



HINDUSTAN
INSTITUTE OF TECHNOLOGY & SCIENCE

ANNUAL QUALITY ASSURANCE REPORT (AQAR)

2016 - 17

SUBMITTED

BY

INTERNAL QUALITY ASSURANCE CELL

HITS

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

AQAR for the year (for example 2014-15)

2016-2017

1. Details of the Institution

1.1 Name of the Institution

Hindustan Institute of Technology
and Science (HITS)

1.2 Address Line 1

Post Box No.1,Rajiv Gandhi Salai
(OMR)

Address Line 2

Padur Via Kelambakkam

City/Town

Chennai

State

TamilNadu

Pin Code

603103

Institution e-mail address

registrar@hindustanuniv.ac.in
info@hindustanuniv.ac.in

Contact Nos.

044-27474262/044-27474395

Name of the Head of the
Institution:

Dr.S.Ramachandran
Vice-Chancellor

Tel. No. with STD Code:

Mobile:

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHCOGN 18879)

OR

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:

Web-link of the AQAR:

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	2.82	2013	5
2	2 nd Cycle	A	3.32	2016	5

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

01 / 11 / 2012

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

AQAR (2013-2014) submitted to NAAC on 31.07.14

AQAR (2014-2015) Submitted to NAAC on 31.07.15

AQAR (2015-2016) Submitted to NAAC on 31.07.16

1.9 Institutional Status

University State Central deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution 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

1.10 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

1.11 Name of the Affiliating University (*for the Colleges*)

NA

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

Autonomy by State/Central Govt. / University

University

University with Potential for Excellence

-

UGC-CPE

-

DST Star Scheme

-

UGC-CE

-

UGC-Special Assistance Programme

-

DST-FIST

-

UGC-Innovative PG programmes

NIL

Any other (*Specify*)

-

UGC-COP Programmes

-

2. IQAC Composition and Activities

2.1 No. of Teachers

7

2.2 No. of Administrative/Technical staff

3

2.3 No. of students

1

2.4 No. of Management representatives

1

2.5 No. of Alumni

1

2.6 No. of any other stakeholder and
community representatives

-

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

2

2.9 Total No. of members

16

2.10 No. of IQAC meetings held

2

2.11 No. of meetings with various stakeholders:

No. 4

Faculty

8

Non-Teaching Staff /Students

8

3

Alumni

1

Others

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.

7

International

-

National

2

State

-

Institution Level

5

(ii) Themes

1. Writing Research Proposals
2. Outcome – based Education
3. Research Methodology
4. Applying Funded Projects
5. Training for new Faculty members on accreditation Practices
6. Choice Based Credit System
7. LMS using Moodle

2.14 Significant Activities and contributions made by IQAC

1.	Emphasize various stake holders about the prime need of quality
2.	Carried out feedbacks Analysis and Recommendations from stake holders
3.	OBE Tests and Creation of Awareness
4.	Academic Audit
5.	Surprise Class visits and Lab Visits for corrective actions
6.	Curriculum Development process
7.	Syllabus / Academic Regulations Development
8.	Faculty Recruitment process
9.	Induction training for Faculty
10.	Course allocation based on competency matrix
11.	Time Table
12.	Course Materials – standardization
13.	Course Delivery Plan
14.	Course Assessment Plan
15.	Course Assessment Reports
16.	Continuous Quality Improvement reports
17.	Surprise Class / Lab visits
18.	Student random feedback
19.	Faculty feedback
20.	Online courseware / LMS standardizations
21.	Monitoring the conduct of classes
22.	Feedback through Class committee meetings, Student meetings, Parent meetings
23.	Monitoring the pre –placement training process
24.	Monitoring the quality of projects
25.	Teacher performance analysis through Performance based Appraisal system
(PRAS)	

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

S. NO.	Plan of Action	Achievements
1.	To Practise OBE For the Academic year 2016-2017	Has been Effectively Implemented
2.	To Create Courseware Link Platform for all courses	Link has been created and it is being used effectively by all staffs
3.	To Conduct Periodic refresher Program for faculty	10 programmes are have been Conducted.

4.	To conduct Internal Academic Audit for all Departments	Academic Audit for all departments have been done twice and corrective actions are recommended
5.	Online Feedback for students	Implemented
6.	Faculty recruitment And Training	IQAC Involved in recruitment process and conducted Training programmes for the Newly recruited Staffs
7.	Peer Review and External Audit	Implemented
8.	To strengthen the PBAS system	Implemented
9.	To modernize the laboratories	Modernization plan and budget are allotted based on the advice of IQAC
10.	To monitor the Curriculum Development process	The IQAC is involved in Quality checks of curriculum development process. It has laid down well defined procedures for the new curriculum and syllabus for the year 2018 - 19
11.	To implement the CBCS effectively	CBCS Open Electives and Cross Discipline elective registrations and allocation are effectively implemented
12.	To conduct Result Analysis for the various programmes and suggest corrective actions to the Departments	Implemented effectively
13.	To monitor the NBA	Being Carried out. Applying for 6 programmes under Tier 1
14.	To conduct orientation programmes for NBA / NAAC	Several programmes are organized. NAAC A grade was achieved with 3.32 score on 4.

2.15 Whether the AQAR was placed in statutory body Yes

Management Sync Any other body

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	24	3	27	-
PG	17	0	17	2
UG	20	1	21	-
PG Diploma	1	-	1	-
Advanced Diploma	1	1	2	-
Diploma	3	-	3	2
Certificate	-	-	-	1
Others	-	-	-	-
Total	66	5	71	5

Interdisciplinary	22	-	22	-
Innovative	34	-	34	-

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

- CBCS has been implemented from 2015 -2016.
- Engineering Electives and Open Electives are offered across disciplines for holistic learning of students.
- The add / drop provision for the elective is implemented. The student is given 10 days period to attend classes and if he/she feels that the electives are not suitable for them, they can opt for a new elective.
- Flexibility in registrations (minimum 16 credits and Maximum 30 credits) in a semester to balance the requirements of slow and fast learners.
- Credit mapping is done for Semester Abroad Programmes
- Credit Transfer facility is available for the courses offered in GIAN.
- Non CGPA credits are offered for Extra Curricular and Co – Curricular activities including MOOC
- Campus wide MATLAB licenses are procured for design and analysis. Short term Software courses are introduced as Value Added courses which gains credits in NCGPA category.

