## ANNUAL QUALITY ASSURANCE REPORT

## 2015-2016

## National Assessment and Accreditation Council Bangalore-560 072

Submitted by



# SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS) Accredited by NAAC with 'A' Grade (3.32/4.00 CGPA), Approved by AICTE and Autonomous with JNTUK, Kakinada Seetharampuram, Narsapur – 534 280, W.G.Dist., Andhra Pradesh

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## The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (*Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013*)

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I. Details of the Institution	n	
1.1 Name of the Institution	SWARNANDHRA COLLEGE OF ENC TECHNOLOGY	GINEERING AND
1.2 Address Line 1	Seetharampuram	
Address Line 2		
City/Town	Narasapur	
State	Andhra Pradesh	
Pin Code	534280	
Institution e-mail address	principal@swarnandhra.ac.in	
Contact Nos.	08814-240588	
Name of the Head of the Institution	Dr.M.Sreenivasa Kumar	
Tel. No. with STD Code:	08814-240588	]
Mobile:	9440757039	]

Name of the IQAC Co-ordinator:

Dr.K.S.Gowri Sankar

Mobile:

9440607984

IQAC e-mail address:

swarnandhraiqac@gmail.com

1.3 NAAC Track ID (For ex. MHCOGN 18879)

1.4 NAAC Executive Committee No. & Date: (For Example EC/32/A&A/143 dated 3-5-2004. This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)

1.5 Website address:

APCOGN15217 Dt 21/11/12

EC/PCA&A/64/31 Dt 21/11/12

www.swarnandhra.ac.in

Web link of the AQAR:

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	А	3.32	2013	07 July, 2018

1.7 Date of Establishment of IQAC :DD/MM/YYYY

31/01/2013

1.8 AQAR for the year

2015-16

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC2015-2016-

2014-2015-

2013-2014-

1.10 Institutional Status				
University	State <b>v</b> Central	Deemed Private		
Affiliated College	Yes <b>v</b> No			
Constituent College	Yes No V			
Autonomous college of UGC	Yes <b>v</b> No	]		
Regulatory Agency approved Insti	tution Yes 🗸	No		
(eg. AICTE, BCI, MCI, PCI, NCI)				
Type of Institution Co-education	on <b>v</b> Men	Women		
Urban	Rural	<b>v</b> <sub>Tribal</sub>		
Financial Status Grant-in-a				
Grant-in-aid + Self Financing	Totally Self – Financi	ing <b>v</b>		
1.11 Type of Faculty/Programme				
Arts Science Commerce Law PEI (Phys Edu)				
TEI (Edu) Engineerir	ng <b>v</b> Health Scien	ce Management V		
Others (Specify) . Master of Computer Applications(MCA)				
1.12 Name of the Affiliating Universi	ty (for the Colleges	Jawaharlal Nehru Technological University Kakinada, Kakinada		

Autonomy by State/Central Govt. / University	University &	& UGC
University with Potential for Excellence		UGC-CPE
DST Star Scheme		UGC-CE
UGC-Special Assistance Programme		DST-FIST
UGC-Innovative PG programmes		Any other (Specify)
UGC-COP Programmes 2. IQAC Composition and Activit		
2. IQAC Composition and Activity	<u></u>	
2.1 No. of Teachers	7	
2.2 No. of Administrative/Technical staff	1	
2.3 No. of students	2	
2.4 No. of Management representatives	1	
2.5 No. of Alumni	2	
2. 6 No. of any other stakeholder and community representatives	1	
2.7 No. of Employers/ Industrialists	1	
2.8 No. of other External Experts	0	
2.9 Total No. of members	15	
2.10 No. of IQAC meetings held	2	
2.11 No. of meetings with various stakeholders:	No. 4	Faculty 1

### 1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

SCET, NARASAPUR

Non-Teaching Staff students 1 Alumni 1	Other 1
2.12 Has IQAC received any funding from UGC during the year	r? Yes No V
If Yes, Mention the amo	unt _

- 2.13 Seminars and Conferences (only quality related)
  - (i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.	10     International     State     Institution Level     5
(ii) Themes	Choice based credit System
	NBA-SAR Report preparation
	CRT Classes on Soft skills
	CRT Classes on Career Empowerment

2.14 Significant Activities and contributions made by IQAC

Quality parameters developed for various academic / administrative activities of the institute.

