

## Hindusthan College of Engineering and Technology Coimbatore – 641 032



The Annual Quality Assurance Report (AQAR) of the IQAC 2017-18

# Submitted to National Assessment and Accreditation Council (NAAC) Bangalore

### Hindusthan College of Engineering and Technology

(Accredited by NAAC with 'A' grade, An Autonomous Institution, Affiliated to Anna University, Chennai) Othakkalmandapam (po), Coimbatore – 641 032, Tamil Nadu, INDIA

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

#### Part – A

<b>AQAR</b>	for the	vear	(for	exam	ple	201	3-1	4
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2017-18

#### I. Details of the Institution

1.1 Name of the Institution	Hindusthan College of Engineering and Technology
1.2 Address Line 1	Othakkalmandapam (po),
Address Line 2	Pollachi Mani Road, Coimbatore
City/Town	Coimbatore
State	Tamil Nadu
Pin Code	641 032
Institution e-mail address	hicetprincipal@hindusthan.net
Contact Nos.	0422 - 2611833
Name of the Head of the Institutio	n: Dr.T.KANNADASAN
Tel. No. with STD Code:	0422-2611844
Mobile:	09894100454

Name of the IQAC Co-ordinator:  Dr.B.ANAND									
Mol	Mobile: 09843048080								
IQA	AC e-mail a	address:		hicetiqac(	ahindusthan.net				
1.3	NAAC Tr	ack ID (For OR	ех. МНСО	GN 18879)	TNCOGN23	258			
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 a	ddress:		www.hind	lusthan.net/hicet				
	Web-link of the AQAR: www.hindusthan.net/hicet/aqar1718.pdf								
		For ex. h	ttp://www.	.ladykeane	college.edu.in/A	AQAR2012-13	3.doc		
1.6	Accredita	tion Details							
	Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period			
	1	1 <sup>st</sup> Cycle	Α	3.07	2015	2020			
	2	2 <sup>nd</sup> Cycle							
	3	3 <sup>rd</sup> Cycle							

1.7 Date of Establishment of IQAC : DD/MM/YYYY 08/12/2014

4<sup>th</sup> Cycle

4

*	QAR submitted to NAAC after the latest Assessment and le AQAR 2010-11submitted to NAAC on 12-10-2011)
i. AQAR 10.01.2017	(DD/MM/YYYY)4
ii. AQAR_13.12.2017	
iii. AQAR	
iv. AQAR	(DD/MM/YYYY)
1.9 Institutional Status	
University	State Central Deemed Private V
Affiliated College	Yes V No
Constituent College	Yes No V
Autonomous college of UGC	Yes No No
Regulatory Agency approved Insti	tution Yes v No
(eg. AICTE, BCI, MCI, PCI, NCI)	
Type of Institution Co-education	on V Men Women
Urban	Rural V Tribal
Financial Status Grant-in-	aid $\square$ UGC 2(f) $\bigvee$ UGC 12B $\bigvee$
	1 + Self Financing Totally Self-financing V
1.10 Type of Faculty/Programme	
Arts Science	Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering	g V Health Science Management V
Others (Specify)	
1.11 Name of the Affiliating University	ity (for the Colleges)  ANNA UNIVERSITY, CHENNAI

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

Autonomy by State/Central Govt. / University	V		
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)	Autonomous by UGC
UGC-COP Programmes			
2. IQAC Composition and Activit	<u>iies</u>		
2.1 No. of Teachers	10		
2.2 No. of Administrative/Technical staff	2		
2.3 No. of students	2		
2.4 No. of Management representatives	1		
2.5 No. of Alumni	1		
2. 6 No. of any other stakeholder and	1		
community representatives			
2.7 No. of Employers/ Industrialists	2		
2.8 No. of other External Experts	1		
2.9 Total No. of members	20		
2.10 No. of IQAC meetings held	2		

2.11 No. of meetings with various stakeholders: No. Faculty 4
Non-Teaching Staff Students 2 Alumni 1 Others 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. 2 International National State Institution Level 2
(ii) Themes Quality Enhancement in Technical Institutions
Quanty Emiliancement in Technical Institutions
2.14 Significant Activities and contributions made by IQAC
<ul> <li>IQAC monitors the overall academic performances of the Institution.</li> <li>This cell give awareness to faculty members to publish more technical papers in referred journals.</li> </ul>
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
Autonomous in second year Completed successfully
Quality sustenance Maintained
2.15 Whether the AQAR was placed in statutory body YesV No
Management V Syndicate Any other body
Provide the details of the action taken
As per the instruction of the Management the college authorities maintained the quality in technical education in Autonomous stream.

