 1350 State level	1180
National level 0 International level	0
3.22 No. of students participated in NCC events:	
University level 0 State level	0
National level I International level	0

3.23 No. of Awards won in NSS:



3.26 Major Activities during the year in the sphere of extension activities and institutional social responsibility

S.No	Date	Name Of The Event	No. Of Students Participated
1)	22/07/2017	Rims hospital organized Blood donation camp	150
2)	27/07/2017	Life Line Blood bank organized Blood donation camp	150
3)	08/12/2017	Rims hospital organized Blood donation camp	100
4)	08/12/2017	Belief Blood bank organized Blood donation camp	100

## 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	10.17 acres	2.31 acres		12.48 acres
Class rooms (No's)	68		Srinivasa	68
Laboratories (No's)	72		Edu. Society's	72
Seminar Halls (No's)	04			04
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.		10		10
Value of the equipment purchased during the year (Rs. in Lakhs)		24.95	PACE	24.95
Others (machinery, furniture, computers, library booksEtc) (Rs. in Lakhs)		136.45		136.45

4.2 Computerization of administration and library

Allotted Computer systems for OPAC (Online Public Access Catalogue) and Circulation through E-CAP Software.

### 4.3 Library services:

	Exi	Existing		y added	Total	
	No.	Value	No.	Value	No.	Value
Text Books	28961	64,06,854	563	2,31,402	29524	66,38,256
Reference Books	4642		213		4855	10,91,611
e-Books	1400		400		1800	
Journals	66	1,01,570	-	-	66	1,01,570
e-Journals	226	1,63,570	1023	4,77,865	1249	6,41,435
Digital Database						
CD & Videos	1096				1096	
Others (specify)	35				35	

4.4 Technology up gradation (overall)

	Total Computers	Compute r Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others (printers & LCD projectors)
Existing	1035	11	65 Mbps	01	01	07	30	162
Added	170	01	115 Mbps			12	60	04
Total	1205	12	180 Mbps	01	01	19	90	166

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

Students Training:

- 1. Soft skill & Communication Training for all B.Tech and MBA students-30 hours
- 2. Aptitude Training-2,3,4<sup>th</sup> year- 30 hours
- 3. Technical Training- C, Java, HTML, Python- 30 hours
- 4. IOT/AWS/Python/Android is the technology trained as a workshop for 3 days to 6 days
- 5. APSSDC certification like Course era, Udamy

**Teachers Training:** 

- 1. APSCHE- British Council Communication English Training for faculty
- 4.6 Amount spent on maintenance in lakhs :

i) ICT	0.70
ii) Campus Infrastructure and Facilities	46.97
iii) Equipments	
iv) Others	446.09

**Total:** 493.76

### **Criterion – V**

Student Support and Progression

5.1 Contribution of IQAC in enhancing the awareness about the Student Support Services:

a) IQAC organized and delivered lectures from time to time to make the students aware of the changing global scenario.

b) Students were given supporting assistance in seeking jobs opportunities not only local but also globally.

c) IQAC has been encouraging the students to develop skills, competencies and values among students.

d) At the beginning of an academic year, IQAC provided a format to the Heads of the Departments to collect the information regarding the support required to the students to be undertaken throughout the year. This will help IQAC to know the working of each department and will help to prepare an action plan of the institution. Monitoring the working of the departments is being done through meetings of the IQAC, which directs the future course of action.

e) IQAC has developed better internal communication between student and their respective departments.