- 1. Assessing the quality parameters and providing required suggestions for the improvement.
- 2. Arranging FDP'S for newly joined faculty
- 3. Conducting seminars / workshops, FDPs, Guest Lectures, training / certification programmes on quality related issues
- 4. Implementation of Outcomes Measurement for the courses in the Programme
- 5. Evaluation of existing teaching learning systems and related documents

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
To Monitor Teaching Learning process	• Academic Audit is done at the middle and end of the every semester.
To Encourage R&D and Consultancy, Establishing advanced / research labs / centres, setting up new experiments on latest technologies.	Mechanical Engineering, Electronics and Communication Engineering, Computer Science Engineering departments have applied for research centres to JNTUK, Kakinada
Conducting Faculty Development Programs on Emerging technologies.	• 10 Faculty development Programs are organised.
Communication with Parents	<ul> <li>Letters with particulars of Percentage of attendance, Mid- exam marks, SGPA and Backlogs have been sent.</li> <li>Percentage of student attendance is improved</li> </ul>
Online Certification courses	<ul> <li>Faculty members and Students have got NPTEL course completion certificates for various courses.</li> </ul>
To improve technical activities	<ul> <li>National Level Technoscet 2K15 was organized</li> <li>Project Expo was organized in the institute in the month of March 2016</li> </ul>
CBCS Curriculum(R16)	• Designed CBCS Curriculum which will be implemented from AY 2016-17
To send SMS alert to the parents about progress	<ul> <li>Alerts of Attendance and performance of students are sent to the parents.</li> <li>Communication with Parents is done through SMS.</li> </ul>

\* Attach the Academic Calendar of the year as Annexure. Refer Annexure-A

2.16 Whether the AQAR was placed in statu	tory b	ody Yes	۷	No			
Management	٧	Syndicate		Any	/ other ł	oody	٧
Descripted and the state it and the state of							

Provide the details of the action taken

Placed in Academic Council meeting held on 21-05-2016.

## Part – B

## Criterion – I

## I. Curricular Aspects

#### 1.1 Details about Academic Programmes

Career ited nmes

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

Presently, the college is offering Under Graduate Programmes in the following disciplines:

Computer Science and Engineering (CSE)

Electronics and communication Engineering (ECE)

Electrical and Electronics Engineering (EEE)

► Information Technology (IT)

Mechanical Engineering (ME)

≻Civil Engineering (CE)

#### **3.1 Structure of the Programme:**

#### Each Programme of a Discipline or branch of study will consist of:

i). General core courses in Basic Sciences, Engineering & Technology, Humanities, Mathematics and Management.

ii). Interdisciplinary courses in Engineering, to impart the fundamentals of Engineering.

iii). Compulsory core courses to impart broad based knowledge needed in the concerned branch of study.

iv). Elective courses from the discipline or interdisciplinary areas / industry related opted by the student based on his/her interest in specialization.

v). Seminars, Technical Paper, Comprehensive Viva-Voce, Mini Project and Major Project approved by the Department to be submitted in the course of study.

Each Programme of study will be designed to have 40-45 theory courses and 16-18 laboratory courses. The distribution and types of courses offered from the above is indicated in the following table.

General Core courses	25-30%
Interdisciplinary courses in engineering	15-20%
Compulsory Core courses in the branch of study	45-50%
Elective Courses	5-10%

Note: All components prescribed in the curriculum of any Programme of study will be conducted and evaluated.

**Contact hours:** Depending on the complexity and volume of the course the number of contact hours per week will be determined (4 to 6 hours per week per course).

Credits: Credits are assigned to each course as per norms mentioned in the following table

Subject	Credits
Theory Course	03
Laboratory Course	02
Seminar/ Technical Paper	02
Soft Skills / Aptitude Lab	01
Comprehensive Viva	02
Mini Project	02
Major Project	06

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	UG-06, PG(FT)-07
Trimester	NIL
Annual	NIL

1.3 Feedback from stakeholders* (On all aspects)	Alumni	٧	Parents	٧	Employers	٧	Students	٧	
Mode of feedback :	Online	٧	Manual	٧	Co-operatin	ng sch	nools (for PEI)		]

\*Please provide an analysis of the feedback in the Annexure

- Departments take feedback from the students on paper during the course work and also at the time of exit.
- Alumni /Employers feedback also collected through paper.
- Feedback is taken from the parents during Parents meet and during the study period of their children.
- Alumni cell will collect the feedback from the alumni during the Alumni Meets.

