International Institute of Information Technology, Hyderabad

(Deemed University)

Internal Quality Assurance Cell (IQAC)

and Submission of Annual Quality Assurance Report (AQAR) in

Accredited Institutions

ACADEMIC YEAR

2017-18

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

The Annual Quality Assurance Report (AQAR) of the IQAC
(July 1, 2017 – June 30, 2018)

Part – A

1. Details of the Institution

1.1 Name of the Institution

International Institute of Information Technology

1.2 Address Line 1

Prof. C R Rao Road

Address Line 2

Gachibowli

City/Town

Hyderabad

State

Telangana

Pin Code

500032

Institution e-mail address

query@iiit.ac.in

Contact Nos.

040-6653 1000

Name of the Head of the Institution:

Prof. P J Narayanan

Tel. No. with STD Code:

040-6653 1144

Mobile:

09949544088

Name of the IQAC Co-ordinator:

Prof. Pradeep Kumar R

Mobile: 9391131199

IQAC e-mail address: registrar@iiit.ac.in

1.3 **NAAC Track ID** *(For ex. MHCOGN 18879)* TSUNGN10161

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

EC(SC)/24/A&A/29.2 dated 2.5.2017

1.5 Website address: www.iiit.ac.in

Web-link of the AQAR: https://www.iiit.ac.in/files/naac/AQAR-2017-18.pdf

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	A	3.40	2011	5 years
2	2nd Cycle	A	3.04	2017	5 years
3	3rd Cycle				
4	4th Cycle				

1.7 Date of Establishment of IQAC :   DD/MM/YYYY   30.6.2016

1.8 **AQAR for the year** *(for example 2010-11)*   2017-18

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

  i.   AQAR 2011-12 submitted to NAAC on 08/08/2016
  ii. AQAR 2012-13 submitted to NAAC on 11/08/2016
  iii. AQAR 2013-14 submitted to NAAC on 12/08/2016
  iv. AQAR 2014-15 submitted to NAAC on 12/08/2016
  v.   AQAR 2015-16 submitted to NAAC on 12/08/2016
  vi. AQAR 2015-16 submitted to NAAC on 14/12/2017

1.10 Institutional Status

  University   State ☐ Central ☐ Deemed ✓ Private ☐

  Affiliated College   Yes ☐   No ✓

  Constituent College   Yes ☐   No ✓

  Autonomous college of UGC   Yes ☐   No ✓

  Regulatory Agency approved Institution   Yes ✓   No ☐

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

  Type of Institution   Co-education ✓   Men ☐   Women ☐

                         Urban ✓   Rural ☐   Tribal ☐

  Financial Status   Grant-in-aid ☐   UGC 2(f) ☐   UGC 12B ☐

          Grant-in-aid + Self Financing ☐   Totally Self-financing ✓

1.11 Type of Faculty/Programme

  Arts ☐   Science ☐   Commerce ☐   Law ☐   PEI (Phys Edu) ☐

  TEI (Edu) ☐ Engineering ✓   Health Science ☐   Management ☐

  Others   (Specify)   [.]

1.12 Name of the Affiliating University *(for the Colleges)*   Not Applicable

1.13 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	NA	UGC-CPE	NA
DST Star Scheme	NA	UGC-CE	NA
UGC-Special Assistance Programme	NA	DST-FIST	NA
UGC-Innovative PG programmes	NA	Any other (*Specify*)	
UGC-COP Programmes	NA		

2. IQAC Composition and Activities

2.1 No. of Teachers

3

2.2 No. of Administrative/Technical staff

1

2.3 No. of students

0

2.4 No. of Management representatives

1

2.5 No. of Alumni

1

2. 6 No. of any other stakeholder and

   community representatives

0

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

0

2.9 Total No. of members

7

2.10 No. of IQAC meetings held

1

2.11 No. of meetings with various stakeholders: No.   1   Faculty   2

        Non-Teaching Staff Students   3   Alumni   1   Others   2

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. 68   International 3   National 4   State 1   Institution Level 60

(ii) Themes   Academic and Research

2.14 Significant Activities and contributions made by IQAC

- Observing the ongoing teaching mechanisms and providing feedback to meet the education goals of the Institute.

- Interacting with faculty and students regarding ongoing research activity and providing appropriate broad guidelines as per the latest research trends and domestic research requirements.

- Analyzing the potential of technology transfer and providing feedback.

Studying the social sensitivity programmes and providing feedback for the improvement.