- f) Encouraging eco-consciousness among students.
- g) Grievance Redressal Cell is working for students' support.
- 5.2 Efforts made by the institution for tracking the progression:
  - a) Frequent observation
  - b) Regular meetings and Monitoring
  - c) Faculty involvement through Counseling System Regular feedback from students

The institutional heads track the progression of the students in academics throughout the year. The same is conveyed to the heads of departments in regular meetings for the follow up action. Head of the departments also identify the slow learners and design remedial classes to be conducted after the class hours by the faculty. Apart from these classes, expert lectures are regularly organized. The counselors periodically analyze the progress of the students in academic and extra-curricular activities.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2992	363	00	00

(b) No. of students outside the state

(c) No. of international students

00	

00

No	%		No	%	
2150	64.08	Men	1183	35.92	Women

		Last Year							Th	is Yea	r	
	General	SC	ST	OB C	Physically Challenged	Total	General	SC	ST	OB C	Physically Challenged	Total
UG	1344	712	39	961	-	3053	1296	696	35	965	-	2992
PG	185	106	6	100		397	198	71	01	93		363

Demand ratio:- Dropout %: - 0.5

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

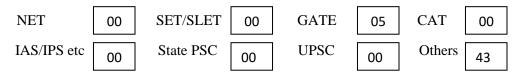
a. The College regularly conducts awareness programs on GATE, MAT, CAT, IELTS,

TOEFL, and GRE for the students by the clairvoyant personalities.

b. The College has set up an exclusive Career Guidance Cell to give guidance and notifying the students about competitive exams and entrance exams.

c. Many students get benefit for the career advancement.

5.5 No. of students qualified in these examinations



5.6 Details of student counseling and career guidance:

Career Guidance Cell organize career development programs for students through seminars, workshops, and career guidance sessions that have been carefully designed for the people of different backgrounds to do extremely well in their career.

Chief Coordinator took care of counseling students

Mode - Telephonic and Personal Meeting Area - Motivation for better performance

✓ Encouragement – Encouraging students and helping them to reach their next level goals.

No. of students benefitted

57

5.7 Details of campus placement

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
25	480	329	06

5.8 Details of gender sensitization programs:

The women welfare and sexual harassment eradication cell has conducted 4 supporting programs for women as:

- 1. An Essay Writing Competition on women Rights
- 2. The awareness program on Personal Hygiene
- 3. A Short training program on Self Defense
- 4. World Women's day celebration

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

State/ University level	09	National level	02	International level	00
No. of students participa	ated in o	cultural events			
State/ University level	00	National level	00	International level	00
5.9.2 No. of medals /awards won by stud	dents in	Sports, Games a	nd othe	er events	
Sports: State/ University level	02	National level	01	International level	00
Cultural: State/ University level	00	National level	00	International level	00

## 5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	2200	1,08,65,048
Financial support from government	2559	10,05,69,400
Financial support from other sources	00	00
Number of students who received International/ National recognitions	00	00

## 5.11Student organized / initiatives

Fairs	: State/ University level	01	National level	00	International level	00
Exhibitio	n: State/ University level	00	National level	00	International level	00
5.12No. c	of social initiatives underta	ken by	the students	03		
5 10) K ·		<b>c</b> )	1 1 1 1 177			

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

## **Criterion – VI**

### 6 Governance, Leadership and Management

6.1 State the Vision and Mission of the Institution

#### Vision:

Our vision is to impart futuristic technical education, which transforms the students technically superior, ethically strong, and self-disciplined to serve the nation as a valuable resource.

#### Mission:

Our mission is to impart quality education by providing outstanding technical resources, cutting edge technologies, professional skills, and special training by experts from leading industries and institutions. We encourage the students to participate in the conferences, seminars, workshops, and social activities through NSS, IETE, etc. The institute is committed to encourage creativity, critical thinking, and self-discipline besides giving exposure to industry and sensitivity towards society and care for the environment.

6.2 Does the Institution have a management Information System?

Yes. The Institute has used IMS software in-house to cater to the needs of the institute in conducting various activities.

The main components of the IMS Software are:

- a.) Faculty Information
- b.) Student Information
- c.) Department Information
- d.) Assets Information, etc.

All the departments have an IQAC representative responsible for data updating.

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

#### 6.3.1 Curriculum Development:

a. The senior faculty has been deputed for training on various aspects of curriculum design and development and their expertise has been used in the design and development of the curriculum.

b. The Department Advisory Committee (DAC) is constituted with members from industry, faculty and from University (JNTU-K).

c. Regular meetings are arranged by inviting eminent academicians from various institutes for the enrichment of the curriculum.