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

YES, New regulation R14 is introduced in the A.Y 2014-15. The following are the few salient points of R14 regulation:

- Mini Projects.
- Electives
- Mandatory courses
- Open Elective Course

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

NIL

## Criterion – II

## 2. Teaching, Learning and Evaluation

2.1 Total No. of	Total	Asst. Professors	Associate Professors	Professors	Others
permanent faculty	213	163	33	17	0

17

2.2 No. of permanent faculty with Ph.D.

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

Asst.		Associa	ite	Profes	sors	Others		Total	
Profes	sors	Professe	ors						
R	V	R	V	R	V	R	V	R	V
10	I	2	0	-	-	-	-	12	I

2.4 No. of Guest and Visiting faculty and Temporary faculty	-	-	-
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended			
Presented papers	20	5	
Resource Persons			1

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

- > Use of ICT and modern pedagogical techniques.
- > Special arrangement of classes on Aptitude and communication skills.
- A good number of video lessons (NPTEL & MOOCS) are available and they are being used for the better understanding of the subjects.
- 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)
- 195
- Provision is given for Revaluation
- $\succ$  Bar coding
- Paper setting and Valuation is done by External Faculty

- 2.9 No. of faculty members involved in curriculum 40 restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop
- 2.10 Average percentage of attendance of students

82

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students		Ι	Division		
Togramme	appeared	Distinction %	I %	II %	III %	Pass %
B.Tech Civil	58	32.70	34.40	-	-	67.20
B.Tech EEE	108	30.50	48.14	1.80	-	80.50
B.Tech CSE	108	41.60	28.70	-		70.30
B.Tech Mech	123	44.70	37.30	6.50	-	88.60
B.Tech ECE	199	45.00	34.10	1.50	-	81.90
B.Tech IT	-	-	-	-	-	-
MBA	40	45.00	40.00	12.50		97.50
MCA	38	73.60	15.70			89.47

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

- Monitors and evaluates the Teaching and learning processes by way of conducting the periodical meetings.
- Collects the project reports randomly from the departments and evaluates the quality of reports and same will be submitted for the discussion at IQAC deapartment.
- Collects course files randomly and assesses the process followed and the attainment of Course Outcomes
- Identifies the new methods of teaching adopted by the faculty and shares the same among the faculty
- Conducts workshops on the teaching-learning process
- Prepares action Report and the Principal takes necessary steps to implement them.
- 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	
UGC – Faculty Improvement Programme	
HRD programmes	
Orientation programmes	3
Faculty exchange programme	
Staff training conducted by the university	
Staff training conducted by other institutions	

Summer / Winter schools, Workshops, etc.	22
Others	30

#### 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	183	-	-	-
Technical Staff	40	-	-	-

## Criterion – III

## 3. Research, Consultancy and Extension

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

Our institute is the 1st institute holding the semi-conductor 10000 clean room facility throughout the state & college level. The goal is to involve the entire faculties on research project and motivate for further research career / PhD. As a part of institute we are providing good infrastructure, equipments, journals, seminars, workshops to meet the needs of research work. We are timely organizing seminar with internal source to see the program of the research and provide proper guidance. We are also providing financial assistance to the researchers where ever required such as conference registration, workshops and contingency. All these activities is monitored by our strong research advisory committee.

The College has taken several steps to promote research culture among both the faculty and students, this includes the enhancement of infrastructural facilities, setting up instrumentation center, augmentation of the laboratory and library facilities, subscription to research/e-journals, provision of free access to internet, etc. It is commendable that the college provides seed money for the deserving candidates to carry research. The project work is organized for the students in the curriculum of PG and UG courses which helps the students to imbibe research aptitude and broaden their perspective on their subjects. We have made collaborations with various research organizations and universities such as UGC-DAE, CSIR laboratory, RRCAT-INDORE, NORTH MAHARASTRA (JALGAON), AURAGABAD UNIVERSITY, VIT VELLORE, PUNE UNIVERSITY, GUJARAT UNIVERSITY, ARCI LAB-HYD, Namibia University (Africa).By organizing guest lectures by eminent Professors and personal contacts, the students and research scholars gets the opportunity to work in the respective laboratories to fulfil their objectives. Our broad areaof research includes, Solar cells (Si based), Porous materials, Dye Sensitized Solar cells (DSSC), Thin films, Nanomaterials, Electrospun nanofibers, Sensors, Super capacitors etc.