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
Activity 1: Observing the ongoing teaching mechanisms and providing feedback to meet the education goals of the Institute. Plan of action: Analyzing the course feedback. Informal Interaction with the students.	Changes are made in course content and improved evaluation process
Activity 2: Interacting with faculty and students regarding ongoing research activity and providing appropriate broad guidelines as per the latest research trends and domestic research requirements. Plan of action: Analyzing the research activity of the faculty and research students.	Increased no.of research publications of faculty and students; Research projects from Govt and Industry are increased
Activity 3: Analyzing the potential of technology transfer and providing feedback.	Organised Distinguished lectures and invited talks from Industry and academia;

Plan of action: By reviewing the progress of technology transfer.	Participation from Industry and students from other Engineering colleges is improved in annual R&D showcase of the Institute
Activity 4: Studying the social sensitivity programmes and providing feedback for the improvement. Plan of action: By reviewing the social sensitivity programmes.	A school by name Ashakiran runs by campus community for children from nearby slums; Talks were organised to spread awareness about health and RTI.

* Academic Calendar of the year 2017-18 is enclosed as Annexure-i

2.16 Whether the AQAR was placed in statutory body   Yes [✓]   No [ ]

Management [✓]   Syndicate [ ]   Any other body [ ]

Provide the details of the action taken

Governing council was informed about the information of IQAC

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	9	0	9	0
PG	13	0	13	0
UG	2	0	2	0
PG Diploma	0	0	0	0
Advanced Diploma	0	0	0	0
Diploma	0	0	0	0
Certificate	0	0	0	0
Dual Degree	2	0	2	0
Total	26	0	26	0

Interdisciplinary	2	0	2	0
Innovative	0	0	0	0

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

Pattern	Number of programmes
Semester	28
Trimester	0
Annual	0

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

       Mode of feedback   :   Online ☐   Manual ✓   Co-operating schools (for PEI) ☐

Please provide an analysis of the feedback in the Annexure

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

> The syllabus of each course undergoes periodic revision; A significant number of new courses are introduced in almost every semester; All course syllabi are approved by the academic committee; 18 courses were introduced in 2017-18.

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

> None

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
86	40	17	22	07

2.2 No. of permanent faculty with Ph.D.   78

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
07	-	1	-	-	-	-	-	8	-

* Vacant (V): Faculty recruitment at the institute is a continuous process throughout the year. Hence the question of vacant position does not arise.

2.4 No. of Guest and Visiting faculty and Temporary faculty | 13 | -- | 19* |

* Adjunct, Distinguished and affiliate faculty.

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	59	11	4
Presented papers	111	3	3
Resource Persons	37	3	3

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

Introduction of model for effective course management

2.7 Total No. of actual teaching days during this academic year | 156 |

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

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop | 32 | | |

2.10 Average percentage of attendance of students | 85 |

2.11 Course/Programme wise distribution of pass percentage:

For the Academic Year 2017-2018

Programme	Total No. of Students Appeared	Total No of Students Passed	% of Students Passed
B.Tech-CSE	101	94	93.1%
B.Tech-ECE	23	22	95.6%
B.Tech-CSD	30	30	100
B.Tech-ECD	7	7	100
B.Tech-CND	6	6	100
B.Tech-CLD	8	8	100
B.Tech-CHD	5	5	100

M.Tech-CSE	59	57	96.6
M.Tech-CASE	22	21	95.5
M.Tech-Bioinformatics	9	9	100
M.Tech-CSIS	23	23	100
MS-CSE	21	21	100
MS-ECE	11	11	100
M.Phil-CL	1	1	100
PhD-CSE	4	4	100
PhD-ECE	3	3	100
PhD-CL	1	1	100
PhD-CNS	4	4	100

The institute does not award any class/division. Minimum CGPA for B.Tech is 5.5 (55%), for M.Tech 6.5 (65%) for research students (MS/PhD) is 7.0 (70%).

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

The feedback on the course contents, method of teaching, performance of the teacher(s) and teaching assistant(s) are collected from each student at the end of each semester and are reviewed for improvements. A detailed survey of teaching and learning experiences of outgoing students is conducted every year.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	
UGC – Faculty Improvement Programme	
HRD programmes	
Orientation programmes	
Faculty exchange programme	
Staff training conducted by the university	
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	15
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	49	-	2	-
Technical Staff	23	-	Nil	-

Criterion – III

3. Research, Consultancy and Extension

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

IQAC recommended the Institute to hold R&D showcase every year. As a result both UG, PG, Research students are able to get exposure to the latest research activities of faculty and other students.

Seed funding is provided for new faculty to have enough time to understand the research environment and expectations of the institute.

Research talks are encouraged by providing travel support to experts whenever required.