#### 6.3.2 Teaching and Learning

- a. Academic Monitoring committees to improve the quality of teaching.
- b. Use of e-learning resources in teaching/learning
- 6.33 Examination and Evaluation

All components in any programme of study are evaluated continuously through internal evaluation and an external evaluation. Internal evaluation is done throughout semester/year in the form of mid examinations and assignments. External evaluation is done at the end of semester/ year in the form of end examination by the University JNTU-K.

#### 6.34 Research and Development

a. Motivating the faculty to apply both for major and minor research projects by sensitizing them regularly.

b. Organizing lectures from various experts on the contemporary subjects.

c. Set up a separate Research and Development programs to encourage inter-disciplinary work.

#### 6.3.5. Library, ICT and physical infrastructure / instrumentation

- a. Creation of Video Conferencing facility to provide access to the experts.
- b. Strengthened the in-house Computer Service Centre for providing quick services to the users.
- c. The campus is Wi-Fi enabled. All the buildings are under the electronic surveillance.

d. The institute facilitated mobile SIM for administrative communication among various

departments over the internet backbone.

#### 6.3.6 Human Resource Management

The faculties are sponsored to attend various workshops/ conferences/ seminars to enhance their knowledge and skills. The institute regularly organizes Conferences, Workshops and Seminars by inviting eminent personalities from academia and industry on various fields. The institute gives various awards viz., Best Teacher Award and Best Research Award with reward to motivate the faculty.

#### 6.3.7 Faculty and Staff Recruitment

The institute regularly recruits faculty and staff after a thorough review of the requirement for both teaching and non-teaching positions. The institute follows the guidelines issued by AICTE from time to time for specifying the minimum qualifications, constitution of selection committees, etc. The faculties are selected strictly on the basis of merit.

#### 6.3.8 Industry Interaction / Collaboration

The institute is having collaboration with many leading industries in and around Andhra Pradesh. It has signed nearly 22 MOUs with various research organizations and industrial establishments. The institute has several interdisciplinary and multi-disciplinary research projects. The directorate of IIR and collaboration liaisons with the industry/corporate to identify their needs and connects the faculty for offering solutions.

#### 6.3.9 Admission of Students

The institute has an open policy on admission process as per EAMCET for B.Tech. and PGECET for MBA. Admissions to all the programs offered by the University (JNTU-K) are made on the basis of merit obtained in the entrance examination. For admission to management programs, however, Group Discussion and personal interview are also given weightage in assessing the merit and deciding the rank. A separate wing viz., Directorate of Admissions has been set up for conducting various entrance tests for different programs and organizing the counseling process smoothly. The entire admission process ensures transparency. Rule of Reservation is followed in admissions for SC, ST & physically challenged students as per the Government of Andhra Pradesh.

6.4 Welfare schemes for

Teaching	EPF, Maternity leave, Medical
	Leave, Special Leave, Academic
	Leave, Study Leave, Group
	Insurance
Non teaching	EPF, Maternity leave, Medical
	Leave, Special Leave,
	Academic Leave, Study Leave,
	Group Insurance
Students	Group Insurance, Fee
	Concessions

6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done: Yes

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

Audit Type	E	xternal	Inter nal		
	Yes/No	Agency	Yes/ No	Authority	
Academic	No	No	Yes	IQAC	
Administrative	Yes	Madhavi Rajesh Associates	No	No	

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

For UG Programs

	No

Yes

Yes

No	٧

٧

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

Not Applicable

- 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 Institute regularly organizes department-wise alumni meets during November/December and alumni with their families meet together to share their experiences and ideas for the growth of the institution.

6.12 Activities and support from the Parent - Teacher Association

The institute regularly organizes parent -teacher meet to know the requirements of the students and to address their grievances. Parents share their views for the growth of the institute in the form of suggestions.