- Each department has a Department research committee, which convene periodical meetings to review synopsis presented by Masters' students.
- Encouraging the faculty to pursue higher education.
- Encouraging faculty to publish quality research papers in referred journals and conferences etc.
- Categorization of the projects undertaken by the final year students into three catergoies: Industry based, Research based and Automation based.
- QEEE(Quality Enhancement in Engineering Education) Lectures delivered in the institute in almost all the branches of UG

3.2Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	2	2	1	1
Outlay in Rs. Lakhs	15.4	13.75	13.3	15

3.3Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	1	-	-
Outlay in Rs. Lakhs	-	3.6	-	-

3.4 Details on research publications

	International	National	Others
Peer Review Journals	33	-	-
Non-Peer Review Journals	-	-	-
e-Journals	-	-	-
Conference proceedings	20	5	-

3.5 Details on Impact factor of publications:

Range 0.12-4.39	Average	0.93	*h-index*	105.68	Nos. in SCOPUS	5
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2+2	UGC-DAE, UGC Major	13.75	13.75
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects (other than compulsory by the University)	-	-	-	-
Any other (Specify)	-	-	-	
Total	4	2	13.75	13.75

3.7 No. of books published	i) With ISBN No.	1	Chapters	in Edited Books	1
3.8 No. of University Depar	ii) Without ISBN No.	from			
	UGC-SAP	CAS	-	DST-FIST	-
	DPE _		1	DBT Scheme/funds	-

SCET, NARASAPUR

3.9 For colleges Auto	Autonomy    CPE    DBT Star Scheme						
INS	CE _	Ar	y Other	(specify) _			
3.10 Revenue generated through consultancy -							
3.11 No. of conferences	Level	International	National	State	University	College	
	Number					5	
organized by the Institution	Sponsoring					Self	
	agencies						
3.12 No. of faculty served as ex	perts, chairperson	ns or resource p	ersons				
3.13 No. of collaborations	Internatio	onal 1 Na	tional 4		Any other		
3.14 No. of linkages created dur	ing this year	2			-		
3.15 Total budget for research for current year in lakhs :							
From Funding agency 17.35 From Management of University/College 4.00							
Total 2	1.35						

3.16 No. of patents received this year

Type of Patent	Number			
National	Applied	-		
	Granted	-		
International	Applied	-		
International	Granted	-		
Commercialised	Applied	-		
	Granted	-		

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

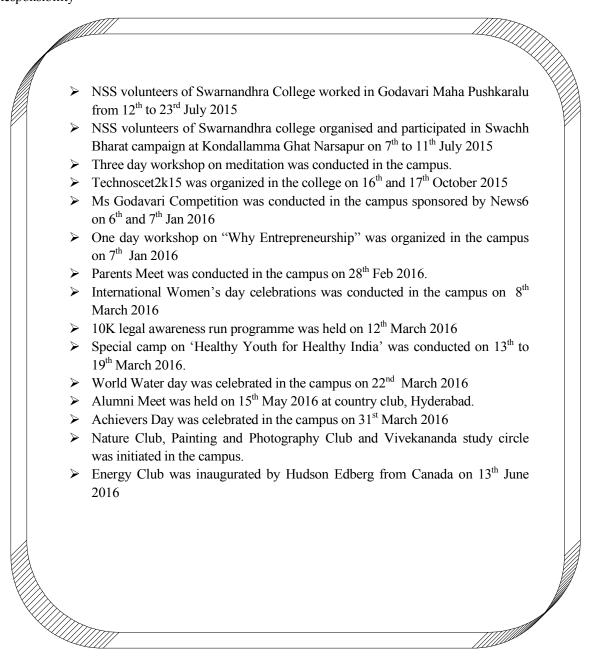
Total	International	National	State	University	Dist	College
6	-	4	-	-	-	2

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them34	
3.19 No. of Ph.D. awarded by faculty from the Institution	]
3.20 No. of Research scholars receiving the Fellowships (Newly enrolled	d + existing ones)
JRF 2 SRF - Project Fellows _	Any other NIL
3.21 No. of students Participated in NSS events:	
University level	State level 120
National level _	International level
3.22 No. of students participated in NCC events:	
University level	State level _
National level	International level
3.23 No. of Awards won in NSS:	
University level	State level _
National level _	International level _
3.24 No. of Awards won in NCC:	
University level	State level _
National level -	International level