#### Criterion - I

## I. 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	4			
PG	6			
UG	10			
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	20			
Interdisciplinary				
Innovative				

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

Pattern	Number of programmes
Semester	17
Trimester	-
Annual	-

1.3 Feedback from stakeholders* (On all aspects)	Alumni	٧	Parents	٧	Employers	٧	Students	٧	
Mode of feedback :	Online	٧	Manual	٧	Co-operating	g scho	ools (for Pl	EI)	
*Please provide an analysis of the fe	edback in ti	he Ann	exure						
1.4 Whether there is any revision/	update of r	egulat	ion or syll	abi, if	yes, mention	their	salient asp	ects.	
Full syllabus prepared for a	ll UG/PG	course	s under Au	ıtonor	nous stream.				
1.5 Any new Department/Centre i	ntroduced	during	the year.	If yes,	give details.		•		

#### Criterion - II

#### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
352	257	62	33	

2.2 No. of permanent faculty with Ph.D.

30

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

Asst.		Associa	ite	Profes	sors	Others		Total	
Profes	sors	Profess	ors						
R	V	R	V	R	V	R	V	R	V
60	22	8	-	3	-	2	-	73	22

2.4 No. of Guest and Visiting faculty and Temporary faculty

6	5	-
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	55	26	3
Presented papers	33	25	-
Resource Persons	3	8	3

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

#### CSE:

- 1. Conducted 5 days Faculty Development Programme on "Instructional model for Outcome based Education" combined with National Institute of Technical Teachers Training and Research.(13.06.2017 to 18.06.2017).
- 2. Faculty members were undergone various technical events related to Teaching and Learning process.
- 3. Students are encouraged to use E-learning resource like NPTEL, open access Journals, conference proceedings, online reference books, open source materials and video lectures for their knowledge enhancement and better understanding.
- 4. Curriculum enrichment through value added programs in association with MoU partners.
- 5. Use of various instructional methods pedagogical initiatives like Project based learning and Collaborative learning are adopted to enrich the teaching and learning process.
- 6. Course material for all subjects prepared by concerned faculty and made available on institute web site for the students.

- 7. Various methodologies like Mentoring System, Students counselling system, Weak students coaching, Parent Teacher Communication are used to improve the weak students.
- 8. Students are encouraged to develop innovative projects, working models and research publications.
- 9. Projects, Factory Visits, In-plant trainings and Internships arranged.
- 10. Webinars and online lectures by eminent persons from Industry and Academia.
- 11. Curriculum enrichment through value added programs in association with MoU partners.
- 12. E-learning resource like NPTEL, made available for easy access.
- 13. Projects, Factory Visits, In-plant trainings and Internships arranged.
- 14. Slow learners identified and Remedial classes conducted. Smart material are prepared and issued to the slow learners.
- 15. Students are encouraged to develop innovative projects, working models and research publications.

#### CIVIL:

- 1. Visual and auditory interactive classes like video presentation, power point presentation ICT and NPTEL materials for easy and better understanding of the students.
- 2. Incorporation of student seminars, small group discussions, debates and quizzes in regular classes.
- 3. Content delivery and question papers preparation based on outcome based education by using bloom's taxonomy and mapping of CO's, PO's with PEO's
- 4. Frequent special lectures by academicians, scientists, practicing engineers and industrial experts.
- 5. Supplementary learning programmes such as symposiums, seminars and workshops provides a platform for the students to interact with people from reputed institutions, research organizations, construction industry and students from other institutions.
- 6. Regular industrial visits and implant training for the students to meet the current industrial requirements and expectations.
- 7. Preparation of laboratory manuals by faculty members will enable them to understand and analyze about each experiments before the commencement of laboratory sessions.
- 8. Value added courses on various drafting, analysis, design and project planning software applications like AutoCAD, STAAD.Pro, Revit Architecture etc.
- 9. Adequate placement and training programmes in association with the corporate relations cell for the students to enhance their aptitude skills, communication skills and interview techniques.