6.13 Development programs for support staff

The institute deputes the supporting staff to skill development programs organized by the experts. Every year the Institute honours the Best Supporting Staff by giving them an award and cash prize.

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

PACE institute is well known for its ambient environment with flourishing green lawns and trees. Green audit is conducted every year to take suitable measures to maintain the campus in an ecofriendly manner.

### **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.

*Incubation Centre:* The institute has set up an Incubation Center to foster entrepreneurial skills among the students. The centers extend support by providing necessary facilities, mentorship, investment support, and a platform to interact with experts from the industry. Around **5** start-ups in the areas of manufacturing, web-designing, mobile apps, etc., had their origin in these incubation centers.

**Research Forum:** The institute has set up a Research Forum to provide a platform for all the researchers to get exposed to the research work carried out in the Institute. The forum provides an opportunity to learn the skills and methodologies of applied and/or basic research while exploring an area of personal interest. It helps to create research proposals, conduct research, prepare professional research papers, and present their findings.

- 7.2 At the beginning of the year IQAC planned the objectives for the current year (2017-18). It provides the Action Taken Report (ATR) based on the plan of action decided upon and then the progress was monitored through Action Taken Report monthly from all concerned persons. In meetings, these Action Taken Reports were discussed and remedial measures were taken appropriately whenever required.
- 7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

#### **Best Practice: -i**

Title of the practice:

Online certification course for faculty and Students to improve the quality of teaching learning process

#### **Best Practice: -ii**

Title of the practice:

Outcome Based Education (OBE) System in Engineering Studies.

#### Details in annexure- ii &iii

7.4 Contribution to environmental awareness / protection

- o Plantation/Greening
- Energy Conservation
- Use of Renewable Energy
- Deployment of solar lighting

#### **Plantation/Greening**

Institute has taken several measures for plantation inside the college campus and 60% of the open place is covered with greenery. The NSS team planted many saplings around the campus and conducted awareness programs on plantation.

#### **Energy conservation**

- The students and the staff are instructed to switch off the fans and lights when ever not required.
- Providing good ventilation and sun light system in to the class by placing large windows.
- Using LED lamps and bulbs in hostels to save electricity.

#### Use of Renewable Energy

- To save electrical power we use solar panels for steam cooking in the hostels.
- Solar panels are used inside the campus for producing steam for cooking and for hot water in hostels.

7.5 Whether environmental audit was conducted? Yes  $\bigvee$  No

7.6 Any other relevant information the institution wishes to add. (For example SWOT Analysis)

#### Strengths

- Received UGC 12 (f) and UGC 12(B) Status
- NBA Accreditation for 3 UG programs
- Well qualified and experienced faculty
- Fully equipped Laboratories and workshops
- Well equipped computer centre with CLOUD as well as BIGDATA servers
- Healthy student- teacher ratio (STR)
- Air-conditioned seminar halls, fully equipped with state-of-the-art and audio-visual devices.

#### Weaknesses

- Professional skills need to be further improved among students.
- Communication skills among rural students need improvement.
- Need to strengthen research and development

#### **Opportunities**

- Opportunities for faculty members through web based teaching environment
- Preparing competitive examination like GATE, BEC, TOEFL, GMAT, etc for students

#### Challenges

• Unpredictable admission rate due to less job opportunities in core industries

#### 8. Plans of institution for next year

- To improve our college academics pass percentage result to the next level
- To promote applied research, innovations, incubation & entrepreneurship
- To develop intellectuals rather than just degree holders
- To develop our students with environment sensitivity, human values and Professional ethics
- To prepare our students for global competitiveness and employability
- To strengthen the industry institute interaction in our college
- To focus continuous evaluation of learning outcomes
- To focus teaching outcomes adaption in education
- To train at least 75% of the students in essential professional skills(soft Skills, critical thinking)
- To improve the graduate outcomes at least 70% of our institute
- Improvement of quality of faculty research publications and innovations
- Strengthening rubric based assessment outcomes
- Strengthening the student's academic projects as patentable
- · Planning to conduct more faculty development programs and seminars
- Planning to improve student and faculty outreach
- Planning to improve industrial network