3.25 No. of Extension activities organized

University forum	-	College forum	5		
NCC	-	NSS	15	Any other	

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



## 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	25.06 Acres		Internal Resources	
Class rooms	66		Do	
Laboratories	44		Do	
Seminar Halls	3		Do	
No. of important equipments purchased			Internal	
$(\geq 1-0 \text{ lakh})$ during the current year.			Resources	
Value of the equipment purchased during			Internal	
the year (Rs. in Lakhs)			Resources	
	Total			
	Hostel-5			
Others	Boys		Internal	
Others	Hostel-3		Resources	
	Girls			
	Hostel-2			

4.2 Computerization of administration and library

- > All the computers in the office have internet facility both wired and Wi-Fi.
- > Automation of library administration is under the process
- The students and faculty can also take photocopies of the books and journals from Central Library.
- Digital Library
- ➢ Wi-Fi facility for the Library.

#### 4.3 Library services:

	Exi	Existing		y added	Total		
	No.	Value	No.	Value	No.	Value	
Text Books	33468	73,51,679	41	9307	33509	73,60,986	
Reference Books	5803	12,82,590	10	2270	5813	12,84,860	
e-Books							
Journals					46	1,37,124	
e-Journals					265	3,84,293	
Digital Database	DELNET	11,500				11,500	
CD & Video	2000GB						
Others (specify)							

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart- ments	Others
Existing	852	23	42 Mbps		1	20	15	
Added					-			
Total	852	23	42 Mbps		1	20	15	

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

$\succ$	Internet Connectivity increased to 50 Mbps.
$\succ$	Students are encouraged to use internet for their project work.
$\succ$	We have EZ School Software in the Institution for e-Governance of students, faculty
	and staff.

#### 4.6 Amount spent on maintenance in lakhs :

i) ICT	60.48	
ii) Campus Infrastructure and facilities	32.60	
iii) Equipments	48.57	
iv) Others	283.31	
Total :	4,24,960,00	

## Criterion – V

## 5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

#### Canteen

Clean Hygienic cafeteria 4 nos. is available for both students and faculty providing nutritious food for supporting studying in shift system

#### **Stationary Shop**

Two Stationary Shops are available in campus. The basic requirements like stationeries, lab books are kept for sales in college premises.

#### Others

- Training programs are conducted periodically to create the awareness and to enhance the entrepreneurial skills
- Publishing college/Department Newsletter to encourage the new trends and events happened in the institute level.
- > CRT Programmes was conducted to enhance the skill develop in the students.
- > Printed information available in college calendar/college website

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

Day to day attendance in theory & lab classes and intimation to the parents Counseling Mechanism:

- > Each Faculty member was allocated by twenty students.
- > The Counselor maintains the complete record of the student.
- > They also work hand in hand by bringing upto date on their academic progression.
- All the student counselors are involved in both academic and personal counseling for a group of 20 students.
- > A separate counseling period was allocated.
- Suggestions and feedback are the index to understand the progression of students.

#### Others(Diploma) UG PG Ph. D. 5.3 (a) Total Number of students 2543 620 \_ 620 (b) No. of students outside the state (c) No. of international students % % No No Men Women 2238 66 9 1126 33.08

Last Year				This Year							
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenge d	Total
						1728	480	29	1127	-	3364

Demand ratio Dropout %

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

- Personality development courses and student practice courses are part of the curriculum.
- In-house GATE coaching classes were conducting by internal and external subject experts.
- Eminent resource persons were invited to train in communication skills.

|--|

5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	-	CAT	-
IAS/IPS etc	-	State PSC	-	UPSC	-	Others	10

5.6 Details of student counselling and career guidance

$\triangleright$	Student counseling and	career guidance of	each and every student is done.
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- Counselling process is followed continuously
- > This process has successfully resulted in improved student performance
- Training and Placement Cell conducted CRT classes for better employment of students
- Students are motivated to participate in various competitions conducted by different Universities and colleges

No. of students benefitted

500

#### 5.7 Details of campus placement 2015-16(B.TECH/MBA/MCA/DIPLOMA)

	On campus			
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed	
72	773	536	20	

- 5.8 Details of gender sensitization programmes
  - > Women empowerment and grievances cell was formed in the college
  - ▶ International Women's day was conducted on 08-03-2016.
  - > Student competitions on women empowerment was conducted.

