

The Annual Quality Assurance Report (AQAR) of the IQAC 2012-2013

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	:	Rajagiri School of Engineering & Technology
1.2	Address Line 1	:	Rajagiri Valley
	Address Line 2	:	Kakkanad
	City/Town	:	Kochi
	State	:	Kerala
	Pin Code	:	682039
	Institution e-mail address	:	office@rajagiritech.ac.in
	Contact No's	:	0484 2427835, 2428238
	Name of the Head of the Institution	:	Dr. J. Isaac
	Tel. No. with STD Code	:	0484 2427160
	Mobile	:	98467 10815
	Name of the IQAC Coordinator	:	Dr. Vinod Kumar P.B.
	Mobile	:	98957 75409

Annual Quality Assurance Report

IQAC e-mail address : IQAC@rajagiritech.ac.in

1.3 NAAC Track ID : **08030**

1.4 Website address : **www.rajagiritech.ac.in**

Web-link of the AQAR :

http://www.rajagiritech.ac.in/home/naac/2013_14.doc

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	2.79	2009	5 years

1.6 Date of Establishment of IQAC : **07/10/2008**

1.7 AQAR for the year (*for example 2010-11*) : **2012-13**

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

i. AQAR _____ (DD/MM/YYYY)

ii. AQAR _____ (DD/MM/YYYY)

iii. AQAR _____ (DD/MM/YYYY)

iv. AQAR _____ (DD/MM/YYYY)

1.9 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Annual Quality Assurance Report

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
Urban Men Women
Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B
Grant-in-aid + Self Financing Totally Self-financing

1.10 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering Health Science Management
Others (Specify)

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

➤ Mahatma Gandhi University, Kottayam, Kerala

1.12 Special status conferred by Central/ State Government--

UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University No
University with Potential for Excellence No UGC-CPE No
DST Star Scheme No UGC-CE No
UGC-Special Assistance Programme No DST-FIST No
UGC-Innovative PG programmes No Any other (Specify)
UGC-COP Programmes No

2. IQAC Composition and Activities

2.1 No. of Teachers	: 9	
2.2 No. of Administrative/Technical staff	: 6	
2.3 No. of students	: 0	
2.4 No. of Management representatives	: 0	
2.5 No. of Alumni	: 0	
2.6 No. of any other stakeholder and community representatives	: 0	
2.7 No. of Employers/ Industrialists	: 0	
2.8 No. of other External Experts	: 0	
2.9 Total No. of members	: 15	
2.10 No. of IQAC meetings held	: 2	
2.11 No. of meetings with various stakeholders: No.	: 2	
Faculty	: 1	
Non-Teaching Staff	: 1	
Alumni		
Others		
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. : 0	International : 0	National : 0
State : 0	Institution Level : 0	

(ii) Themes

2.14 Significant Activities and contributions made by IQAC

- IQAC reviewed the academic performance of all departments and suggested steps to improve overall teaching learning
- The IQAC chalks out an academic plan in the beginning of the semester which helps the faculty and students in making the teaching- learning process more effective
- The IQAC monitors the activities throughout the year, makes suggestions and incorporates the remedial measures
- Interaction with Heads and faculties of each and every department for maintaining and sustaining quality education as directed by IQAC

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
• Prepare for NBA Accreditation	Activities are going on.
• Course Files need to be more organized.	Given a format for the course file and course files are filed in new format.
• Initiate an international conference	International conference was successfully organized
• More Industry Institute interaction to strengthen and motivate the faculty	Lectures from Industry experts are organized
• Continue the Professional Association activities	Activities are regularly organized by all the associations
• Initiate Course Handout preparation and publish in the site	Course Handouts are prepared and published
• Continue Organizing	One international conference and

Annual Quality Assurance Report

conferences/Workshops/Seminars	several workshops and FDPs were conducted during the academic year
• Continue conducting Short term Courses	Short term courses are conducted regularly
• Feedback from the students are reviewed	Advices are given accordingly.

** Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body(Academic Council)

Part -B

Criteria-I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD				
PG	6	0	6	0
UG	6	0	6	0
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	12	0	12	0

Interdisciplinary				
Innovative				

1.2 (i) Flexibility of the Curriculum: **Core/Elective option/Short term courses**

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	12
Trimester	
Annual	

1.3 Feedback from stakeholders* Alumni ✓ Parents ✓ Employer ✓
Students ✓

(On all aspects)

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

Annual Quality Assurance Report

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

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

➤ **NO**

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

Criterion - II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Asst. Professors	Associate Professors	Professors	Others	Total
139	6	16	7	168

2.2 No. of permanent faculty with Ph.D.

No:
11

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
139	-	6	-	16	-	7	-	168	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

Annual Quality Assurance Report

Guest	Visiting	Temporary
2	0	0

2.5 Faculty participation in conferences and symposia

No: of faculty	International level	National level	State level
Attended	44	26	1
Presented papers	15	4	1
Resource persons	1	2	1

