

2009-10

JIS College of Engineering
Block A, Phase III
Kalyani, Nadia
West Bengal

INTERNAL QUALITY ASSURANCE REPORT

Submitted to NAAC for the year 2009-2010

Executive Summary

JIS College of Engineering has been accredited by NAAC in the year October 2009. In line with the guide line of NAAC and the JISCE policy of **QUALITY-CONSISTENCY-DEVELOPMENT**, the college undertook a number of initiatives. IQAC of JISCE established as the 1st step after NAAC accreditation of JISCE. Through IQAC a planned quality policy and manual are prepared. The activities of the IQAC have ushered the quality movement in the Institution towards quality assurance.

JIS Management has endorsed the formation and policy and the decisions of the IQAC and requested for implementation. Senior academicians and faculty members are engaged to execute the plan.

Dr. Sourav Dutta, a senior expert of IBM has kindly consented to be an external member of IQAC. Dr. Dutta earlier worked as a professor in Computer Science at Kalyani Govt. Engineering College and Jadavpur University and is well conversant with the academic issues like problems, development and quality of educational Institution. More over Dr. Dutta is well conversant with the corporate world and modern global technological trends, frontiers, laboratories etc. So he plays a key role in the policy formulations of IQAC.

Students and alumni are invited periodically during meeting of IQAC for feedback which ensures the quality enhancement. They suggest the measures to be taken for quality enhancement.

Institutional Profile

- JIS College of Engineering is a self financing engineering college.
- The institute was established in the year 2000, the sprawling 17.5 acres campus with built up area of 387160.36 Sq.ft. is located in Kalyani.
- The institute has also the separate college - Center for Management Studies.
- The institute has an enrollment of 2787 students pursuing various courses offered (2198 Male & 589 Female) and includes 12 foreign students.
- The institute has a Faculty strength comprising of 198 Teaching staff of the rank of Professors, Asst. Professors.
- The campus comprises of:
 - 60 class rooms
 - 250-seater audio visually equipped auditorium
 - 160 seats conference hall
 - 66 laboratories
 - 700 computers with fully inter-connected network (internet band width 10 mbps)
- Central library consisting of 55,553 books and 270 journals and a large number of E-journals (National & International) & IEL [Online] under INDEST.
- Hostel accommodation is available for all aspirants [Separate Boys and Girls hostels].

The Academic Portfolio

The college started with the UG streams of EE, ECE, and CSE & IT in the year 2000. During 2001 CA Course was introduced and in 2002 MBA Course was added with B.Tech in EIE. On 2003 BME, 2005 M.Tech Courses EDPS & MCNT was added respectively. On 2007 NBA Accredited Departments of CSE, EE & ECE. On 2008 two M.Tech courses in CSE & IT (SE) were inducted. On 2008 NBA Accredited Departments of IT, EIE & MBA and B.Tech Course in ME were started.

The learning environment focuses on Self Growth and Team Growth through

- Continuous Performance Evaluation
- Classroom Instructions
- Project Work
- Remedial Classes
- Technical Skill Enhancement Training
- Soft Skill Training
- FDP
- Conferences
- Seminars
- Mentoring -Each member of the departments is attached to Mentorship programme. Each member of the teaching faculty is entrusted with the task of mentoring 10 to 15 students. They are responsible for academic and personal mentoring. This is to strengthen the bonds of appreciation and affection that exists between teachers and students. Interaction with students and counseling them help in their personal development. Tutors may keep the progress of the students in the Teacher's diary. This method ensures one to one assistance provided to the students.

State-of-the-Art-Infrastructure

The wide- range of technical set up and diversified framework of computation across the disciplines for practical and hands-on experience for the students is worth mentioning.

Viz. Computer Systems Setup comprised of:

1. High end research Laboratories
2. Research Lab established with SOLARIS 10 administration
3. Hardware Training Laboratories
4. Project and Research Laboratories System Laboratories for
5. Curriculum based Practical subjects
6. Dedicated desktop and Client computing
7. N-computing Desktop sharing
8. SUN Computational setup with SUN Blade Server, SUN Ultra, Rays, Fire
9. Open Source environment viz. RedHat, Fedora, Ubuntu

Faculty

The wide- range of technical set up across the disciplines for practical and hands-on experience for the students is unique in comparison to other Private Self-Financed Engineering Colleges and even some Government Colleges in the State of West Bengal.