#### 5.9 Students Activities

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

	State/ University level	-	National level	10	International level	-
	No. of students participa	nted in cul	tural events			
	State/ University level	-	National level	-	International level	-
5.9.2	No. of medals /awards w	von by stu	idents in Sports,	Games and	other events	
Sports :	State/ University level	-	National level	2	International level	-
Cultural	: State/ University level	-	National level		International level	-

#### 5.10 Scholarships and Financial Support

	Number of students	Amount	
Financial support from institution	200	8,91,675	
Financial support from government	2417	7,88,99,900	
Financial support from other sources			
Number of students who received International/ National recognitions			

#### 5.11 Student organised / initiatives

Fairs	: State/ University level	-	National level	-	International level -	]
Exhibition	: State/ University level		National level	-	International level	
5.12 No.	of social initiatives unde	10				
5.13 Major grievances of students (if any) redressed:						

SCET, NARASAPUR

## Criterion – VI

## 6. Governance, Leadership and Management

#### 6.1 State the Vision and Mission of the institution

Vision:

To provide the society with Center of Learning in Technical Education and Research that motivates the students to evolve into dynamic professionals.

Mission:

- Providing quality education, student cantered teaching learning process and state of the art infrastructure for professional aspirants hailing from both rural and urban areas.
- > Evolving this organization into a center of Academic and Research Excellence.
- Imparting Technical Education that encourage independent thinking, develops strong domain knowledge and positive attitude towards holistic growth of young minds.

6.2 Does the Institution has a management Information System

Yes

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

- 6.3.1 Curriculum Development
- > Appointing industry personnel and alumni as members of Board of Studies.
- > Curriculum revision will be done as and when required.
- Receiving feedback from the employers and alumni on existing curriculum for the required improvement and innovation
- > Board of Studies (BOS) meetings are conducted every year to frame/ revise the syllabus.
  - 6.3.2 Teaching and Learning
- Promoting the usage of ICT.
- Remedial classes were conducted for slow learners.
- > Expect Lectures and NPTEL Lectures were arranged to create wide exposure.
- > Arranging training on pedagogy and assessing its impact on teaching-learning.
- > Arranging Guest Lectures or Workshop to fill curriculum gaps and content beyond syllabus.
- Encouraging Faculty and students towards online certification course.

- Autonomous end semester examination papers are being set and evaluated by external experts
- Continuous internal evaluation
- Display of internal answer sheets to the students.
- > Result will be declared within three weeks from the last date of exam.
- Uploading of provisional result in individual login of students
- > Display of consolidated internal marks to the students in respective department notice board.

#### 6.3.4 Research and Development

- R&D Cell with convener was established to give support in applying for funding agencies.
- Encouraging faculty to register for Ph.D
- Providing incentives to faculty for presentation of research papers, attending conferences, workshops, etc.
- > Conducting various awareness programs by experts.
- 6.3.5 Library, ICT and physical infrastructure / instrumentation

#### Library

- OPAC Software for library management
- The college joined as an institutional member of DELNET. DELNET connects all libraries of the technical institutions approved by AICTE in the country.
- NPTEL (National Programme on Technology Enhanced Learning), web courses and video courses are being used by staff and students to enhance their skills
- ➢ Wi-Fi connectivity is provided in the campus
- > Digital Library with twenty students was established
- > Providing access to E-journals such as Springer, ASME and ASCE.

#### Infrastructure

- Providing required computational facilities with sufficient number of computer and peripherals.
- Providing the various amenities such as canteen, indoor and outdoor game facilities, Gym centre, medical centre, hostels and transport.
- > CCTV cameras have been installed within and around the campus for security purposes
- 6.3.6 Human Resource Management

http://swarnandhra.ac.in/images/downloads/Human-Resources.pdf

- 6.3.7 Faculty and Staff recruitment
- > Whenever there are vacancies advertisements are made through news papers and the recruitment is done by the Management through college staff selection committee as per the rules and regulations.