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	All
Trimester	-
Annual	-

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

Mode of feedback : Online Manual operating schools (for PEI)

N

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

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

The revision of curriculum, syllabus revamping for all the programmes offered by the University is being carried out meticulously for roll out from the academic year 2018.

The CBCS regulations with 70% change in the syllabus and curriculum was done in 2015.

The new regulations and syllabus with OBE components will be done in 2018.

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

The following new Centers were created during the year

SCHOOL OF COMPUTING SCIENCES

1. MACHINE INTELLIGENCE AND DATA ANALYSIS
2. NETWORKING AND CYBER DEFENSE
3. CENTRE FOR HIGHER EDUCATION LEARNING MANAGEMENT (HELM)

SCHOOL OF BUILDING SCIENCES

1. SUSTAINABLE TECHNOLOGIES

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
491	300	57	93	41

2.2 No. of permanent faculty with Ph.D.

136

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
59	58	6	6	12	12	3	4	80	80

2.4 No. of Guest and Visiting faculty and Temporary faculty: 23

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	27	28	49
Presented papers	29	38	45
Resource Persons	07	18	31

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

- Online Courseware, Webinars, Virtual labs, Video lectures
- Last hour is mandated as remedial class for all programs.
- Comprehension course in 6th semester to recap all the foundation courses.
- Outcomes Based Education Model (OBE)
- Choice Based Credit System (CBCS)
- Choice of NCGPA credits / Credit Transfer / MOOC equivalence

- LTPS structure (Lecture: Tutorial: Practical: Self Study)
- Modular course structure
- Lab integrated with theory courses
- Pre-requisites for elective courses
- Uniformity in credits -- 180 credits for all B.Tech programmes
- 10 credits under Non CGPA for Professional Development
- Opportunity for the students to gain additional credits through MOOC
- Flexible – CBCS – Wide choice of electives
- **Distinct Assessment Platform for various courses based on the uniqueness of the course**
- Inclusion of e-books, courseware, tutorial modules for each course
- CO – PO mapping and Bloom’s Level attainment for each course
- Student learning Outcomes and Profiling for each course
- Inclusion of mini projects for courses
- Modernization of labs to accommodate the latest trends in industries.
- Compulsory Industry 2 industry internships
- Online courseware for every course
- Online surveys, quiz, tutorials, tests, seminars etc.,
- Online Webinars
- HITS MOOC / Webinars
- Virtual labs / Project Based learning / Flip classes
- Opportunities for students to earn additional credits by taking up Value Added courses / Audit courses offered by the Training department.

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

183 Days

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding,

Double Valuation, Photocopy, Online Multiple Choice Questions)

1. The Continuous internal Assessment system is designed in such a way that every faculty has the freedom to decide on their internal assessments based on the uniqueness of the course as approved by the Departmental Examination Committee (DEC). The DEC will decide on the nature of assessment like Quiz, MCQs, Field visits, mini projects, Team projects, Seminar, Online examinations etc.,
2. The Question paper pattern is revised in accordance with the Learning outcomes by mapping the Course outcomes to Programme outcomes. The depth of assessment is specified in terms of Blooms Level and weightages are distributed accordingly.
3. The Question paper is designed in such a way that it caters to all the categories of the students.
4. The learning outcomes are measured at each and every stage of the continuous assessment process through analytics and profile is generated for every which focuses on the learning outcomes.
5. It is planned to issue two grade cards, one for the Formative Assessment Grade sheet and Summative Assessment Grade sheet.
6. It is also planned to introduce Digital Valuation System for assessment, revaluation, photocopy of the answer scripts, in this academic year.
7. Bar Coding is in practice; Open Book Examination is followed for Internal Assessments

2.8.1 Evaluation process

2.9 No. of faculty members involved in curriculum

Restructuring/revision/syllabus development

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

176	121	123
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2.10 Average percentage of attendance of students

84%

2.11 Course/Programme wise distribution of pass percentage :

Sl. No	UG/ PG	BRANCH	Odd Sem				Even Sem			
			I	III	V	VII	II	IV	VI	VIII
1	UG	AERO	53.2	33.2	33.53	56.44	50.50	46.78	54.91	96.88
2	UG	AEROSPACE	66.2	49.4	50.79	52.73	56.94	51.19	66.67	94.55
3	UG	MECHANICAL	47.6	31.8	37.42	50.32	47.86	44.58	50.31	89.17
4	UG	MECHATRONICS	48.8	26.3	15.22	71.43	46.51	41.03	29.17	100
5	UG	AUTOMOBILE	22.2	32	37	58.65	24.7	42.1	56.04	80.58

6	UG	CHEMICAL	45	30.4	63.64	81.25	47.37	63.64	72.73	80
7	UG	BIO TECH	80	70	77.78	100.00	80.00	60.00	88.89	100
8	UG	CIVIL	29.4	25.5	50.00	57.98	23.91	38.38	51.06	83.05
9	UG	CSE	63	46.7	52.00	71.13	47.52	50.00	63.20	89.58
10	UG	IT	29.5	12.1	59.09	65.38	26.31	25.00	68.18	80.77
11	UG	EEE	46.2	30.4	45.83	59.09	57.69	40.00	58.33	81.54
12	UG	ECE	59.5	23.6	50.00	79.07	42.33	48.78	66.25	94.19
13	UG	EIE	37.5	0	78.95	55.56	25.00	35.71	57.89	83.33
14	UG	ARCH	52.1	56.4	63.03	78.26	60.34	60.68	59.48	90.24
15	PG	AERO	80.95	76.19	-	-	80.95	92.86	-	-
16	PG	MECH	90.91	88.24	-	-	90.91	100	-	-
17	PG	AUTOMOBILE	93.33	81.48	-	-	73.33	100	-	-
18	PG	NANOTECH	NA	100.0 0	-	-	NA	100.00	-	-
19	PG	STRUCT ENGG	100.0 0	92.31	-	-	87.50	100	-	-
20	PG	CONS MANAG	57.14	87.50	-	-	100.00	100	-	-
21	PG	ENV ENGG	NA	100.0	-	-	NA	100	-	-
22	PG	M ARCH (HOUSING)	NA	100	-	-	NA	100	-	-
23	PG	M ARCH(PT)	NA	50	-	-	75.00	75	-	-
24	PG	M.PLAN	100.0 0	100	-	-	50.00	100	-	-
25	PG	CSE (DATA SCIENCE)	100.0 0	50	-	-	100.00	50	-	-
26	PG	IT	100.0	60	-	-	100.00	60	-	-

