ANNUAL QUALITY ASSURANCE REPORT

2016-2017

National Assessment and Accreditation Council
Bangalore-560 072

Submitted by

S W A R N A N D H R A
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

INDEX

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)*

Part – A

1. Details of the Institution

1.1 Name of the Institution	SWARNANDHRA COLLEGE OF ENGINEERING AND TECHNOLOGY
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)*　　　APCOGN15217 Dt 21/11/12

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)

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

1.5 Website address:

| www.swarnandhra.ac.in |

Web link of the AQAR:　| http://www.swarnandhra.ac.in/images/AQAR/AQAR-2016-17.pdf |

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	A	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

| 2016-17 |

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

2016-2017-

2015-2016-

2014-2015-

1.10 Institutional Status

University   State [√]   Central [ ]   Deemed [ ]   Private [ ]

Affiliated College   Yes [√]   No [ ]

Constituent College   Yes [ ]   No [√]

Autonomous college of UGC   Yes [√]   No [ ]

Regulatory Agency approved Institution   Yes [√]   No [ ]

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution   Co-education [√]   Men [ ]   Women [ ]

                  Urban [ ]   Rural [√]   Tribal [ ]

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

Grant-in-aid + Self Financing [ ]   Totally Self –Financing [√]

1.11 Type of Faculty/Programme

Arts [ ]   Science [ ]   Commerce [ ]   Law [ ]   PEI (Phys Edu) [ ]

TEI (Edu) [ ]   Engineering [√]   Health Science [ ]   Management [√]

Others (Specify)   [.   Master of Computer Applications(MCA)]

1.12 Name of the Affiliating University (for the Colleges   [Jawaharlal Nehru Technological University Kakinada, Kakinada]

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

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 Activities

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

Non-Teaching Staff students | 1 | Alumni | 1 | Other | 1 |

2.12 Has IQAC received any funding from UGC during the year?   Yes | | No | √ |

If Yes, Mention the amount | - |

2.13 Seminars and Conferences (only quality related)

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

Total Nos. | 5 | International | | National | 1 | State | | Institution Level | 4 |

(ii) Themes

> Choice based credit System
>
> NBA-SAR Report preparation
>
> Outcome based education
>
> 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.	• 05 Faculty development Programs are organised.
Communication with Parents	• Letters with particulars of Percentage of attendance, Mid-exam marks, SGPA and Backlogs have been sent. • Percentage of student attendance is improved
Online Certification courses	• SCET was recognised as NPTEL Local Chapter. • Faculty members and Students have got NPTEL course completion certificates for various courses.
To improve technical activities	• National Level Technoscet 2K16 was organized • Project Expo was organized in the institute in the month of March 2016
CBCS Curriculum(R16)	• CBCS Curriculum has been designed.
To send SMS alert to the parents about progress	• Alerts of Attendance and performance of students are sent to the parents. • Communication with Parents is done through SMS.

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

2.16 Whether the AQAR was placed in statutory body   Yes √   No ☐

Management √   Syndicate ☐   Any other body √

Provide the details of the action taken

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

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	-	-	-	-
PG	7 M.Tech-5, MBA, MCA	-	7	-
UG	6 (B.Tech)	-	6 (B.Tech)	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	4	-	4	-
Certificate	-	-	-	-
Others	-	-	-	-
Total	17		17	

Interdisciplinary				
Innovative				

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

The proposed CBCS for Swarnandhra College of Engineering and Technology provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides advantageous approach in which the students can register courses of their choice, learn at their own pace, undergo additional courses and adopt an interdisciplinary approach through open electives.

Each Program of a Discipline or branch of study will consist of:

i) Foundation courses in Basic Sciences, Engineering Sciences and Humanities.
ii) Program core courses to impart broad based knowledge needed in the concerned branch of study.
iii) Elective courses from the discipline or interdisciplinary areas / industry related opted by the student based on his/her interest in specialization.

Each Program of study will be designed to have 35-40 theory courses and 20-25 laboratory courses. The distribution and types of courses offered from the above is indicated in the following table.