Name Dr.Sukumar Puhan

Signature of the Coordinator, IQAC

Name Dr. M.Sreenivasan

12/11/18

Signature of the Chairperson, IQAC

#### **ANNEXURE-A**

Grams: "TECHNOLOGY" Email: dapjntuk@gmail.com



Phone: 0884-2300991 Mobile: +9177790000

#### Directorate of Academic & Planning JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA-533003, Andhra Pradesh, INDIA (Established by AP Government Act No. 30 of 2008)

Lr. No. JNTUK/DAP/Aca.Cal/ B.Tech/B.Pharm -II Year/2017-18 Date: 07-06-2017

Dr. Ch. Satyanarayana

M.Tech, Ph.D., Director, Academic & Planning

То

The Principals of All Affiliated Colleges, JNTUK, Kakinada

#### ACADEMIC CALENDAR FOR B.TECH/ B.PHARM II YEAR 2016 BATCH

Description	From	То	Weeks
Commencement of Class Work	12-06-2017		
I Unit of Instructions	12-06-2017	05-08-2017	8W
I Mid Examinations	07-08-2017	12-08-2017	1 W
II Unit of Instruction	14-08-2017	07-10-2017	8W
II Mid Examinations	09-10-2017	14-10-2017	1W
Preparation & Practicals	16-10-2017	21-10-2017	1 W
End Examinations	23-10-2017	04-11-2017	2W
Commencement of Class Work	20-11-2017		
B.TECH/ B.PHARM II YEAR II SO	emester		
Commencement of Class Work	20-11-2017		-
I Unit of Instructions	20-11-2017	13-01-2018	8W
I Mid Examinations	15-01-2018	20-01-2018	1 W
II Unit of Instruction	22-01-2018	17-03-2018	8W
II Mid Examinations	19-03-2018	24-03-2018	1 W
Preparation & Practicals	26-03-2018	31-03-2018	1 W
End Examinations	02-04-2018	14-04-2018	2W
Commence of Class work	11-06-2018		

Director, Academic and Planning

Copy to the Secretary to the Hon'ble Vice Chancellor Copy to the Rector Copy to the Registrar Copy to the Director of Evaluation Copy to the Controller of Examination (UG) Grams: "TECHNOLOGY" Email: dapjntuk@gmail.com



Phone: 0884-2300991 Mobile: +9177790000

#### Directorate of Academic & Planning JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA-533003, Andhra Pradesh, INDIA (Established by AP Government Act No. 30 of 2008)

Lr. No. JNTUK/DAP/Aca.Cal/M.Tech&M.Pharmacy-II/2017-18

Date: 29-05-2017

Dr. Ch. Satyanarayana M.Tech, Ph.D., Director, Academic & Planning

То

The Principals of affiliated colleges, JNTUK, Kakinada.

#### ACADEMIC CALENDAR FOR M.TECH/M.PHARMACY II YEAR 2016 BATCH

III & IV Semesters					
Description	From	То	Weeks		
<b>Commencement of Project Work</b>	05-06-2017	2			
III Semester	05-06-2017	04-11-2017	22W		
IV Semester	06-11-2017	07-04-2018	22W		
Thesis submission duration	09-04-2018	30-06-2018	12W		

# Director, Academic and Planning

Copy to the Secretary to the Hon'ble Vice Chancellor Copy to the Rector Copy to the Registrar

Copy to the Director of Evaluation

Copy to the Controller of Examination (PG)

Copy to Director Institute of Science and Technology

Grams: "TECHNOLOGY" Email: dapjntuk@gmail.com



Phone: 0884-2300991 Mobile: +9177790000

#### Directorate of Academic & Planning JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA-533003, Andhra Pradesh, INDIA (Established by AP Government Act No. 30 of 2008)

Lr. No. JNTUK/DAP/Aca.Cal/Ist MBA/2017-18

Date: 31-08-2017

Dr. Ch. Satyanarayana M.Tech, Ph.D.,

Director, Academic & Planning.