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

180

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

Internal Assessment – centralized for Autonomous and Non-Autonomous stream

Autonomous End Semester Exam – Fully external evaluation and external question paper setting

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

50

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	Division				
Tiogramme	appeared	Distinction %	I %	II %	III %	Pass %
B.E(Aero)	112	15.17	31.2	-	-	47.3
B.E(Automobile)	70	-	72%	13%		85.7
B.E(ECE)	186	1.6	64.5	9.6	-	75.7
B.E(EEE)	149	0.0067	52	0.020	-	59
B.E(EIE)	57	-	88.57	11.42	-	61.40
B.E(Civil)	136	0.73	41.17	6.17	-	58.09
B.E (Mech)	204	0.0047	72.01	7.8	-	79.86
B.E(Mechatronics)	122	-	48.36	4.91	-	53.27
B.E. (CSE)	178	0.57	83.5	16.29	-	83.5
B.Tech (IT)	64	-	83	17	-	47
PG Courses						
M.E(AE)	6	66	100	-	-	100
M.E. (CAD/CAM)	1	-	100	-	-	100
M.E(CSE)	4	-	100	-	-	100
MBA	59	12	41	-	-	82.75
MCA	46	6.5	84.7	8.69	-	91.3

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

- 1. Academic schedule and calendar prepared and disseminated to students.
- 2. Lecture notes prepared by faculty well in advance.
- 3. Regular conduct of Class Committee meeting and Peer Group meeting.
- 4. Feedback analysis done.
- 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	7
UGC – Faculty Improvement Programme	28
HRD programmes	6
Orientation programmes	14
Faculty exchange programme	32
Staff training conducted by the university	13
Staff training conducted by other institutions	49
Summer / Winter schools, Workshops, etc.	115
Others	152

#### 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	8	-	1	-
Technical Staff	44	-	8	-

#### Criterion - III

#### 3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
  - > Department level research committee
  - Seed Money
  - Research Lab established
  - > Encourage the faculty members to prepare and submit project proposals to Govt/ Private funding agencies.
  - ➤ Encourage faculty members to participate in Seminars, Conferences, Workshops, FDP etc.
  - > Faculty members are encouraged by providing weightage in appraisal system for research papers publications in journals.
  - > Faculties are rewarded for research publications.

#### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number			5	5
Outlay in Rs. Lakhs			12 Lakhs	85 Lakhs

#### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	2	-	6
Outlay in Rs. Lakhs	0.56 Lakhs	0.05 Lakhs		1.25 Lakhs

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	101	6	-
Non-Peer Review Journals	10	-	-
e-Journals	14	-	-
Conference proceedings	42	19	-

3.5 Details on Impact factor of public	ations:
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Range	0.11-9.7 A	Average 3.65	h-index	148	Nos. in SCOPUS	53	
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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	1 Cai	MSME	12 Lakhs	
Minor Projects	1	SERB	0.5 Lakhs	0.5 Lakhs
Interdisciplinary Projects				
Industry sponsored	1	PCS Casting Pvt. Ltd	0.2 Lakhs	0.2 Lakhs
Projects sponsored by the University/ College				
Students research projects (other than compulsory by the University)	6 Months	TNSCST	0.1 Lakhs	0.1 Lakhs
Any other(Specify)	6 Months	AICTE	7 Lakhs	2.1 Lakhs
Total	3 Years		20.8 Lakhs	2.9 Lakhs

3.7 No. of books published	i) With ISBN	No. 19	Chapters in	Edited l	Books	l I	
3.8 No. of University Departs	ii) Without IS		2				
U	IGC-SAP _	CAS	_ D	ST-FIS	Γ	-	
Б	PPE _		D	BT Sch	eme/funds	-	
_	utonomy	CPE CE			Scheme r (specify)	-	
3.10 Revenue generated through	ugh consultan	cy Rs.4,7	1,500/-				
3.11 No. of conferences	Level	International	National	State	University	College	
	Number	2	3				
organized by the Institution	Sponsoring agencies	IEEE,CSI,IEI	Management				
3.12 No. of faculty served as experts, chairpersons or resource persons 50  3.13 No. of collaborations International 3 National 15 Any other 7							
3.14 No. of linkages created	during this yea	ar 18					