27	PG	MCA	NA	66.67	75	-	NA	83.33	100	-
28	PG	ECE	100	100	-	-	100.00	100.00	-	-
29	PG	POWER ELECTRONICS & DRIVES	100.00	NA	-	-	0.00	NA	-	-
30	PG	PCI, INDUSTRIAL AUTOMATION	0	100	-	-	0.00	100	-	-
31	PG	MBA, AVIATION, MEDIA, FAMILY BUSINES, HOS. HEALTHCARE, DEFENCE	55.22	56.63	-	-	68.25	98	-	-
32	PG	CHEMISTRY	50	NA	-	-	100.00	NA	-	-
33	PG	ENGLISH	50	NA	-	-	100.00	NA	-	-
34	ARTS	BBA(TRAVEL& TOURISM, HOS. & HEALTHCARE)	38.03	55.22	56.76	-	65.57	64.06	86.49	-
35	ARTS	B.COM(BANK MANAGEMENT)	27.27	32.65	62.22	-	54.05	43.14	86.36	-
36	ARTS	BCA(DB & MULTIMEDIA)	27.08	11.67	54.55	-	41.86	36.21	78.18	-
37	ARTS	B.Sc(AIRCRAFT MAINTENANCE)	52.83	39.53	83.72	-	62	61.36	100	-
38	ARTS	B.Sc(AVIONICS)	61.36	52.38	80.00	-	69.57	68	100	-
39	ARTS	B.Sc(AVIATION)	NA	90.91	75.00	-	NA	91	100	-

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

IQAC is involved in contribution monitoring and evaluating the Teaching learning process throughout the academic year in the following areas

1. Vacancy projection for the University based on UGC norms
2. Recruitment and Selection process
3. Validation of the reports submitted by the Curriculum review Committee and BoS on Curriculum development process
4. Standard formats supplied to the departments for development of Modular Syllabus under OBE pattern
5. Validation of allocation of courses as per competency matrix
6. Validating Master Workload, Time table, Individual time table, Lab time table
7. Monitoring Attendance of students
8. Conducting surprise visit to class and labs to ensure
9. Course wise Academic Audit (twice in a year)
10. Analyzing the feedback of students and faculty during class committee meetings.
11. Conducting Student representative meetings, Parent meetings, Faculty meetings and taking corrective actions
12. IQAC department coordinators involve in monitoring the academic plan and report to the IQAC coordinator periodically
13. Result Analysis is validated by the IQAC after each continuous assessment tests and End semester Examination
14. IQAC is involved in the Performance Based Appraisal System (PBAS) to evaluate the academic performance of the faculty under the criterion laid down by the UGC
15. Introduction of new courses, new lab experiments, mini projects, end of programme projects, faculty development programmes, student development programmes are monitored by the IQAC

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	2
UGC – Faculty Improvement Programme	12

HRD programmes	62(1 prog)
Orientation programmes	107(2 Prog)
Faculty exchange programme	4
Staff training conducted by the university	169
Staff training conducted by other institutions	155
Summer / Winter schools, Workshops, etc.	-
Others	-

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	223	0	27	0
Technical Staff	103	0	22	0

Criterion – III

3. Research, Consultancy and Extension

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

- Programmes are conducted in Research Methodology, Collaborative research with the support of industries, promotion of research through partnerships with various leading international Universities
- Several measures are taken by the IQAC for promoting research culture through Research Incentive Scheme (RIS) through which faculty, students and scholars of the institute are benefitted.
- Paper publications
- Consultancy
- Book Publications
- Industry Institute Partnerships
- Patents
- Collaboration with International agencies for joint research Projects
- International, National prestigious awards
- IQAC is a part of the Research Promotion Board

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	16	5	17
Outlay in Rs. Lakhs	62.81	421.04	141.04	688.37

3.3 Details regarding minor projects

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

3.4 Details on research publications: (2015-2016):

	International	National	Others
Peer Review Journals	181	37	-
Non-Peer Review Journals	53	14	-
e-Journals	-	-	-
Conference proceedings	96	77	-

3.5 Details on Impact factor of publications:

Range 0.196-8.58 Average 1.745 h-index 16 Nos. in SCOPUS 131

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 (Rs in Lakhs)	Received (Rs in Lakhs)
Major projects	Annexure-I			
Minor Projects	Annexure-II			
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	Annexure-III			
Students research projects (<i>other than compulsory by the University</i>)	-	-	-	-
Any other(Specify)	-	-	-	-
Total				

3.7 No. of books published i) With ISBN No. 2 Chapters in Edited Books 4

ii) Without ISBN No. 1

3.8 No. of University Departments receiving funds from

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

3.9 For colleges

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

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	4	4	-	-	-

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

3.13 No. of collaboration

International

National

Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs : 228.80

From funding agency

From Management of University/College

Total

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	28
	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
-	-	-	-	-	-	-

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

113

108

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

21

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

JRF SRF Project Fellows HTRF

3.21 No. of students Participated in NSS events:

University level State level
National level International level

3.22 No. of students participated in NCC events:

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	-		
NCC	7	NSS	13	Any other	-

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

1. Anti Ragging Day – 02.8.2016

Chief Guest: Shri. Abhash Kumar, IPS

Addl. DGP, Tamil Nadu Police Academy

Kelambakkam Road, Vandalur

No. of participants: 800

Anti-Ragging Squad and Committee functions in the University effectively. Anti ragging campaign, rally, awareness programmes, Street plays, Skits, short films are conducted regularly every year which has made the campus a Ragging Free Campus.

Awareness on anti-ragging theme is propagated among second year students by the Student Counsellor who visited each class at the beginning of ODD Semester, 2016.

2. Two-Day Training Programme on Counselling for faculty on 10 & 11th January 2017

By **‘Talkitover Counselling Services, Bangalore.** Ms. Ennis Jose & Ms. Monisha Srichand.

3. Orientation for Counselling Training conducted for all faculty on 4th January 2017

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	38.02 Acre	-	From the Society funds	-
Class rooms	207	0		207
Laboratories	95	1		96
Seminar Halls	10	0		10
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	-	29		-
Value of the equipment purchased during the year (Rs. in Lakhs)	-	461.36Lakhs		-
Others(Vehicles)	-	317.63 Lakhs		-

4.2 Computerization of administration and library

Library circulation activities namely issue and return of books are computerized in LIBSYS software system. 19 databases are available in library website to enable the research scholars to browse review of literature for their thesis. E-books and Online Journals are available in the website for library users.