Foundation Courses – Basic Sciences & Humanities
Foundation Courses – Engineering Sciences

| Program Core Courses in the branch of study |
| Elective Courses |

(ii) Pattern of programmes:

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

1.3 Feedback from stakeholders*   Alumni [√] Parents [√] Employers [√] Students [√]
    (On all aspects)

    Mode of feedback   :   Online [√] Manual [√] Co-operating schools (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 R16 is introduced in the A.Y 2016-17. The following are the few salient points of R16 regulation:
> - Curriculum gap
> - Industrial Oriented
> - Internship
> - Mandatory courses
> - Open Elective Course

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

> Cloud Computing and Data Science Laboratory established

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of
permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
205	147	38	20	0

2.2 No. of permanent faculty with Ph.D.

23

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

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
9	-	1	0	8	-	-	-	18	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

-		-		-

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended			
Presented papers	25	33	
Resource Persons			4

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

> - Use of ICT and modern pedagogical techniques.
> - Cooperative Learning was initiated in the institute
> - 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.
> - Programmes are designed by Outcome based approach.

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

195

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

> - Provision is given for Revaluation
> - Bar coding
> - Paper setting and Valuation is done by External Faculty

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

| 48 |

2.10 Average percentage of attendance of students

| 85 |

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B.Tech Civil	71	27.00	59.90	4.24		67.60
B.Tech EEE	54	26.30	60.90	4.14		66.30
B.Tech CSE	91	35.16	21.97			57.14
B.Tech Mech	144	45.40	74.90	0	0	74.9
B.Tech ECE	162	45.13	80.53	0	0	80.53
B.Tech IT	-	-	-	-	-	-
MBA						
MCA						

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 of BOS etc.

 ❖ Collects the project reports randomly from the departments and evaluates the quality of reports and same will be submitted for the discussion at IQAC meetings
 ❖ 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	8
HRD programmes	
Orientation programmes	
Faculty exchange programme	

Staff training conducted by the university	
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	14
Others	1

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 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. For which they are reimbursed Tuition fee etc.
- ❖ 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

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	02	-	2
Outlay in Rs. Lakhs	52.81	21.3	-	40

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	1			
Outlay in Rs. Lakhs	4.7 Lacs			

3.4 Details on research publications

	International	National	Others
Peer Review Journals	24		
Non-Peer Review Journals	6		
e-Journals	3		
Conference proceedings	19		

3.5 Details on Impact factor of publications:

Range   0.12-6.2   Average   32.99   *h-index*   364.68   Nos. in SCOPUS   22

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	21.3	21.3
Minor Projects	2	UGC-Minor	4.7	3.6
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects *(other than compulsory by the University)*				
Any other(Specify)				
Total	6	3	26	24.9

3.7 No. of books published   i) With ISBN No.   3   Chapters in Edited Books   2

ii) Without ISBN No.   --

3.8 No. of University Departments receiving funds from

UGC-SAP [ ]   CAS [ ]   DST-FIST [ ]

DPE [ ]   DBT Scheme/funds [ ]

3.9 For colleges   Autonomy [ ]   CPE [ ]   DBT Star Scheme [ ]

INSPIRE [ ]   CE [ ]   Any Other (specify) [ ]

3.10 Revenue generated through consultancy [ ]

3.11 No. of conferences

organized by the Institution

Level	International	National	State	University	College
Number					
Sponsoring agencies					

3.12 No. of faculty served as experts, chairpersons or resource persons [3]

3.13 No. of collaborations   International [1]   National [4]   Any other [ ]

3.14 No. of linkages created during this year [2]

3.15 Total budget for research for current year in lakhs :

From Funding agency [19.0]   From Management of University/College [20.0]

Total [39.0]

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	
	Granted	
International	Applied	
	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
4	-	4	1	-	-	3

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

2

3

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

2

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

JRF 2   SRF [ ]   Project Fellows [ ]   Any other NIL

3.21 No. of students Participated in NSS events:

University level 1   State level 15

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 [10]

NCC [ ]   NSS [16]   Any other [6]

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

- Organizing Medical Check-up camps and Blood Donation Campus
- Clean and Green Program in the campus
- Organized Experts lectures on health issues.
- Organized religious program in College Sankranthi Sambaralu
- Teachers day was celebrated on 05-09-2016
- Engineering day was celebrated on 15-09-2016
- Mathematics day was celebrated on 22-12-2016
- Mini Marathon was conducted in College campus to create awareness about eco-friendly system in Jan 2017
- International Women Day was celebrated on 08-03-2016
- World Water day was celebrated on 22-03-2017
- Third International Yoga Day was celebrated on 21st June, 2016 and Yoga Training camp was conducted by Pathanjili Srinivas
- Meditation Program was conducted