3.15 Total budg	get for research	h for curren	t year i	n lakhs :					
From Fundi	ng agency 3	38 Lakhs From Management of University/College 7.44 Lakhs							
Total		45.44 Lakhs							
		J.44 Lakiis							
2.16 No 6	4 4	41.:							
3.16 No. of par	tents received	tnis year		e of Patent	Appl	ied	Numb	er	
			Nation	al	Gran	ted	-		
			Interna	tional	Appl Gran		3		
			Comm	ercialised	Appl	ied	-		
			Comm	Ciciansca	Gran	ted	-		
3.17 No. of rese		_	s rece	eived by facu	lty and	research f	ellows		
Of the ins	stitute in the ye	ear							
Total	International	National	State	University	Dist	College			
31	20	7	-	4	-	-			
1					I				
3.18 No. of fact	ulty from the l	Institution	Г	27					
who are Ph.			L	27					
and students	registered un	der them		105					
3.19 No. of Ph.	D. awarded by	v faculty fro	m the I	institution	Г	11			
	•	, ,			L	11			
3.20 No. of Res	search scholar	s receiving	the Fell	owshins (Ne	wly en	rolled + ev	isting or	neg)	
				•	_			ŕ	
JI	RF -	SRF	-	Project Fe	llows	- A	Any othe	er	-
					_				
2.21 No. of atu	danta Dartiaina	stad in NCC	arranta						
3.21 No. of stud	uents Participa	itea in NSS	events	•					
				Universit	y level	60	State le	evel	19
				National	level	7	Internat	tional level	
						/			-
3.22 No. of stu	dents particip	ated in NCC	C events	s:					
				Universi	tv leve	1 5	State le	evel	
				National	level	-	Interna	itional leve	el

3.23 No.	of Awards won in	NSS:					
				University level	-	State level	-
				National level	-	International level	-
2.24 N.	- C A 1 i	NGC:					
3.24 No.	of Awards won in	NCC:					
				University level	_	State level	-
				National level	-	International level	-
3.25 No.	of Extension activi	ities organiz	zed				
	University forum	-	College fo	orum -			
	NCC	1	NSS	168	Any	other 4	

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

CSE

S.No.	Program Name	Industry/Institution Name	Academic Year	Date
1	Basic Computer Course (BCC)	Panchayat Union Middle School  – Eachanari Coimbatore	2017 – 2018	7th July 2017

CIVIL

S. No.	Events	Date	Venue	Organized by
1	Village Camp	15.05.2017- 21.05.2017	Seerapalayam, Coimbatore.	National Service Scheme
2	Yoga Camp	23.08.2017	Hindusthan College of Engineering and Technology, Coimbatore.	National Service Scheme / Heartful Foundation
3	Passport Camp	14.09.2017	Hindusthan College of Engineering and Technology, Coimbatore.	National Service Scheme
4	Pre Republic Day Parade	10.10.2017	Anna University Regional Centre, Coimbatore.	Anna University Regional Centre, Coimbatore.

5	AIDS Awareness Programme	15.11.2017	Anna University Regional Centre, Coimbatore.	Anna University Regional Centre, Coimbatore.
6	Vermicomposting – Demo	21.01.2018	Hindusthan College of Engineering and Technology, Coimbatore.	National Service Scheme
7	Rain Water Harvesting	15.02.2018	Hindusthan College of Engineering and Technology, Coimbatore.	National Service Scheme
8	Blood Donation Camp	23.02.2018	Hindusthan College of Engineering and Technology, Coimbatore.	Indian Medical Association
9	Temple Cleaning Programme	18.03.2018	Sivan Temple, Othakkalmandapam, Coimbatore.	National Service Scheme

#### MCT

- ➤ Tree Planting event was conducted at Madukkarai Panchayat on 06-08-2017
- ➤ Dengue fever awareness notices were distributed to public at Malumichampatti and Othakkalmandapam area on 07-11-2017
- ➤ Two days National level workshop on Carbon Neutrality in Industries and Automobiles on 2<sup>nd</sup> and 3<sup>rd</sup> April 2018
- As part of contribution to society, our student blood donors, donates blood to the needy people in their emergency situations in and around Coimbatore.

#### **Criterion - IV**

#### 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of	Total
			Fund	
Campus area	123834m	-	Management	123834m
Class rooms	70	1	Management	71
Laboratories	90	2	Management	92
Seminar Halls	7	1	Management	8
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	29	9	Management	38
Value of the equipment purchased during the year (Rs. in Lakhs)		17.82 L	Management	
Others				

#### 4.2 Computerization of administration and library

The following software's are available in the central library,

- OPAC
- E-GATE
- DOLPHIN

#### 4.3 Library services:

	F	Existing		Newly added		Total
	No.	Value	No.	Value	No.	Value
Text Books	62,878	29,386,397/-	4228	9,95,920/-	67106	30,382,317/-
Reference Books	5872	7,56,625/-	92	75,815/-	5964	8,32,440/-
e-Books	10,215	Delnet Membership	472	Delnet Membership	10,687	Delnet Membership
Journals	179	9 Lakhs	-	9.5 Lakhs	179	18.5 Lakhs
e-Journals	1775	7 Lakhs	-	8 Lakhs	1775	15 Lakhs
Digital Database	3	9 Lakhs		9.5 Lakhs	3	18.5 Lakhs
CD & Video	3694	1,35,000/-	118	15,000/-	3812	1,50,000/-
Others (specify)						