- ✓ Training through regular Faculty Development Programme / Quality improvement Programme
- ✓ State-of-the-art Learning Centric High end Training via WIPRO Mission 10X Learning Approach (component : Dale Carnegie Certification, Advanced Workshop and Cambridge University certification)
- ✓ High retention rate
- ✓ Regular and Consistent financial assessment
- ✓ Thrust towards self-growth and team growth through various appraisal procedures
- ✓ This vision produced a strong collection of middle level faculty members.

Faculty Achievement

- ❖ Mr Sohan Sengupta- Javaguru Title: Google Orkut Team 2008
- ❖ Authorship of IBM Developer Work, IBM, US, Mr Sohan Sengupta.
- ❖ IBM Drona Award -2009, Mr Sohan Sengupta.
- ❖ Mr Sohan Sengupta-CSI Young IT Professional Award -2008 (National Champion)
- ❖ Mr Sohan Sengupta-CSI Young IT Professional Award -2009 (National Champion)
- ❖ IBM Certified Associate Developer for Rational and Websphere, Mr Sohan Sengupta.
- ❖ Mr Sohan Sengupta-5 successful and acceptable Java APIs published
- ❖ Mr Sohan Sengupta-Entrepreneurship Initiative: Tech IT Easy Labs (Founder & CEO)

Industry Interface

- ☑ IBM Centre of Excellence
- ☑ MOU with WIPRO
- ☑ Advance Partner College of INFOSYS Campus Connect
- ☑ First Private Engineering College in West Bengal having Strategic set-up with IBM
- ☑ MOU with IIT, Kharagpur for Academic tie-up
- ☑ Grant from AICTE
- ☑ Tied up with MSME
- ☑ ICICI Learning Matrix Centre
- ☑ Accredited by TCS, CTS, Videocon

The learning-centric environment

- Continuous Evaluation Process
- Personal Care through Mentorship Programme
- More emphasis on Contact learning (Tutorials-Projects, etc.) compared to one way-teaching

Students' Achievement

- ❖ Mr. Pranshu Sinha, Student, Department of Electronics and Communication Engineering and Mr. Rajiv Gupta, Student, Department of Electronics and Communication Engineering were awarded Runner-Up Position in 'Paper Presentation' Category in Infosys Aspiration2020 Contest at State Level, held on 23rd March, 2009, at Infosys Technologies Limited, Bhubaneswar.
- ❖ Mr. Manas Ghosh, Student, Department of Electrical Engineering and Mr. Jayanta Das, Student, Department of Computer Science and Engineering were awarded 1st Position in the 'Path Finder' Category of Srijan 2009, held during 19th to 22nd February, 2009, organized at Jadavpur University.
- ❖ Mr. Manas Ghosh, Student, Department of Electrical Engineering and Mr. Jayanta Das, Student, Department of Computer Science and Engineering were awarded 1st Position in 'The Houdini Act' Category of Techniche 2008, held during 5th to 7th September, 2008, organized at Indian Institute of Technology, Guwahati.
- ❖ Mr. Subhajit Roy, Student, Department of Electronics and Communication Engineering, Mr. Somnath Chakraborty, Student, Department of Electronics and Communication Engineering, Mr. Nilashis Acharya, Student, Department of Information Technology and Mr. Arindam Chakraborty, Student, Department of Information Technology were awarded 3rd Position in the 'Robotics' Category of Prayukti 2008, held at Haldia Institute of Technology.
- ❖ Mr. Shayan Ahmed Khan, Student, Department of Biomedical Engineering was awarded 1st Position in 'Paper Presentation' Category at 'Transition' 2008, held on 5th April, 2008, at Cognizant Technology Solutions Campus.
Moreover, Mr. Khan was offered with a job as Programmer Analyst in Cognizant Technology Solutions instantaneously, for his unique topic in address through the concerned paper titled "Ajooba Tube Light."
- ❖ Mr. Jaydeep Mandal, Student, Department of Information Technology wins 1st Position in 'i2i06' Category at Indian Institute of Management, Calcutta in association with NUSBS, Singapore in 2006.
- ❖ Students of JIS College of Engineering, under the guidance of Mr. Rajdeep Chowdhury, Assistant Professor, Department of Computer Application and Mrs. Sila Singh Ghosh, General Manager, Corporate Relations, were awarded the Critics Award at 'Cognizant Carnival' for the unique theme of 'Sarod Deepabali', held on 21st November, 2008, at Cognizant Technology Solutions Campus.