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	1	Do	
No. of important equipments purchased (≥ 1-0 lakh) during the current year.			Internal Resources	
Value of the equipment purchased during the year (Rs. in Lakhs)			Internal Resources	
Others	Total Hostel-5 Boys Hostel-3 Girls Hostel-2	Seminar Hall with Capacity of 500	Internal Resources	

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:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	33509	73,60,986	1421	4,26,000	34930	77,86,986
Reference Books	5813	12,84,860	166	49,800	5979	13,34,660
e-Books						
Journals	46	1,37,124			46	1,37,124
e-Journals	265	3,84,293			265	2,84,293
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	50	3	8 Mbps		-			
Total	902	27	50 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.)

> ➢ Internet Connectivity increased to 50 Mbps.
> ➢ Students are encouraged to use internet for their project work.
> ➢ 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   21,60,790

ii) Campus Infrastructure and facilities   61,42,152

iii) Equipments   16,00,786

iv) Others   3,80,90,327

Total :   4,79,94,055

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.
  ➢ CISCO laboratory facility was established in the campus.
  ➢ 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.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others(Diploma)
2247	166		

(b) No. of students outside the state

(c) No. of international students

--

	No	%
Men	1680	69.62

	No	%
Women	733	30.37

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1374	322	1	715		2412						

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.

No. of students beneficiaries   500

5.5 No. of students qualified in these examinations

NET ☐   SET/SLET ☐   GATE ☐   CAT ☐

IAS/IPS etc ☐   State PSC ☐   UPSC ☐   Others 15

5.6 Details of student counselling and career guidance

> ➢ Student counseling and career guidance of each and every student is done.
> ➢ 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 2016-17(B.TECH/MBA/MCA/DIPLOMA)

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
56	612	382	12

5.8 Details of gender sensitization programmes

> Women empowerment and grievances cell was formed in the college
> International Women's day was conducted on 08-03-2017
> 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 [ ]   International level [1]

No. of students participated in cultural events

State/ University level [ ]   National level [ ]   International level [ ]

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

Sports : State/ University level [ ]   National level [ ]   International level [ ]

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	2433	8,85,65,400
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 [2]   International level [ ]

5.12   No. of social initiatives undertaken by the students   [6]

5.13 Major 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:
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.
> ➢ Implementing OBE
> ➢ 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.

6.3.3 Examination and Evaluation

- ➢ 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

HR POLICY :

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

6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done   Yes √   No ☐

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	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 √   No

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

> ➢ Provision is given for Revaluation
> ➢ Bar coding
> ➢ Paper setting and Valuation is done by External Faculty

6.10 What efforts are made by the University to promote 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. Choice based elective laboratory was introduced in the curriculum
3. Practice of conducting Guest lectures, Industrial visits and Industrial training has been enhanced.
4. Value addition by certification programs as well as technology training is focused by various departments.
5. More Practical orientation is supported through Mini-projects, Technical seminars.
6. Industry Internship is made mandatory for all students
7. Continuous inputs from all stakeholders like Alumni, Academicians and Industry experts are taken to improve the curriculum on regular basis.
8. Additional Training on communication skills and soft skills is further increased.
9. Research aptitude among the students is inculcated through project implementations.
10. Improved Membership in various professional bodies like IEEE, CSI, ISTE, IETE
11. Improved class room facilities with ICT tools.

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 was 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.
> ➢ 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?   Yes √   No ☐

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

> **SWOT Analysis of Institute:**
> **Strength**
>
> > ➢ 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.
- Good ambience through infrastructure facilities.

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.

Threat

- 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, and short term courses.
- ➢ 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.
- ➢ Preparation of SSR and A&A by NAAC.
- ➢ Adapting innovative delivery methods
- ➢ Improving the faculty student ratio
- ➢ Obtaining NBA Accreditation for UG programs of ECE, CSE, ME.
- ➢ Organizing Campus Recruitment Training programs to Engineering students to enhance their employability skills

Name   <u>Dr.K.S.Gowri Sankar</u>   *Name*   <u>Dr.M.Sreenivasa Kumar</u>

_____   _____

Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

PRINCIPAL
SWARNANDHRA COLLEGE OF
ENGINEERING & TECHNOLOGY
(AUTONOMOUS)
NARASAPUR - 534 280, W.G.DT.,

_____ *** _____

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	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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SESSION: 2017-2018

ODD SEMESTER ACADEMIC CALENDAR

SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY
AUTONOMOUS
SEETHRAMPURAM, NARSAPUR, W.G.Dt – 534 280

PROPOSED ACADEMIC CALENDAR FOR THE COMMENCEMENT OF CLASS WORK FOR B.TECH – III & IV SEMESTERS

The proposed Academic Calendar for B.Tech III & IV Semesters during the Academic year 2017-18 is detailed below.