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsin g Centres	Computer Centres	Office	Depart- ments	Others
Existing	1660	19	Reliance	2	4	10		
Added	120		Airtel					
Total	1780	19	190 Mbps	2	4	10		

## 4.5 Computer, Internet access, training to teachers and students and any other programme for technology

upgradation (Networking, e-Governance etc.)

Reliance: (40Mbps) : Rs.5,66,400 Airtel: (150Mbps) : Rs.12,00,000 New System(120Nos.) : Rs.42,19,680 Firewall - SHOBOS : Rs.4,30,700 4.6 Amount spent on maintenance in lakhs:

i) ICT

ii) Campus Infrastructure and facilities

1.68 Lakhs

iii) Equipments

1.3 Lakhs

iv) Others

**Total:** 4.77 lakhs

#### Criterion - V

#### 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - The Internal Quality Assurance cell (IQAC) and Department Advisory Committee (DAC)
    analyzes the activities of the department periodically and provides suggestions for the
    benefit of the students towards knowledge up gradation.
  - The primary task of the cell is to develop a system for consistent and catalytic improvement in the performance of the department. The cell defines the assessment process for the course attainment.
  - The IQAC develop the quality benchmarks for the various academic activities of the department.
  - o The cell suggests the improvement strategies for academic excellence.
  - The improvement strategies may include conduct of value added courses, workshops and seminars.
  - o The cell encourages industry institute interactions.
- 5.2 Efforts made by the institution for tracking the progression
  - 1. University examinations Feedback obtained
  - 2. Internal examinations Result analysis
  - 3. Internship/in-plant training report submission
  - 4. Project/product developed demonstrated
  - 5. Placement related activities Mock test conducted

#### **Course and program attainments:**

The course attainments are analyzed for every course based on the analysis of the knowledge gained by the student through academic and as well as co-curricular activities. If the attainment is required to be improved, the necessary actions are implemented by DAC as per the guidance provided by IQAC.

The guidance may be conduct of seminars, workshops, collaborative learning, implant training and industrial visits.

- Students are encouraged to attend seminars and workshops related to their syllabus. Students
  are encouraged to participate in paper presentation and the technical events conducted by
  various reputed Institutions.
- Technical events like workshops, seminars, guest lecture etc. are organized within the institution in association with professional society students' chapters.
- Students are persuaded to undergo In-Plant training and internship through which they can gain more technical knowledge.
- Students go for industrial visit to get exposure to the latest technologies in the corporate sector.
- Students are members of various professional societies namely like IEEE, CSI, IETE, IET, SAE, IIF etc., and this helps them to widen their knowledge.
- Students also participate in the technical events and project fairs conducted by other reputed institutions.
- Career oriented discussions are arranged for students.
- Value added courses are provided to the students to meet the current corporate requirements.
- Technical training and soft skills training are provided to the students to make the students employable.
- Students are motivated to do real time projects during their course of study.
- Students with good academic performance are self motivated by providing scholarships.
- BEC certification training programme is conducted in the first year to enhance the communication skills of the graduates
- Online courses are recommended for students to earn additional credit points.
- Fast track is recommended for the students in order to help them to take their internship in the final semester exclusively.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
3886	218	58	-

(b) No. of students outside the state

265

(c) No. of international students

1

Men No % 4256 83

SC

488

ST

13

General

1669

No	%	Wansan
872	17	Women

Physically Challenged

			]	This Yea	r	
Total	General	SC	ST	OBC	Physically Challenged	Total

3232

5128

10

Demand ratio 0.88 Dro

Last Year

OBC

3805

**Dropout % 1.93** 

5975

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

- Hindusthan IAS Academy
- Coaching class for GATE exams, availability of books for competitive exams like GATE, TOEFL, GRE, CAT,

1432

454

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

No. of students beneficiaries

1523

5.5 No. of students qualified in these examinations

NET - SET/SLET 2 GATE 8 CAT -

IAS/IPS etc \_ State PSC \_ 5 UPSC \_ 4 Others \_ 17

#### 5.6 Details of student counselling and career guidance

**Mentoring system** is followed in our institution to help the students to overcome their difficulties in taking up their studies. One mentor is allotted for 20-25 students. Mentoring record is maintained for each student. The mentors maintain the personal and academic record of the students. They continuously monitor the student's progress to identify their academic and personal grievances. The students are given freedom to express their grievances to their mentors.