Research Projects and Publications

- JISCE faculty members published papers in International /National Journals and Proceedings
- JISCE Senior Faculty member guided to successful Ph.D. through University

Projects

Type of Sponsorship	Name of the Project/ Seminar	Amount	Funding Agency	Sponsored to	Letter No.
Project under MODROB	"Machine Intelligence"	Rs. 11,00000/-	AICTE	Dept. of CSE(Dr. Rabin Kr. Jana)	8023/RID/BOR/MOD-414/2007-08 dt. June 20, 2008
Project under RPS Scheme	"Development of Compact, Broadband and Efficient Patch Antennas for Mobile Communication"	Rs. 5,00000/-	AICTE	Dept. of ECE(Dr. S.K.Chowdhury)	8023/BOR/RID/RPS-94/2007-08 dt. March 5, 2008
Project Under MODROB	"Modernization of Power Systems Lab. "	Rs. 8,45,000/-	AICTE	Dept. of EE(Dr. S.K.Mitra)	8024/RID/BOR/MOD-37/2008-09 dt. December4, 2008
Project under IIPC: Plan Grant	Implementation of IIPC	Rs. 8,00000/-	AICTE	JISCE (Ms. Sila S. Ghosh)	8020/RID/IIPC(7)/2008-09 dt. December 29, 2008
Project under EDC: Plan Grant	Implementation of EDC	Rs. 6,92,000/-	AICTE	JISCE(Ms. Sila S. Ghosh)	8022/RID/EDC (91.)/2008-09 dt. March 31, 2009
Project under RPS Scheme	Three Dimensional Shape Sensing	Rs. 3.75 Lakhs	AICTE	Dept. of ECE(Dr. Debesh Chowdhury)	8023/BOR/RID/RPS-112/2008-09 dt. March 12, 2009

Seminar & Conferences

2010							
1	12 th January, 2010	Seminar on "Mission 10X learning Approach"	JIS Group organized Programme. Coordinated by IT Dept., Venue: Centre of Excellence, JISCE	IT, CSE and MCA Dept.	Institutional	Resource Person: Mr. Srinivash, WIPRO MXLA, Delft University, The Netherlands	Centrally organized and sponsored by JIS Group
2	21 st to 28 th January, 2010	Faculty Development Programme on	JIS Group organized Programme.	IT, CSE and MCA	Institutional	Resource Person: Prof. Charles Van	Centrally organized and

		“IT Educational Software”	Coordinated by IT Dept., Venue: Centre of Excellence, JISCE	Dept.		Der Mast, Delft University, The Netherlands	sponsored by JIS Group
3	May 4, 2010.	Seminar on “Nano Electronics and Photonic Devices”	ECE & Physics	All Depts	National	1.Dr. Swapan Chakraborty, Dept. of Chem., C.U. 2. Dr. Sanatan Chattopadhyay, Dept. of Electronics Science, C.U	JIS Gr
4	4 th October, 2010	Seminar on “Business Etiquette and You”	T & P Cell	All Depts	Institutional	Members from Infosys	JIS Gr.

2009

1	30/12 2009	Flow Characteristics Related to Vascular Diseases"	BME	Physics ECE, EE, EIE, CSE, IT, Chem.	International	1. Prof. Niranjan Talukdar, Professor Dept. of Physics Clark Atlanta University Atlanta, Georgia, USA	AICTE
2	17/03/09	Global Economic Melt-down	BA	All students	Departmental	Prof. P. P. Pal IIM – Calcutta Mr. Udayan Basu, Indian Institute of Cultivation of Science	JIS Group
3	16/3/09 & 18/3/09	Workshop on“Membership Drive” by IET(U.K.) and IEEE (U.S.A)	JISCE	All students	Institutional	Member from IET and IEEE	JIS Gr.
4	16/6/09 to 19/6/09	Workshop on“Rational Application Developer with Websphere Application Surver Global certification test- 255”	organized by IBM Gurgaon	JISCE	Institutional	IBM Personnel	JIS Gr.
5	31/7/09	Workshop on “Demonstration	JISCE		Institutional		JIS Gr