#### 6.3.8 Industry Interaction / Collaboration

- > MOUs are signed with local industries for mutual benefit
- > Students are encouraged to undergo internships

6.3.9 Admission of Students

> 70% of the admissions are done by the Convener, EAMCET, Govt. of Andhra Pradesh Remaining 30% of the seats are filled by the Management based on the guidelines given by Govt. of Andhra Pradesh

#### 6.4 Welfare schemes for

Teaching	<ul> <li>Concession for Hostel &amp; Transport facility</li> <li>Maternity Leave will be provided for female faculty</li> <li>Laptops are provided for HOD's</li> <li>Special CL for Research study</li> <li>Group Insurance Scheme is provided to teaching staff</li> </ul>
Non teaching	<ul> <li>Employee provident Fund (EPF) will be provided for Non teaching staff</li> <li>Maternity Leave will be provided for female Non teaching staff</li> <li>Group Insurance Scheme is provided to teaching staff</li> </ul>
Students	<ul> <li>Offering financial support from college management for poor &amp; deserve students</li> <li>Cash prizes will be given to student for Academic toppers.</li> <li>Sponsoring the students to participate in co-curricular and extracurricular activities.</li> <li>Group Insurance Scheme is provided .</li> </ul>

#### 6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done

Yes	٧	No

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

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

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

For UG Programmes	Yes 🗸 No
For PG Programmes	Yes v No
6.9 What efforts are made by the University/ Auton	omous College for Examination Reforms?
<ul> <li>Provision is given for Revaluation</li> <li>Bar coding</li> <li>Paper setting and Valuation is done by External</li> </ul>	ernal Faculty
6.10 What efforts are made by the University to pro	omote autonomy in the affiliated/constituent colleges?

The affiliating University, JNTUK nominates its representatives and subject experts for academic council and Board of studies to design the curriculum and provide the suggestions to improve the quality of education in the college the eminent personalities for the college and to promote the autonomy.

6.11 Activities and support from the Alumni Association

- ➢ It is extending technical help to students
- Alumni meets are conducted periodically to get feedback and to improve the number of placements
- Members of BOS of College
- > Financial support from Alumni to poor and deserving students

6.12 Activities and support from the Parent - Teacher Association

- Parent teacher meet is conducted every year with principal, staff and management members, where the discussion is open on any academic and administrative matters.
- > Feed back is taken from parent and analyzed for further improvement
- Parents meet the respective counsellors and HOD's regularly and made necessary suggestions

6.13 Development programmes for support staff

- > ICT training and encouraging for Higher studies.
- Supporting staff are encouraged to go for training takes place at various places for updation.

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

#### a) Energy Conservation

- Awareness among the students and staff on energy conservation is created by displays at appropriate places.
- Switching off all the electrical utilities whenever and wherever they are not required.
- > All the departments are equipped with appliances and equipment that consume low power.
- > The buildings are fitted with glass windows for maximum utilization of natural light.
- The college has widespread arrangements for power distribution with a Control panel and Power room.
- b) Use of Renewable Energy
- Steps are being taken for the utilization of solar power in the college campus.
- c) Water Harvesting
- To minimize the wastage of water resources and to improve the water table, the rain water is led into the pond located in the campus.
- d) Efforts for Carbon neutrality
- Care is taken to restrict vehicle entry into the campus and specific parking area is allotted for faculty and students.

Green campus

#### **Plantation/Greening Drives**

- Plantation programme has been taken up by the NSS unit for increasing the Green Cover in the college and nearby villages.
- The NSS unit regularly conducts awareness programmes on plastic free environment in and around the village.

#### e) Hazardous Waste Management and e-Waste Management

- > The condemned batteries are disposed through outside agencies
- Awareness programmes are initiated on waste management.

## 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.
  - 1. Involvement of students in various committees has been increased.
  - 2. Practice of conducting Guest lectures, Industrial visits and Industrial training has been enhanced.
  - 3.
  - 4. More Practical orientation is supported through Mini-projects, Technical seminars.
  - 5. Continuous inputs from all stakeholders like Alumni, Academicians and Industry experts are taken to improve the curriculum on regular basis.
  - 6. Additional Training on communication skills and soft skills is further increased.
  - 7. Research aptitude among the students is inculcated through project implementations.
  - 8. Improved Membership in various professional bodies like IEEE, CSI, ISTE, IETE
  - 9. Improved class room facilities with ICT tools.
  - 10. Active learning techniques for better teaching learning process

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

Plain of Action	Action Taken
Nominating academic coordinators for each year at UG level to look after the progress of students and their class attendance along with the class teachers.	Academic coordinators at the level of Professors / Associate Professors were nominated for I, II, III & IV B.Tech in every department. Students attendance and progress record are closely monitored every fortnight by the Academic Coordinator.
Grouping the faculty members in to three or four based on specialization in each department.	In every department faculty members were grouped into three or four depending on their specialization. Each group was headed by a Senior Faculty. The course files, assignments, etc. prepared by the junior faculty members were verified and suitable guidance for improvement was provided by the group leaders.
Allocating the Course coordinators for courses of multi section program.	Course coordinators are allocated for courses of multi section program.
Organising subject based seminars and subject based workshops.	Subject based seminars and subject based workshops are organized by the departments.