Career guidance is given to the students through Placement Cell and also from the Department Career Guidance Club. Based on their self understanding capability, interests, aptitudes and reasoning abilities and personal traits, the academic and career options available are identified to narrow down their career direction into a specific one through an informed decision-making process. Career guidance is provided to the students based on the identified occupational direction, preparing them to work and to understand where different education and training choices could take them in the future. Technical training is given by internal faculty members. Career Guidance Club organizing a Career Guidance program on 01.12.2017 Wednesday at PG Seminar Hall. Mr. A. Saravanakumar, Director, Gate Forum Educational Services Pvt. Ltd.

- Counselling by faculty advisors during Tutor hours to strengthen students 'academic performance, involvement in co-curricular activities and morality
- Organizing career guidance programmes every semester by inviting experts from industries.
- Organizing seminars, workshops and guest lectures on personality development and other related topics

No. of students benefitted

1306

#### 5.7 Details of campus placement

	On campus					
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed			
41	451	254	19			

#### 5.8 Details of gender sensitization programmes

- Prevention of Sexual Harassment Cell (POSH) and Women Grievance Redressal committee is functioning to address the grievances of girls and lady faculty members.
- Suggestion / complaint Box are installed in various places in which the Students, faculty and staff who want to remain anonymous, put in writing their grievances and their suggestions for improving the Academics / Administration in the College.
- Ragging in any form is strictly prohibited in and outside the institution.

#### 5.9 Students Activities

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

State/ University lev	el 200 ]	National level	2	International level	2
No. of students parti-	cipated in cultu	ıral events			
State/ University lev	el 25 1	National level	-	International level	-
5.9.2 No. of medals /aware	ds won by stud	ents in Sports,	Games and	l other events	
Sports: State/ University lev	11 trophies 140 Medals	National leve	el 2	International level	2
Cultural: State/ University level	7 Na	tional level -	Iı	nternational level -	

#### 5.10 Scholarships and Financial Support

	Number of students	Amount in Rs.
Financial support from institution	233	51,84,500
Financial support from government	1378	1,98,97,015
Financial support from other sources	20	5,00,000
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives
Fairs : State/ University level 4 National level 4 International level -
Exhibition: State/ University level 1 National level 1 International level _
5.12 No. of social initiatives undertaken by the students 8
5.13 Major grievances of students (if any) redressed:
Criterion – VI
6. Governance, Leadership and Management
6.1 State the Vision and Mission of the institution
VISION
<ul> <li>To become a premier institution by producing professionals with strong technical knowledge innovative research skills and high ethical values</li> </ul>
MISSION
<ul> <li>To provide academic excellence in technical education through novel teaching methods.</li> <li>To empower students with creative skills and leadership qualities.</li> <li>To produce dedicated professionals with social responsibility.</li> </ul>
6.2 Does the Institution has a management Information System
Yes, eCampus portal is being used.  Daily student attendance entry Internal marks entry Study materials upload Student project details etc Individual profile Class timetable / work load etc.
6.3 Quality improvement strategies adopted by the institution for each of the following:
6.3.1 Curriculum Development
• Anna University Curriculum – As per Anna University
Autonomous Curriculum – stakeholder meeting conducted – inputs from Alumni, Industry

person and society received.

#### 6.3.2 Teaching and Learning

- Bridge Course for MQ Students
- Lecture plan with objective & Learning outcome
- Uniformity in Class room Teaching
- Course Material & Question Bank
- Use of Teaching Aids
- Creation of learning environment in classes which includes critical thinking and creativity
- Regular conduction of Value added programmes and Career guidance programmes
- For all programmes practical orientation is insisted in the form of projects and guest lectures
- Field exposure is imparted through conduction of hardware project contest.
- Teaching and Learning process is strengthened with the help of e-learning resources
- The students are encouraged to undergo online training courses such as NPTEL
- The students are encouraged to involve in various professional body activities such as SAE, IIF etc to expertise them for practical studies.
- Demonstration kits have been developed for delivering the engineering concepts.
- Animated videos /presentation have been identified and used in classroom teaching.
- Industrial supported labs have been established for delivering the current concepts.
- The students are encouraged to take up industry based projects with social relevance.