To

All the Principals of affiliated colleges, JNTUK, Kakinada.

#### ACADEMIC CALENDAR FOR MBA I YEAR - 2017 BATCH

Description	From	То	Weeks
Commencement of Class Work	04-09-2017		
I Unit of Instructions	04-09-2017	28-10-2017	8W
I Mid Examinations	30-10-2017	04-11-2017	1 W
II Unit of Instructions	06-11-2017	30-12-2017	8W
II Mid Examinations	01-01-2018	06-01-2018	1W
Preparation & Practicals	08-01-2018	13-01-2018	1W
End Examinations	16-01-2018	27-01-2018	2W
Commencement of Class Work	29-01-2018		
MBA I Year II Semester			
Commencement of Class Work	29-01-2018		
I Unit of Instructions	29-01-2018	24-03-2018	8W
I Mid Examinations	26-03-2018	31-03-2018	1W
II Unit of Instructions	02-04-2018	26-05-2018	8W
II Mid Examinations	28-05-2018	02-06-2018	1W
Preparation & Practicals	04-06-2018	09-06-2018	1W
End Examinations	11-06-2018	23-06-2018	2W
Commencement of II Year Class Work	09-07-2018		

Director, Academie and Planning

Copy to the Secretary to the Hon'ble Vice Chancellor

Copy to the Rector

Copy to the Registrar

Copy to the Director of Evaluation

Copy to the Controller of Examinations (PG)

Copy to Programme Director, School of Management Studies

#### Annexure- ii

#### **Best Practice: -1**

#### 1. Title of the Practice:

Online certification course for Faculty and Students to improve the quality of Teaching Learning Process.

#### 2. The context that required the initiation of the practice (100 – 120 words)

Massive Open Online Course (MOOC) is essentially a process of Teaching Pre-recorded Lectures, Resource Video Materials, Lecture Notes, Assignments and Quizzes.

They are usually online and provide the user for Self-Assessment at regular intervals during learning process. The learning involves the simultaneous participation of teachers and a large number of students.

It is similar to a classroom with wide use of the internet. This methodology is well suited to the current generation users of Mobile- Twitter- Face book-YouTube etc.

#### 3. Objectives of the practice (50 - 60 words)

The primary objectives of this practice are:

- a) Make high quality learning material available to students, through which they can improve their employability.
- b) NPTEL (National Programme on Technology Enhanced Learning A joint venture of IITs and IISC) Web Courses and Video Courses are being used by the staff and the students to enhance the Teaching Learning Process.
- c) To provide an opportunity to students and faculty to get certificate from IITs.

#### 4. The Practice (250 – 300 words)

NPTEL Local Chapter is established in the college. Through the local chapter, we encourage the students and faculty to enroll for the NPTEL online courses every semester. Mentoring system is in practice for guiding the students in enrollment, course access, and timely submission of assignments to end exam. The local chapter supports the students to avail 50% exam fee waiver as scholarship from IIT Madras.

#### **5.** Obstacles faced if any and strategies adopted to overcome them (150 – 200 words)

Time Management and Self-Motivation are the difficult tasks for e-Learners.

The mentors motivate the students to follow the new educational trends and also help them to meet the deadlines of the courses.

#### 6. Impact of the practice (100 – 120 words)

The faculty members are using these contents as part of their lesson plan to teach the university curriculum to students. They are using NPTEL not only to prepare for technical jobs and competitive exams, but also as a platform for constant learning and updating knowledge for the ever-changing environment and market realities.