30 Travel grants for students are provided to the UG, PG and Research students to present the papers in India and abroad

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	14	60	10	10
Outlay in Rs. Lakhs	836.90	4362.44	584.96	584.96

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	9	8	8
Outlay in Rs. Lakhs	32.27	79.98	73.38	73.38

3.4 Details on research publications

	International	National	Others
Peer Review Journals	196		--
Non-Peer Review Journals			--
e-Journals			--
Conference proceedings	149	10	--

3.5 Details on Impact factor of publications:

Range [ ]   Average [ ]   h-index [11]   Nos. in SCOPUS [ ]

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		Details are given at Annexure ii		
Minor Projects		Minor Projects – Annexure iii		
Interdisciplinary Projects				
Industry sponsored		Details are given at Annexure iv		
Projects sponsored by the University/ College	--	--	--	--
Students research projects *(other than compulsory by the University)*			1	
Any other(Specify) Consultancy Projects		Details are given at Annexure v		
Total	2017-2018			

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

ii) Without ISBN No. | -- |

3.8 No. of University Departments receiving funds from

UGC-SAP | -- | CAS | -- | DST-FIST | |

DPE | -- | DBT Scheme/funds | |

3.9 For colleges   Autonomy | -- | CPE | -- | DBT Star Scheme | -- |

INSPIRE | -- | CE | -- | Any Other (specify) | -- |

3.10 Revenue generated through consultancy | 1,00,24,240/- |

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	3	4	1	--	--
Sponsoring agencies	12	3	2	--	--

3.12 No. of faculty served as experts, chairpersons or resource persons | 12 |

3.13 No. of collaborations   International | 2 | National | 4 | Any other | 10 |

3.14 No. of linkages created during this year | 16 |

3.15 Total budget for research for current year in lakhs :

From Funding agency | 630.91 | From Management of University/College | 240 |

Total | 870.91 |

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	
	Granted	
International	Applied	5
	Granted	2
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
8	7	1	--	--	--	--

3.18 No. of faculty from the Institution
who are Ph. D. Guides | 42 |
and students registered under them | 183 |

3.19 No. of Ph.D. awarded by faculty from the Institution | 14 |

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

JRF | 5 | SRF | 5 | Project Fellows | 1 | Any other | -- |

3.21 No. of students Participated in NSS events:

University level | 200 | State level | -- |

National level | -- | International level | -- |

3.22 No. of students participated in NCC events: NA

University level | -- | State level | -- |

National level | -- | International level | -- |

3.23 No. of Awards won in NSS: NIL

University level | -- | State level | -- |

National level | -- | International level | -- |

3.24 No. of Awards won in NCC: NA

University level | -- | State level | -- |

National level | -- | International level | -- |

3.25 No. of Extension activities organized

University forum | -- | College forum | -- |

NCC | --- | NSS | 4 | Any other | 2 |

a) Participation in R&D showcase
b) Research publication portal (providing public access to MS/PhD theses and research papers through internet.)

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

Human Values course is made compulsory for all UG students. Value Education Seminar for students and faculty. Ashakiran School is running in the campus to impart primary education to the under privileged children. STEP programme was conducted to familiarize school children to computational thinking and problem solving.

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	66	--	--	66
Class rooms	28	---	--	28
Laboratories	24	--	--	24
Seminar Halls	2	--	--	2
No. of important equipment's purchased (≥ 1-0 lakh) during the current year.				
Value of the equipment purchased during the year (Rs. in Lakhs)				

4.2 Computerization of administration and library

The following sections are computerised and using different software applications:
Admissions: (i)Process of collecting applications for all new UG and PG programmes through online portal; (ii) selection process and announcement of results, and (iii) collection of tuition fee and other charges.

Academics:
(i)Institute Students' Administrative System (ISAS) of all students, which contains student personal and academic details, course registration, examination grades are stored; (ii) selection of TAs; (iii) Course management portal; (iv) research publications portal

Library:
(i) Cataloguing and circulation services are being managed with fully integrated multi-user Library Management Software (LIBSYS), which also facilitates the Online Public Access Catalogue (OPAC); (ii) dedicated systems for accessing E-journals

Hostels: Mess portal

Finance & Accounts: Tally software

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	29730	154.2	1201	10.0	30391	164.2
Reference Books	1929		41		1970	
e-Books	3951	271.96	0	78.88	3951	347.84
Journals	49		16		65	
e-Journals	5+1800		(2) 3200+		5(7) 5000+	
Digital Database	5		2		7	
CD & Video	1363		07		1370	
Others (specify)						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	1230*	21	1 gbps+4 mbps+20 mbps	21	18	1	20	
Added	120	0	6mbps	1	--	0	--	
Total	1450	21	1 gbps+10 mbps+20 mbps	22	18	1	20	

* Old Systems were removed as scrap and sold.

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

> Faculty of the Institute are highly qualified and used to access computer and internet daily in their day-to-day academic and research work.

4.6 Amount spent on maintenance in lakhs :

   i) ICT

   NA

   ii) Campus Infrastructure and facilities

   206.92

   iii) Equipments

   53.38

   iv) Others

   2896.00

   Total :

   31.56

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

> Student help cell was introduced.
>
> Student parliament which consists of a core group of about 10 students was formed to enable institute student interaction.
>
> Student Counsellor centre was started to support the students for managing stress related issues.
>
> For economical backward students, the scholarships were introduced from the fund contributed by Alumni.

5.2 Efforts made by the institution for tracking the progression

> The progress of weak students was reviewed every semester and special counselling sessions were conducted to manage the course work. Programme coordinators were appointed to guide the students to take appropriate courses to manage the course load. If required students were asked to go under probation to clear the backlogs with appropriate counselling.

5.3 (a) Total Number of students 1680   UG-919, PG-582, Ph.D-179, Others-NIL

(b) No. of students outside the state

1372

(c) No. of international students

109

Men

No	%
1322	78.7

Women

No	%
358	21.3

	Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1637	2	1	56	0	1696	1631	1	0	48	0	1680

Demand ratio   Dropout %

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

> We do not have any mechanism. Students will go on their own for coaching and appear for Competitive Exams

No. of students beneficiaries

NA

5.5 No. of students qualified in these examinations

NET [ ] SET/SLET [ ] GATE [80] CAT [ ]

IAS/IPS etc [ ] State PSC [ ] UPSC [ ] Others [ ]

5.6 Details of student counselling and career guidance

Placement Department help the students in guiding about the various corporate Profile and Job Profiles. If anyone is interested to become an entrepreneur, they can approach to CIE (Center for Innovation and Entrepreneurship), an Incubation Centre of IIIT for further assistance.

No. of students benefitted [200]

5.7 Details of campus placement

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
120	216	200	16

5.8 Details of gender sensitization programmes

The Committee on Gender Relations having vision in mind conducts regular session to promote healthy gender relations through sensitization using discussions and actions with respect to the conduct of the different constituents of the campus community.

5.9 Students Activities

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

State/ University level [32] National level [32] 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 | 32 | National level | 5 | International level | |

Cultural: State/ University level | | National level | | International level | |

5.10 Scholarships and Financial Support

	Number of students	Amount (Rs.)
Financial support from institution	797	5,82,34,970/-
Financial support from government	174	2,22,33,200/-
Financial support from other sources	12	49,50,000/-
Number of students who received International/ National recognitions	31	32,82,392/-

5.11   Student organised / initiatives

Fairs   : State/ University level | 1 | National level | | International level | |

Exhibition: State/ University level | 1 | National level | | International level | |

5.12   No. of social initiatives undertaken by the students | 7 |

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

(i) Students raised concerns over stray dogs' movement in the campus. As a result Campus Canine Club (CCC) was formed to take care of the vaccination and identified them for proper care in the campus.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

> The vision of the Institute is
> - To train and educate, at both undergraduate and postgraduate levels, engineers of outstanding ability who can become leaders in the IT industry and profession.
> - To carry out advanced research and development in information and software technologies and their societal, scientific, industrial and financial applications
> - To develop a larger humanistic vision of self and society within the institute and outside.
>
>   The mission of the Institute is
>
> - To contribute to the transformation of industry and society, in India and the world over, by delivering world class research and education, and promoting innovation and human values.

6.2 Does the Institution has a management Information System

> Yes.
>
> The Institute do not have a single management system for the operations of the Institute on the whole. However, individual sections are having various software applications to maintain their operations.

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

6.3.1 Curriculum Development

> - The faculty were given flexibility to plan the course as per the international standards. However the course content has to be approved by academic affairs committee to ensure the rigor of the course.

6.3.2 Teaching and Learning

> Projector is placed in every class room. Multimedia facilities are available in seminar halls. Course management is carried out using Moodle software system.
>
> Tutorial classes were held for all courses. Senior students were recruited as TAs to clear the doubts and manage the course projects. Each TA manages about 25 students which improves the focus. Access to Labs is available 24/7. Library is open from 9:00AM to 12:00 Midnight including on holidays. Library has a dedicated study room.

6.3.3 Examination and Evaluation

> A semester based examination and evaluation system is being followed. For each course, normally, 3 exams are conducted in a semester. In addition, quizzes are being conducted.
>
> The evaluation process is transparent. All the answer books are shown to the student before final grading.
>
> In case of projects, a team of faculty will evaluate the project.
>
> Master of Science / PhD Theses is evaluated based on the review reports obtained from the remote referees

6.3.4 Research and Development

> Students are directed to publish papers in top level conferences and journals before submitting Master of Science and PhD Theses.
>
> Students present the progress of the research to the proposal committee after first 2 years of research.
>
> Faculty are encouraged to carryout collaborative research by interacting with researchers of the Universities and research laboratories in India and abroad.
>
> A team of faculty are allowed to guide Master of Science / PhD students.
>
> Dean Research awards scheme is being introduced to recognize UG and M.Tech students who publish research papers.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Wi-Fi connection is being provided in the campus including faculty residences.
Online access to journal and conference papers published by IEEE, ACM and Springer is provided.
Based on the requirement, new books are procured every year.
About 20 computers are provided in the library to access the online material.
Library is managed with OPAC software system.
Sport facility. GYM facility.
AROGYA medical consultation center
YOGA for relaxation and self-development.
Several clubs

6.3.6 Human Resource Management

Staff training programmes are being organized regarding English language proficiency, interaction with the students and operating software packages.

Staff are encouraged to attend courses to enhance their educational profile.

Faculty training programmes are organized to exchange best teaching practices, especially handling of large classes and teaching assistants.

Every year a retreat of all faculty and staff is organized to discuss the experiences of that year and to take appropriate steps for betterment

6.3.7 Faculty and Staff recruitment

For staff recruitment, advertisement is given in major news papers and selection is being carried out based on the written test and/or personal interview.

For faculty recruitment, a three tier process is being followed. Firstly, online screening is being carried out based on the resume. Next the candidate is being asked to make a presentation and interact with the faculty. Lastly the faculty selection committee analyzes the feedback of the faculty, letters provided by referees and takes appropriate decision.

6.3.8 Industry Interaction / Collaboration

To enhance the interaction with the industry, the staff in various industries in Hyderabad were given option to do course work under PGSSP (Post Graduate Student Status Programme).

Students are encouraged to work in the local industry or startup companies.

Industry is invited to R&D showcase.

Experts with research qualification were encouraged to offer courses either alone or jointly with in house faculty.

Industry employees were allowed to join part time research programmes after scrutiny.

MoUs are being signed with industry to achieve research based solutions.

Experts from industry are being called to give research talks.

6.3.9   Admission of Students

For UG, admissions, following are the modes of admission:
- Through AIEEE ranks
- Through entrance examination followed by interview
- Through direct interview
- Through SAT score

Lateral entry students: Students who have completed second year at other institutes are admitted in to B.Tech /MS program based on written test and interview.

For M.Tech/MS/PhD, admissions are carried out based on written test conducted all over India followed by interview.

6.4 Welfare schemes for

Teaching	Mediclaim Policy
Non teaching	Mediclaim Policy
Students	Mediclaim Policy

6.5 Total corpus fund generated | 5.0 Crores |

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

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	No	Yes	AAC
Administrative	No	No	Yes	IAC

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?

- Banning of Cell phones strictly in the examination hall.
- Open book examination and allowing laptop for certain examinations
- Conduct of make-up examination for the absentees of end semester on medical grounds

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

Alumni are members of GC.

6.12 Activities and support from the Parent – Teacher Association

Interaction meetings held with parent-teachers once in a year.

Interaction meeting are held on convocation day.

6.13 Development programmes for support staff

Human values program has been developed. English training program has been developed. Training program on basics of computer operation is being developed.

Sport facilities.

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

Water-harvesting mechanism is being implemented.

Solar power based heating is implemented.

Organic farm is being maintained to give exposure to students about organic crop cultivation.

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.

FSIS meetings were held with students of each batch once in a month.

Student help cell is being introduced

Faculty coordination committee is constituted to help UG students.

Apex group of students is being constituted to welcome and help new students.

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

Course feedback form is modified. Improving the methodology of MS/PhD evaluation. Improving teaching methodology and course management. Introduction of FSIS mechanism to improve interaction with the students. Improving environmental awareness. Introduction of value education. Introduction of project based learning. Encouraging patents and startup environment. Introduction of new electives. Improving R&D showcase. Improving examination practices. Improving library facilities. Introduction of clubs. Improving sport facilities Improving medical facilities.

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

i)   Project based learning
ii) Creating environment for under graduate students to carry out research

Details are attached at annexure-vi

7.4 Contribution to environmental awareness / protection

 Engineering systems course was offered to provide an integrated view of system development.
Environmental science course is being offered which is being taken by lot of students.
Human value course is being made compulsory to all students which highlights about the interconnectedness nature of the reality.
Students as a part of NCC have carried out environmental awareness campaigns such as planting of trees in the campus and outside the campus.
Water audit is being carried out to sensitize the residents and students about the use of water.
Water-harvesting mechanism is being implemented.
Electricity audit is being carried out to sensitize about the use of electricity.
Solar power based heating is implemented.
Organic farm is being maintained to give exposure to students about organic crop cultivation.

7.5 Whether environmental audit was conducted?   Yes ✓   No ☐

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

Rather than departments, the institution is being organized into research centers to encourage inter-disciplinary research.

The curriculum is flexible for a student to allow her/him to take depth courses earlier to acquire deep knowledge for carrying out research.

Honors program is available to allow the student to gain area-specific expertise.

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

Curriculum revision to reduce total credits and to make it current.

Name Prof. Pradeep Kumar Ramancharla   *Name Prof. P J Narayanan*

Sd/-   *Sd/-*
Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

Academic Year 2017 – 2018

Monsoon – 2017

Registration	27th – 29th July, 2017
Mid Sem I	4th – 6th September, 2017
Mid Sem II	9th – 11th October, 2017
Last Day of Classes	15th November, 2017
End Sem Exams	17th – 23rd November, 2017
BTP Evaluation – III	24th August, 2017
BTP Project Proposals Due	4th November, 2017
BTP final Evaluation	11th November, 2017
MS/PhD faculty Signup	11th November, 2017
Thesis defense due	30th December, 2017

Spring – 2018

Registration	28th – 29th December, 2017
Mid Sem I	5th – 8th February, 2018
Mid Sem II	14th – 17th March, 2018
Last Day of Classes	18th April, 2018
End Sem Exams	20th – 26th April, 2018
BTP Evaluation – I	24th January, 2018
BTP Evaluation - II	27th April, 2018

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MAJOR GOVT. PROJECTS: 2017-18

Amt. in Rs.

S.No.	Name of the Project	Name of funding Agency	Sanction	Receipts	Duration
1	Information access from document images of indian languages	MHRD	8000000	1400000	3 years
2	Intelligent Camera Systems	SERB	2844600	1748200	3 years
3	3D Dep Learning for Non-rigid Shape Acquisition	SERB	3082651	2069610	3 years
4	Development of new methods and algorithms based on non-equilibrium statistical methods for computation of free energy surfaces and rates of bio-molecular processes by simulation methods	SERB	3249400	2168450	3 years
5	Investigation of atomistic mechanism of the cosolvent effects of protein folding equilibrium	SERB	5201350	3912200	3 years
6	Residential Building Energy Demand Reduction in India (RESIDE)	Department of Science & Technology	27184800	16000480	4 years
7	Continuity and Change in a Trans-Himalayan Buddhist Community: Socio-economic Study of Four Monasteries of Spiti, Himachal Pradesh	Indian Council for Social Science Research (ICSSR)	1500000	375000	2 years
8	Compiling Polymage Domain-specific Language for Emerging Parallel Architectures	DST	2306480	1172160	3 years
10	Design of Radio frequency cavities for detection of specific protein	DBT	1732000	1357000	18 MONTHS

11	Design and implementation of parallel algorithms and associated systems for dynamic graphics	SERB	3394600	1799800	3 Years
12	Phenomenology with Exotic Particles – Probing Physics Beyond the Standard Model at the Large Hadron Collider	SERB	2503600	1467866	3 years
13	Modeling Molecular Dynamics Simulations and Computer Aided Drug Design studies of Viroporins, HIV - VPU and SARS - COV 3A	DBT	6145600	882654	3 years
15	Investigation of the physiochemical basis of stacking interactions in nuclic acid architectures	INSA	1500000	480102	3 years
16	Insight into the structure function relationships of chemically modified nucleic acids a molecular dynamics simulations study	DAE	2544900	385875	3 years
17	Computational design of protease inbibitous based on HIV-I protease subtype	SERB	3650000	300000	3 years
18	Functionalisation of corbon nanostructures:Computational design of materials for cellular uptake and drug delivery	SERB	3300000	400000	3 years
19	Big Data Analytics – HSRS Data (BDA-HSRS)	DST	3914900	1243000	3 years
20	Climate Change Impacts on Regional Evapotranspiration Flux and Variability of Climatological and Hydrological Droughts	DST	1133620	75000	3 years
21	System level modeling of the integrated cell cycle, metabolic and redox network to study proliferative diseases	SERB	1662100	300000	3 years
22	Structure stabilities and catalytic activities of surface anhored metal nanoparticles:A detailed quantum mechanical and molecular dynamics study	SERB	1920000	790000	3 years

MINOR GOVT. AND INDUSTRY PROJECTS

Amt. in Rs.

S.No.	Name of the Project	Name of funding Agency	Incharge	Sanction	Duration
1	Preparing Primer on Rapid Visual Screening	National Disaster Management Authority (NDMA), Govt. of India	R Pradeep Kumar	236470	1 year
2	Co-Innovation Lab Agreement between CA & IIIT-H	CA	Manish Shrivastava	1250000	4 Months
3	Design & implimentation of mechanisms as smart controls	Koinearth	Sujit P Gujar	1000000	1 year
4	Image based scene relighting	Qualcomm	Narayanan P J	1370000	1 year
5	Integrated shading and lightning control system based on real-time sky luminance maps for energy efficiency and glare protection	Indo-US Science & Technology Forum	Vishal Garg	1162000	6 months
6	PROTABLE WIRELESS BLOOD PRESSURE MEASUREMENT DEVICE	CARE Foundations	Azeemuddin syed	1000000	3 years
7	Efficient Symmetry Breaking in the congest Model	SERB	Kishore Kothapalli	660000	3 Years
8	Convergence estimates of linear solvers for heterogeneous saddle point problems in Phase Field models (MATRICS)	SERB	Pawan Kumar	660000	2 years
9	Graph Theory , Linear Algebra and coding theory applied to broadcast communication	SERB	Dr.Prasad Krishnan		

INDUSTRY PROJECTS: 2016-17

Amt in Rs.

S.No.	Name of the Project	Name of funding Agency	Sanction	Receipt
1	Opentext contracts deep learning exploration	Open Text	6378250	6378250
2	Duplication and information extraction for medical journals	Novartis	3750000	2500000
3	Reducing edit checks for clinical trial data	Novartis	2500000	750000
4	Camcorder/preview quality assessment	Qualcomm india p ltd	4000000	1000000
5	Honeywell volume estimation	Honeywell technology solutions lab pvt ltd	3500000	3500000
6	Co-Innovation Lab in the areas of computer Science and algorithm	Applied Materials India Pvt Ltd	6000000	3000000
7	Object SLAM for Indoor Enviornment – TCS	TCS	3727056	840000

Consultancy Projects: 2016-17

Sl. No.	Project Name	Funding agency	PI Name	Sanction Amt(Rs.)	Receipt Amt(Rs.)
1	Co-Innovation lab for R&D consulting services	Microsoft india p ltd	Jawahar C V	1500000	1500000
2	Research advisory guidance	Finmee technologies p ltd	Sujit P Gujar	300000	175000
3	Guidance of research advise on agriculture legal and health domains	TCS	Vasudeva Varma	1050000	612500
4	Adobe Gift to support Research activities	ADOBE	Vasudeva Varma	1348935	1348935
5	Road extraction and centerline identification	Cyient limited	Avinash Sharma	1500000	810000
6	Shrimp Feed Signature Detection	Eruvaka Technologies	Anil Kumar Vuppala	300000	300000
7	CRM system migration and updation from the existing system	NRSC	K. S. Rajan	495305	
8	Road Extraction and Center line identification	Cyient Limited	K. S. Rajan	1500000	810000
9	Development of 3GppLTE and 5GNR	Wisig Netwroks Private Limited	Sachin Chaudhari	360000	315000
10	Development of 3GPP rel-15 compliant plar encoder and decoder modules (DCPE)		Lalitha Vadlamani	1180000	557628
11	Co-creation agreement		Jawahar C V	100000	50000
12	Data driven decision making		Sujit P Gujar	195000	195000
13	Trading Agents		Praveen Paruchuri	195000	195000

7.3 Give two Best Practices of the institution

Best Practice-1:

1. Title of the Practice
    Creating environment for under graduate students to carry out research

2. Objectives of the Practice

    Objective 1: Expose UG students the importance of research.
    Outcome 1: Intelligent students will be attracted towards the research and select research and development as a future carrier.

    Objective 2: Involve UG students to collaborate with MS/PhD students in solving research problems.
    Outcome 2: UG students will be exposed to the practice of solving research problems and writing research papers. They will also be exposed to the development of research prototypes and latest research trends.

    Objective 3: Exposing the UG-students to the latest research trends through expert talks and seminars.
    Outcome 3: Every UG student will get the opportunity to attend talks in diverse domains and come to know about the corresponding latest research trends. As a result, he/she will be able to select the interested research area for further exploration.

3. The Context
    The institute should have   eminent research faculty who carry cutting edge research. Also, the students who are getting admitted should be intelligent. There should be research environment with several MS and PhD students in diverse disciplines.
    To implement the above practice, it is important that the management shows full commitment towards excellence. The commitment should be reflected in attracting eminent research faculty and visiting faculty. Also, the institute should have a robust research oriented curriculum.

4. The Practice
    The number of research students in India are significantly less than China and USA. In order to solve research problems, we need human resource with research skills. As of now, several companies are operating their research labs in India.   To get quality researchers, it is important that Indian universities should produce researchers with required research skills.
    Also, to solve India's economic problems and increase high GDP, it is important that we develop indigenous technologies. We can not expect foreign researcher to produce technologies to solve India's problems. So it is very necessary to encourage thee current and next generation towards research by developing institutes which encourage high quality research.

    In summary, it can be said that "India's problems can only be solved by Indian researchers". The main question is how ? At IIIT Hyderabad, we are striving to create research environment to produce next generation researchers.   At first, we have declared IIIT Hyderabad as "Research University". As a result, any one who joins this University, either faculty or the student, has no confusion regarding expectations. Also, we are making efforts to create a research culture through various mechanisms such as attracting intelligent students, encouraging collaborative culture and providing avenues for getting exposure to latest research trends through guest lectures/seminars.

Like any new idea, the proposed mechanism also has constraints. There are several constraints.

- Indian education environment during intermediate education: There is a mushrooming of coaching classes for entrance exam has changed the mind-set of students towards learning. They come to college with the mind-set of coaching class: higher emphasis on grades than learning. As a result, it is becoming difficult for the institute to mould the students for carrying out research.
- Parents and peer pressure: The parents want their children to get the good job in the company. They do not understand the scope of research based education and therefore influencing the students towards the high paid jobs like other peers rather than spending few years doing research with scholarship which is significantly less than the salary.
- Faculty: Also, since independence the faculty are not in the habit of doing cutting-edge research and gave importance in providing high quality education. Mostly, individuals are earning PhD taking faculty job as a settlement and doing research as a part-time activity. It is becoming difficult to get the committed high quality researchers as a faculty members.