Involving students in various committees.	Involved students in various committees for better improvement in the system.
Exposing students to various industrial processes.	Exposed students to various industrial processes through Guest lectures, Industrial visits and Internship.

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

- Curriculum design with focus on Choice Based Credit System (CBCS)
- Enhancing student skills by active learning tools

#### \*Provide the details in annexure (annexure need to be numbered as i, ii,iii)

7.4 Contribution to environmental awareness / protection

- Environmental Awareness Programme are organised for students as well as faculty from time to time.
- Separate cell i.e. Ground & Gardening exists for protection of environment and keep the trees alive and green and to feed them with manure.

Yes

- E-waste is followed as per Govt. policy.
- Solar system is in place in the form of street lights etc.
- > Dustbins have been kept at all prominent places to keep environment eco-friendly.
- Water harvesting system is in process.
- > No vehicles are allowed to enter in academic area.

7.5 Whether environmental audit was conducted?

V No

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

#### SWOT Analysis of Institute: <u>Strength</u>

- One of the most preferred, engineering colleges situated in a serene rural place of coastal Andhra Pradesh.
- Learned, pro-active and visionary management readily responding to the needs and aspirations of all stake holders towards quality education, placements and good governance.
- A highly decentralized administration, governed by a well defined and transparent quality policy. Managed by different committees formulated satisfying the requirements of statutory bodies with Governing Body (GB) as the highest policy making body.
- College was accorded permanent affiliation by JNTUK, Kakinada in 2010, 2013 and also in 2016 for a period of three years consequently.
- ➢ 50% of the young faculty members have undergone pedagogical training programs on various subjects.

- National Board of Accreditation (NBA) accorded the status of Accreditation for 3 years to the eligible UG B.Tech programs in 2008 and reaccredited in 2012 under Tier-II.
- > Good financial discipline through appropriate budgeting and allocation.
- > Aesthetically designed, spacious and fully computerized library.
- Feedback taken periodically from students, parents, alumni and other stake holders is given due weightage for taking corrective measures to strengthen the teaching learning process.
- > Semester scheme with continuous assessment.
- > Effective Teaching-learning process with use of ICT with E- resources.
- ➢ Good ambience through infrastructure facilities.
- Teaching learning process in accrodance with accreditation bodies like NBA,NAAC,ABET Etc.
- Value based Education system.

#### Weakness

- > Lack of Industry- Institute interaction in a purposeful manner as college located in rural area.
- Inadequate mechanism of industrial exposure for faculty and staff which can update the latest technical knowledge and skill being used by the industry.

#### **Opportunities**

- > Starting recognized research centres for departments to enhance research activity.
- Library enhancement to access international knowledge resources.
- ▶ Inculcating the culture of entrepreneurship to rural youth through technology transfer.
- > Enhanced support from Alumni in institutional development and placement opportunities.

#### <u>Threat</u>

- Recruiting Ph.D qualified and experienced faculty
- Escalation of cost of education prohibiting the underprivileged section (rural students) of the society to opt for the technical education
- Merit of incoming students is getting affected due to opening of many new engineering colleges in the region.
- Bright students not opting teaching as profession thus making difficult in replacing the retired teacher with an equally intelligent new entrant, thus declining the supply of quality faculty

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

- > Undertaking funded R&D major projects and consultancy works.
- > Increasing the number of journal and conference publications.
- Strengthens alumni association.
- > Planning to introduce certificate courses, workshops, short term courses & internsips.
- > Enhancing the student's communication skills.
- Planning to increase the number participation in online certification courses such as NPTEL Etc.
- > Improving the security and discipline in the campus.
- Adapting innovative delivery methods
- > Obtaining NBA Accreditation for UG programs of ECE, CSE, ME.
- Organizing Campus Recruitment Training programs to Engineering students to enhance their employability skills

Name

Dr.K.S.Gowri Sankar

Name

Dr.A.Gopi Chand

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Signature of the Coordinator, IQAC



Signature of the Chairperson, IQAC PRINCIPAL SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS) NARASAPUR - 534 280, W.G.DT.,

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### <u>Annexure I</u>

#### Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
СОР	-	Career Oriented Programme
СРЕ	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

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