#### 6.3.3 Examination and Evaluation

#### Anna University -

- 1. Three Internal examinations
- 2. University Examinations

#### Autonomous -

- 1. Three internal and one mid-sem exam centralized
- 2. End Semester Exam Question paper setting and valuation external only.

#### 6.3.4 Research and Development

- Faculty members are motivated to publish their article in referred journal.
- 4 departments are recognized as research centre by Anna University Chennai.

- Experts from various organizations are brought in to give valuable advices for the faculties and students to improving their research knowledge to the date and thus articulate the research possibilities.
- Institution has been receiving funds from agencies in consistent basis to improve the laboratory structures and students learning process.

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

- Central library is automated with OPAC, E –Gate and DOLPHIN
- Digital library
- Text books/Reference section/News papers/Novel/ Transactions/Journals/Ph.D. Theses/DCs etc.

#### 6.3.6 Human Resource Management

- The institute recruits staff for various vacancies by giving a advt. in leading news papers and conducts interviews.
- The institution has well structured documented policy on appointment of staff.

#### 6.3.7 Faculty and Staff recruitment

Faculty and staff requirement advertisement given in leading news paper.
 Advisor, Principal, HoD and expert member conduct interview and final list is prepared.

#### 6.3.8 Industry Interaction / Collaboration

- Interaction with the industry helps a strong foundation.
- MoU signed with various industries.
- Creating job opportunities for students.
- Industrial Visits/Internship
- Consultancy work that is part of the strategic plan for growth of the Institution.
- Alumni are invited to interact with the students

#### 6.3.9 Admission of Students

Admissions are based on merit. Counselling will be conducted by Anna University and Govt. of Tamil Nadu.

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h	4	w	ента	are	SCI	าen	nes	tor

Teaching	Provident fund, college bus concession, insurance, maternity leave, vacation, OD CL etc
Non teaching	Provident fund, college bus concession, insurance, maternity leave, vacation, OD CL etc
Students	Scholarships, Fee waiver, counselling cell etc

6 5	Total	cornus	fund	generated
0.5	1 Otal	corpus	Tunu	generated

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6.6 Whether annual financial audit has been done

Yes V	No	
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6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	Ex	ternal	Internal		
	Yes/No	Agency	Yes/No	Authority	
Academic	Yes	Rehinland TUV	Yes	M.R.	
Administrative	Yes	Rehinland TUV	Yes	M.R.	

6.8	Does	the	Unive	rsitv/	Autonomous	College	declares	results	within	30	days	s?

For UG Programmes Yes V No	For UG Programmes	Yes	V	No	
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6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

- Timely publishing of results
- Centralized answer script evaluation
- Online procedure

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

University will provide NOC to enable to apply autonomy as per norms.

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

- Registered Alumni association
- Alumni meeting once in a year
- Alumni are invited to address the students.
- Alumni helps the students to know about openings in their company.

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

- Parents-Teacher meeting will be conducted once in academic year.
- Students' academic and attendance performance are discussed.
- Individual attention will be given.

#### 6.13 Development programmes for support staff

- Electrical maintenance foe electrician
- Safety measurements for civil workers
- Basic computer programming for CSE lab assistants.

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

- Rain Water harvesting
- Green campus planting more saplings
- Battery operated car inside the campus
- Litter Free Zone maintained by NSS

#### 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.
  - The department practices innovations in Teaching-Learning Process such as the usage of ICT and webinars for subjects, NPTEL videos, e-Resources, Video lectures, remedial classes, value added courses etc
  - Outcome based Education with evaluation of PEOs and POs are being practised
  - Blooms taxonomy is used to address the cognitive level in Question papers setting
  - Technical and soft skill training to improve the employability of the students

#### • Meta cognitive strategies:

Students' are provided with much problem solving techniques and they know their own way of things to remember and learning style. Students become increasingly autonomous in their learning as they become aware of their strengths and weaknesses and understand that being successful depends on the effort they make and the strategies they implement.

#### • Peer learning:

By means of this student centred approach, the students' develop their organizing skills, problem solving ability, collaborative skills, receiving feedback from fellow students and evaluating themselves.

#### • Thinking aloud:

Thinking aloud method is a collaborative method to bridge the gap between academics and industrial needs for which a special hour mentioned in the academic timetable as collaborative learning hour and is followed by the fellow faculties.