#### 7. Resources required

Desktop / Laptop / Smart phone with

headsets/Internet facility

#### **Best Practice: -2**

#### 1. Title of the practice:

Outcome Based Education (OBE) system in Engineering Studies

#### 2. The context that required the initiation of the practice (100 - 120 words):

Global demand for qualified and qualitative engineering human resource is increasing day by day and the learning process has become dynamic in the current century. A technically strong knowledge based society is very much needed for a fast developing nation like India. To meet the challenges and demands for the present and future, it is the need of the hour to groom the engineering students to meet the demand and expectation of the country and world. Keeping this in mind and following the norms of the NBA, our institution is practicing the best teaching and learning methods in the campus such that the outgoing student from the institute is a global asset and proven professional to contribute his/her best for the National building by availing all the facilities and infrastructure for his/her capacity building.

#### **3.** Objectives of the practice (50 – 60 words):

- Imparting best and qualitative engineering education to the rural students who are under privileged to have all the learning facilities of their urban peers.
- To prepare the engineering graduates to meet the global demands in technology implementation and innovation through research.
- > Imparting skill set to the engineering graduates to enhance their employment skills.
- > Improve the communication skills to have a strong role in the Knowledge Society.

#### 4. The Practice (250 – 300 words):

The institute is having well qualified faculty and state-of-the-art workshops and Engineering laboratories to impart the best teaching. The faculties are trained to carry out Outcome Based Education (OBE) based on teaching methodology where teaching learning practices are implemented. The lectures are designed to provide more interactive session of learning with 50% Black Board Teaching, 25% PPTs, 15% student interaction and 10% assignments. All the faculty members are encouraged to appear for Online Certification Courses in their respective teaching subjects conducted by NPTEL and Pedagogy Principles in OBE based education system. Institute is one among the best NPTEL local chapters in the state (Ranked as 5th best centre in A.P.

A separate R&D Cell is provided in the college to encourage students and faculty to carryout research work and publish papers in various journals. The institute has a strong link with the industry in and around the institute and in neighboring states to send students for necessary Industry-Interaction-Internship. Our institute is approaching various foreign universities to have student exchange program. To this, a separate Career Guidance Cell (CGC) is established in the college to motivate the students in this direction. CGC Cell also provides GATE/GRE/GMAT etc., coaching information to the students. As the institute is established to provide higher education facilities to rural students a separate Training Cell is established in the college to provide communication skills in English and soft skills to the students.

#### 5. Obstacles faced if any and strategies adopted to overcome them (150 – 200 words):

As the students are admitted with the rural back ground and completed their Intermediate Education in regional medium of instruction, there is a large resistance is expressed by the students to speak in English and understand the English medium of instruction. Separate LSRW training classes are organized to remove the fear from the students to speak, understand and communicate in English.

As the institute is in the rural area, eminent teachers from various institutions and industrialists especially from software industry have not shown much interest to visit the institute to participate in seminars and guest lectures. We have provided exclusive transport facility and other facilities for their visits to our college to share their knowledge and expertise with the students.

Digital communications like Internet facilities were not available in the early stages. Hence, Management has taken a separate 65MB leased internet connectivity exclusively for the campus to have world connectivity through internet which will be available to all the members of the institution.

#### Gap in the Technical updates:

To have technical connectivity in the area of Technology and Management, our institution has become a institutional member for various professional bodies like IE, ISTE, CII, IEWB, ISLE, IETE and Student Chapters are also established to have Industry-Institute visits to our campus by the experts to share their experience and their addressing on real time world problems in the area of technology.

#### 6. Impact of the practice (100 – 120 words):

By implementing the above mentioned teaching-learning practices and strictly adhering to the Vision and Mission of the institution and identifying the gaps in implementation level and minimizing the gaps, the institution has grown to the level of obtaining the Grade of "A" by NAAC with a period of 8 years from the date of establishment. Due to this grading, the confidence in the stake holders has improved enormously and the confidence level of the student has also grown and the same is reflected in the university examinations to increase in the pass percentage. The number of placements has also increased as more and more employers are visiting the campus to recruit our students.

#### 7. Resources required:

- Funds for purchasing modern laboratory equipment to carryout advanced research in various branches of Engineering.
- Funds to upgrade the digital systems to have well equipped digital class rooms.