2.6 Innovative processes adopted by the institution in Teaching and Learning

- Bridge Courses – Training on software packages like C, Matlab, PIC etc. for students. Usually done during the beginning of the semester
- Student Enrichment Programmes (SEP) – An hour per week is allocated for SEP
- Activities like talk by experts from academia and industry
- Tutorial Hours – An hour per week is spent as tutorial hour for every theory subjects

2.7 Total no: of actual teaching days during this academic year

- 128

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

- Nil

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

Annual Quality Assurance Report

Curriculum Restructuring	Revision	Syllabus Development
5	7	8

2.10 Average percentage of attendance of students

Attendance %
89.35

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B.Tech in CSE	117	38	67	Nil	NA	90.6
B.Tech in ECE	119	43	57	Nil	NA	87
B.Tech in EEE	59	37.28	47.4	Nil	NA	84.74
B.Tech in IT	41	7.3	46.3	Nil	NA	56.6
B.Tech in AE	57	14	31	Nil	NA	78.95

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

- All entries in the RSMS are monitored
- Course coverage is monitored and if there is any deviation IQAC seeks clarification from the concerned staff through HOD
- Audits are done to see all the activities are done on time
- Feedbacks are studied and improvements are suggested
- IQAC evaluates the report and suggest improvements by discussing with the faculty

2.13 Initiatives undertaken towards faculty development

Annual Quality Assurance Report

Faculty / Staff Development Programmes	Number of faculty benefitted
Summer / Winter schools, Workshops, etc.	105

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
Technical Staff	34	0	6	1
Administrative Staff	31	0	1	0

Criterion – III

3. Research, Consultancy and Extension

3.1. Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number		2	1	
Outlay in Rs. Lakhs		44,68,178	34,24,178	

3.2. Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number		2	2	
Outlay in Rs. Lakhs		4,65,000	4,65,000	

Annual Quality Assurance Report

3.3. Details on research publications (Specify number)

	International	National	Others
Peer Review Journals	6		
Non-Peer Review Journals			
e-Journals	56		
Conference proceedings	38	19	

3.4. Details on Impact factor of publications:

Range	0.356 – 2.8
Average	1.4618
h-index	
Nos. in SCOPUS	Vol 4

3.5. Research funds sanctioned and received from various funding agencies, industry and other organizations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2012-2015	DST	34,24,178	34,24,178
Minor Projects	2012 – 2017	Internal	3,00,000	3,00,000
Interdisciplinary Projects	2012 – 2015	Internal	1,65,000	1,65,000
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects (<i>other than compulsory by</i>				

Annual Quality Assurance Report

the University)				
Any other(Specify)				
Total				38,89,178

3.6. No. of books published

With ISBN No.	
Without ISBN No.	
Chapters in Edited Books	

3.7. Whether received funds from

	Count	Amount
UGC-SAP		
CAS		
DST-FIST	1	34,24,178
DPE		
DBT Scheme/funds		

3.8. Revenue generated through consultancy

- Rs.1,27,530/- (One lakh Twenty seven thousand five hundred and thirty) Mr.Biju Abraham –TCS(CS)
- Rs.4,39,890/-(Four Lakh thirty nine thousand eight hundred and ninety) Prometric(CS)

3.9. No. of conferences organized by the department

Level	International	National	State	University	College
Number	2				
Sponsoring agencies	IEEE, Springer				

Annual Quality Assurance Report

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

➤ 4

3.11. No. of collaborations

International	
National	5
Any other	

3.12. Total budget for research for current year in lakhs :

From Funding agency	34,24,178
From Management of University/College	13,12,188
Total	47,36,366

3.13. No. of patents received this year

Type of Patent		Number
National	Applied	
	Granted	
International	Applied	
	Granted	
Commercialized	Applied	
	Granted	

3.14. No. of research awards/ recognitions received by faculty and research fellows

Total	International	National	State	University	Dist	College

3.15. No. of faculty from the department

Who are Ph.D. guides	1
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Annual Quality Assurance Report

Students registered under them	0
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3.16. No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF	
SRF	
Project Fellows	
Any other	

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

- Libin Varghese & Mebin Joseph, students of M.Tech IDAC 2012 – 2014 batch of EEE Department, won the third prize at **Yuva Mastermind Contest-conducted by Malayalam Manorama**. The award was given away by Dr. K. Radhakrishnan, Chairman, ISRO on 29th January 2013.
- RRCC conducts **Year Round Poster Competition** for first year B. Tech students. The students are grouped into the different research groups. They prepare and present a poster on some topic in that area.
- Three month training program in Process Control and Instrumentation at RSET(AEI)
- PIC 16F877A microcontroller programming short term course conducted from 10th to 14th January 2013(EC)
- Students of S3 B.Tech (2011 Admission) took up Social service in Alwaye region in June 2012.(EEE)
- An invited talk by Mr. T. M. Venugopalan (Retd. Senior Superintendent, HNL, Kottayam) was held on 22nd January 2013 regarding 'Environment and health'.(ME)

Annual Quality Assurance Report

- The institution has successfully organized an international conference International Conference on Advances in Computing & Communications (ICACC) on 9th - 11th August 2012
- The institution has organized First International Conference on Eco-friendly Computing and Communication Systems, ICECCS on 9th - 11th August 2012
- An environment week was organized from 14th January to 19th January 2013 by the mechanical department of RSET together with NSS unit of RSET in association with Rajagiri outreach and Mithradam.
- Inauguration of Mechanical students association on 'REAL MECHANICA' was conducted on 22nd March 2013 by Dr. G. Madhu, Professor, Division of Safety and Fire Engineering, School of Engineering CUSAT.

Criterion - IV

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	28.73 acres	Nil	Management	28.73 acres
Class rooms	34 (2853.13 sq m)	2 (161.8 sq m)		36 (2996.93 sq m)
Laboratories	28 (3057.56 sq m)	6(604.79 sq m)		34(3662.35 sq m)
Seminar Halls	3 (550.42 sq m)	Nil		3(550.42 sq m)

Annual Quality Assurance Report

No. of important equipments purchased (> 1-0 lakh) during the current year.	18	18
Value of the equipment purchased during the year (Rs. in Lakhs)	10025347.52/-	10025347.52/-

4.2 Computerization of administration and library

- We have internal software called RSMS (Rajagiri Student Management System) for the day to day administration, this software is updated as and when required and Library automation is done using the software Libsoft.

4.3 Library services(1st April 2012 - 31st March 2013):

	Existing		Newly added (2013-14)		Total	
	No.	Value	No.	Value	No.	Value
Text Books (2001 - 31 st March 2013)	20399	6324148.2	859	387172.3	21258	6711320.5
Reference Books (2001 - 31 st March 2013)	2830	2526062.8	132	277192.7	2962	2803255.5
e-Books (2011-12)	McGraw-Hill (363 E-Books)	105342	McGraw-Hill (363 E-Books)	115545	363	220887
Journals (2009-12)	157	417541	48	230407	205	647948
e-Journals (2009-12)	1. IEEE/IET - IEL (241journals) 2. IEEE ASPP (134 Journals)	1000156	1. IEEE/IET - IEL (241journals) 2. IEEE ASPP (134	1303848	7 E-Journal Packages	2304004

Annual Quality Assurance Report

	and IEEE (POP) 3. Springer (134 Journals) 4. Elsevier Science Direct (275 Journals) 5. ASME (26 Journals) 6. JGATE		Journals) and IEEE (POP) 3. Springer (134 Journals) 4. Elsevier Science Direct (275 Journals) 5. ASME (26 Journals) 6. JGATE 7. ASTM			
Digital Database	NPTEL Video Lectures , Institutional Repository					
CD & Video(2009-12)	576		85		661	
Others (specify) – Back Volumes						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	563 Desktops + 97 laptops	10	Nil	1	1	1	06	Entire college is Wi-Fi enabled and all computer labs have Internet access.
Added	Desktop =159	2	Asianet-12Mbps,	Nil	Nil	Nil	01	
Total	722 Desktops + 97 Laptops	12	12 Mbps	1	1	1	07	

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

COMPUTER AND INTERNET ACCESS

- All the staff rooms are equipped with computer and printer with internet access.
- The institution has a total of 12 Mbps line for internet.
- Faculty members are provided with Laptops on seniority basis.
- All students have separate login accounts to store their data in the college server.
- Separate accounts are given to all the faculty members to save their data and they may use internet and intranet facility any time free of cost.
- Entire campus is Wi-Fi enabled and all computer labs have Internet access.
- The Wi-Fi facility is available in the college hostels also.

TRAINING TO TEACHERS AND STUDENTS

- Talk on “An ISRO project chance: What can we & How can We”, Feb 7, 2013.
- One day workshop on “Industrial pollution Control”, April 25, 2013.
- Short Term Training Program on ‘Research Frontiers in Networking, Clustering & Cloud computing’ at RSET during May 3-10 ,2013
- 3-day DRDO sponsored National Seminar on Software Defined Radio (SDR) held at RSET, Cochin, during May 14-16, 2013.
- 1-day workshop “STATE LEVEL ESDM WORKSHOP” 30th APRIL 2013
- Short Term Training Program on ‘Research Frontiers in Networking, Clustering & Cloud computing’ at RSET during May 3-10,2013.

Annual Quality Assurance Report

- Academic Retreat program for RSET organized by Christ University, Bangalore held during March 25-27, 2013.
- AICTE sponsored FDP on 'Frontiers in Biomedical Engineering' at Model Engineering College from April 22-May 5, 2013.
- One day ESDM Seminar on the 6th April 2013
- AICTE sponsored FDP on "Electronics in medical imaging" from 6th may to 17th may 2013 at AISAT.(TM,)
- Signal Processing & Matlab conducted by Sahridaya Engineering College, 6-10 may 2013
- FDP on Recent trends and developments in Microwave Engineering and communication organized by dept. of electronics model engg. college(20th May to 2nd june2013)
- Three days' workshop on 'Open source Academic Tools' at RSET from February 22- 24, 2013.(SD)
- National workshop on Campus Faith Formation in the context of Year of Faith, organized by Jesus Youth in association with Xavier Board of Higher Education in India at Pastoral Orientation Centre, Palarivattom, Kochi, Kerala, India on 25th and 26th January, 2013.
- Organized one day workshop on "EDA tool, Mentor Graphics", May 2013. (JA)
- Workshop on VLSI Design Methodology and Tools (JA)
- One day workshop on "EDA tool, Mentor Graphics", May 2013. (JA)
- 3-day DRDO sponsored National Seminar on Software Defined Radio (SDR) held at RSET, Cochin, during May 14-16, 2013(DDK)
- 1-day ESDM seminar on the 6th of April 2013(DDK)
- A session on "Numerical techniques and Computational Electromagnetics" on 26th Feb 2013 during the one day seminar on "Emerging Tools in Computational Physics" held at Cochin college, Cochin. (DDK)

- A session on "Subtleties of High Frequency Simulations" on May 31, 2013 during the AICTE sponsored two week FDP on "RECENT TRENDS AND DEVELOPMENT IN MICROAVE ENGG" at Model Engg College, Cochin 20th May to 2nd June 2013. (DDK)
- 3 day workshop on "Introduction to MATLAB and SIMULINK " to M.Tech students Sept.2013 (SPG)
- Talk on "Advances in Manufacturing Systems and Processes" by Mr. Thankachan T. Pullan, DGM, HMT Kalamassery, on 1st February 2013.
- Talk on 'Brief Overview of Solar Thermal Technology' by Mr. Arun Menon, Senior Engineer, R&D, Clique Solar, Mumbai on 18/04/2013
- DAC workshop, July 6, 2012
- Hands on training Lab VIEW, Nov 5-7, 2012
- PSPICE OrCAD and Basic electronic circuit soldering practices. July 4-6, 2012 (S3AEI)
- PSPICE OrCAD and Basic electronic circuit soldering practices. July 9-11, 2012(S5AEI)
- Workshop on "Robotics Studio Software", Nov 28, 2012
- Fourth SERC School on Laser Produced Plasmas: Physics and Applications July 9-21, 2012, RRCAT, Indore.
- 3-day workshop on "Recent Trends in RF and Microwave Technology and Measurements" on July 18-20, 2012 at Indian Institute of Space Science and Technology (IIST), Trivandrum.
- 3-day workshop on LabVIEW on the 5th , 6th , and 7th November 2012 at RSET conducted by the Department of Applied Electronics and Instrumentation in association with Trident Tech Labs.
- 3-day conference attended : the 13th Antennas and Propagation Symposium (APSYM) 2012, Cochin, Kerala, 2012 during December 17-19

Annual Quality Assurance Report

- Two weeks Faculty Development Programme on Applications of Mathematics, Dec 3 to 15, 2012 at Rajagiri School of Engineering and Technology, Kochi, Kerala, India.
- International conference on Eco-friendly Computing and Communication Systems (ICECCS-2012) at RSET during August 9-11, 2012.
- Induction Training (FDP) at GEC Trichur organized by Faculty & Staff Development Centre, GEC Thrissur from 19th to 23rd Nov, 2012
- International Workshop on Recent Trends in Engineering and Technology on Oct 31st, 2012 at Rajagiri School of Engineering and Technology, Kochi, Kerala, India.
- FDP on ‘Instructional Design & Delivery System’ at ToCH Institute of Science & Technology from 02-02-2012 to 04-02-2012.
- Workshop on Labview basic training conducted by Trident Techlabs, Bangalore at RSET from 5th to 7th Nov, 2012
- Lab Staff Skill Up gradation Programme - 2-day Course on PSpice Simulation and OrCAD, Nov 8 & 9, 2012 (RV)
- International workshop on Application of signal processing (I-WASP-2012) at RSET, during 9 – 11 August 2012 (JJ)
- A Talk on “Cognitive Radio and its opportunities” in association with the inauguration of dept association at BPC college Piravom on 11th December 2012. (JJ)
- Matlab Workshop for students of RSET in December 2012 (RJ)
- Latex course organized for students in RSET.(JD)
- Department Seminar on the topic ‘Introduction to Computer Networks and Network Simulator tool’ at Rajagiri School of Engineering and Technology, Kochi, Kerala, India on 22nd Nov, 2012.(DTR)
- Three Day Hands on Workshop on “OrCAD” at RSET, July 2012 (RRA and RA)

Annual Quality Assurance Report

- One day workshop on 'PSPICE' for lab staff at RSET on 8th November, 2012. (SD)
- Talk on All digital Ultra Wideband Transmitter design (Dept of E.C.E) (SPG)
- A Department talk about Induction Training Program for new faculty by Govt. of Kerala, at RSET, on 1st Dec 2012 (BPL)
- Mr. Jithin P. Narayanan attended a two-week ISTE workshop on Engineering Thermodynamics under the National Mission on Education through ICT (MHRD, Govt. of India) from 11th – 21st December 2012 conducted by IIT Bombay at KMEA Engineering College, Aluva.
- Mr. K. UdaySankar as RSET representative attended Placement Officers Meet hosted by NIMHANS Convention Centre Bangalore on November 23rd 2012

4.6 Amount spent on maintenance in lakhs(1st April 2012 – 31st March 2013) :

i. ICT	22.17
ii. Campus Infrastructure and facilities	50.18
iii. Equipments	4.17
iv. Others	1.32
Total:	77.84

Criterion - V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about student support services

- The institution publishes its updated handbook annually. The handbook contains College Profile, Courses Offered, Facilities in college, Code of Conduct, Rules of Attendance, Library Rules, Co-Curricular and Extra Curricular activities, The Parent Teachers Association, List of Class Teachers, Academic Calendar, Semester Plan, Staff List and College Timing
- The college Newsletter called “RSET NEWS” published annually which has the information about the important events that happened during the semester. This is distributed among the students and faculty members for their reference.
- The institution facilitates students to avail scholarship & other financial assistance from state government, central government and other authorities.
- Enrichment of library by adding new books and journals.
- Builds a culture of social responsibility through extension activities by students.
- Grievance Re-addressal Cell is working for student support

5.2 Efforts made by the institution for tracking the progression

- The academic council and the college council meet regularly to discuss various matters on the college particularly on student progression
- Continuous assessment is carried out for the students and feedback taken.
- Remedial classes are arranged for slow learners
- Organizing coaching classes for competitive exams like GATE etc.
- Result Analysis is, after the announcement of university exam results and remedial measures are suggested.

5.3 a) Total number of students

UG	PG	Ph.D	Others
1777	118		

b) No. of students outside the state

➤ 0

c) No. of International students

➤ 270

Men

No	%
834	44

Women

No	%
1061	56

Last year						This Year					
General	SC	ST	OB C	Physi cally Chal leng ed	Total	General	SC	S T	OB C	Phy sical Chal leng ed	Total
1786	18	0	8		1812	1844	31	1	19		1895

Demand ratio : **4.64**

Dropout % : **1.06**

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

➤ No. of students beneficiaries : **35**

5.5 No. of students qualified in these examinations

NET	<input type="text"/>	SET/SLET	<input type="text"/>	GATE	<input type="text" value="59"/>	CAT	<input type="text" value="0"/>
IAS/IPS etc	<input type="text"/>	State PSC	<input type="text"/>	UPSC	<input type="text"/>	Others	<input type="text"/>

5.6 Details of student counseling and career guidance

- The student welfare officer (SWO) of the college works as a mediator between the student and the college authorities if there is an argument and tries to resolve it. He/She holds various sessions with the students to identify the behavioral issues and provides solution to handle them. Academically backward students are usually referred to SWO to explore for stress factors in the students' life and to help them out in coping with the stress factors or resolving the stressful situations. In order to establish rapport with the students, the SWO is allotted 4 – 5 sessions with the first year students every year.

- The career guidance cell organizes lectures, presentations and seminars and act as an information source on higher education and career opportunities. It helps students analyze their aptitude and make the best choice from the available alternatives. The Placement cell keeps track of the openings within the country and abroad and brings in companies for campus recruitment.

No. of students benefitted : **500**

5.7 Details of campus placement

On Campus			Off Campus
No. of organizations visited	No. of students participated	No. of students placed	No. of students placed
16		299	

5.8 Details of gender sensitization programme

- Women’s Grievance Redressal cell conducts talks on issues related to women empowerment, health etc. The cell displays WGRC notices on every notice board.

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

Annual Quality Assurance Report

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	25	Rs. 13,91,750
Financial support from government	119	RS. 30,88,371
Financial support from other sources	29	Rs.18,25,000/-
Number of students who received International/National recognitions		

5.11 Students Organised/ initiatives

Fairs:	State/ University level	<input type="text" value="01"/>	National level	<input type="text" value="02"/>	International level	<input type="text"/>
Exhibition:	State/ University level	<input type="text" value="0"/>	National level	<input type="text" value="01"/>	International level	<input type="text"/>

5.12 No. of social initiatives undertaken by the students : 9

5.13 Major grievances of students (if any) redressed: **Nil**.

Criterion – VI

6. Governance, Leadership and Management

6.1. State the Vision and Mission of the institution

VISION

To evolve into a premier technological and research institution, moulding eminent professionals with creative minds, innovative ideas and sound practical skill, and to shape a future where technology works for the enrichment of mankind.

MISSION

To impart state-of-the-art knowledge to individuals in various technological disciplines and to inculcate in them a high degree of social consciousness and human values, thereby enabling them to face the challenges of life with courage and conviction.

6.2. Does the institution has a management Information system

- YES, The institute has its own internally developed management information system (Rajagiri Student Management System (RSMS)) to manage general administration, academic activities of students & faculty members, various feedback reports and other RSET activities.

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

6.3.1. Curriculum Development

- Rajagiri School of Engineering & Technology is affiliated to Mahatma Gandhi University, Kottayam, Kerala. The institute does not have any flexibility of curriculum other than to follow the curriculum by the university to which it is affiliated. Faculty members from the college have

contributed significantly to the development of curriculum during syllabus revision meetings conducted by M. G. University.

6.3.2. Teaching and Learning

- Semester plan is prepared and disseminated in RSMS in accordance with the academic calendar published by university prior to the start of a semester.
- Dissemination of curriculum book and course hand out in the website
- All faculty members prepare and update the course plan in RSMS regularly
- Mentoring: Each faculty is assigned with a group of student mentees. Periodic interaction with mentees is carried out for proper monitoring and guidance.
- Previous year question papers and study materials are available in digital library.
- Industrial Visits, Internships, Invited talks, Mini & Major projects.
- Students' performance is monitored through continuous assessments like class assignments, tutorials, mid semester & model examinations.

6.3.3. Examination and Evaluation

- Students must take all the examinations and tests conducted in the college. Absence from an examination/test will result in the forfeiture of their sessionals.
- There are two series examinations and one model examination in the first year; and a mid-semester examination and one model examination in each of the higher semesters. They form part of the Internal Assessment. Comprehensive examination is given to those students who had taken prior permission from the class teacher and HoD under valid medical grounds.
- The sessional marks breakup is as given below:

Annual Quality Assurance Report

Breakups	Marks
Examinations	30 (marks will be allotted proportionately)
Assignments	10
Attendance	10
Maximum Marks	50

- For the first years', the first series examination will be conducted after completion of Modules 1 and 2, the second after completion of Modules 3 and 4, and the model examination will include the whole syllabus. For the higher semesters, the mid-semester examination shall be conducted after completion of Modules 1 to 3, and the model examination will include the whole syllabus.
- Late/non submission of assignments (which are part of the Internal Assessment) will result in reduction of sessionals.
- The progress report of the students will be sent to the parent/guardian after each test, and Open House will be conducted to facilitate parent-teacher interaction.
- Internal assessment marks of each theory subject should have a class average limited to 80%.
- Semester-end examinations are conducted by M. G. University.
- A candidate shall be declared to have passed in an individual subject of a semester examination if he/she secures not less than 40% marks for the subject in the university examination and not less than 50% of the total marks of the subject i.e. university examination marks and sessional marks in that subject put together.

6.3.4. Research and Development

- Research is considered as an integral part of the academic activities of the college.
- RSET management promotes research by granting incentives for publications in journals and conferences.
- Rajagiri Research and Consultancy Center (RRCC) coordinates the research activities of the various research groups within the institution in view of institutional and industrial projects and consultancy.

6.3.5. Library, ICT and physical infrastructure/instrumentation

- Rajagiri School of Engineering & Technology (RSET) has 28.73 acres of land with 26813 m² built up floor space.
- Academic ambience is enhanced by modern furniture, improved infrastructure & state of the art facilities in classrooms and laboratories.
- Daily academic activities start with prayer.
- Hostel accommodation for boys and girls.
- The college has transportation facilities to major parts of Ernakulam district.
- The college has canteen facility with seating capacity 300.
- College has telecom facility of BSNL with 11 lines are in use and every department, section, lab and all supporting service locations are having telephone access through intercom network of 138 lines.
- The College has its own security services to provide safety and 24 hours protection to the college, hostels and its belongings.
- RSET campus is networked and internet enabled through a 24/7, 12 Mbps leased line (6 Mbps X 2). Leased lines are connected through firewall. RSET also has 10 Mbps NMEICT connectivity on fiber.
- RSET has a well-furnished central library with modern amenities with a total area of 937 m² with a seating capacity of 201. Library functions from

8.00 a.m. to 8.30 p.m. on all working days and 9.30 a.m. to 4.00 p.m. on Sundays and holidays.

- RSET has a digital library equipped with institutional repositories (Faculty collection, Previous University question papers, etc.), video lectures and E-Journal packages like IEEE ASAP, Elsevier Science Direct, Springer, ASTM, ASME, J-Gate(JET), McGraw Hill (Access Engineering Library) – E-books.)

6.3.6. Human Resource Management

- Manpower planning is carried out every year in the month of May by considering the faculty workloads in each department. The HoDs prepare the department workload as per the guidelines for the coming academic year (both odd and even semesters) before one month of odd/even semester. The principal scrutinizes the department faculty work load and after necessary modifications, if required, get it approved by the Director. A copy of consolidated faculty requirement, along with a copy of the approved department faculty work load, is submitted to the Principal by Heads of departments. Department faculty workload and faculty requirements will be presented to the Director for final approval.

6.3.7. Faculty & Staff recruitment

- Vacancies arising from time to time shall, as required, be mentioned in the leading newspapers as decided by the management. The advertisement specifies the minimum qualifications and other requirements for the post(s) subject to meeting the norms prescribed by AICTE or other competent authority

6.3.8. Industry Interaction/Collaboration

- Industry institute cell has been setup with the objective of promoting interaction between industry and institute.
- Cell organizes industrial visits, industrial training, seminars, workshops, technical talks etc.
- Coordinators: Prof. Dominic Mathew, Prof. Kuttyamma A. J., Ms. Lakshmi Prabha S., Prof. K. S. Mathew

6.3.9. Admission of students

B. Tech Programme

- Admission is strictly on the basis of merit.
- Students having a pass in Higher Secondary Examination of the Board of Higher Secondary Education of Kerala or an examination recognized equivalent thereto with at least 50% mark in Mathematics separately, and 50% marks in Mathematics, Physics and Chemistry put together are eligible for admission .
- He/She should be qualified in Kerala Engineering Entrance Examination for being eligible for admission in all seats, other than NRI quota.
- 4. 50% of the total seats in B. Tech courses are set apart for centralized allotment by the Commissioner for Entrance Examinations.15% of seats within sanctioned intake is provided for NRI category and is given on the basis of marks obtained for PCM in 12th standard. Remaining seats are Management seats, allotted on merit by ranking applicants on the basis of marks obtained for PCM (12th standard only) and for Kerala Engineering Entrance Examination.
- Nationality: - Candidates must be Citizens of India.

M. Tech Programme

- Eligibility will be subject to the rules and regulations of Mahatma Gandhi University/AICTE
- The candidates shall be citizens of India.
- The candidates shall have acquired the prescribed qualification from an institution approved by the AICTE and Mahatma Gandhi University.
- Candidates should have a minimum of 60% aggregate marks in BE / B. Tech in the respective discipline.
- For SC/ST candidates a pass in the above mentioned degrees is sufficient.
- Candidates, who have passed AMIE/AMIETE examinations and satisfying the following conditions, are eligible for admission to institutions under Universities of Kerala.
 - They must have valid GATE score.
 - A minimum of 55% marks for Section B in AMIE/ AMIETE examination
 - Minimum three years of professional experience in the field of specialization after acquiring the qualifying degree.
 - Non GATE candidates have to appear for a test conducted by the Institution.
 - e. Candidates who have qualifying degree awarded from universities other than M. G. University shall submit Eligibility Certificate from Mahatma Gandhi University as well as Migration Certificate at the time of admission.
 - Candidates who have appeared for final examination of any of the qualifying examinations may also apply provided he/she has passed all the subjects up to and including 7th semester. Selection of such candidates shall be subject to the production of qualifying degree at the time of admission.

6.4. Welfare Schemes for

Teaching	Gratuity, Staff Welfare Fund
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Annual Quality Assurance Report

Non teaching	Staff Welfare Fund
Students	Merit Scholarships

6.5. Total Corpus fund generated

6.6. Whether annual financial audit has been done

Yes No

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Agency
Academic	No	NA	Yes	IQADC
Administrative	No	NA		

6.8. Does the University/Autonomous College declare result 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?

NA

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

NA

6.11. Activities and support from the Alumni Association

- Each department has a faculty advisor for coordinating alumni activities
- Alumni association
- Arrange periodic meetings of alumni
- Ensure alumni registration
- Prepare alumni news letter
- Maintain records of alumni & the meets that take place.

6.12. Activities and support from the Parent-Teacher Association

- PTA has an executive committee comprising the parents of students' branch wise and year wise and the representatives of the faculty including Director and the Principal
- Committee meets at least twice in a year to discuss all matters of interest

6.13. Development programmes for support staff

- To improve the skill of the support staff, the college deputed the members of the staff to undergo training and workshops organized by other institutions, universities and govt. organizations.
- In house training programmes are also arranged by various departments to cater the needs of the support staff.

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

- Plenty of trees and plants are planted and properly maintained to make the campus eco friendly. Exclusively appointed gardeners take care of the lawn and the greenery of the campus.

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.

- Administrative setup decided to develop and practice outcome based education.
- The RSET website and associated framework for automating the **Rajagiri Students Management System (RSMS)**, RSET Digital library, RSET payroll management system ,RSET online examination system ,Admission automation system, Exam automation system (PRAGATI) and maintenance management system have been upgraded for smooth functioning of the institution.
- Institutional repository (GYAN) is linked with RSMS as intranet facility and accessible to students and faculty.
- Self-appraisal for faculty
- Wi-Fi facility provided in Boys Hostels
- Higher semester B.Tech classrooms provided with fixed projectors
- Coaching classes are conducted for students for GATE examinations
- College initiated the training programmes, workshops and guest lectures in various domains to the students by industrial experts through departmental associations
- The career guidance cell organised different activities to enrich information source on higher education and career opportunities

Annual Quality Assurance Report

- Remedial classes are conducted for weak students for improving their academic performance
- Entrepreneurship Development Cell initiated activities to enhance entrepreneurial awareness among 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	Achievements
To organize , update files and Lab Manuals based on criteria of National Board of Accreditation (Tier -2).	Course files and Lab manuals updated as per outcome based education.
Insist on each M.Tech Student to produce at least a conference paper and a journal paper	More no of papers were published
More Industry Institute interaction to strengthen and motivate the faculty and to inculcate Entrepreneurial culture in students.	Lectures from Industry experts are organized
Continue the Professional Association activities	Activities are regularly organized by the all the associations
Continue Organizing conferences/Workshops/Seminars	One international conference and several workshops and FDPs were conducted during the academic year
To get external funding from agencies like AICTE, DRDO	Project plans have been submitted for the approval
To conduct classes for competitive exams and develop course materials	Aptitude Classes and GATE classes were conducted & course materials are given. Improvement in number of students qualified for GATE exam

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

Best Practice-1

- To encourage technical knowledge and to enhance research potential in faculty members consultancy work were enhanced.

Best Practice-2

- Initiative in organising International Conferences for knowledge transfer.

****Provide the details in annexure (annexure need to be numbered as i, ii,iii)***

7.4 Contribution to environmental awareness / protection.

Environmental friendly Campus

- Each block of the building and playgrounds are surrounded by large green lawns, and plants which maintain healthy and balanced environment.
- RSET TREE (Together Restoring Environment Effectively) Nature club organizes nature conservation activities, study trips, Quizzes, Bird watching trips etc.
- Cycle campaigning trip and trekking are the specialties.

NSS & Nature Club activities to support environmental awareness

- 5 days NSS programme in association with Rajagiri out reach, Kalamassery.
 - Suchitwa Bodhana Yajnam –Always
 - Project U- Ernakulam
 - BPCL Survey- Tripunithara
- Environment Week
- (Exhibition, inter school competitions, street play & padayatra)

- World Water Day-“Walking for Water”(Road Rally)
- Made green campus by planting more than 50 saplings every year

Energy Conservation

- The college has been conscious about the energy conservation for which it constituted Energy Conservation and ENCON club to promote energy conservation awareness among students and society.
- Energy auditing has been carried out by energy monitoring committee for energy saving.
- The college is replacing the CRT monitors with LED monitors thus conserving energy to the extent required.
- College also promotes procurement and installation of efficient electrical systems to save electricity.

Use of Renewable Energy

- The College has a tie-up with Renewable Energy Centre MITHRADHAM Chunangamveli, which promotes Solar Energy awareness among student community.
- A Bio-Gas plant is established at hostel and canteen to produce cooking gas from bio-degradable waste.
- A Solid-waste management unit is functional to segregate plastic, glasses, papers etc.
- Water treatment plant using reverse osmosis process is functional to provide drinking water for the entire campus.

Water harvesting

- A network of ponds is maintained in the campus to ensure continuous recharging of ground water table.

Annual Quality Assurance Report

7.5 Whether environmental audit was conducted?

Yes No

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

Faculty Retreat program was conducted at Christ university Bangalore-campus where brain storming session among faculty for SWOT Analysis was done during March 2013

Annexure-i

Best practice -1

1. Title of the Practice: Enhancement of consultancy work.

2. Goal:

- To encourage technical interaction with outside world and to enhance research potential in faculty members consultancy work were enhanced.

3. The Context

- To improve the confidence level of faculty and students in academic and research activities.
- To upgrade the technology practiced currently in industries.
- To imbibe the research culture among faculty and students

4. The Practice

- The technical requirement of the industry/organization is collected and based on the technical support that could be provided from RSET faculty the consultancy proposals are framed and executed.

5. Evidence of Success

- CSI Digital Resource center consultancy work was carried out by Mr. Binu. A, Asst. Professor, IT Department during the academic year 2012-13.

6. Problems Encountered and Resources Required:

- Inadequate number of faculty with Ph.D affected the number of consultancy proposals.

7. Notes (Optional): Nil

8. Contact Details:

Name of the faculty: Mr.Binu.A

Name of the Institution: Rajagiri School of Engineering and Technology

City: Kochi

Pin Code: 682 039

Accredited Status: NAAC with B grade

Work Phone :+91 484 2427835, Fax:+91 484 2426241

Website: www.rajagiritech.ac.in , E-mail : office@ rajagiritech.ac.in

Annexure-ii

Best practice -2

1. Title of the Practice: Initiative in organizing International Conferences for knowledge transfer.

2. Goal:

- Initiative in organizing International Conferences to provide a forum for sharing insights, experience and interaction on various facets of evolving technologies in different engineering disciplines.

3. The Context

- To provide the most relevant opportunity to bring together students, researchers from both academia and industries for enhancing the research culture at RSET.

4. The Practice

- Conference brochures are prepared and published in website. Papers are first invited from various participants and a scrutinizing committee will be selecting the final papers to be presented on the conference depending on the technicality of the paper.

5. Evidence of Success

- International Conference on Advances in computing and Communications(ICACC-2012), conducted during 22-24 July 2011.
- International conference on Eco friendly computing and communication (ICECCS-2012).

6. Problems Encountered and Resources Required:

- Difficulty in clearance of embassy procedures for the smooth transition of foreign delegates.
- Publicity about conference among international universities were difficult.

7. Notes (Optional): Nil

8. Contact Details:

Mr.Biju Paul

Asst.Prof,Dept. Of Information Technology

Rajagiri School of engineering and Technology

Rajagiri Valley,Kakkanad,Kochi 682 039,Kerala,India

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