INTERNET ACCESS

110 Mbps Broad Band Internet connections are provided for enhancing the classroom study and for access to the e- resources. There are 56 apple **i-mac, iPod, laptop and kindle** computers accessories available in the digital section to access various educational institutions websites. Institutional repository service provided to library users.

E-BOOKS & E-JOURNALS

Our library subscribes more than 33323 Online Journals, 1,750 Transactions, 156540 E-Books and has access to over 12,68,000 journals, magazines and newspaper articles from international societies.

WEB OPAC

The Library follows Open Access System. There is a provision for remote access to online public access catalogue.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	71301	7586351.00	344	262142.00	71645	7848493.00
Reference Books	33701	4456210.00	486	425671.00	34187	4881881.00
e-Books	14040	1917495.00	142500	672750.00	156540	2590245.00
Journals	380	12421401.00	242+ 28(new)	1732151.00	270	14153552.00
e-Journals	32066	23552770.00	1257	5306899.00	33323	28859669.00
Digital Database	48800	11058992.00	8688	3383283.00	57488	14442275.00
CD & Video	3102	145832.00			3102	145832.00
Others (specify)	80750	35449250.00	2755	1476680.00	83505	36925930.00

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsin g Centres	Computer Centres	Office	Depart ments	Others
Existing	1758	30 Labs	100 Mbps Primary / 10 Mbps Backup	2				
Added	200							
Total	1958	30 Labs			1466 Computers	104 comput ers	188 comput ers	

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

All Departments and Computer Labs are connected to LAN with Internet Facility, Hostels, Halls, Canteens; Library and Open areas are covered under Wi-Fi. All Building blocks and Hostels are connected with OFC and connected via Wi fi.

4.6 Amount spent on maintenance in lakhs :

i) ICT	38.56 lakhs
ii) Campus Infrastructure and facilities	949.13 lakhs
iii) Equipments	461.36Lakhs
iv) Others	96.13 lakhs
Total :	1544.95 Lakhs

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- IQAC conducts awareness programmes periodically to promote the following
 - Library and support services
 - International Affairs
 - NSS, NCC, YRC
 - Hindustan Technology Business Incubator services
 - Services of Centre for Higher Education Learning Management
 - Counselling Centre services
 - Anti ragging Committee services
 - Various Grievance committees like Exam Grievances, Academic Grievances etc.,
 - Feedback through Class committee meetings, student Council meeting, Hostel roster duties.
 - Awareness programmes on Value Added courses through Training department
 - Swatch Barath initiatives / Environmental awareness camps
 - Head Injury awareness camps
 - Placement and Training services

.2 Efforts made by the institution for tracking the progression

- Student progression is monitored based on the following reports and found to be increasing
 - Result Analysis
 - Outcomes of remedial measures
 - Placement, Higher studies and Entrepreneurship reports
 - Learning outcomes reports, Success rates, Awards, Competitions, co and extra curricular activities, sports achievements etc., Formative Assessment Grade sheet planned will have all the criteria on the learning parameters

5.3 (a) Total Number of students
in 2016-2017

UG	PG	Ph. D.	Others
5937	417	483	-

admitted

(b) No. of students outside the state 3250

(c) No. of international 27 students :

Men	No	%	Women	No	%
	5604	82		1233	18

Last Year							This Year						
General	SC	ST	OBC	BC	PC	Total	General	SC	ST	OBC	BC	PC	Total
652	65	19	236	941	0	1913	726	80	13	171	743	0	1733

Demand ratio 1:4

Dropout % : 0.58%

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

- GATE Training Academy
- GRE Training
- TOEFL Training
- Pre – Placement Training
- Value Added courses as NCGPA credits

No. of students 670 beneficiaries

5.5 No. of students qualified in these examinations

NET	3	ST/SLET	-	GATE	15	CAT	23
IAS/IPS etc	-	State PSC	-	UPSC	6	Others	-

5.6 Details of student counselling and career guidance

Details of the Student Mentoring and Support

HITS has effective counselling / mentoring system. Every faculty is a mentor who are assigned with 20 students. At least once in a month each student gets the chance for counselling. The entire strength of students is facilitated with chance for counselling while they are in campus. In addition to that special attention is given by the professionally qualified University Counsellor, through Hindustan University Counselling Cell. Sensitization programmes, poster competitions are conducted among students and staff to nurture counselling. A separate Cell by name HITS counselling centre is functioning in the office of the Student affairs. Parents, Mentors and student volunteers are members of the counselling cell who are specially trained for counselling.

The details of individual counselling given through the cell are given below:

Sl.No	Duration	Number of Students benefited
1	2012-2013	172
2	2013-2014	78
3	2014-2015	60
4	2015-2016	100
5	2016-2017	154

The student counsellor visited the classes with frequent intervals.

No. of students benefitted

154

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
64	380	282	22

5.8 Details of gender sensitization programmes

- HITS has organized competitions for faculty and students on Gender equality. It assures an environment that fosters equal treatment for boys and girls and it is identified that there no bias in interactions
- Women’s grievance cell and cell for prevention of Sexual Harassment are also functioning in HITS with a vision to address any grievances that are reported against the women staff and girl students.
- Anti ragging cell is in place.

5.9 Students Activities

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

State/ University level National level International level

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

Details	Number o students	Amount
Financial support from institution	1568	10,99,77,750
Financial support from government	18	237800
Financial support from other sources	5	131000
Number of students who received International/ National recognitions		
INBOUND	13	
OUTBOUND	35	

5.11 Student organised / initiatives

Fairs	: State/ University level	<input type="text" value="7"/>	National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>
Exhibition:	State/ University level	<input type="text" value="-"/>	National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

5.12 No. of social initiatives undertaken by the students (Both NSS & NCC):

5.13 Major grievances of students (if any) redressed: No Major Grievances.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision: To make Every Man a success and no Man a failure.