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

S. No.	Points Discussed	Action Taken
1.	Signing of MoUs with reputed companies.	An MoU was signed with M/s Edifice Placement Solutions in relation to the students' training, internship and placement.
2.	Conducting special coaching classes for improving the performance of the slow learners.	Slow learners were identified based on their academic performances and special coaching classes were conducted after the regular class hours.
3.	Collaborative Learning	Based on the learning skills, students were categorized into 3 groups - Achievers, Moderators and Challengers and collaborative learning sessions were conducted on Saturdays to improve their performance based on their needs.
4.	Continuous monitoring of Students' and Faculty performance.	Peer group members were identified in each class and weekly meetings were conducted to monitor and improve the performance of students and faculty.
5.	Special coaching classes for GATE, TANCET and other competitive exams.	Special coaching classes for GATE, TANCET and other competitive exams are conducted for the interested students after regular class hours.  Students were enrolled in the various NPTEL courses conducted by the IITs and Faculty members were assigned as mentors to coordinate the same.
6.	Association and Club Activities	A National Level Workshop and Hands on Training Programme on "Bar Bending and Reinforcement Detailing" was conducted on 07.09.2017.  A National Level Technical Symposium "Renaissance 2017" was organized successfully on 05.10.2017.  An Eco-Symposium "Vidhai 2018" was organised by the Department's Eco-Club on 21.03.2018.

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

#### **Best Practice - I**

#### 1. Title of the Practice

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

#### 2. Goal

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

#### 3. The context

- Assimilation of the subject and application to real world
- To look beyond the curriculum
- Interaction with subject experts from renowned institutions like IITs, and IIMs.

#### 4. The Practice

- The requirements for lectures by experts either a part of the curriculum or beyond the syllabi are identified before the commencement of classes.
- The centre for e-learning( NPTEL- on line courses) sends the list of **on line course** to each department.
- The interested students can register for on line courses and also they can choose their mentors for the subject.
- The centre maintains a learning management system (E campus) and designates privileges to various users. Lecture notes, question bank, assignments and course plan are made available to students.

#### 5. Evidence of Success

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

#### 6. Problems Encountered and Resources Required

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

#### **Best Practice - II**

#### 1. Title:

Industrial Alliances and Partnerships to bridge the skill gap

#### 2. Goal:

To strengthen industrial collaboration and industry institute interaction.

#### 3. The context:

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

#### 4. The Practice:

- Linkages have been created with industries and formal MoUs have been signed.
- Value added courses have been conducted in association with MoU partners during 2015-2016.
- Training programs on industry practices and recent advancements have been organized for faculty
- Internships, Industrial projects and factory visits are arranged with leading industrial and research organizations.

#### 5. Evidences of Success

- Placement opportunities have been increased.
- Students completed internships at leading industries.
- Students received prestigious awards for their innovative projects.

#### 7.4 Contribution to environmental awareness / protection

- Green Thumbs the Civil Engineering Eco Club has taken efforts to make the department and the institution more eco-friendly.
- The club had conducted many tree plantation programmes in and around the campus to ensure a green environment
- Waste plastic bottles from the campus were collected and used for planting plants to ensure that the bottles are not dumped into environment.

The Go Green campaign is a manifesto to which every individual has a personal obligation. The green cover of HICET campus, lush lawns and shady bowers are witness to the green thumb efforts

- Students participated in Plantation of Saplings
- Energy saving transportation such as battery car is operated inside the campus.
- A campaign to save energy in classrooms was mobilized as a gentle reminder to students to Switch Off all electrical points when not in use

	• The institution's NSS team organized a plantation of saplings programme		
7.5	Whether environmental audit was conducted?	Yes V No	

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

#### Strengths:

- Accredited by NAAC with 'A' Grade.
- Accredited by National Board of Accreditation (NBA) for 5 Programmes B.E. EEE, ECE,
   MECH, CSE and B.Tech IT.
- Research centres recognition by Anna University for EEE, MECH, ECE and CSE Depts.
- Permanent Affiliation for EEE, MECH, ECE, CSE, IT, AERO and MCA departments.
- All faculty members are with PG qualifications.
- Faculty retention ratio is good.

#### Weakness:

- · Lack of Patent.
- R&D and consultancy activities

#### Opportunities:

- Cater the needs of rural students in terms of education.
- · Establish Center of Excellence.

#### Challenges:

- Exposure to faculty on Industry culture.
- Collaboration with Industries and Foreign Universities

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

- To get NBA accreditation for rest of the departments.
- To get more internships to students.

Name: Dr.B.ANAND

Name: Dr.T.KANNADASAN

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC