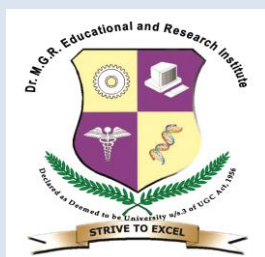


Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE
UNIVERSITY

(Declared as Deemed to be University U/S 3 of UGC Act 1956)

(An ISO 9001 : 2008 Institution)
Maduravoyal, Chennai – 600 095.



Annual Quality Assurance Report
(AQAR)
2015-16

Internal Quality Assurance Cell
(IQAC)

NATIONAL ASSESSMENT AND ACCREDITATION
COUNCIL

The Annual Quality Assurance Report (AQAR) of the IQAC

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

Part – A

1. Details of the Institution

1.1 Name of the Institution	Dr.M.G.R Educational and Research Institute, (Deemed University u/s 3 of the UGC Act 1956) NH/4
1.2 Address Line 1	Periyar EVR High Road
Address Line 2	Maduravoyal
City/Town	Chennai
State	Tamil Nadu
Pin Code	600095
Institution e-mail address	vc@drmgrdu.ac.in
Contact Nos.	044-23782176/23782085
Name of the Head of the Institution:	VICE CHANCELLOR, Dr. K. Meer Mustafa Hussain
Tel. No. with STD Code:	044-23782186

Mobile:

0-9884804999

Name of the IQAC Director:

Dr. Malini Pande

Mobile:

9940410783

IQAC e-mail address:

iqac@drmgrdu.ac.in

1.3 NAAC Track ID -

TNUNGN10128

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/41/98

dated

10-02-2007

1.5 Website address:

<http://www.drmgrdu.ac.in>

Web-link of the AQAR:

<http://www.drmgrdu.ac.in/naac>

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B+	-	2007	5 years
2	2 nd Cycle	B	2.94	2015	5 years
3	3 rd Cycle				
4	4 th Cycle				

1.7 Date of Establishment of IQAC:

15-02-2007

1.8 AQAR for the year**2015-16**

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

i. AQAR - 2007-2008

ii. AQAR - 2008-2010

iii. AQAR - 2013-2014

iv. AQAR - 2014-15

1.10 Institutional StatusUniversity 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) ☐ UGC12B ☐Grant-in-aid + Self Financing ☐ Totally Self-financing ☒**1.11 Type of Faculty/Programme**Arts ☒ Science ☒ Commerce ☒ Law ☐ PEI ☐TEI (Edu) ☒ Engineering ☒ Health Science ☒ Management ☒

Others (Specify)

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

NA

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

Autonomy by State/Central Govt. / University

UGC

University with Potential for Excellence

-

DST Star Scheme

UGC-CE

-

UGC-Special Assistance Programme

-

DST-FIST

✓

UGC-Innovative PG programmes

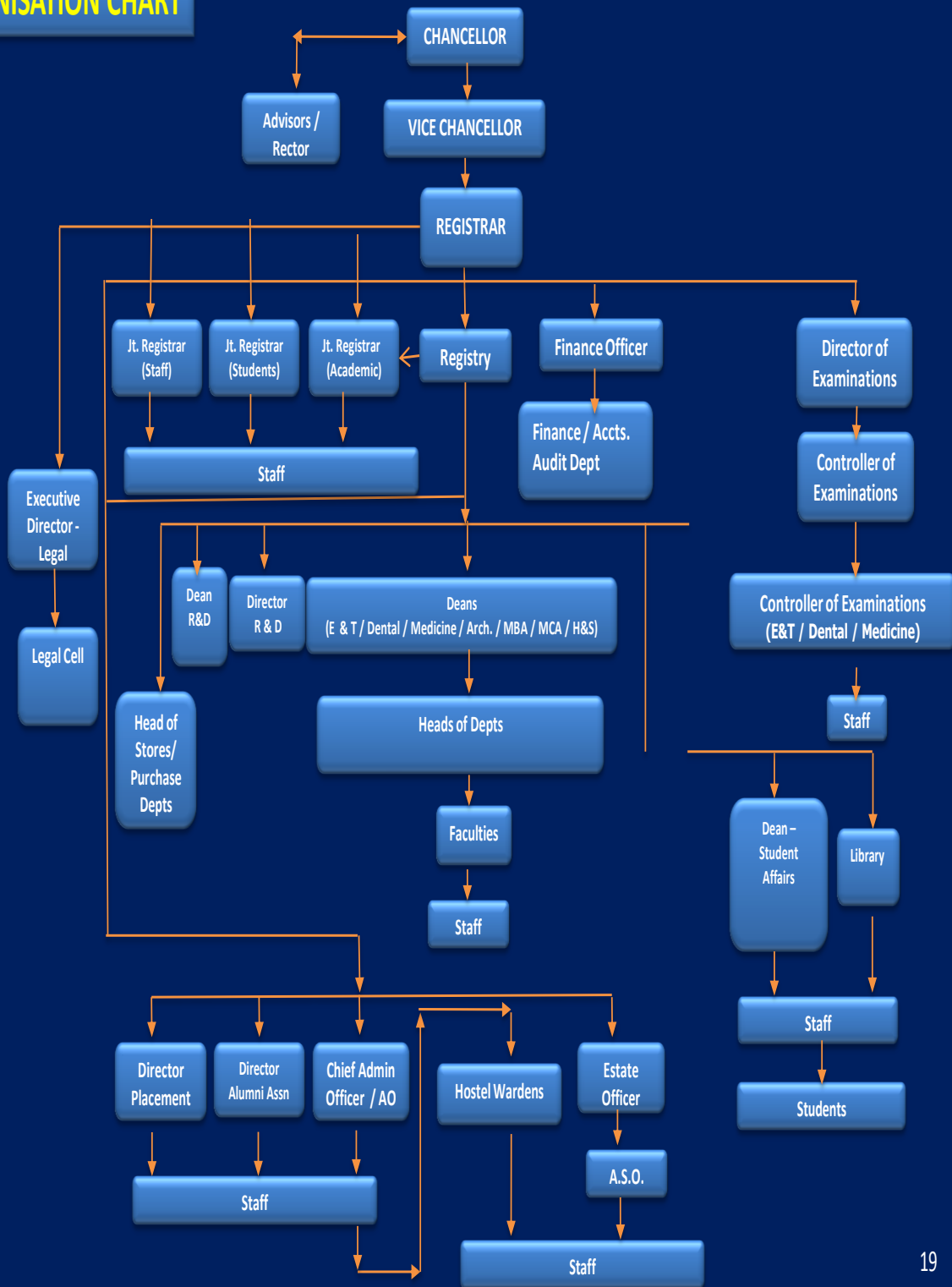
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Any other (*Specify*)

-

UGC-COP Programmes

ORGANISATION CHART



2. IQAC Composition and Activities - 2014-2015

2.1 No. of Teachers	<input type="text" value="08"/>			
2.2 No. of Administrative/Technical staff	<input type="text" value="16"/>			
2.3 No. of students	<input type="text" value="04"/>			
2.4 No. of Management representatives	<input type="text" value="01"/>			
2.5 No. of Alumni	<input type="text" value="05"/>			
2. 6 No. of any other stakeholder and Community representatives	<input type="text" value="3"/>			
2.7 No. of Employers/ Industrialists	<input type="text" value="02"/>			
2.8 No. of other External Experts	<input type="text" value="01"/>			
2.9 Total No. of members	<input type="text" value="40"/>			
2.10 No. of IQAC meetings held	<input type="text" value="04"/>			
2.11 No. of meetings with various stakeholders:	No.	<input type="text" value="04"/>	Faculty	<input type="text" value="04"/>
	Non-Teaching Staff	<input type="text" value="04"/>	Students	
	Alumni	<input type="text" value="02"/>	Others	<input type="text" value="04"/>
2.12 Has IQAC received any funding from UGC during the year?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
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. International National State Institution Level

(ii) Themes

- **Improving the pedagogy of teaching**
- **Improving Research Environment in HEIs**

2.14 Significant Activities and contributions made by IQAC

- Department IQAC set up for ideation, brainstorming & quality improvement
- Department level IQAC quarterly meetings held – involvement of all stakeholders,
- All department meetings documented with Agenda, Minutes, Attendance, and Photographs
- Output of department IQAC Meetings – ideation on curriculum improvement, quality enhancement, teaching-learning methods, evaluation methods, research etc.
- Stakeholder's feedback taken and documented through the IQAC Meetings
- Innovations in teaching and learning process – an output of IQAC deliberations
- In the 1st quarter University IQAC Meeting - Initiated the process of setting quality benchmarks/parameters for the various academic, administrative, research and extension activities of the University
- In the 2nd quarter University IQAC Meeting – department wise goals & objectives (SMART – Specific, Measurable, Action oriented, Result oriented, Time bound) set during the Departmental Quarterly Meetings discussed.
- Audit courses on Entrepreneurship & Research introduced
- Industry linked course – Railway Engineering approved by BOS
- Training Cell set up to improve soft skills of students
- Skill Development Center set up to improve employability of the students
- Coaching Center for GRE, GMAT, TOEFL, IELTS, IAS set up
- Improvement in the quality of events – Conferences, Seminars, Workshops, Technical talks, Faculty Development Programs
- Improvement in Research environment, quality of research, funded projects etc
- Entrepreneurship development accelerated- Incubation Center with MSME set up
- Test Engineering Lab set up with Q-Max.

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
1. To introduce industry linked Course. 2. To providing holistic education – soft skills, personality development. 3. To improve skills of the students by skill based training. 4. Improve Industry-Institute Linkage. 5. To provide opportunity to students to get equipped for competitive exams like GRE, GMAT, IELTS, TOEFL, GATE, IAS etc. 6. More Alumni connection. 7. Improve the teaching learning process & syllabus up gradation.	1. Railway Engineering Course approved. Test Engineering – in process. 2. Skill Development Centre set up. Collaborated with an outside agency to provide soft skills training. 3. Course for Mechanical Engineering students on Heating, Ventilation, & AC. Course on Retail with Barclays Bank. MSME & NSDC courses- in process. Test Engineering for ECE. 4. Industry Institute Planning Cell set up. More Technical talks, Guest Lectures, IVs, more involvement of industry through Departmental IQACs & Board of Studies Meetings. 5. Coaching Centers set up for guidance and classes. 6. Alma Connect to register Alumni, Knowledge sharing by the Alumni experts on a weekly basis in the form of technical talks. 7. Syllabus revision done in some subjects, learner – centric teaching environment created.

* Attach the Academic Calendar of the year as Annexure.

2.16 Whether the AQAR was placed in statutory body Yes

☒

No

☐

Management

☒

Syndicate

☐

Any other body

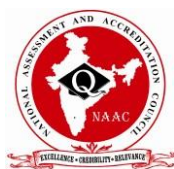
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- ☐ Provide the details of the action taken: - The Points approved in the Academic Council have been implemented

Guidelines for the Creation of the Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) in Accredited

Institutions

(Revised in October 2013)



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

CRITERION – 1 to 7
AQAR - 2015-16
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	1		1	
PG	25		25	
UG	12		12	
PG Diploma	0		0	
Advanced Diploma	0		0	
Diploma	0		0	
Certificate	0		0	
Others	0		0	
Total	38		38	
Interdisciplinary				
Innovative				

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

The UG curriculum is structured for 8 semesters with a total of 135 credits. The curriculum has been divided into the following groups, namely the

- Core subjects – 30 subjects with 3 or 4 credits for each paper depending on whether it is a theory or mathematical subject
- Elective subjects – 4 subjects with 3 credits for each one
- Laboratory classes -10 practical courses with 1 credit for each course
- Project – divided as two phases. The phase I and II with 2 and 6 credits respectively

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	37
Trimester	0
Annual	04

1.3 Feedback from stakeholders* Alumni
(On all aspects)



Parents



Employers



Students



Mode of feedback :

Online



Manual



Co-operating schools (for PEI)



*Please provide an analysis of the feedback in the Annexure

List the stakeholders of the Programme.

- i) The students
- ii) The Alumni
- iii) The Industries
- iv) The Faculty
- v) The Parents
- vi) The society

Students

- The most important stakeholder in the program.
- In order to meet the current requirement, the views from students are considered and new courses are introduced in the form of electives and non credit subjects.

Alumni

- The views from alumni are considered to reframe or modify the syllabus.
- Alumni feedback is considered for long term success of the program.
- They provide the department with necessary inputs regarding industry expectations.

Industries

- The views from industries help to create awareness about practical requirement of the programme.
- Their views help to overcome the barrier between the programme and industry.

Faculty

- The faculty has a very important role in carrying out the programme successfully.
- The views from the faculty are considered for redesigning the programme, the PEOs, PO and CO.
- The involvement of faculty in various levels of the programme to check for reliability of the programme.

Parents

- The views from the parents are considered as they want their ward to excel in good professional career and/ or higher education.

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

Yes, revision of UG and PG syllabus made considering the industry requirements and new electives were introduced. Details with the departments.

Mechanical - Proposing to introduce CBCS from 2015-16 batch. Curriculum designed for CBCS

Civil - Regulation and syllabus has been revised in the year 2013

Chemical - Revision of PG syllabus made considering the requirement and adding novel electives.

Dental - The Syllabus is according to the Dental Council and University guidelines

Physiotherapy - Inclusion of Environmental studies in BPT I Year

Nursing - Following Indian Nursing Council Syllabus in toto, Revision is made as per the resolutions received from INC .

Inclusion of Environment study in II year B.Sc(N)

MBA - The complete MBA syllabus was revamped in 2015.

Out of 3 papers in PhD one new paper Business Environment was introduced

MCA – Revised the curriculum and syllabus of B.Sc (Animation and Viscomm), MCA and M.Phil

The following flowchart describes the methodology for the revision or updation of the Curriculum and Syllabi, followed by most of the departments.

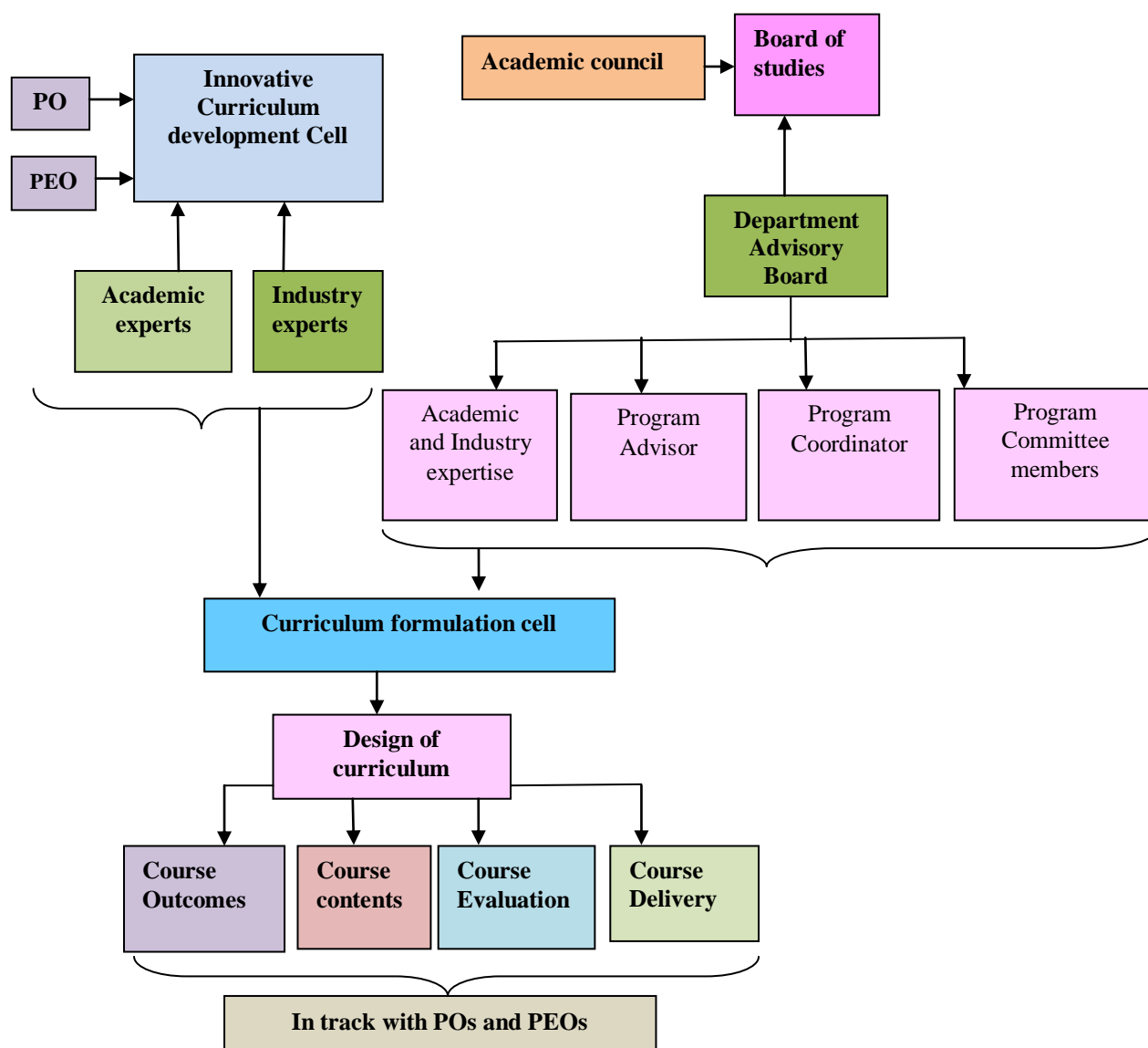


Fig 1 Flow chart for framing the Curriculum & Syllabus.

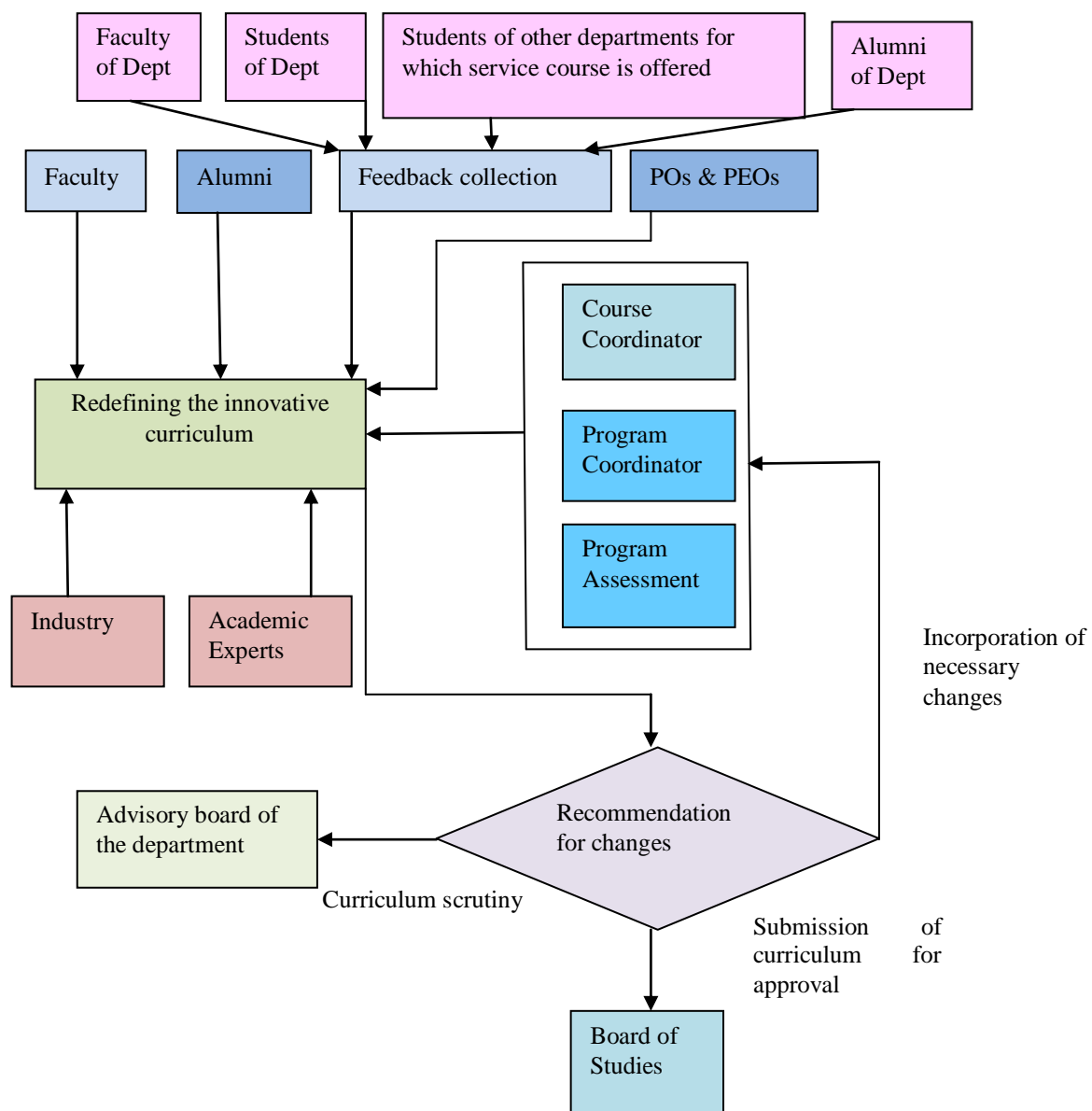


Fig 2 Flowchart for improvement of courses and curriculum

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

1. ECE - Center of Excellence in IOT – 2016
2. Civil - Centre of Excellence for **ADSERIN** - *Advanced Structural Engineering Research Institute* started in the year 2012
Centre of Excellence for construction practices started in the year 2015
Centre of Excellence for GIS started in the year 2015
3. MCA - Yes, Centre for Advanced Visual Effects and Dubbing Studio on 10/3/2016
4. CSE
 1. IBM Centre of Excellence
 2. Java Academic Alliance centre
 3. FOSS Centre - Super RC status
 4. Oracle Work Force Development programme
 5. BEC – English Course
 6. B.Tech - ISDF
 7. CISCO Network academy
 8. IMAC LAB
 9. Watson Innovation Centre
 10. Cyber Security Lab
 11. National resource centre for National Cyber security Program (NCSP)

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
832	437	110	170	115

2.2 No. of permanent faculty with Ph.D.

132

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
23	6	4	1	3	0	9	1	39	8

2.4 No. of Guest and Visiting faculty and Temporary faculty

27

29

0

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	58	192	100
Presented papers	39	107	40
Resource Persons	15	29	15

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

Program Educational Objectives set for each department e.g. the following are some of the PEOs

- To prepare students to excel in various competitive exam and pursue higher education by acquiring a rigid foundation in mathematical, core science and engineering fundamentals.
- To enhance the students knowledge in real life problem such as sustainable and renewable energy, designing electric and electronic systems in a cost effective manner to solve the energy crisis in the society.
- To make students professionally competent by enhancing their communication skills, team spirit, personality, leadership and entrepreneurial qualities and also to prepare the students for lifelong learning through innovative and research activities.

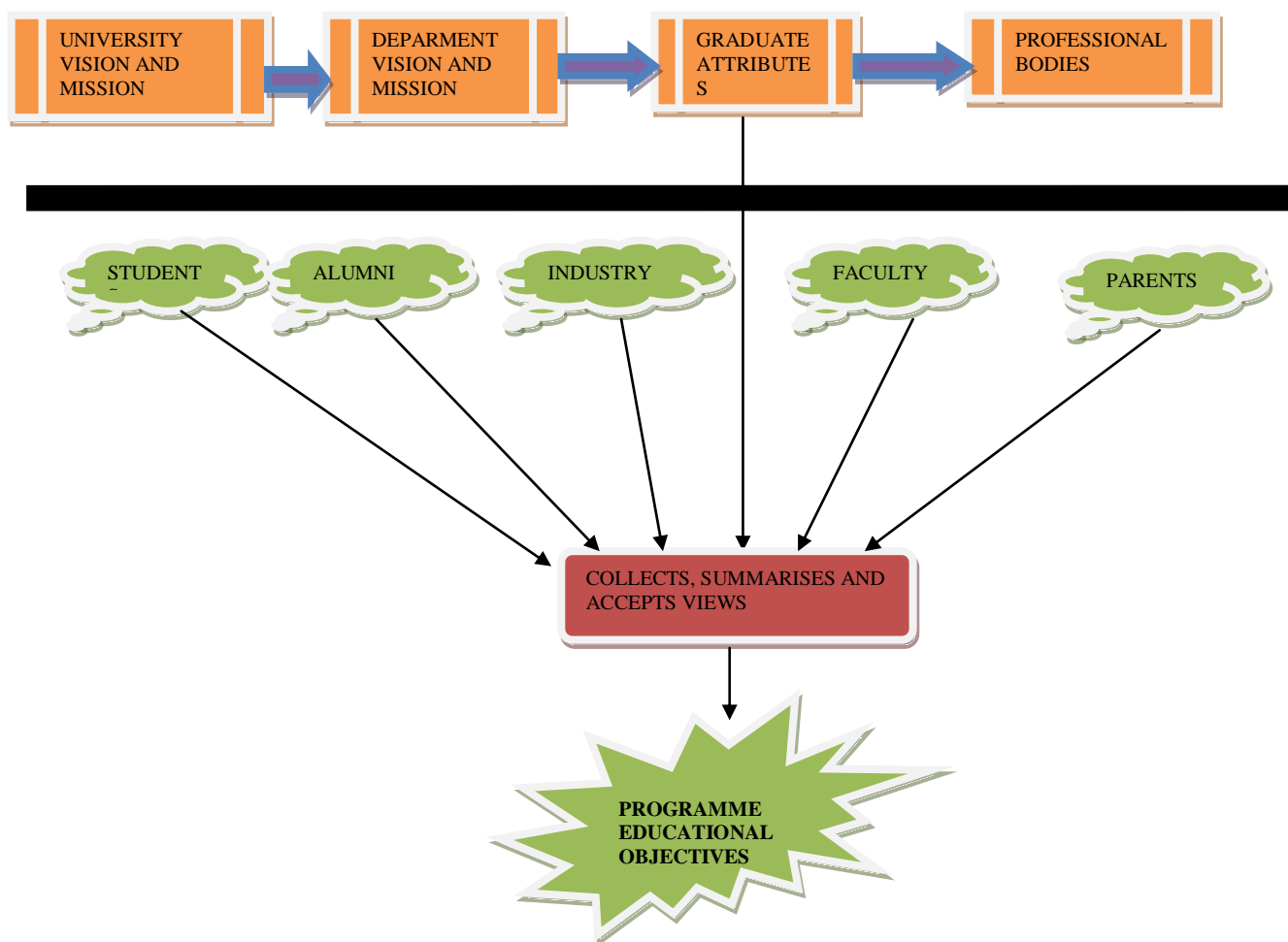


Fig 3 : Process of Programme Educational Objective

Program Outcomes:

Program outcomes are described as what students are expected to be gained at the end of the program.

The general Program outcomes are as follows:

1. To understand the fundamentals in the domain area.
2. An ability to develop problem solving attitude.
3. To design, implement the current technology and to perform and conduct experiments by changing the parameters and interpret the results
4. To identify and solve the issues what the society is facing.
5. To develop the environment with innovative ideas using latest technology.
6. To face the problem in the society and try to solve.
7. An ability to understand the environmental impact and sustain in the environment.
8. To understand legal, security and social issues and responsibilities
9. To work in team thereby exploring multidisciplinary talents
10. To communicate effectively in the society activity such as public speaking, in conference etc.
11. To develop interest in the individual to have an open mind to learn and accept things in the entire life.
12. To apply the software skills for the industrial issues and also an ability to manage finance.

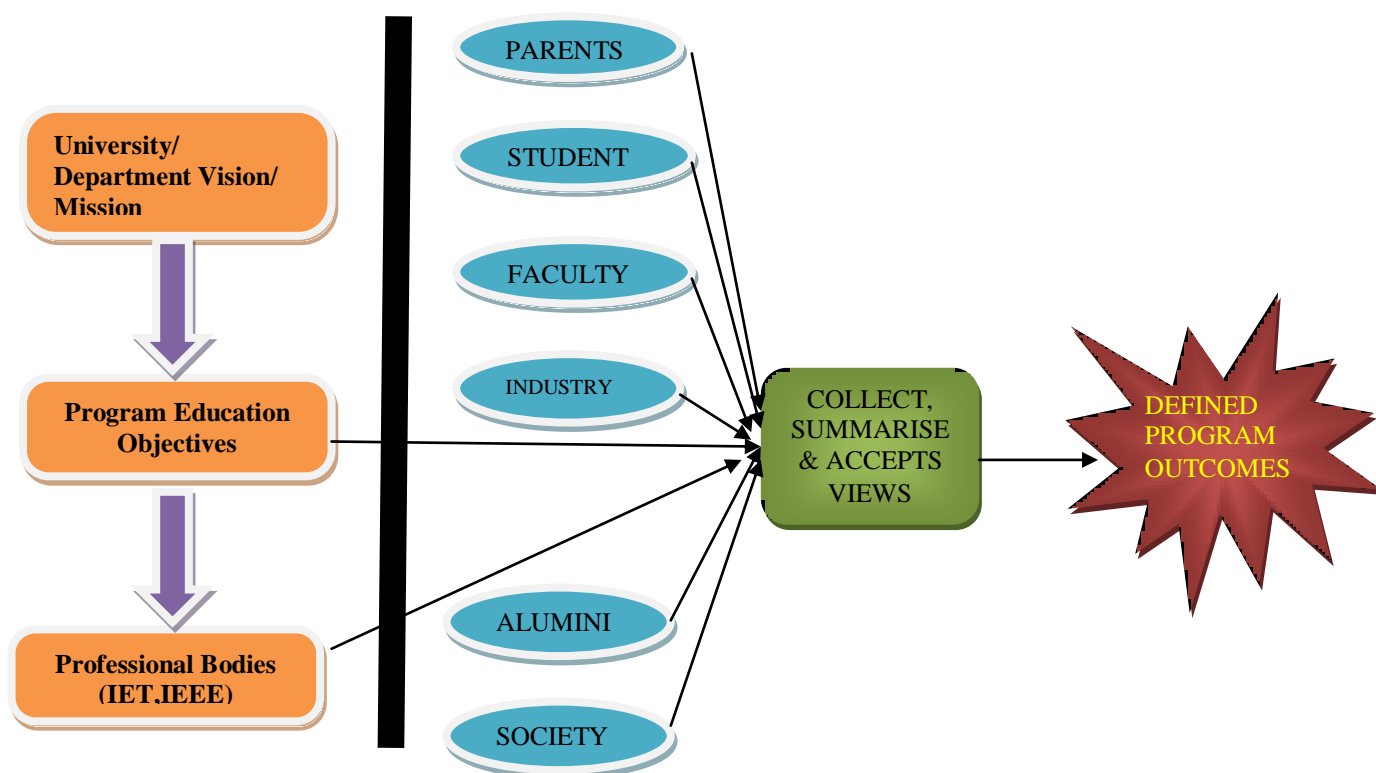


Fig 4: Process to define Program Outcomes

The contribution of the PEOs is briefly explained through an example given in the table below with reference to the 12 PEOs given above. Also the PEOs are expected after a few years of graduation but the outcomes are the immediate response.

In this table “1” indicates low and “2” indicates high correlation between PEO & POs.

PEO \ PO		1	2	3	4	5	6	7	8	9	10	11	12
PEO1	PEO 1.1: Excel in Competitive Exams	1		1			2	2		2			1
	PEO 1.2: Higher Education	2			1			1		2	2		1
PEO2	PEO2.1: Real Life problem analysis and Finding Remedies	1		2	1		2		2	2			1
	PEO2.2: Developing Sustainable Solutions with cost effective manner.		2	2		2			1		1		2
PEO3	PEO3.1: Development of interpersonal skills like communication skills etc.	2		1		1	2			2	2		2
	PEO3.2: Life long Learning & Innovative Ideas.		1		2	2				2	1		1

Table 1: Mapping between Program Outcomes to Program Educational Objectives

Innovative Board of Studies

Introduction

One of the most important activities of the University and by the Departments is its continuous assessment of the Learning practices.

There is a need to assess students’ learning, so as to judge the standard of the present curriculum for its suitability. So in order to impart quality education, Innovative Board of Studies consisting of experienced senior Faculty members, was formed.

Objectives of the Innovative Board of Studies

1. To continuously assess the present curriculum and syllabus for its suitability with reference to the technological changes that are taking place around us by conducting periodical meeting
2. Review of learning practices and to suggest practical based and knowledge based curriculum

Content Delivery Methods:

The Faculty members are trained by Mission 10X to deliver the course content effectively and we also involve the students to make models and then ask them to frame challenging questions and find answers there by the students improve their knowledge. In addition to this there are various other content delivery methods which are listed below.

- M1: Class room Lecture with discussions.
- M2: Practical oriented Teaching like Industrial Visit, laboratory etc.
- M3: Assignment
- M4: Presentation
- M5: Group Discussion
- M6: Classroom Quiz
- M7: Brainstorming

Learning Resources Sharing

The students are provide with various National & International educational websites of such as

NPTEL

<http://nptel.iitk.ac.in>

Stanford Engineering Everywhere(SEE)

<http://see.stanford.edu/>

The program outcomes are met with the proper selection of Delivery methods. The mapping of the content delivery method to the Program Outcome is shown in the Table

Program Outcome Content Delivery Method	1	2	3	4	5	6	7	8	9	10	11	12
M1	X	X			X			X			X	
M2			X	X		X	X		X		X	X
M3	X				X		X	X	X	X		X
M4			X		X	X	X		X	X		
M5		X	X	X		X			X	X		X
M6	X			X		X		X		X	X	
M7	X		X		X		X	X	X	X	X	X

Table 2: Mapping of Content Delivery methods to Program Outcome.

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

180

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

Assessment Tools:

To assess the students' performance we have the following methods:

- (1) Direct Method**
- (2) Indirect Method**

(1) In the **Direct method** the students are made to submit

- (a) **Individual assignment-** The students are given individual title based on the syllabus and also based on the latest technology. The students are advised to surf the net and write a brief note on the given topic.
- (b) **Surprise test-** The individual subject Faculty will conduct surprise test in the classroom which would have not been informed to the students. The paper will be evaluated by the students themselves and they will get practice for the semester end.
- (c) **Content Delivery Test:** This test will also be conducted by the individual Subject Faculty in the Classroom. The questions asked in the Content Delivery Test will be from the content delivered for the past one week. This test is conducted to improve the performance and also the level of understanding by the student will be judged.
- (d) **Seminar:** The students will be given some specific Topic from the recent trends related to the Subject and will deliver the presentation in the Classroom and will be graded for the same.
- (e) **Open Book Test:** The students will be given some questions and they have to write the assignment by finding the solutions and will be assessed for 50% marks and a Oral Test will be conducted which will be assessed for the remaining percentage of marks.
- (f) **Continuous Assessment Test:** The students are made to appear for the Continuous Assessment Test conducted by the University. Three Test will be conducted and the Marks will be accounted for the calculation of the Internal Marks
- (g) **Semester End Examination:** At the end of each semester the students attend the end semester examination and this semester end examination will determine whether the program outcomes are delivered otherwise.

(2) In the **Indirect method** the students are made to submit reports

- (a) **Survey Report:** In this report the students are given a task and the students are made to take survey and submit the summary of the survey. For example Energy Auditing Survey Report, Power Consumption Report etc.
- (b) **Annual Report:** The students are made to submit a report based on the workshop, paper presentation, seminar attended, Workshop , Industrial Visit, In-Plant Training and submit the same either individually or in a Group.
- (c) **Project & Innovative Learning Practice:** The students are made to do mini project individually or in a group and submit the report for certain subjects like Design of Electrical Machines etc. Also in the final year the students are encouraged to do projects and submit the report for the same.

Department CAT Cell – Continuous Assessment Test

The Objective of CAT cell is to continuously evaluate and monitor the performance of the students and give them various opportunities to improve their performance with appreciation .The CAT Cell has the responsibility to generate the internal marks for the students based on the three CAT conducted periodically by the CAT Cell.

- a. **OBT** – To improve the performance Open Book Test will be conducted on CAT question paper for 60 mark evaluation which includes 30 marks for viva voce.
- b. **SST** – CAT cell is regularly conducting Subject Surprise Test to check the technical creativity of the student with additional mark in the internal.
- c. **SDG** – Self Development Group which consists of both fast and slow learners where interaction between both take place for betterment of slow learners
- d. **CCM**- CAT Committee which consists of students and faculty members meet once in a semester to review the progress of the CAT.
- e. **CATC Award**- Awards for the students with reference to the CAT I , II and III evaluation including OBT and SST are announced every semester.

PO \ CAT		1	2	3	4	5	6	7	8	9	10	11	12
Direct Method	(a)Individual Assignment	x						x			x		X
	(b)Surprise Test		x		x	x			x	x	x		X
	(c)Content Delivery Test	x	x	x		x		x			x		X
	(d)Seminar	x		x			x				x		X
	(e) Open BookTest		x	x	x		x	x		x			
	(f)Continuous Assessment Test	x	x		x				x				X
	(g)Semester End Examination			x			x				x		
Indirect Method	(a)Survey Report	x		x		x		x			x		X
	(b)Annual Report		x			x	x	x	x	x		x	
	(c)Project & Innovative Learning Practice	x	x	x	x	x			x		x		X

Table 3: Assessing Student Performance

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

Curriculum Restructuring	Revision	Members of Board of Study
125	61	41

2.10 Average percentage of attendance of students

75%

2.11 Course/Programme wise distribution of pass percentage:

Percentage of student progression to higher education

S.No	Faculty		2010-2014		2011-2015		Total	
			No. of St passed	No. of St higher studies	No. of St passed	No. of St higher studies	Total St. passed	Total St higher studies
1	E& T	Civil	151	33	155	42	773	243
2		CSE & IT	62	13	114	36	1231	417
3		ECE	136	43	122	44	959	393
4		EEE	170	53	142	35	1163	412
5		Mech	376	135	433	148	1657	576
6		Biotech	20	8	25	---	266	100
7		Chemical	12	2	03	01	64	11
8	Computer Applications	MCA	42	02	36	02	78	04
9	Management Studies	MBA	107	15	101	16	311	48
10	Architecture	ARCH	--	--	--	--	30	11
11	Dental	BDS	68	27	--	--	138	77
12	Medical	Nursing	39	01	--	--	81	13
13		Medical	95	02	--	--	95	02
14		Physiotherapy	18	09	--	--	63	32
15	Hotel Management & Catering Tech		38	6	34	4	120	14
Total no. of students underwent Higher studies							7029	2353

Result Analysis - Average pass percentage of students

S.No	Courses	Statistics
1.	MDS	100%
2.	BDS	97%
3.	B.Sc (N)	100%
4.	MPT	100%
5.	BPT	90%
6.	MCA	100%
7.	PG(E&T)	97%
8.	MBA	79%
9.	M.Arch	76%
10.	UG(E&T)	72%
11.	MBBS	55%

Result Analysis - BDS

2010 BATCH				
MONYR	YEAR	APPEARED	PASS	PASS %
Oct-11	I	95	71	75
Oct-12	II	75	54	72
Sep-13	III	61	53	87
Oct-14	IV	58	42	72
2011 BATCH				
MONYR	YEAR	APPEARED	PASS	PASS %
Oct-12	I	65	43	66
Sep-13	II	51	47	92
Oct-14	III	48	48	100
Oct-15	-	-	-	-

Result Analysis – B.Arch.

COURSE	6 th SEMESTER	5 th SEMESTER	4 th SEMESTER	3 rd SEMESTER	2 nd SEMESTER	1 st SEMESTER
	PASS %	PASS %	PASS %	PASS %	PASS %	PASS %
B.Arch	79.31	68.97	65.52	82.14	62.07	51.72

Result Analysis – B.Sc. (Nursing)

2010 BATCH				
MONYR	YEAR	APPEARED	PASS	PASS %
Oct-11	I	44	34	77
Oct-12	II	40	27	68
Sep-13	III	39	38	97
Sep-14	IV	38	38	100
2011 BATCH				
MONYR	YEAR	APPEARED	PASS	PASS %
Oct-12	I	45	33	73
Sep-13	II	44	40	91
Sep-14	III	44	43	98

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

- IQAC contributes by providing a student centered environment for quality education and helps faculty to adopt the required knowledge and technology for teaching and learning process.
- By getting feedback from students, parents and other stakeholders on quality-related issues.
- Assessing the quality parameters of higher education by alumni survey and academic experts.
- Helps in organizing workshops, seminars on quality related themes and promotion of latest technology learning.
- Keeping a record of the different programmes leading to quality improvement.
- Helps in preparing the Annual Quality Assurance Report (AQAR) of the department.
- It also ensures adequacy, maintenance and proper allocation of support structure.
- IQAC ensures efficient and progressive performance of academic, administrative and financial tasks. It also ensures adequacy, maintenance and proper allocation of support structure.
- IQAC helps in maintaining a good quality in teaching and learning process. If there is inadequacy in teaching and learning process, IQAC monitors the same and helps in maintaining the quality and improving the same
- Monitoring and improvements through quarterly departmental IQAC Meetings & University IQAC Meetings ensures that there is regular interaction among the stakeholders and collection of feedback that helps in improvement.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	29
UGC – Faculty Improvement Programme	63
HRD programmes	0
Orientation programmes	23
Faculty exchange programme	0
Staff training conducted by the university	92
Staff training conducted by other institutions	17
Summer / Winter schools, Workshops, etc.	93
Others	49

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	172	4	3	1
Technical Staff	855	3	3	-

Criterion – III

3. Research, Consultancy and Extension

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

Research Skill Empowerment Program (RSEP) “Shiksha” – 5 day Program for Faculty on Research, writing papers, funded projects, collaborative research, ethics in publishing organized – Resource persons from IIT, Industry, & UGC.

IQAC ensures the sharing of research findings and its helps to network with the other institution in India and abroad.

Advanced Research Institute has been set up in the University. It conducts regular meeting to motivate the faculties in research.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	20	21	2	15
Outlay in Rs. Lakhs	3697000	938000	1300000	8000000

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	26	47	430001	0
Outlay in Rs. Lakhs	0	131400	131400	0

3.4 Details on research publications

	International	National	Others
Peer Review Journals	197	29	1
Non-Peer Review Journals	8	19	1
e-Journals	13	7	0
Conference proceedings	37	95	0

3.5 Details on Impact factor of publications:

Range	01 -6.3	Average	12.18	Index	20	Nos.in SCOPUS	147
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	9	DRDO-CVRDE DRDO-CABS CSIR/ DBT-Fast Track /DBT Dr. M. G. R.	10515000	1000000
Minor Projects	5	Milltec Machinery Dr. M. G. R.	636400	336400
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	3	Dr. M. G. R.	180000	
Students research projects (other than compulsory by the University)				
Any other(Specify)				
Total	15		112159000	10364000

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

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP	<input type="text" value="0"/>	CAS	<input type="text" value="0"/>	DST-FIST	<input type="text" value="0"/>
DPE	<input type="text" value="0"/>	DRDO	<input type="text" value="0"/>	DBT Scheme/funds	<input type="text" value="0"/>
ICMR&CSIR	<input type="text" value="0"/>	Others	<input type="text" value="0"/>		

3.9 For colleges

Autonomy	<input type="text" value="Nil"/>	CPE	<input type="text" value="Nil"/>	DBT Star Scheme	<input type="text" value="Nil"/>
INSPIRE	<input type="text" value="Nil"/>	CE	<input type="text" value="Nil"/>	Any Other	<input type="text" value="Nil"/>

3.10 Revenue generated through consultancy

Rs.257380

3.11 No. of conferences Organized by the Institution .

Level	International	National	State	University	College
Number	4	11	4	0	7
Sponsoring agencies		1 (DeiTY) Q-MAX Teche Equipments IEEE Dr MGR University Listerine	Colgat		

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

56

3.13 No. of collaborations

International

5

National

29

Anyother

0

3.14 No. of linkages created during this year

2

3.15 Total budget for research for current year in lakhs :

From funding agency

13.64

From Management of
University/College

14.80

Total

Rs.1616400

3.16 No. of patents received this

Type of Patent		Number
National	Applied	43
	Granted	0
International	Applied	01
	Granted	0
Commercialised	Applied	0
	Granted	0

**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
60	02	06	0	52	0	0

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

132
245

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

29

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

JRF	04	SRF	0	Project Fellows	7	Any other	04
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Research Scientist: - 22

Project Manager: - 0

3.21 No. of students Participated in NSS events:

University level	350	State level	0
National level	20	International level	0

3.22 No. of students participated in NCC events:

University level		State level	0
National level		International level	0

3.23 No. Of Awards won in NSS:

University level	4	State level	0
National level	0	International level	0

3.24 No. Of Awards won in NCC:

University level	0	State level	0
National level	0	International level	0

3.25 No. of Extension activities organized

University forum	10	College forum	06	
NCC	0	NSS	16	Any Others 15

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

- Swacch Bharath
- Helmet awareness Programme
- Clean Chennai
- Women's Day celebration
- Teachers day celebration
- Thirukkural Week
- Plastic Awareness Programme-PAC-2015
- Road Safety Management
- Inaugurated Dr.M.G.R. Univeristy Eco club

Plantation

Our University is known for the greenery and the pleasant environment. Students and staff relish the feel of being at a good environment. Various trees are planted and maintained to keep the campus green. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by the staff under the guidance of a member. No tree is cut unless it becomes dead. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this University. Our University has also planned to plant medicinal herbs. Plants to plant saplings in and around the campus with Tamilnadu Forest Department.

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	2,69,050sq.mt	-	Management	2,69,050sq.m T
Class rooms	164	28	Management	17,682Sqmt
Laboratories	117	06	Management	22,322 Sq.Mt
Seminar Halls	07	01	Management	8,669 Sq.Mt
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	Rs 38,75,000	-	Management	Rs 38,75,000
Value of the equipment purchased during the year (Rs. in Lakhs)	Rs 250000	Rs 50000	Management	Rs 30,00,000
Others(Canteen-Mess-Gym-Student Common Room-Library-Hostel Etc)	52,450Sq Mt		Management	52,450Sq Mt

4.2 Computerization of administration and library

Department Library & offices are computerized

Digital data base and E journal are available with updated books

Daily attendance of students

Test marks of students

Issue of library books

The Resource centre, Library and Office are well equipped with Computers with Internet Facility for Research Candidates, Students and Faculties respectively.

Total Number Computer in the University-2431

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	22736	5516181	1736	1085600	20600	5401782
Reference Books	10488	1574757	487	441332	3325	516089.7
e-Books	319436	105000	10	2000	319466	107000
Journals	164	1649790	72	1520980	176	1670770
e-Journals	267	1919729	1	0	270	1919729
Digital Database	0	75000	1	0	1695	75000
CD & Video	440	37000	6	4000	286	41000
Others (specify)	204	10000	4	2000	208	12000

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart Ments	Others
Existing	1311	62		2	2	24	3	28
Added	144	12	10	0	0	3	5	1
Total	1340	72	218	1	1	21	22	2

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

Google apps, NIC E-GOVERNANCE, BigData Workshop

Hands on Training- LabVIEW/MEMS/Pspice/Modern Tool usage

All the staff members have been trained to utilize the advancements in Google apps, Jack Prodigy

IDS Software is widely used in hotels and resorts including luxury, medium and small ones. It will assist front office and back office operations. The software assists users to access information in a quick and efficient manner. We have installed the software in our department of Hotel Management and Catering Technology to help students become job-ready.

Computer/ Internet access is available at campus

Training for students and staff was organized (SPSS & MATLAB)

4.6 Amount spent on maintenance in lakhs :

i)	ICT	04
ii)	Campus Infrastructure and facilities	3600010
iii)	Equipments	6097035.86
iv)	Others	5
	Total:	11597035.86

ANNA BLOCK



RAMANUJAM BLOCK



MOTHER TERESA BLOCK



VOC BLOCK



Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

IQAC creates awareness about Student Support Services through the meetings conducted at the department & University level where student representatives are also present. These representatives are asked to convey and create awareness among the students.

University IQAC and Department IQACs deliberate once in a quarter on all issues. There are representatives from student community, alumni, industry, parents etc. These deliberations give ideas on how to make education student centric.

IQAC arranges the feedback response from the students which ensures internalization of the quality culture.

5.2 Efforts made by the institution for tracking the progression

- ☐ Mentors for all the students are assigned.
- ☐ Performance of students reported to parents periodically.
- ☐ Feedback from the students and parent obtained
- ☐ Regular monitoring by respective coordinators
- ☐ Class committees formed for monitoring the progress of students
- ☐ University is committed to a system of monitoring student attendance and progress and conveys it to students during Mentorship & counseling sessions
- ☐ Periodical, continuous assessment tests with equal weightage to theory and practical exams
- ☐ Regular meetings/monitoring to improve the performance of weak students

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
7456	687	244	-

(b) No. of students outside the state

916

(c) No. of international students

9

Men

No	%
5332	63.6

Women

No	%
3055	36.4

Last						This					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
542	178	4	676	2	1402	1316	349	252	8	1017	2942

Demand ratio

Dropout % - 0

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

- ☐ GATE coaching classes arranged by collaborating with an outside agency
- ☐ GRE, TOFEL, IELTS, GMAT, IAS, Interviews etc. – coaching given by collaborating with an outside agency.

No. of students beneficiaries

487

5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	28	CAT	11
IAS/IPS etc	1	State PSC	1	UPSC	-	Other	61

5.6 Details of student counselling and career guidance

- Class-committees& its meetings for understanding student perspective, everything documented & follow up action taken.
- Mentorship: Each Mentor counsels 25 students & maintain a Record of the Mentees, their problems, challenges etc & counsels them accordingly.
- Teachers – Parent Interaction on a regular basis.
- Placement cells coordinate career guidance.
- Complete Proctor data maintenance.
- Regular Industry Interaction Programmes and Seminars for giving a fresh perspective on career guidance

No. of students benefitted

943

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
76	591	238	131

5.8 Details of gender sensitization programmes

- Gender counseling done for female students during Mentorship sessions
- Workshop conducted for female students to create awareness about female health challenges
- International Women's Day is celebrated with great fanfare where women achievers are honored.
- Women Grievance Cell
- Academic Staff College arranges various programs especially for women faculties.
- Skill based training and Entrepreneurship Development Programs for women through Academic Staff College.

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

	Number of students	Amount
Financial support from institution	105	Rs. 11285300
Financial support from government	63	Rs. 1389895
Financial support from other sources	NIL	NIL
Number of students who received International/ National recognitions	NIL	NIL

5.11 Student organized initiatives

Fairs	: State/ University level	03	National level	03	International level	Nil
Exhibition:	State/ University level	03	National level	01	International level	10

5.12 No. of social initiatives undertaken by the students 37

5.13 Major grievances of students (if any) redressed:

There are a number of redressal mechanisms and bodies which specifically look at complaints:

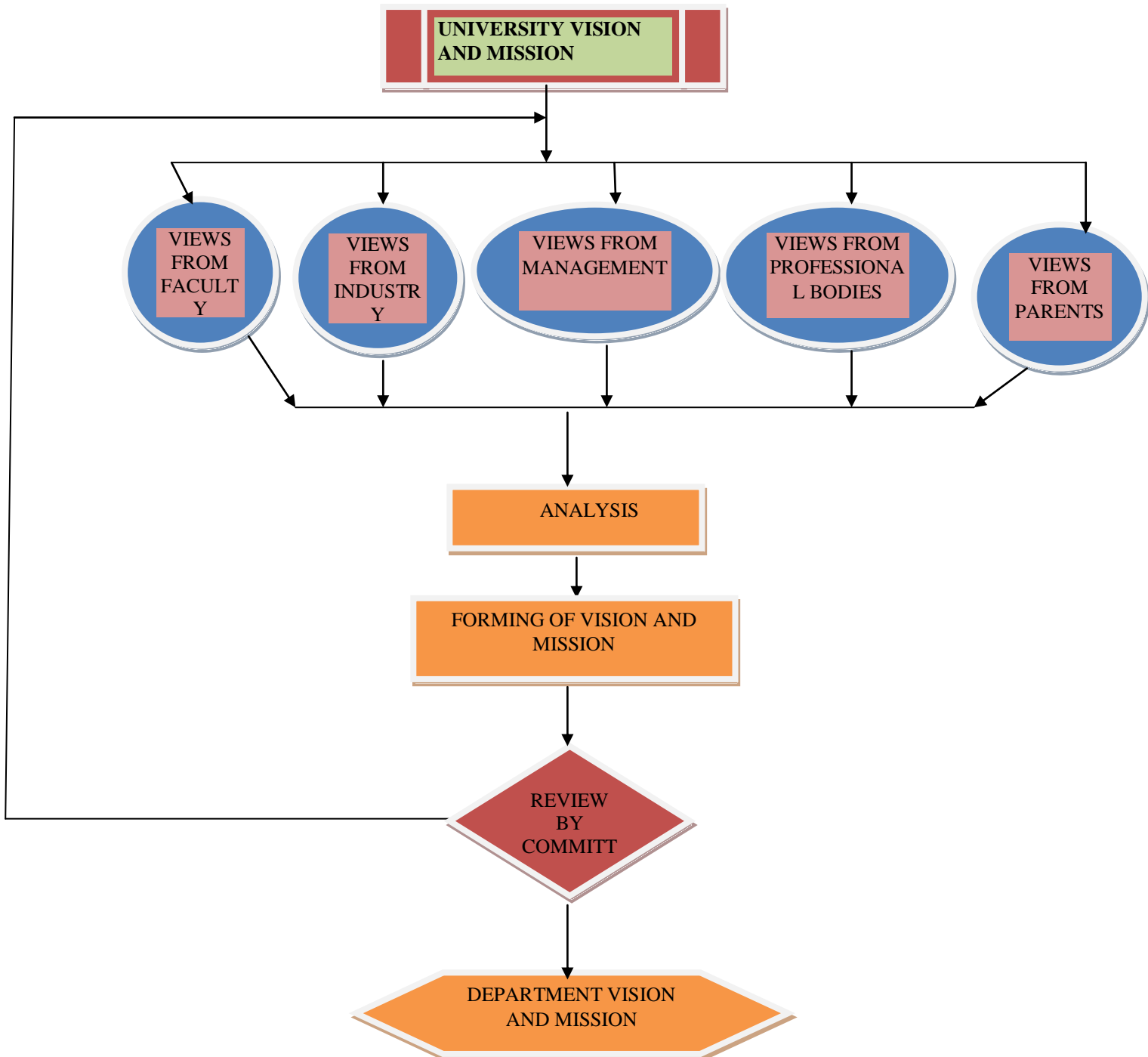
- ☐ Students' issues – Class in charges /Head of the Department
- ☐ Ragging –Chief Administrative Officer /Head of the Department
- ☐ Administrative issues –Vice Chancellor and Registrar
- ☐ Examination issues –Controller of Examination.
- ☐ Transport issues –Transport in charge
- ☐ Faculties – Heads, Deans, Dean E&T, Registrars, and Joint Registrar
- ☐ Committees related to functional areas

Valuing and asking for feedback has recognized benefits for staff, students and management. Keeping this in mind, the Department collects feedback from the students through various sources. Through Class Committees students offer feedback/suggestions about academics, infrastructure and any issues related to syllabus, internal assessments, basic facilities, teaching methods etc. Individual feedback on faculty is also collected from the students to improve the teaching –learning process. This feedback is communicated to faculty members by the Head of Department and counseling done accordingly. Through Mentor- Mentee process also faculty collect feedback from the students.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution



OUR VISION

To provide for Contemporary Knowledge Delivery of Global Standards, excellence in Knowledge creation in Emerging Areas and Mutually Rewarding University -Societal Interaction

OUR MISSION

Our Mission is to make the Institution as a Resource Centre for Higher Level Teaching . Learning Process, in the fields of Engineering, Dental Surgery, Medicine, Allied Health Sciences, Humanities & Sciences, Architecture, Management & Education, so as to impart relevant training and education to the youth to make them technically qualified, practically competent and skilled human resources, to suit the needs and demands of the modern industries, business or research and development organizations, besides promoting ethical values and encouraging creative ideas among the younger generation and thereby to develop their entrepreneurial skills which will ultimately benefit the Society and Nation. *"Our Students are to be Job Creators and not Job Seekers"*

OUR QUALITY POLICY

We strive to make our University as a Centre of Excellence for Quality Education and Research in the fields of Engineering and Technology, Dentistry, Medicine & Allied Health Sciences, Architecture, Science & Humanities. We aim to impart technological competence and inculcate dignity, discipline and humaneness to all our students.

To promote the mission of the University we provide quality education, training, research and consultancy, so as to enhance employability and entrepreneurial skills of its students. Effective interface with industry and other institutions within and outside the country is the cornerstone of the approach. We intend to provide and develop the capabilities of the students by raising their level of competence and intellect to face various challenges in the global environment. Through research oriented continuous quality education in convergence with knowledge, skills and values we try to empower students to meet global standards in entrepreneurship. We strive to develop citizens with knowledge, skill and character leading to entrepreneurship development, economic transformation and National development.

The Mission statement is duly propagated through display boards as well as information brochures for awareness of the various stakeholders and to serve as reminder to students and employees of the University. With the unique pedagogy of teaching, a blend of creativity and analytical problem-solving skills, the focus of all programs is to develop holistic human beings who internalize a synthesis of conventional and modern scientific, management, and entrepreneurial thinking and who can comfortably adapt to changing business requirements

6.2 Does the Institution has a Management Information System

Jack Prodigy System

It is a compact package, designed to provide a sophisticated, state of the art web technology, aimed at bringing about total quality in Education Management. JPS focuses on excellent coordination between University and students, making e-education scenario "a reality". It provides the detailed structure of the University and its departments.

It covers all aspects of the University, Students, Faculties, Departments, Assessment Marks, Attendance, Examination Time Table, Results, Placements and other Co – Curricular and Extra - Curricular activities. Our University provides various information about the staff and students, through the website: www.jackprodigy.com. JPS helps the Faculty members, Parents and Students of our University to keep track of the day-to-day activities such as Attendance Management, Mentee Management, Management Information System (MIS), Internal Assessment Management, Reports Generation etc.

The following are some of the highlights and best practices of our user friendly System.

- The process of Course Registration, Student Registration, and Mentee Registration is simplified in our University.
- The attendance marking system in our University is very user friendly.
- The online leave submission, OD submission, Medical leave submission and their corresponding approvals are decentralized.
- The change/delete attendance, late attendance entry, internal assessment correction/deletion goes through automated hierarchical approvals.
- The attendance and the internal marks are transparent and can be viewed by students, parents, teachers and Heads of Departments. This information is also disseminated to parents through SMS.
- Mentors are provided with an efficient reviewing system for their mentees.
- A reminder through SMS helps the mentees to enter the attendance on time.
- Color coded report facilitates the mentors to easily track the reviewing /status / approval processes.
- The internal assessment reports can be generated from the University system itself which will then be sent to parents through postal communication.

Goal

The Main objective of Jack Prodigy System is to provide an easy way to automate all functionalities of University, thus reducing human error and paper work. The technology, solutions and features are aimed at providing unlimited "scalability". JPS provides various types of Education Management related service, operations and high level of efficiency in recording and information dissemination.

The Context

- ☐ Effective communication between Faculty, Parents and Students
- ☐ Complete automation of operations
- ☐ Centrally stored information with zero redundancy
- ☐ Best possible resource optimization
- ☐ Enhanced interaction with teachers, parents and students
- ☐ Access to attendance, timetable, marks, grades and examination schedule
- ☐ Freedom to browse through library books catalogue and to find the circulation status of the book(s).
- ☐ Prior information about University events and holidays. The effectiveness of JPS is measured based on the overall benefits to the Management, Staff, Faculty, Parents and Students

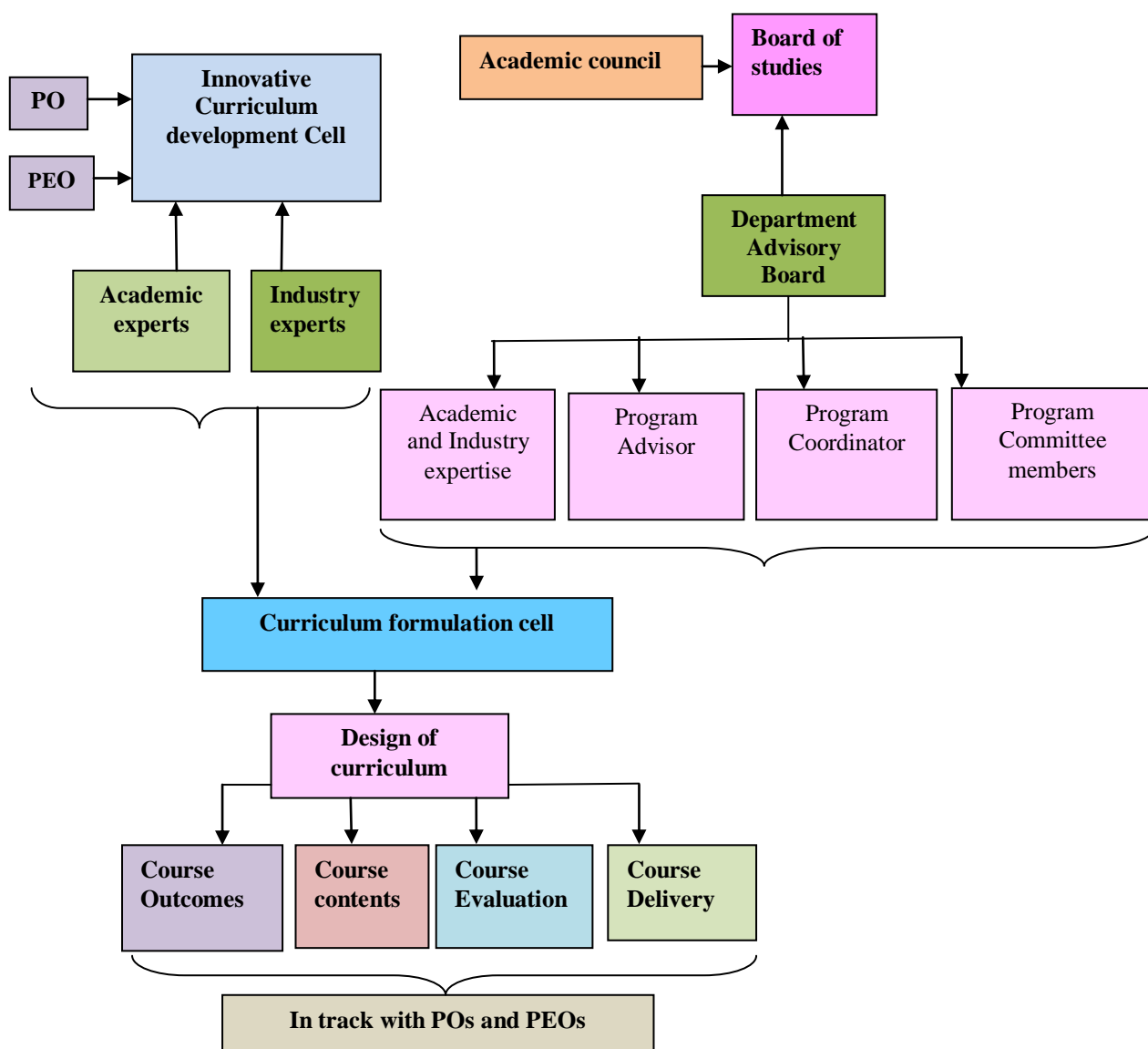
The Practice

JPS in our University is loaded with features like admission module, curriculum staff details salary management, fees management, online notices, online attendance, online examinations, online time-table, report card generation, Library Management, etc. All these features together create a blended learning environment, easy data access and effective communication for students and teachers alike. The following information is available in the University website, www.jackprodigy.com.

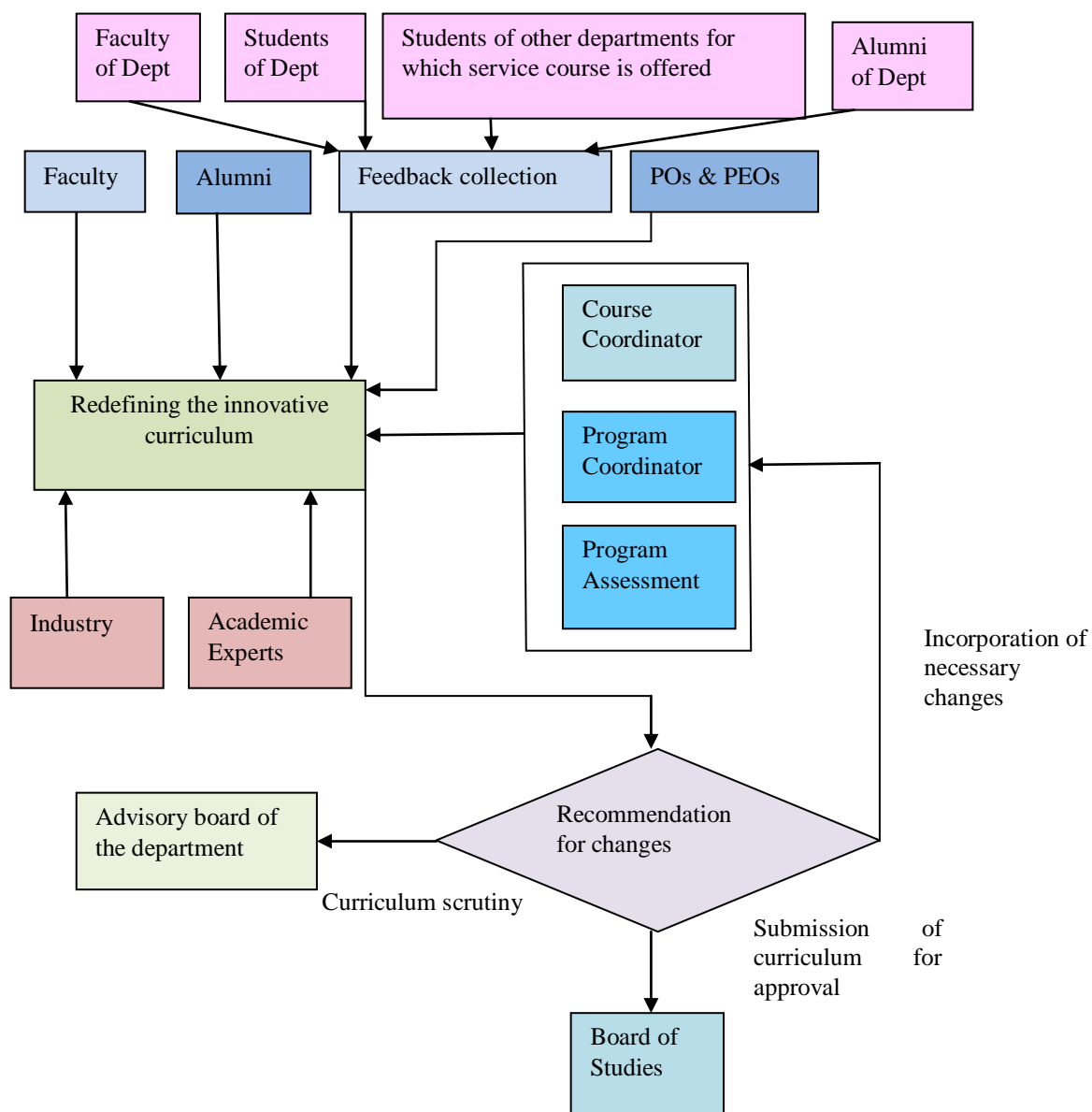
Complete information regarding admissions; details of courses offered, Curriculum and Syllabi of every course; Detailed period wise attendance of all students; Detailed internal assessment marks of all students; Individual Timetable and Results of End Semester Examinations; Details of placements and organizations recruiting our students; Information on Campus Life; Information on International Association of Exchange of Students for Technical Education and Collaborations; In our Mail for all students and staff; Information regarding Career opportunities available in our University ; Photo Gallery and Digital Campus Tour.

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

6.3.1 Curriculum Development



Flow chart for framing the Curriculum & Syllabus



Flowchart for improvement of courses and curriculum

Academics - Choice Based Credit System (CBCS-Electives)

The University has a Curriculum Design and Development Cell at specific faculty levels. Since 2003, **Choice Based Credit System for Electives** was offered right from the inception of the University in 2003. The Board of Studies (BoS) meeting of every Faculty/Department is convened with minimum two external experts as members, one each from industry and premier academic institutes. The curriculum is designed to achieve course outcomes, content evaluation and delivery in line with PO.s and PEO.s.

The present system of curriculum of fixed credit system of learning offers flexibility to students in choosing the elective courses. As part of providing quality education, Dr.M.G.R. Educational and Research Institute are taking the next step in this direction by introducing the Choice Based Credit System (CBCS) into its academic curriculum from June 2017. Different areas of specialization are offered and their curriculums were designed, and also provide opportunity to gain knowledge and improving employability skills.

Curriculum Update

- ☐ Board of Studies meetings
- ☐ Faculty meetings
- ☐ Alumni feedback
- ☐ Industry expert feedback during their visits to department and during visits of faculty to companies
- ☐ Academic expert feedback
- ☐ Student feedback
- ☐ Learning, Linkage, Research, and Responsibility
- ☐ Soft skills training throughout the course with clearly defined takeaways and objectively identifiable criteria
- ☐ Continuous industry interaction through IVs, Guest Lectures, Seminars, and Placement interactions. Using all these industry interactions for syllabus up-gradation, curriculum feedback, and placements. Documenting these interactions on as and when required
- ☐ MoUs with reputed professional associations and industry for growth of the University
- ☐ Organizational structure of the Department ensures effective delegation and empowerment of the team members, Coordinators for each role, Decisions taken based on continuous team meetings and consensus building. Organizational chart displayed in the department. ☐ Process of continuous feedback from the students through interactions with the students by the HOD on a regular basis. Interaction through class committee meetings also
- ☐ Organizing several innovative events for the department.
- ☐ Value added Certificate courses by MSME
- ☐ Student Clubs based on specialization

- Focus on Entrepreneurship - ED programs, Business Plan competition, business run and funded by students.
- Innovative Outreach programs
- The students participated in many outreach programs in various capacities such as organizers, volunteers and Participant.

6.3.2 Teaching and Learning

The rapid changes and increased complexity of today's world present new challenges and put new demands on our education system. There has been generally a growing awareness of the necessity to change and improve the preparation of students for productive functioning in the continually changing and highly demanding environment. The University strategizes to achieve excellence in teaching and learning by adopting the best practices such as convergent and divergent techniques being followed by the University to suit local needs. It continuously updates its curricula and reinvents pedagogic methods to suit the need of the students. We have Student feedback, Alumni interaction, Industry interaction and feedback on syllabi during guest lectures, IVs, project internships, Seminars, Conferences etc., Class Committee Meetings, Board of Studies and Academic Council to deliberate on matters related to academics. All this feedback and meetings are well documented. New pedagogical styles as well as use of new technologies (ICT-enabled) are constantly evaluated for adoption. Courses and classes are always being evaluated based on internal audit mechanisms, including student feedback on the quality of the associated process. Perspective plans always include solutions for the gaps identified through such audits

6.3.3 Examination and Evaluation:-

The Controller of Examination's Office is functioning with a full time Controller of Examinations, 3 Joint Controllers of Examinations and 20 supporting staff. The duties and Responsibilities are well defined and the work flow is smooth and streamlined.

This Office has the facilities for central valuation, Store room, Computers, Database Server and Printing/Photocopying facilities within it. Relative grading is introduced to remove the variations in valuations. Exam time table, seating arrangement are computerized.

Learning evaluation is done with two continuous assessment tests, model exam following by term end semester exams. The questions are framed as per Blooms Taxonomy levels and are mapped with the course outcomes. The evaluation process is transparent where answer scripts of CAT and model exam and assignment are returned back to the students paving way for improvement.

The University has put several mechanisms in place to ensure that the examination system is foolproof. A Manual has been prepared for this purpose which defines the roles and responsibilities of all the stakeholders, protocols and procedures to be followed, and steps to be taken at all levels in the conduct of the examinations.

All the Forms / Proforma being used in the examination process has been drawn out meticulously in standardized formats.

Measures to curb malpractices have also been listed together with the penalty and punishment. Answer sheets with Bar code and OMR based cover page has helped in transferring data to computers besides eliminating manual data entry operation. Random Dummy Numbers are generated for the answer scripts before being sent for valuation, to ensure absolute confidentiality. The University Examinations, both for UG and PG courses, have equal Internal and External components. Central Valuation system is carried out for completing the valuation work quickly and publishing the results early. For UG courses the valuation of answer scripts is done only by the External Experienced Examiners dealing with the concerned subjects.

For PG courses the University follows double valuation that too by External Examiners only.

Staff members prepare the question papers using the suitable verbs available in Blooms taxonomy level chart for Internal Continuous Assessment Tests.

Usually results are published within two weeks after the end of the final examinations and made available on the website, and also on the University notice boards.

The University ensures transparency in both internal and final evaluation. Internal assessment is done based on the Continuous Assessment Test and model exams, in which the answer scripts are returned to the students for verification. Evaluation is done by external and internal examiners who are chosen at random. The students are allowed to apply for re-totaling, revaluation and access to Xerox copies of their answer scripts.

6.3.4 Research and Development

The University has constituted a Research Committee and such committees in all departments. The institution facilitates its faculty to undertake research by providing research funds. All the departments have laboratory equipment, research journals and research incentives made available to the faculty. The University promotes a research culture by providing teaching work load remission and opportunities for attending conferences. The University has drafted a policy, procedure, and practice in key areas for research performance monitoring. Ten workshops and five conferences are conducted every year. Workshops on research methodology sensitization programs have been conducted by the institution to promote a research culture on campus. The University has introduced research fellowships and Senior Scientist positions for doing Research. The Faculty is granted leave to pursue Research in other advanced centers also. The University has also received support from industry for some drug discovery research. The faculty members are encouraged to publish Research papers in SCOPUS rated Journals by giving financial assistance. Faculty members are granted concession in Research Fees when they register for Ph.D. Degree, given incentives to participate and present papers in seminars and conferences. Interdisciplinary Research involving, Biotechnology, Pharmaceutical Chemistry, Biochemistry and Veterinary Science. Mathematics and Computer Science have been carried out. The University checks plagiarism in Thesis and Three Thesis have been rejected for plagiarism. The faculty has established a research committee, ethics committee to cater to the needs of ethics in research. The University carries out multi disciplinary and interdisciplinary projects among various departments and universities.

Resource Mobilization for Research

A detail of the research projects completed and grants received in last four years funded projects completed are 5 and amount received Rs.71, 93,373.00. Fund received by conducting workshops and conferences are Rs.7, 21,500.00.

Research facilities

Departments have taken initiative to establish Centre of Excellence in the upcoming domains. Very recently a budget for Rs.3 crores has been granted to augment the infrastructure. Faculties are encouraged to participate in workshops, seminars and conferences to update their knowledge. Experts from industries are invited to conduct Faculty Improvement Programs through Academic Staff College. Various MOU.s have been signed with leading industries. All the stake holders are connected through the Cloud-based University Information Management System. This facility is for research activities. A separate digital library is available where International journals such as IEEE, IET, Elsevier, ASME, ASCE, and Science Direct are available. E-books from McGraw Hill have been subscribed. NPTEL on line course material is also available. Residential facilities are available with internet facility for Research Scholars. Specialized Research Centre, C-DAC, GARUDA, Grid, Super Computing Connectivity is available in our University – *High Performance Computing Facility*: HPC is a key component in many applications: designing vehicles and airplanes; designing high-rise buildings and bridges; discovery of drugs; discovery and extraction of new energy sources like oil and natural gas; weather forecasting; and many more.

The University has established an *Advanced Research Institute (ARI)* with a focus on Defence Research. This Centre receives funding from DRDO. At present the Centre has 4 Scientists and 6 Research Fellows. The University -*Creating enabling mechanism for research*-has hired a Patent Agent for help in the patent application process. *Provision of R&D investments to create a research infrastructure*, fellowships and start-up grants for faculty are being provided. The University has initiated fellowships for full-time Ph.D. students from 2014.

6.3.5 Library, ICT and physical infrastructure / instrumentation

The highlights of the University are highly qualified and experienced faculty in all the disciplines, well equipped Laboratories with Centres of Excellence for doing research, 201 state of the art Laboratories, collaboration with Confederation of Indian Industries, More than 100 and odd Experienced Professors with Doctorate qualifications, 100 Mbps Internet connection with Wi-Fi facilities, Fiber Optics Intra-net facilities, individual Central Libraries at all campuses, Digital Library, 700 Bedded Multi-specialty own Hospital, Laser & Sedation Dentistry and Cosmetic Smile Designing, University Research Centre ARI-Advanced Research Institute, Founder . Chancellor's and President's Scholarships, Entrepreneurship Development Cell, Academic Affiliate of IET. U.K., Active Students. Chapters of Professional societies like CSI, IEEE, IETE, ISA, IET, ISOI, SAE and SPE , National Entrepreneurship Network Chapter, Active Cambridge recognized Literary Seminary(Esol), Active Placement and Training Cell, Separate hostels for Gents and Ladies with all modern facilities with attached Toilets, National Experts and leading Psychiatrists giving regular Group Counseling , Student Exchange Programs with foreign Universities, Medical Card for Students and Faculty Members and an A.C.S. Convention Center; one of the largest in Tamil Nadu which can accommodate more than 9000, Collaboration with Microsoft IT Academy, Microsoft Advantage Platinum Partner, Oracle Workforce Development, and MOU with IBM Software Center of Excellence, National Instruments Lab View, etc., providing the students to acquire additional Certificates in specialized subjects during their course of study, Banking facility with ATM, Indoor and Outdoor Games Facilities, Gymnasium and Fitness center facilities, Hi-tech A/c and Non A/c Buses and many other facilities are there in University to fulfill the needs of the stakeholders

A built-up area of 2, 69,050 sq.mts. The ACS Convention Centre in our University campus is one of the largest Convention Centre available in Chennai city/Tamil Nadu. The Convention Centre at ACS Medical College and Hospital can accommodate more than 9000. Important functions like Convocation, Annual Days, Inter Collegiate cultural programs and other major events are conducted in this spacious indoor auditorium. Besides, well designed A/C Seminar and Conference Halls are also available in each of the constituent colleges of the University.

The University has Sports facilities with a playground area of 18,471 sq. mts. and a gymnasium with 980 sq.mts. It has 5 Gents hostel blocks with an area of 30932sq.mts. with 1404 inmates and with all facilities. It has also 5 Ladies hostel blocks spreading over 18807sq.mts. with 587 inmates with all facilities. It has also 4 Staff Quarters occupied by 180 inmates with all facilities. The University has 4 Nos. of cafeteria with an area of 1897 sq.mts. It also has health centre facilities and banking, transports facilities, etc. for students and staff. It also has an animal house, a power house, and waste management.

Departments have taken initiative to establish Centre of Excellence in the upcoming domains. Recently a budget for Rs.3 crores has been granted to augment the infrastructure. Faculties are encouraged to participate in workshops, seminars and conferences to update their knowledge. Experts from industries are invited to conduct Faculty Improvement Programs through Academic Staff College. Various MOU.s have been signed with leading industries. All the stake holders are connected through the Cloud-based University Information Management System. This facility is for research activities. A separate digital library is available where International journals such as IEEE, IET, Elsevier, ASME, ASCE, and Science Direct are available. E-books from McGraw Hill have been subscribed. NPTEL on line course material is also available. Residential facilities are available with internet facility for Research Scholars. Specialized Research Centre, C-DAC, GARUDA, Grid, Super Computing Connectivity is available in our University – *High Performance Computing Facility*: HPC is a key component in many applications: designing vehicles and airplanes; designing high-rise buildings and bridges; discovery of drugs; discovery and extraction of new energy sources like oil and natural gas; weather forecasting; and many more.

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6.3.6 Human Resource Management

- ☐ Rewards/ Merit follows a process of fair selection at teaching and non-teaching levels
- ☐ Regular induction programs for new teaching and non-teaching staff
- ☐ Mentoring by senior faculty
- ☐ Conduct regular orientation programs,
- ☐ Refresher courses, staff development programs, and short term capacity building Workshops

6.3.7 Faculty and Staff recruitment

Faculty and staff recruitment are centralized

Only competent members selected with qualified degree

Experienced members are given priority while recruiting

The candidates are selected for appointment based on their merit and passion for this teaching profession.

Based on the rules and regulations and directions given by the Government and UGC, the recruitment of the faculty and non-teaching staff is followed strictly.

6.3.8 Industry Interaction / Collaboration

Industry interaction

- Establishment of Industry-Institute Partnership: Centers of Excellence.
- Setting up of Industry Institute Planning Cell
- Organizing Workshops, Conferences and Symposia with joint participation of the faculty and the industries.
- Encouraging engineers and management experts from industry to visit our Institution to deliver lectures.
- Participation of experts from industry in curriculum development.
- Arranging visits of staff members to various industry
- Professional consultancy by the faculty to industries.
- Industrial testing by faculty & technicians at site or in laboratory.
- Joint research programs and field studies by faculty and people from industries.

- Visits of faculty to industry for study and discussions or delivering lectures on subjects of mutual interest.
- Visits of industry executives and practicing engineers to the Institute for seeing research work in laboratories, discussions and delivering lectures on industrial practices, trends and experiences. Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Human resource development programs by the faculty for practising engineers and management
- Collaborative degree programs. B.Tech. MBA/MCA and M.Tech. Projects / dissertation work in industries under joint guidance of the faculty and experts from industry.
- Short-term assignment to faculty members in industries.
- Visiting faculty/Professors from industries.
- Scholarships/fellowships instituted by industries at the Institute for students.
- Practical training of students in industries.

Internationalization

The University has an office of International relations which facilitates MoUs and Agreements with universities abroad. There are a number of active MoUs in which the University is currently engaged. There is also a *Center for International Collaboration* office which actively facilitates admission of foreign students to Dr MGR Educational and Research Institute. Students from many countries study with us and create an interesting diversity.

6.3.9 Admission of Students

Admission Process

Admission to all UG / PG / MS / Ph.D is processed in the University following the norms of UGC and concerned statutory bodies.

All India Common Entrance Examination is conducted for all the courses every year (i.e.) MGR Engineering Entrance Examination (MGREEE) throughout India in major cities like Chennai, Mumbai, New Delhi, Tirupathi, Guwahati, Patna, Lucknow, Bangalore, Kolkatta and Bhopal depending upon the registration of the candidates. Even at the time of advertisement, it is clearly indicated that the selection of students is done on merit basis only.

Date of Issue and Receipt of Application forms and Centers for Entrance Examination are being advertised in leading newspapers throughout India. This practice has been followed from the inception of the University till date.

For admission to UG courses, candidates are selected through merit, entrance test and interview. For admission to PG performance in written test and interview are considered for selection.

The University Management reviews the admission process annually for modifying eligibility criteria as per the State and Central government norms and analyses the students profile by organizing meetings with Heads of the Departments. Further, scrutiny of the profile of students is done centrally by the Admission section in the central administrative office. A separate committee is constituted to get ideas from the Board Members, Faculty members, Parents, Alumni, Stake Holders and also with the current students on a regular basis of once in a year or whenever necessary and discusses the current selection procedures. It also gives suggestions/recommendations to be adopted to improve the Admission

6.4 Welfare schemes for

Teaching	Health Insurance
Non teaching	PF, Health Insurance
Students	Health Insurance

6.5 Total corpus fund generated

Rs.10000000

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	Yes	ISO	Yes	Dept Wise Audit
Administrative	Yes	ISO	Yes	Management Audit

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?

The Controller of Examination Office is functioning with a full time Controller of Examinations, 3 Joint Controllers of Examinations and 20 supporting staff. The duties and responsibilities are well defined and the work flow is smooth and streamlined. This Office has the facilities for central valuation, Store room, Computers, Database Server and Printing/Photocopying facilities within it. Relative grading is introduced to remove the variations in valuations. Exam time table, seating arrangement are computerized.

Learning evaluation is done with two continuous assessment tests, model exam following by term end semester exams. The questions are framed as per Blooms Taxonomy levels and are mapped with the course outcomes. The evaluation process is transparent where answer scripts of CAT and model exam and assignment are returned back to the students paving way for improvement.

The University has put several mechanisms in place to ensure that the examination system is foolproof. A Manual has been prepared for this purpose which defines the roles and responsibilities of all the stakeholders, protocols and procedures to be followed, and steps to be taken at all levels in the conduct of the examinations.

All the Forms / Proforma being used in the examination process has been drawn out meticulously in standardized formats.

Measures to curb malpractices have also been listed together with the penalty and punishment. Answer sheets with Bar code and OMR based cover page has helped in transferring data to computers besides eliminating manual data entry operation. Random Dummy Numbers are generated for the answer scripts before being sent for valuation, to ensure absolute confidentiality.

The University Examinations, both for UG and PG courses, have equal Internal and External components. Central Valuation system is carried out for completing the valuation work quickly and publishing the results early. For UG courses the valuation of answer scripts is done only by the External Experienced Examiners dealing with the concerned subjects. For PG courses the University follows double valuation that too by External Examiners only. Staff members prepare the question papers using the suitable verbs available in Blooms taxonomy level chart for Internal Continuous Assessment Tests.

Usually results are published within two weeks after the end of the final examinations and made available on the website, and also on the University notice boards. The University ensures transparency in both internal and final evaluation. Internal assessment is done based on the Continuous Assessment Test and model exams, in which the answer scripts are returned to the students for verification. Evaluation is done by external and internal examiners who are chosen at random. The students are allowed to apply for re-totaling, revaluation and access to Xerox copies of their answer scripts.

Receipt of Question Papers:

With a view to ensure confidentiality of the questions, the question paper setting is done by different examiners working in the Colleges and Universities outside Chennai area.

Confidential Room:

The processing of question papers is carried out in the confidential room under the direct vigil and supervision of the Controller of Examinations.

Dispatch of Question Papers:

The question papers required for the examinations are supplied to the Chief Superintendent separately for each session of the examination, 30 minutes before the commencement of the examinations.

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

- University encourages autonomous functioning of the department. The Departments have autonomy, within the rules and regulations of the University, in the following roles:
- Teaching Learning Process
- Organizing Guest Lectures
- Deciding on the conduct of short term/augmentation courses for students, like, CCNA,
- DB2, DOTNET, Microsoft Programs, Lab view programs and any other Industry centric training programs etc.
- Deciding on the purchase and procurement of new and advanced equipment
- Decide on Seminars, Workshops and Conferences both National & International
- Modifying the syllabi being a member of the Board of Studies
- Members of various committees like the Board of Management, Academic Council, Boards of Studies, etc
- Member of Student Disciplinary Committees, Anti Ragging, Sexual Harassment Committees
- Departmental stock verification
- Assisting the Controller in the conduct of Continuous Assessment Tests and end Semester examinations.

However, there are bodies where decisions of departments are analyzed as and when required for instance the Internal Quality Assessment Cell, Board of Studies, Academic Council, Class Committees, Mentor- Mentee Forum, Committees etc.

6.11 Activities and support from the Alumni Association

Regular Alumni meet is held in the campus

Interaction of Alumni and the present students are conducted regularly

We have a University Strong Alumni Association and it conducts a Global Alumni Meet every year on January 26th, since 2012. Very recently we had signed an MOU with ALMA CONNECT to maintain the MGR Alumni. The committee members of Alumni Association consist of members from all the departments and the few members of the current final year students. Alumni are

involved in providing feedback on the curriculum and act as a bridge between industry expectations and academic requirements. They also raise funds to help the needy ones.

Last three years the following activities are in action

Minimum of two Alumni Lectures per Department / Semester Maximize the Alumni interaction with the current final year students Yearly Best Student Award hosted by the Alumni Association Involved as committee members in CDC, PDC and Professional Societies

6.12 Activities and support from the Parent – Teacher Association

In interacting with its stakeholders

The University leadership interacts with all the stakeholders, viz. the students, parents, alumni, faculty members, support staff, industry, and the community. Interaction with the students initiated from the time of admission continues up to placement and even after they leave the University and become cherished alumni. The Commencement Day and the department orientation programme initiate the interaction. The Mentor-Mentee system and the co-curricular and extracurricular activities create a sense of belonging in the student community. In addition, all faculty and Heads of Departments are easily approachable by the students. The management interacts with the parents during admission and whenever the parents seek a meeting. The University fosters a strong interaction with the Industry by including industrialists on the Boards of Studies, organizing Academy-Industry Meets, Campus Placements, Industrial Visits and undertaking Consultancy Projects. Student feedback is obtained once in a semester which helps to improve the teaching - learning process in departments.

The University has Class Committees in all departments. These Class Committees have students and staff as members and they meet thrice in a Semester for obtaining feedback and deliberating on all aspects related to academic and non-academic affairs, infrastructure, grievances, and improvement. All issues are discussed at length and the minutes of the meetings scrupulously filed. Introduction of value added courses, up-gradation and modification of curriculum, changes in teaching pedagogy, infrastructure related changes, all have been initiated after interacting with students, alumni, industry and other academicians.

Industry feedback helps to improve our shortcomings. Many recruiters visit our campus during campus placement. Based on the feedbacks received, special training is given to all the students to improve their hardcore skills, soft skills and leadership skills. There is a significant improvement in number of companies visiting the campus. Alumni feedback received during Alumni Meet and on other occasions, helps us to improve working knowledge about companies and identifying areas for skill development. Alumni mentor our students to give an update about industry and help the students getting internships and placement.

6.13 Development programmes for support staff.

They are encouraged to undergo summer training and to attend specialized workshops for capacity building in their respective areas of specialization. A number of MoUs have been signed with Government and other industries in order to facilitate faculty exchanges. Faculty members are given on-duty for various professional development programs and encouraged to go for consulting assignments and higher studies.

Non-teaching staff development: Training has been conducted for non-teaching staff to provide opportunities for updating their professional skills in departments such as IT, Library, and Administration (including training on software, document writing, etc.). The Academic Staff College conducts periodical training programs for staff.

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

Tobacco free campus

Generation of Renewable Energy

The University is situated at the heart of the city. But once any person comes inside our campus they forget that they are still in the city. This is because our University has taken all steps to make the environment look green and natural. Our University is well gardened and is maintained with adequate plants and trees. Students in the campus will never feel that they are in some cement structures, rather they feel the greeneries and it contributes towards a good learning environment. The University campus is totally eco-friendly. The University has adopted various measures to maintain the greeneries of the campus and it has been observed that it creates a positive impact on the beholder and helps in developing an environment-friendly attitude amongst everyone. The University conducts a Green Audit of its campus and facilities. The audit is done in three phases.

Pre-Audit: The scope of the audit is defined. Various initiatives during the academic year are confirmed.

Audit: Conducting Green audit in yearly basis.

Post-Audit: The University (Internal Green Audit Team) reviews environment related initiatives that are implemented. It formulates the action plan for the next academic year in order to have better environmental sensitization.

Buildings are designed and structured in such a way that there is adequate natural lighting and good cross ventilation from the environment. Buildings are architecturally designed taking into account maximum utilization of natural resources. Adequate care is taken while designing the super structure.

The management, staff and students are targeting at making the campus as "polythene zero zone" by 2015. Proper steps are in process to attain it at the earliest. Since our University is having proper natural lighting and good air from the environment, good amount of energy is conserved. Besides, proper awareness is given to students and staff on how to conserve energy. This is done through workshops, placards and notices. This has helped to a large extent in conservation of electricity. University has initiated a save energy campaign and also initiated a *Energy Audit. 10MW*. The following are the major environmental initiatives undertaken by the University.

Energy Conservation

Energy Audits are conducted by the Electrical and Electronics Department to optimize power consumption in Dr. M.G.R. Educational and Research Institute campus and also in the Hostels. The suggestions given through audits are implemented. Students have carried out energy audits and have also studied energy consumption and optimization of water resources.

.The MGR Vision 10MW was inaugurated in our University with an objective to save

10MW of energy in the period of 10 years. Team of .MGR Vision 10MW has involved and audited 25 residential houses, 2 industrial and 1 commercial building till date.

The following are implemented by the construction and maintenance department for the conservation of energy.

- Copper Chokes in tube lights are converted to electronic chokes which consume less energy.
- Energy saving fans used in class rooms and hostels. Many light fixtures have begun using
- Compact Fluorescent Light (CFL) bulbs with special care
- Capacitor banks are used in power houses to improve the power factor.
- Timers are introduced in air conditioners which saves energy.
- Sensors for switching on/off motor pumps are installed.
- Staff monitors unnecessary AC, Fan other electrical appliances used in the unoccupied class rooms and staff rooms.
- The maintenance department also tracks the costs of equipment repairs in comparison to the original cost of the equipment to determine whether or not it would be more cost effective to replace that piece of equipment with a more environmentally-friendly model.

Use of Renewable Energy

The University has installed solar panels in the ACS Medical College and in some campuses. University also has installed wind mills in two places of our main campus, and through that we are in a position to tap the wind energy to some extent. Our students designed and fabricated a solar power operated digital display board. Various activities highlighting the importance of Renewable Energy had been conducted like Conferences, Seminars, Research works leading to energy conservation, bio-diesel as fuel for engines to reduce emission.

Water Harvesting

Rain water harvesting system is completely installed in the University and Hostel campus. Soak pits are provided in all buildings of the University /Hostels. University practices waste water management system effectively, to keep the campus clean, hygienic and free from any sort of pollution. Every building in the campus is surrounded by trees and lawns. Different plants and trees decorate the campus and the campus looks beautiful. To create awareness on Rain Water Harvesting several Bike Rallies were organized by the University along with Metropolitan Water Supply and Sewerage Board, Chennai.

Efforts for Carbon Neutrality

The University makes the student aware of the carbon credits, carbon neutrality and its advantages etc., as a curriculum in the subjects of the University core course. The major contributors to CO₂ are the vehicles. Even though our campus is in city region, you can't find the smoke or fume inside our campus. Because, having understood the hazardous nature of CO₂, we promote the idea of students coming to University by pooled motor bikes, by pooled cars or by college bus. This way we avoid a maximum inflow of motorized two wheelers which would pollute

our environment. As well as the University is declared as *Tobacco Free Zone*. We also conduct many workshops and awareness programs for the stakeholders of our University to promote the idea of Carbon Neutrality inside and outside campus. Projects are also given to students based on topics like carbon credit policy, earning from carbon credit, industrial waste, e-waste etc.

Plantation

Our University's ACS Medical College and Hospital is also known for the greenery and the pleasant environment. Students and staff relish the feel of being at a good environment. This is due to the management's planning and proper execution of the planting and maintaining the greeneries around. Various trees are planted and maintained to keep the campus green. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by the staff under the guidance of a member. No tree is cut unless it becomes dead. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this University. Our University has also planned to plant medicinal herbs.

Hazardous Waste Management

Soak pits are built separately for discharging waste water from Chemistry and Biotech laboratories. Water based chemical reactions are carried out minimizing hazardous solvent chemical usage. Polythene bags and other non-decomposable are separated and sold to vendors before disposing the organic wastes. Waste and effluent water from college as well as hostel is treated and treated water is used for gardening. To create awareness among the public, our Prime Minister's pet project Swachh Bharat had been initiated and our University students were involved in cleaning The Central Railway Station, Chennai to create awareness amongst the public.

E-Waste Management

E-waste can be best described as consumer /business electronic equipment that are near or at the end of its useful life. The University is on a five-year cycle of changing computers with many of the newer ones entering the general computer laboratories and power users about every two or three years. The older computers are removed and reused in and other administrative offices. Sometime computers, printers and other equipments are donated to charitable organizations, if they are in good working condition. The computers that are out of commission are cannibalized for parts and then finally the ones left over are put up for sale by the Purchase Office. A future audit will explore the purchases for academics to see how much thought was given into buying recycled or sustainable equipment and supplies from eco-friendly companies.

The *Sustainability Committee* should be able to provide information as to which companies are the most sustainable and relay this information to the people interested in making purchases. Our aim is to improve the environment through the management of electronic assets throughout the life cycle, including purchasing, operations and maintenance, and end-of-life management. The University has organized an International Conference on "E-waste Management" which created a forum for paper presentation, ideation, and panel discussion on this theme.

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.

- Creation of Departmental IQACs that conduct quarterly meetings with all the stakeholders. Meetings are conducted professionally – Agenda, Attendance, Minute, Photographs - all documented.
- Greater stakeholder involvement through Departmental IQAC meetings. This type of brainstorming with all stakeholders has helped in getting feedback & improving the quality of education
- Academic Staff College strengthened with frequent programmes for faculty members on teaching pedagogy, research etc
- Improved Student support- coaching for GATE, GRE, GMAT, IELTS, TOEFL, IAS, Soft skills, placement training provided by setting up an exclusive Center for Skill Development
- Industry Institute interaction improved by setting up a separate Industry Institute Planning Cell
- Skill oriented courses started with Government certification e.g. HVAC Course for Mechanical Engineer, Retail Banking course with Barclays Bank, NSDC course is in progress
- Events conducted professionally with Event Managers from each Department preparing their schedule.
- Technical talks by industry experts and Seminars, Conferences organized
- Alumni connection improved by inviting them for technical talks and connecting through Alma Connect
- Innovations done in the teaching-learning process through continuous monitoring of the teaching process, focus on Bloom's taxonomy, emphasis on substituting traditional chalk & talk with more interactive teaching methods
- Innovative industry linked courses introduced e.g. Railway Engineering & Audit Courses on Entrepreneurship and Research
- Conduct of value added courses/ beyond curriculum courses to make students industry ready
- Improvement in Mentorship and student counseling by continuous monitoring done by Department Heads
- Creation of a new office of Strategy, Planning, & Development with a separate Dean for the purpose strategic development, planning, and quality improvement.
- Financial rewards for University rank holders and class toppers in the institute
- Frequent annual project contests and competitions at University level to encourage the students

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

Plan of Action	Action Taken
1. To introduce industry linked Course	1. Railway Engineering Course approved. Test Engineering – in process
2. To providing holistic education – soft skills, personality development	2. Skill Development Centre set up. Collaborated with an outside agency to provide soft skills training
3. To improve skills of the students by skill based training	3. Course for Mechanical Engineering students on Heating, Ventilation, & AC. Course on Retail with Barclays Bank. MSME & NSDC courses- in process
4. Improve Industry-Institute Linkage	4. Industry Institute Planning Cell set up. More Technical talks, Guest Lectures, IVs, more involvement of industry through Departmental IQACs & Board of Studies Meetings.
5. To provide opportunity to students to get equipped for competitive exams like GRE, GMAT, IELTS, TOEFL, GATE, IAS etc.	5. Coaching Centers set up for guidance and classes
6. More Alumni connection	6. Alma Connect to register Alumni, Knowledge sharing by the Alumni experts on a weekly basis in the form of technical talks
7. Improve the teaching learning process & syllabus up gradation	7. Syllabus revision done in some subjects, learner – centric teaching environment created
8. Taking the University to the next level by enhancing quality and strategic planning	8. Office of Dean – Strategy, Planning and Development set up.

What is the official policy of the University to check malpractices and plagiarism in research?

Cases in doctoral theses have been found and they have been denied the Ph.D. degree. Action has been taken against the Guides.

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

Best Practice 1: Title: Continuous and consistent curriculum and syllabus improvement.

The core purpose of education is to strengthen the knowledge, skills, dispositions, and attitude of student community.

Goal

The principles on the basis of which this best practice was decided was to make the curriculum more industry oriented , make students more employable, and raise the curiosity of a student in a particular topic, to encourage the students to question the obvious and to increase the interaction in the class.

The Context

The teaching/learning process is given immense importance in the institute. The institute is as good as its students. The students are as good as the teachers. The institute trains their facilitators continuously to help them enhance their teaching abilities. The learning imparted to the teachers is implemented in enhancing the learning experience of the learner.

The Practice

- Board of Studies strengthened in all departments with representation from all the stakeholders.
- Frequent meetings of BoS.
- More industry interactions through various events.
- Learner-centered activities like participative learning, interactive sessions, student seminars, case studies, project work, assignments, problem solving exercises, practical's/field work and use of audio-visual teaching aids.
- Regular Tutorials (LTP system).
- Creative and innovative strategies to cater to advanced / slow learners.
- Value-added courses to enhance personal and professional skills.
- The academic performance of each student is monitored by the course teacher and the Resume is maintained by the mentor who imparts personal and academic guidance. Academic guidance is given both to the slow and the advanced learners by the course teachers and they are properly channelized for their improvement. Their performance in curricular, co-curricular and extra-curricular activities is brought to the notice of the parents.

Teacher Quality

Teacher quality is maintained through orientation sessions, observation of lessons and taking annual feedback from students

IQAC promotes the growth of the teaching staff by organizing quality enhancement and teacher enrichment programs regularly.

Performance appraisal of the faculty is taken up with a view to enhance performance and quality.

Buzz sessions and sharing of innovation and creativity in teaching and using contemporary techniques

Faculty is encouraged to organize and attend International /National /State/Regional level

Seminars /Workshops/Symposia and to be in tune with industry requirements.

Vacancies are filled on a regular basis with the initiative and interest taken up by the management

Orientation and induction programs are conducted for new recruits and new entrants of the college.

Staff enrichment programs are conducted for the growth and development of faculty.

Curricular Aspects

Academics - Choice Based Credit System (CBCS-Electives) Choice Based Credit System is going to be introduced in Dr. M.G.R Educational and Research Institute from the academic year 2016-17 onwards. Currently students are able to choose subjects of their choice for ***Electives*** following the CBCS guidelines. The present system of curriculum of fixed credit system of learning offers flexibility to students in choosing the elective courses. As part of providing quality education, Dr.M.G.R. Educational and Research Institute are taking the next step in this direction by introducing the Choice Based Credit System (CBCS) into its academic curriculum from June 2017. Different areas of specialization are offered and their curriculums were designed, and also provide opportunity to gain knowledge and improving employability skills.

Curricular Update

- Board of Studies meetings
- Faculty meetings
- Alumni feedback
- Industry expert feedback during their visits to department and during visits of faculty to companies
- Academic expert feedback
- Student feedback
- Learning, Linkage, Research, and Responsibility
- Continuous industry interaction through IVs, Guest Lectures, Seminars, and Placement interactions. Using all these industry interactions for syllabus up-gradation, curriculum feedback, and placements. Documenting these interactions on as and when required
- MoUs with reputed professional associations and industry for growth of the University
- Organizational structure of the Department ensures effective delegation and empowerment the team members, Coordinators for each role, Decisions taken based on continuous team meetings and consensus building. Organizational chart displayed in the department.
- Process of continuous feedback from the students through interactions with the students by the HOD on a regular basis. Interaction through class committee meetings also organizing several innovative events for the department.

- Value added Certificate courses by MSME
- Student Clubs based on specialization
- Focus on Entrepreneurship - ED programs, Business Plan competition business run and funded by students.

Evidence of Success

The evidence of success is visible, qualitatively as well as quantitatively. The qualitative indicators are a more positive feedback from the students. Industry feedback on the syllabi and the curriculum is also good. Students feel more connected with the work environment and seem to have a better understanding of practical nuances of business. The outlook towards life has changed, improvement in etiquettes and desire to understand things rather than learning by the rote. The quantitative indicators for learners who actively participate in co-curricular activities are that they show improvement in academic performance. Students who have passed out have done extremely well in the corporate world. Some students have put their learning into application by starting their own businesses. Some of the facts are that students when shown the right direction and given the right encouragement can achieve the goals they desire. Holistic development rather than only academic success, contributes in creating socially sensitive individuals which is a prominent requirement of an educational institute.

Problems Encountered and Resources Required

More interaction with industry is required.

Best Practice: 2

Title: Innovative Events that enhance knowledge, improve managerial & leadership skills of students, and establish industry institute linkage

The University provides adequate exposure to the students by organizing innovative events at the department level & University level. This contributes towards the holistic development of students. Inviting domain experts & Industry practitioners for Seminars, Workshops, Conferences etc helps the students in understanding the industry dynamics.

Goal

A good tide can keep the boat afloat but may not give it direction. Just having a degree is not enough, holistic development, and skills are the buzzwords of today. The goal of organizing innovative student led events is to enhance knowledge, improve managerial & leadership skills, and establish industry institute linkage

The Context

Reviewing and updating the students knowledge and skills requires focusing not only on the curricular aspects but also on co-curricular and extra-curricular activities. This ensures that the educational system does not lose its vibrancy and the students are well equipped to face the challenges of a globalised and competitive world.

The Practice

A separate office of Dean – Events ensures that everything related to Event Management moves in a systematic manner. Each Department has an Event Manager who coordinates the activities of the Department. An Event Calendar is prepared well in advance for department as well as University Events. The Events covers all types: Seminars, Symposia, Workshops, Technical Talks, Guest Lectures, Conferences – National & International, Celebrating important days, Cultural Programs etc. An effort is made to let the students play a leadership role in organizing events so that they learn by doing.

Evidence of Success

The evidence of success is visible, qualitatively as well as quantitatively. The qualitative indicators are a more positive outlook towards life, improvement in etiquettes and desire to understand things rather than learning by the rote. The quantitative indicators for learners who actively participate in co-curricular activities are that they show improvement in academic performance. Students who have

passed out have done extremely well in the corporate world. Some students have put their learning into application by starting their own businesses. Some of the facts are that students when shown the right direction and given the right encouragement can achieve the goals they desire. Holistic development rather than only academic success, contributes in creating socially sensitive individuals which is a prominent requirement of an educational institute.

Problems Encountered and Resources Required

Problems in terms of financial requirements are met by contribution from the management and participation fees for registration. Another problem is the availability of good resource people for the program. Most of the times we are able to overcome this problem because the Event Calendar is planned well in advance and the invitation and confirmation is given well on time.

7.4 Contribution to environmental awareness / protection

Energy Conservation

Energy Audits are conducted by the Electrical and Electronics Department to optimize power consumption in Dr. M.G.R. Educational and Research Institute campus and also in the Hostels. The suggestions given through audits are implemented. Students have carried out energy audits and have also studied energy consumption and optimization of water resources.

“The MGR Vision 10MW” was inaugurated in our University with an objective to save 10MW of energy in the period of 10 years. Team of “MGR Vision 10MW” has involved and audited 25 residential houses, 2 industrial and 1 commercial building till date.

The following are implemented by the construction and maintenance department for the conservation of energy.

- ☐ Copper Chokes in tube lights are converted to electronic chokes which consume less energy.
- ☐ Energy saving fans used in class rooms and hostels. Many light fixtures have begun using
- ☐ Compact Fluorescent Light (CFL) bulbs with special care
- ☐ Capacitor banks are used in power houses to improve the power factor.

- ☐ Timers are introduced in air conditioners which saves energy.
- ☐ Sensors for switching on/off motor pumps are installed.
- ☐ Staff monitors unnecessary AC, Fan other electrical appliances used in the unoccupied class rooms and staff rooms.
- ☐ The maintenance department also tracks the costs of equipment repairs in comparison to the original cost of the equipment to determine whether or not it would be more cost effective to replace that piece of equipment with a more environmentally-friendly model.

Use of Renewable Energy

The University has installed solar panels in the ACS Medical College and in some campuses. University also has installed wind mills in two places of our main campus, and through that we are in a position to tap the wind energy to some extent. Our students designed and fabricated a solar power operated digital display board. Various activities highlighting the importance of Renewable Energy had been conducted like Conferences, Seminars, Research works leading to energy conservation, bio-diesel as fuel for engines to reduce emission.

Water Harvesting

Rain water harvesting system is completely installed in the University and Hostel campus. Soak pits are provided in all buildings of the University /Hostels. University practices waste water management system effectively, to keep the campus clean, hygienic and free from any sort of pollution. Every building in the campus is surrounded by trees and lawns. Different plants and trees decorate the campus and the campus looks beautiful. To create awareness on Rain Water Harvesting several Bike Rallies were organized by the University along with Metropolitan Water Supply and Sewerage Board, Chennai.

Efforts for Carbon Neutrality

The University makes the student aware of the carbon credits, carbon neutrality and its advantages etc., as a curriculum in the subjects of the University core course. The major contributors to CO₂ are the vehicles. Even though our campus is in city region, you can't find the smoke or fume inside our campus. Because, having understood the hazardous nature of CO₂, we promote the idea of students coming to University by pooled motor bikes, by pooled cars or by college bus. This way we avoid a maximum inflow of motorized two wheelers which would pollute our environment. As well as the University is declared as Tobacco Free Zone. We also conduct many workshops and awareness programs for the stakeholders of our University to promote the idea of Carbon Neutrality inside and outside campus. Projects are also given to students based on topics like carbon credit policy, earning from carbon credit, industrial waste, e-waste etc.

Plantation

Our University's ACS Medical College and Hospital is also known for the greenery and the pleasant environment. Students and staff relish the feel of being at a good environment. This is due to the management's planning and proper execution of the planting and maintaining the greeneries around. Various trees are planted and maintained to keep the campus green. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by the staff under the guidance of a member. No tree is cut unless it becomes dead. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this University. Our University has also planned to plant medicinal herbs.

Hazardous Waste Management

Soak pits are built separately for discharging waste water from Chemistry and Biotech laboratories. Water based chemical reactions are carried out minimizing hazardous solvent chemical usage. Polythene bags and other non-decomposable are separated and sold to vendors before disposing the organic wastes. Waste and effluent water from college as well as hostel is treated and treated water is used for gardening. To create awareness among the public, our Prime Minister's pet project

—Swachh Bharat had been initiated and our University students were involved in cleaning The Central

Railway Station, Chennai to create awareness amongst the public.

E-Waste Management

E-waste can be best described as consumer /business electronic equipment that are near or at the end of its useful life. The University is on a five-year cycle of changing computers with many of the newer ones entering the general computer laboratories and power users about every two or three years. The older computers are removed and reused in and other administrative offices. Sometime computers, printers and other equipments are donated to charitable organizations, if they are in good working condition. The computers that are out of commission are cannibalized for parts and then finally the ones left over are put up for sale by the Purchase Office. A future audit will explore the purchases for academics to see how much thought was given into buying recycled or sustainable equipment and supplies from eco-friendly companies.

The Sustainability Committee should be able to provide information as to which companies are the most sustainable and relay this information to the people interested in making purchases. Our aim is to improve the environment through the management of electronic assets throughout the life cycle, including purchasing, operations and maintenance, and end-of-life management.

7.5 Whether environmental audit was conducted Yes

☒

No

☐

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

STRENGTHS

- Qualified and dedicated faculty
- Good curriculum with frequent revisions and modifications
- New innovative industry oriented courses
- Faculty retention rate is almost 100%.
- Teaching pedagogy – learning by doing
- Internships and projects
- Industry – Academia interface: MOUs, IVs, Seminars, Conferences, Guest Lectures, Projects & Internships
- Delegation and leadership roles for faculty and students
- Centre of excellences and augmentation courses supported by industry State of Art Technology and infrastructure
- A team of committed, hardworking and skilful teaching and non-teaching faculty.
- Projects are Industry oriented.
- Projects based on renewable energy (Solution for Energy Crisis).
- Research activities - Publications by Students and Faculty.
- Programs and program combinations to meet the needs of Student's/industry

- Professional societies like IEEE and IET.
- Bulletin courses (BEC) - To develop English language.
- Scholarship for Meritorious students.
- Travel grants from various Funding agencies – To attend Conference, Seminars etc.
- Innovative learning practices for all courses prescribed in the curriculum.
- Well equipped Laboratories.
- ISO CERTIFIED Department for procedural functioning.
- Energy Awareness – To conduct Energy Audit.
- Value added certification programmes.
- Courses for Skill Development (CBSD) have been introduced
- Courses on Ethics, Disaster Management, Environment Sciences & Health Sciences (UGC)
- Additional supplementary /enrichment certificate courses, e.g. CCNA, dot net, DB2, BEC (ESOL).
- Three Continuous Assessment Tests and one final examination for all subjects of E&T
- Health Science Courses are as per regulations of the respective Statutory Councils

Plans of institution for next year

- International Collaboration – Student exchange, Faculty Exchange, Semester abroad, joint conferences, Counseling and helping student taking study abroad
- The ABET accreditation to be sought.
- Improvement in the quality of Research papers
- More Collaborative Projects
- More Funded Projects
- Improve the Industry-Institute Linkage
- More Patents from our students & faculty
- More industry consulting assignments
- Improving placement record
- Improve communication skills of students
- Faculty empowerment through skill improvement programs
- Delegation, empowerment, and leadership roles for faculty and students
- Scope to start more Centers of Excellence
- Develop entrepreneurship & Business Incubation Centers with the help of Government support and partnerships and greater student involvement in becoming entrepreneurs
- Faculty quality improvement by bringing in faculty with industry exposure
- Providing more industry internships to students & faculty to improve practical knowledge.

IQAC Quality Enhancement Program – 2016



Department IQAC Meeting - 2016





University IQAC Meeting 2016







Alumni Participation in IQAC Meeting 2016