Mission: To inculcate comprehensive and contemporary principles of engineering and developing skills that will enable graduates to become leaders who can make significant, contributions to their profession and to the social environment, instilling the highest ethical standards and sense of professionalism

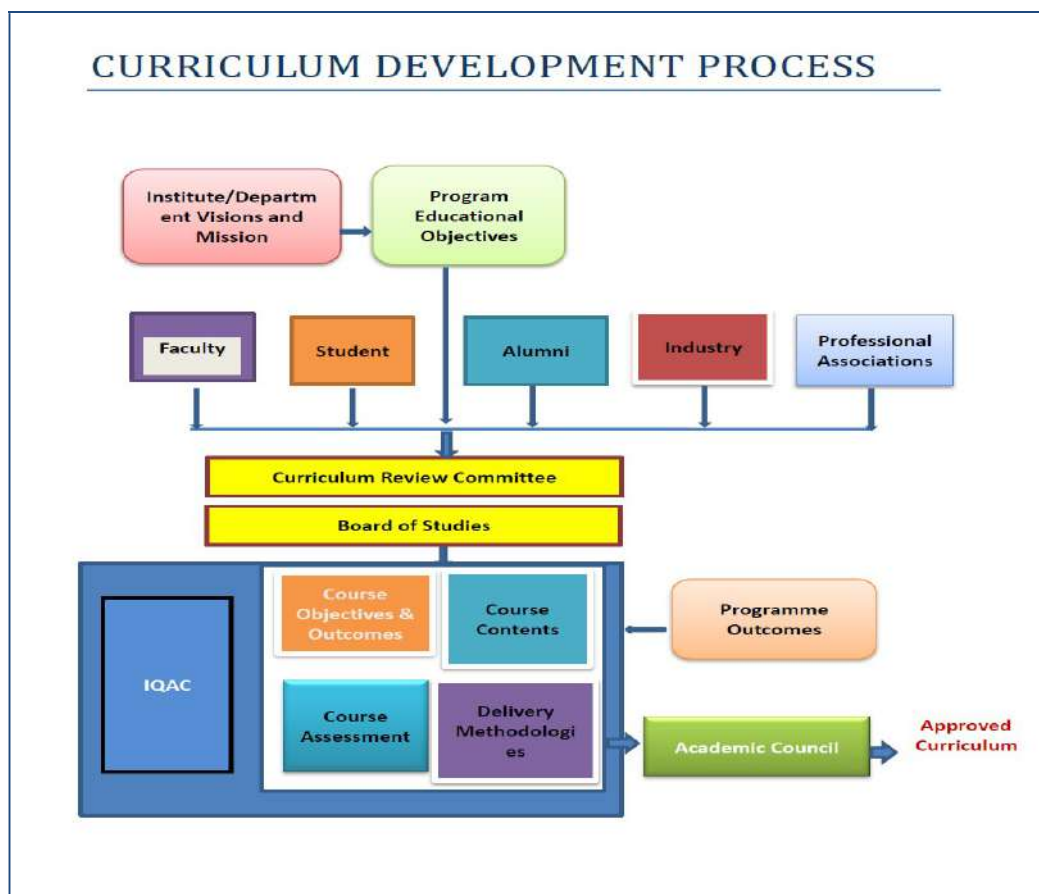
.2 Does the Institution has a management Information System

- The data centre of the University is established to cater to the academic and administrative requirements. ERP is functioning in all the domains namely,
 - HRD
 - Student Admission
 - Finance, Purchase and Stores
 - Inventory
 - Academic modules
 - Attendance
 - Internal marks
 - Co curricular and Extra curricular activities
 - Exam module
 - Hostel
 - Transport
 - Parent information system
 - Faculty data base
 - Research data base
 - Bio metric systems
 - Placement, Training and Entrepreneurship
 - The data centre provides data as and when required by the various units.
- Dedicated email domain for Hindustan

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

6.3.1 Curriculum Development

- Stake Holder’s Feedback
- Formation of Curriculum Revision Committee (CRC)
- Migrated from Department Centric BOS model to a wide encompassing School wise BoS Model for nurturing the interdisciplinary curriculum.
- Eminent people from industry, alumni, PG students, Research scholars, Employees, HoDs of interdisciplinary programmes, form the constitution of the Board of Studies.
- The inputs from the CRC is reviewed by the BoS.
- The items recommended by the BoS is validated by the IQAC and the same is sent back to the BoS for corrective actions, before approval of the Academic Council
- The flow chart for the same is given as follows



6.3.2. Teaching and Learning

- Online Courseware, Webinars, Virtual labs, Video lectures
- Last hour is mandated as remedial class for all programs.
- Comprehension course in 6th semester to recap all the foundation courses.
- Outcomes Based Education Model (OBE)
- Choice Based Credit System (CBCS)
- Choice of NCGPA credits / Credit Transfer / MOOC equivalence
- Online Assessments, LMS, Smart Class rooms
- Flip Class room concepts
- LTPS structure (Lecture: Tutorial: Practical: Self Study)
- Modular course structure
- Lab integrated with theory courses
- Pre-requisites for elective courses
- Uniformity in credits -- 180 credits for all B.Tech programmes
- 10 credits under Non CGPA for Professional Development
- Opportunity for the students to gain additional credits through MOOC
- Flexible – CBCS – Wide choice of electives
- **Distinct Assessment Platform for various courses based on the uniqueness of the course**
- Inclusion of e-books, courseware, tutorial modules for each course
- CO – PO mapping and Bloom's Level attainment for each course
- Student learning Outcomes and Profiling for each course
- Inclusion of mini projects for courses
- Modernization of labs to accommodate the latest trends in industries.
- Compulsory Industry 2 industry internships
- Online surveys, quiz, tutorials, tests, seminars etc.,
- HITS MOOC / Webinars
- Virtual labs / Project Based learning / Flip classes
- Opportunities for students to earn additional credits by taking up Value Added courses / Audit courses offered by the Training department.

6.3.3 Examination and Evaluation

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

6.3.3 Examination and Evaluation –

1. The Continuous internal Assessment system is designed in such a way that every faculty has the freedom to decide on their internal assessments based on the uniqueness of the course as approved by the Departmental Examination Committee (DEC). The DEC will decide on the nature of assessment like Quiz, MCQs, Field visits, mini projects, Team projects, Seminar, Online examinations etc.,
2. The Question paper pattern is revised in accordance with the Learning outcomes by mapping the Course outcomes to Programme outcomes. The depth of assessment is specified in terms of Blooms Level and weightages are distributed accordingly.
3. The Question paper is designed in such a way that it caters to all the categories of the students.
4. The learning outcomes are measured at each and every stage of the continuous assessment process through analytics and profile is generated for every which focuses on the learning outcomes.
5. It is planned to issue two grade cards, one for the Formative Assessment Grade sheet and Summative Assessment Grade sheet. It is also planned to introduce Digital Valuation System for assessment, revaluation, photocopy of the answer scripts, in this academic year
6. In addition to that, the details of the Examination pattern, Grading and any amendments after the approval of the Academic Council, Board of Studies for the existing pattern will be informed to all stake holders by the Dean(Academics) through the respective Deans/HoDs.
7. The Office of the Controller of Examinations has its own examination Procedure manual which was drafted in consultation with the Vice Chancellor, Registrar, Dean(Academics) and all Academic Heads. The manual is transparent and the Office of the Controller of Examinations religiously follows the procedure manual for implementation of all its activities. All matters (except the confidential matters) are being updated to the Deans/HoDs/Faculty Members through regular Office Notifications/Circulars/Orders. In addition to the above, these matters are discussed in the regular HODs Meetings.
8. The final End-Term Examination is coordinated and conducted by the Office of the Controller of Examinations. An Academic Calendar is prepared in the beginning of each Academic Year by incorporating dates of both Internal assessment and Final End-Term examinations. The same would be circulated to all the faculty members and students through the Deans/HoDs of all departments.

6.3.4 Research and Development

Scholars can have Supervisors from abroad.

Reviews are conducted once in six months

Plagiarism checking cell is formed for review of papers before submission for publications in Conferences and journals

Research Incentive Schemes is introduced

Programmes are conducted periodically for creating research culture

UGC latest research regulations are followed

Incentives for publications, awards, patents etc.,

Travel abroad scheme for Hindustan Employees

6.3.5 Library, ICT and physical infrastructure / instrumentation

- Library circulation activities namely issue and return of books are computerized in LIBSYS software system. 19 databases are available in library website to enable the research scholars to browse review of literature for their thesis. E-books and Online Journals are available in the website for library users.

Barcode / RF Enabled Circulation and Surveillance

Multimedia Enabled Digital Library

6.3.6 Human Resource Management

- Transportation for staffs.
- Research Activity Incentives
- Reimbursement of professional body membership fees for active participation

6.3.7 Faculty and Staff recruitment

Direct recruitment to all cadres is strictly based on merit. In all cases, the following procedures are followed:

- (a) At the end of each semester, HODs review staff position in staff meetings and prepare manpower requirement.
- (b) The manpower requirements with justifications are presented to the Vice-Chancellor through the Dean (Academics).
- (c) The Vice-Chancellor & Dean (Academics) review the request and recommend the additional manpower requirement.
- (d) The manpower requirement is forwarded to the Board of Management for approval. After approval, advertisements are released in the leading newspapers.
- (e) Resumes are received, scrutinized and based on criteria prescribed for the position.
- (f) Short listed applicants are intimated to attend the interview.
- (g) Staff Selection Committee members are informed about the Interview dates.
- (h) The Committee recommends the selection of candidates to the Board of Management for finalizing the candidates.
- (i) The HR Department prepares and sends the Offer of appointment letters to the selected candidates, who have accepted our terms and conditions.
- (j) The Selected candidates sign the duplicate copy of the Offer of appointment letter as a token of acceptance.
- (k) Upon joining, the selected candidates are issued Appointment orders duly signed by the Authorized Signatory and the candidates need to fill in the Joining Report.
- (l) Joining Report of each candidate is signed by their respective HOD, Department of H.R.D, Dean (Academics) and Registrar.
- (m) Due to lack of vacancies, the resumes of other selected candidates are filed separately as “Resource Available” or saved in data bank for future purpose.
- (n) Sometimes depending on emergency / exigencies of the situation, adhoc appointments are made on contract basis for specified periods.

Composition of Selection Committee:

a. Mode of Selection of Teaching staff:

Every Selection Committee consists of the following members:

For appointment of Professors:

- i. Vice-Chancellor of the Institute – Chairman
- ii. Nominee of Board of Management
- iii. Dean of Faculty provided he is a Professor/ Head of the School/Department provided he is a Professor/ Chairman, Board of Studies, provided he is a Professor.
- iv. Chief HR Officer
- v. External member.

For appointment of Associate Professor, Assistant Professor:

- i. Vice – Chancellor of the Institute – Chairman
- ii. Nominee of Board of Management
- iii. Dean of faculty / Head of the School/Department/ Chairman Board of Studies, provided he is a Professor or Associate Professor.
- iv. Chief HR Officer
- v. External member

- b. The meetings of the Selection Committees shall be convened by the Chairman of the Selection Committee as and when necessary.
- c. Four members of the Selection Committee shall form a quorum, consisting of at least one nominee of the BOM and two experts.
- d. If the Board of Management is unable to accept the recommendations of the Selection Committee, it shall record its reasons and submit the same to the Chancellor whose decision shall be final.

(b) Mode of Selection of Technical / Non-Teaching staff:

All positions are advertised in the social media or in the local notice boards. After the scrutiny of the received applications, eligible candidates are short listed and are intimated to appear for a personal interview. The Selection Committee comprises of the following:

- (i) Vice – Chancellor of the Institute – Chairman
- (ii) Registrar – for Technical staff / Admin. – for Admin. Staff
- (iii) Dean (Admin.) / Head of the School/Department/ Chairman Board of Studies.
- (iv) Deputy Registrar (HR & Legal)

6.3.8 Industry Interaction / Collaboration

- Establishment of Corporate Training cell
- Field Visits / Industry visits for faculty and students
- Industry Personnel as representatives in BOS and Academic Council
- Research Centres in collaboration with industries
- Laboratory set up in collaboration with industries and institutions
 - Volkswagen Autotronics Lab
 - Yaskawa Robotics lab
 - SMC pneumatics lab
 - Clean Energy and Nano Convergence – Dongkuk University Korea
 - Yokogawa Process Control Lab
 - ADG Boeing flight mechanics lab
 - TIFAC core – Aircraft Maintenance Center
 - Orient Flights - Pilot Training Center
 - Newton Baba Fund for establishing Materials Science lab
 - Siemendes lab for Simulation and Design supported by Dassault System
 - Matlab Campus Supported by MATLAB
 - Siemens Software supported labs

6.3.9 Admission of Students

- HITS EEE online Exam.
- Educational Conferences and Fairs.
- Merit Scholarship is provided to the students with above 90% marks in higher secondary examination.
- Educational loan through leading banks

6.4 Welfare Schemes:

- 1) Staff members are given Provident Fund coverage as per the Employees Provident Fund and Miscellaneous Provisions Act, 1956. The staffs covered under the Provident Fund Scheme are eligible for Family Pension subject to the rules of the Provident Fund. Staff members who are exempted under this Act are also covered under the P.F.
- 2) Personal Accident Insurance provided to all Staff members.
- 3) Staff quarters are provided at minimum charges towards accommodation and electricity.
- 4) A/c vehicle is provided to the Deans, HODs, Senior Faculty members from their residence to the University.
- 5) Free Transport for select faculty members.
- 6) Emergency loans are given to employees for medical emergencies / emergencies caused due to natural calamities.
- 7) Interest free loans based on the necessity.
- 8) Educational Advance for higher studies.
- 9) Festival Advances are given to the Staff.
- 10) Free boarding and Lodging for Senior Professors, Staff holding Warden / Assistant Warden post.
- 11) Free Family accommodation provided for Senior faculty.
- 12) Gratuity is paid to the staff members as per the Payment of Gratuity Act.
- 13) Provision of a separate A/c Dining Hall for the benefit of staff members.
- 14) Marriage gifts for staff, who are getting married, are presented.
- 15) Birthday cakes are given to staff members on their birth date.
- 16) In the event of death of an employee, while in service his / her dependent will be considered for employment, depending on individual merits subject to the availability of the posts.

- 17) Medical Clinic is available for the Staff and Students in the Campus. Free Consultations are provided by the Medical Officers and free treatment is also given including free medicines. Free Medical Camps are organized by the Campus Clinic for the benefit of the students and staff.
- 18) Senior staff members are given special permission to stay in the holiday homes belonging to the Institution at Kerala, Ooty, Delhi, Mysore, Pondicherry.
- 19) Staff and students are permitted free air travel for Training Programmes, meetings, etc.,
- 20) Free Internet facility.
- 21) Special permission to the staff participating in indoor or outdoor games during intercollegiate tournaments.

6.5 Total corpus fund generated : 4.8 crores

6.6 Whether annual financial audit has been done Yes

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Yes	Yes	Dean (Acad)
Administrative	Yes	-	Yes	ISO – Audit team conducts audit every year.

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?

1. From the Academic Year 2015 onwards we are following the Question paper pattern based on Outcome Based Education(OBE) syllabus.
2. Question papers are set based on the concept of “Bloom’s Taxonomy”. The fundamental concept of Bloom’s Taxonomy, Action verbs and Activities are as given below:

S.no	Sections	Time Duration	Marks	Total Questions	Total Marks	Choice	Remarks	Blooms Level	Comments
1	PART-A	10X3 MIN=30 MIN	2	10	20	No	2 Questions from unit	1,2	It may be noted that the PART B & PART C questions will use the lower levels of BTL also. Action Verbs for questions are listed in the diagrams for internal exam activities and end semester exam.
								Remembering	
								Understanding	
2	PART-B	5X12 MIN=60 MIN	6	5	30	Either or type	Each set of question from each unit	3,4	
								Apply	
								Analyze	
3	PART-C	5X18 MIN=90 MIN	10	5	50	Either or type	Each set of question from each unit	5,6	
								Evaluate	
								Create	

1. Part A : 2 marks

Questions must be set as per level 1 and 2 of Bloom's Taxonomy using the Action verbs. The questions shall be designed to test the student's ability in recognizing, recalling the facts, basic principles, basic formulae, Design Equations etc., MCQ / Match the following, Classification problems can also be given. The time taken by a normal student shall be 3 minutes per question.

2. Part B : 6 marks

Questions must be set as per the Level 3 and Level 4 of the Bloom's Taxonomy using the Action verbs. The questions shall be designed to test the student's ability in Applying and Analyzing the rules, formulas, design equation to solve a problem for optimum solution. The questions should be set in such a way that a normal student takes 12 minutes per question.

3. Part C : 10 marks

Questions must be set as per the level 5 and level 6 of the Bloom's Taxonomy using the Action verbs. The questions shall be designed to test the evaluation and creativity of the student in the particular course. Application, Design, Algorithm development, Problems of complex nature checking the judgement levels for optimization, etc., shall be covered from each unit. The time taken by a normal student for each question will be 18 minutes per question.

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

NA

6.11 Activities and support from the Alumni Association

Hindustan Alumni Association (HITSAA) was instituted in the year 1993 and has completed several years of active functioning. HITSAA is registered as a Society (Sl. No. 156/2014) under the Tamil Nadu Societies Registration Act.

HITSAA Activities : HITSAA Executive Committee runs HITSAA Office on the campus which maintains and updates Alumni Database on an ongoing basis.

- HITSAA and the University jointly organize Alumni Events. Batch-wise reunions and Chapter Reunions are organized every year.
- Silver Jubilee re-unions of first three batches (1989, 1990 & 1991) were celebrated on the campus on 2 Aug'14, 9 Aug'15 & 9 July'16 respectively, with alumni and their families.
- UAE Chapter Alumni Reunion was held in Dubai on 14 Oct 2016.

Alumni Networking

HITSAA Networking groups/Page on Facebook and LinkedIn help in Alumni interactions and mutual exchange of news & information on a day-to-day basis.

<https://www.facebook.com/groups/Hindustan.Alumni.Association/>

<https://www.linkedin.com/groups/6632762>

<https://www.facebook.com/hcehits>

There are separate Social groups for USA, Singapore, UAE, Oman, Bhutan and School of Management Alumni on Facebook.

Exclusive Alumni Website

- An All-in-one Alumni Engagement portal was launched in September 2016, which has a user friendly Alumni Directory of over 9500 Alumni, and many other features to connect/communicate with fellow alumni/faculty. Alumni can plan their batch/class reunions, work together on Projects and shared interests, get updates on Alumni Events, and view Alumni News & Photos. Alumni can also request assistance from the University for their specific needs. Faculty can utilize Alumni for Guest Lectures/ Workshops/ Mentoring/ Training sessions etc. to students in their companies.

<http://alumni.hindustanuniv.ac.in/>

- Alumni assist their juniors in preparing for National and International Competitions like SAE, BAJA, Rovers International, Electric Solar Vehicle Championships, etc.

Support from Alumni Association

- Alumni representatives are members in Board of Studies in every department and they are providing guidance in enhancing the curriculum and upgrading the laboratories in accordance with latest industrial trends.
- Alumni are also contributing to the University by presenting Seminars, Guest Lectures, Workshops and Training programmes.
- Some Alumni Entrepreneurs mentor the budding student entrepreneurs enrolled at Hindustan Technology Business Incubator and assist the startups incubated on campus.
Few Alumni offered Campus Placements and Internships
HITSAA assists the University by participating in Career Counselling expos and campaigns in India and abroad.

HITSAA Newsletter

HITSAA office releases its Annual Newsletter 'My Hindustan' every year. The magazine features Alumni news, Alumni achievements, Alumni contributions to the University, Alumni articles and other relevant information useful to the Alumni.

6.12 Activities and support from the Parent – Teacher Association

- Periodic Parent – Teacher meetings department wise is conducted at the University. The Parents, Students, Faculty come together to discuss the common issues and specific issues which are recorded and action taken report of the previous meetings are presented. This system serves as a platform for Continuous quality improvement in all aspects of the University.
- Student Council with 15 member representatives of the student community is functioning in the University to take note of all the day to day issues of the students and represent the same to the appropriate authorities.
- Student council members are consulted for any important policy decision to be made in student welfare in general.
- Parents are consulted on the possibility of their contributions to the curriculum development, infrastructure development, well being etc.,
- SIM (Student Inclusive Management) style is adopted in various development activities

6.13 Development programmes for support staff

- Hands on exercise on computer tools for documentation.
- Soft Skills Training program.
- Budget preparation
- Outcomes Based education
- Grooming etiquettes
- Research methodology
- Training on Moodle
- Training on the department specific software tools / Matlab

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

- Litter free Zone.
- Plastic free Zone.
- Solar Power system has been installed.
- Waste water Treatment plant.
- Tree plantation drive
- Campus cleaning programmes
- Segregation of bio degradable and non biodegradable waste
- Collection of Electronic Waste Drive
- Green Campus awards

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.

- Foreign language Courses in Japanese, French, German and Korean was introduced.
- Choice Based Credit system was successfully implemented. The students are able to move across disciplines to learn interdisciplinary courses.
- Video Lectures and Webinars are created for effective TLP
- Online Assessment techniques were introduced.
- Credits for MOOC was introduced
- Soft skills and personality development was introduced from I semester to 6th semester
- IQAC audit was conducted for every course.
- IQAC was involved in the validation of OBE practices followed by faculty
- IQAC was involved in the Performance based appraisal and validation of outcomes.
- Monthly meeting of the IQAC department coordinators were conducted to enhance the academic compliance.

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

The ATR is summarized in section 2.15

The agenda decided by the IQAC for the academic year 2016 – 17 was implemented and successfully completed

7.3 Give two Best Practices of the institution

- Sponsorship to faculty and students for national and International travel to enhance the institution's visibility. Active MOU's with international partners.
- Effective implementation of the Outcomes Based Model of Education through various innovative methods of TLP

7.4 Contribution to environmental awareness / protection

- Functional Solar Plant – 100 KW
- Waste generated in the institution is segregated and composed
- Electronic Waste collection and sent for recycling
- MoU with TNPL for recycling the paper waste
- Green Campus Awards
- Tree plantation drive
- Swachh Barath scheme by NSS volunteers is fully functional
- Fully functional STTP plant
- Environmental studies introduced as per the UGC regulations, in all UG programmes

7.5 Whether environmental audit was conducted? Yes No

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

- (i) The Institute has made MOUs with a number of Industries for Joint Programs.
- (ii) Tie-ups with a number of foreign Universities for student faculty exchange.
- (iii) Ranked 6th best institution in Patent Filing.
- (iv) SWOC analysis is done based on the inputs of NAAC, NIRF, NBA and QS star rankings and strategic plan is evolved in the following areas
 - a. Research Outcomes and incentive schemes
 - b. Increase in the number of PhD faculty
 - c. Increase in the number of Full time Research scholars
 - d. Increase of publications in peer reviewed journals
 - e. Introduction of Integrated programmes
 - f. To establish research labs in every school
 - g. Up gradation of Existing research centres
 - h. Modernization of labs and class rooms
 - i. To deploy modern pedagogy for TLP by revamping the curriculum and syllabus for 2018.

8. Plans of institution for next year

- Modernization of labs; Strengthen the existing centres of Research
- Improving Industry Academic Partnerships
- Improving access to global information resources
- Initiating public private partnership.
- Improving International Collaboration
- To obtain NBA accreditation for 5 departments
- To strive to work for better NIRF rankings
- To strengthen the resources and facilities for moving towards QS rankings
- To obtain good number of patents
- To promote research and consultancy culture in the University
- All faculty are expected to take up courses offered in MOOC
- To roll out industry aligned curriculum and syllabus for 2018 for all programmes offered by the University.

N. VASUDEVAN

DR. S. RAMACHANDRAN

Name _____

Name _____

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

Annexures-I

Projects Sanctioned during 2016-17 Major Projects					
S.No	Project Title	Duration	Name of the Funding Agency	Total Grant Sanctioned	Received
1	Enhancement of heat transfer using silicon carbide nanoparticles and whiskers based Nano fluids	04.07.2016 3 Years	DST	27.37	15.46
2	Distance based topological indices problems in cheminformatics and its applications	29.12.2016 3 Years	DST (SERB)	15.00	Yet to receive
3	Development of microwave assisted lead-free high performance piezoelectric materials	10.01.2017 3 Years	DST (SERB)	35.23	Yet to receive
4	Application of NDT for Foundry Products and improving skill of Indian Foundry Men	23.02.2017 3 Years	Newton Bhaba fund	42.00	27.50
5	Composites Fuel Tanks for MBT	08.05.2017 3 Years	CVRDE(DRDO)	21.50	Yet to receive
Total				141.04	

Annexures-II

Minor Projects

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Computerized thickness gauging of casting components	2016-2017	Nelcast Ltd., Chennai	8,25,000	

Annexures-III**Project Sponsored by the University.**

S.No	Name of the Project	Duration	Name of the Funding Agency	Total Grant Sanctioned	Received
1	Design and Development of Set up for conducting Studies on Adaptive Noise Control	2016-2018	Hindustan University	2,10,000	151331
2	Environmental Benign Alternative Refrigerant for Automobile Air – Conditioning Systems	2016-2018	Hindustan University	3,40,000	222629
3	Simulation of Traumatic Brain Injury Using Finite Element Method	2016-2018	Hindustan University	2,00,000	100000
4	Condition Monitoring of Grinding Process	2016-2018	Hindustan University	1,10,000	