5. Evidence of Success

Several UG students are collaborating with MS and PhD students in writing research papers. Several students have joined in research start-ups. 6 students joined MS/PhD programs in top graded universities in abroad with fellowships and scholarships.

The results indicate that students are liking the research environment at the institute. Also, due to high quality research, advanced electives in selected areas are being offered which provided opportunity to UG students to get exposed to latest research areas.

6. Problems Encountered and Resources Required

This university has started itself by declaring itself as a research university and the management has set clear-cut goals for the institute. Initially, it took few years to get top research faculty. After getting the threshold number of faculty members, things have proceeded smoothly.

The institute is self-managed, there are issues in getting funds. Things are being managed with optimal management of resources. At the same time, institute is striving to get more funds thrugh research projects and donations.

Best Practice-2:

1. Title of the Practice
    Project based learning

2. Objectives of the Practice

    Objective 1: To improve the ability to apply theory to practice and vice versa
    Outcome: By executing the projects, students will be able to see the applicability of the learned theories which results into enhanced understanding of the theory concepts. Also, the issues faced during the project execution enables to explore more theoretical concepts. As a result, students gain knowledge in an integrated manner due to mutual reinforcement of theory and practice.

    Objective 2: To improve the practical skills of the student.
    Outcome: Students will be able to get the training on using the latest tools and methodologies to develop applications and build systems.

    Objective 3: To impart skills to identify research problems.
    Outcome: Normally, projects are defined by faculty members with certain degree of unexpectedness or hypothesis testing. While doing the project, the student is forced to read the latest research papers related to that problem. As a result, the there is a high probability that the students will be able to identify new research problems.

3. The Context

    The faculty members should be able to identify research projects. It is only possible if the faculty members carry out cutting edge research. Also, the students who are getting admitted should be innovative. The research environment with MS and PhD program will enable project based learning.

    To implement the above practice, the university should be autonomous to modify the curriculum and enable project based learning. Also, the institute should have a robust research enabling curriculum.

4. The Practice

    It is expected that the graduates produced from Indian universities should possess theoretical and practical skills. The theoretical knowledge includes fundamental concepts regarding subject. The practical skills include the ability to design systems, tools and develop applications.

    In engineering education, the theoretical concepts are being imparted through class room lectures and the laboratory skills in the dedicated laboratories. Unfortunately, the enough practical knowledge is not gained due to limited time available to impart practical skills. The issue of imparting practical education becomes unmanageable due to diversity of the students. As a result, the students are not getting expected practical and system development skills. The industry also feels that that the level of practical skills exposed to the students is not up to the desired level.

    Human resources with sufficient system development and practical skills are imperative for accelerating India's growth potential. As of now, several companies are operating their product and service industries in India. Also, to solve India's economic problems and increase high GDP, it is important that we develop indigenous technologies. We can not expect foreign skilled man power to produce technologies and build systems to solve India's problems. So it is very

necessary to impart skill based education to current and next generation students by developing institutes to impart skills.

At IIIT Hyderabad, we are striving to impart skills through project based training. Besides research, high quality teaching is the primary objective of the institute. As a result, any one who joins this University, either faculty or the student, has no confusion regarding expectations with respect to teaching. Project based teaching is a part and parcel of the curriculum. The curriculum provides the flexibility for the faculty and teacher to opt of project based learning and allows them to build a prototype by integrating several different concepts. As a result, the learning becomes an enjoyable journey for both faculty and student.

Like any new idea, the proposed mechanism also has constraints. There are several constraints.

- If not implemented seriously, it will create a negative impact: The project based learning should be taken seriously by faculty and students. It should contain exploration and development part. The academic level should be defined properly.
- Unless faculty are interested, it is difficult to implement.
- The teaching should be of high quality, to encourage students for carrying project based learning.
- The institute should have a research environment.

5.   Evidence of Success

Several UG and PG students have opted for project based learning. The research ideas identified through project based learning have lead to production of research papers. The project based learning has enabled UG students to work with MS/PhD students.
The leaning has enables them to participate in several competitions.
The results indicate that students are liking the project based leaning system. During the year 200 students have opted for course projects.

Social applications of our research are also very important to us. Institute's Lab for Spatial Informatics has launched VRGeo, an open source software for geo-spatial information. In addition, there are the following achievements in technical contests: IIIT-H represented India in the ACM ICPC 2012 international contest and the team came in top 20. It represented India fourth year in a row. IIIT-H has been number 1 globally in Sphere Online Judge, a highly popular programming site with over 30,000 users.

6.   Problems Encountered and Resources Required

Besides research, the university has set high quality teaching as the main goal for the institute. Initially, it took few years to set-up the curriculum. After making several adjustments based on the feedback from students and faculty, project based learning has implemented smoothly.
The project based learning increases academic load on the faculty. It requires more faculty members to manage the projects.