B.TECH - III Semester

Description	From	To	Weeks
Commencement of Class Work		12-06-2017	
Unit Instructions - I	12-06-2017	05-08-2017	8 Weeks
Mid-I Examinations	07-08-2107	12-08-2017	1 Week
Unit Instructions – II	14-08-2017	07-10-2017	8 Weeks
Mid-II Examinations	09-10-2017	14-10-2017	1 Week
Preparation & End Practical Examinations	16-10-2017	21-10-2017	1 Week
End Theory Examinations	23-10-2017	04-11-2017	2 Weeks

B.TECH - IV Semester

Description	From	To	Weeks
Commencement of Class Work		20-11-2017	
Unit Instructions - I	20-11-2017	13-01-2018	8 Weeks
Mid-I Examinations	15-01-2018	20-01-2018	1 Week
Unit Instructions – II	22-01-2018	17-03-2018	8 Weeks
Mid-II Examinations	19-03-2018	24-03-2018	1 Week
Preparation & End Practical Examinations	26-03-2018	31-03-2018	1 Weeks
End Theory Examinations	02-04-2018	14-04-2018	2 Weeks

Commencement of Next Semester Class Work - 04-06-2018

Date: 10-06-2017
Narsapur

Dr. M.Sreenivasa Kumar
Principal

Note:

1. The dates for the Practical examinations for all the branches will be notified by Examination Branch.

2. Number of days falling short of 90 should be compensated by making Saturday/ holidays Working.

EVEN SEMESTER ACADEMIC CALENDAR

SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY
AUTONOMOUS
SEETHRAMPURAM, NARSAPUR, W.G.Dt – 534 280

PROPOSED ACADEMIC CALENDAR FOR THE COMMENCEMENT OF CLASS WORK FOR
B.TECH – V, VI, VII & VIII SEMESTERS

The proposed Academic Calendar for B.Tech V, VI, VII & VIII Semesters during the Academic year 2017-18 is detailed below.

B.TECH V & VII Semester

Description	From	To	Weeks
Commencement of Class Work	12-06-2017		
Unit-I & Unit-II Instructions	12-06-2017	15-07-2017	5 Weeks
Mid-I & Quiz-I Examinations	17-07-2017	22-07-2017	1 Week
Unit-III & Unit-IV Instructions	24-07-2017	26-08-2017	5 Weeks
Mid-II & Quiz-II Examinations	28-08-2017	02-09-2017	1 Week
Unit-V & Unit-VI Instructions	04-09-2017	07-10-2017	5 Weeks
Mid-III & Quiz-III Examinations	09-10-2017	14-010-2017	1 Week
Preparation & End Practical Examinations	16-10-2017	21-10-2017	1Weeks*
End Theory Examinations	23-10-2017	04-11-2017	2 Weeks

B.TECH VI & VIII Semester

Description	From	To	Weeks
Commencement of Class Work	20-11-2017		
Unit-I & Unit-II Instructions	20-11-2017	23-12-2017	5 Weeks
Mid-I & Quiz-I Examinations	25-12-2017	30-12-2017	1 Week
Unit-III & Unit-IV Instructions	01-01-2018	03-02-2018	5 Weeks
Mid-II & Quiz-II Examinations	05-02-2018	10-02-2018	1 Week
Unit-V & Unit-VI Instructions	12-02-2018	17-03-2018	5 Weeks
Mid-III & Quiz-III Examinations	19-03-2018	24-03-2018	1 Week
Preparation & End Practical Examinations	26-03-2018	31-03-2018	1 Week
End Theory Examinations	02-04-2018	14-04-2018	2 Weeks

Commencement of Next Semester Class Work - 04-06-2018

Date: 10-06-2017
Narsapur

Dr. M.Sreenivasa Kumar
Principal

Note:

1. Practical examinations for all the branches will start immediately after the end of regular examinations.
2. Number of days falling short of 90should be compensated by making Saturday/ holidays Working.