		of PASW Statistics 17.0 (Formerly SPSS) software”					
6	6/11/09 to 8/11/2009	Workshop on “DB2”	conducted by IBM	JISCE	Institutional	IBM Personnel	JIS Gr
7	24/11/2009	Seminar on “Free Software Movement: Prospect in INDIA”	organized by Kalyani Book Fair	JISCE	Institutional	1.Prof. A.R.Thakur, VC, WBSU, Barasat 2.Prof. Nandini Mukherjee, Dept. of Computer Science & Engineering, J.U	JIS Gr
8	21/12/2009	Invited Lecture on “Digital Signal Processing/ Digital Communications- A Practical, Cohesive and Hands-On Approach”	JISCE	JISCE	Institutional	Professor Siben Dasgupta, Associate Professor, Department of Electronics and Mechanical Engineering of Wentworth Institute of Technology, Boston, USA	JIS Gr.

Paper Publication

Authors (including Co-author)	Title of the Paper	Detail of Paper (including Vol., Issue, Page No. & Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/IS BN No./ISSN No.
Dr. Suman Kumar Dawn	Designing Effective Distribution Strategies –An Empirical Study	Vol. 49, No.1 &2, 2009 , pp.1-16	Survey (Journal of IISWBM)	National	ISSN : 0586-0008
Dr. Suman Kumar Dawn	The Strategies, Challenges, Opportunities and Growth Dimensions of the Organised retail Sector: An Analysis on Indian perspective	Vol .II , No.2 , July-December , 2008, pp.13-26	JIS Management Vista (JIS Management Journal)	National	ISSN : 0974-0872
Dr. Suman Kumar Dawn and P.K. Bardhan	Role and Efficacies of Supply Chain Management in Indian Automobile Industry : A Case Study of Two Leading Indian Automobile Compaines,	vol. –VIII, number 2, July –December 2008	Kindler (Management Journal of Army Institute of Management),	National	ISSN 0973-0486

Dr. Suman Kumar Dawn and M.K. Das	Reengineering Branding Strategy : A New Paradigm of Sustainable Competitive Advantage with Special Emphasis on FMCG Segment in India	vol.2, Issue 2, Jan-Jun 2010	Domain	National	ISSN No. 0973-9564
Dr. Suman Kumar Dawn & S Paul	Relevance of Logistics in Supply Chain Management for overall Customer Satisfaction: An Empirical Study	Volume -7, Issue 2, July – December, 2009	Review of Professional Management, New Delhi Institute of Management	National	ISSN-0972-8686
Dr. Suman Kumar Dawn & S Paul	Developing Brand Strategies of Pharmaceutical Products: An Empirical Study on Diabetic Products	vol. 50, nos. 1& 2, January-June 2010	Survey, IISWBM	National	ISSN: 0586-0008
Dr. Suman Kumar Dawn & S Paul	Managing Sales through Sales Force Motivation: An Empirical Study Based on Indian Financial Organisations	vol.IX, no.2, issue July-December2009-10	Kindler (Journal of Army Institute of Management , Kolkata)	National	ISSN 0973-0486
Dr. Suman Kumar Dawn and M.K. Das	CRM: An Essential tool for the success of Airline Industry	Vol.- II , Issue-1 , January-2010	Proficient, The International Journal on Management	International	ISSN 0975-475X
Dr. Suman Kumar Dawn & S. Biswas	Managing Absenteeism: A Study on Spanco BPO Services Limited	vol. IV, No.1, January-June 2010	JIS Management Vista	National	ISSN : 0974-0872
Subhajit Basu Chowdhury	“ Supply Chain Management: Its Meaning & Impact on Business”	Presented on 22 nd January, 2010 at “Datta Meghe Institute of Management Studies, Nagpur.	Conference paper	National	-
Subhajit Basu Chowdhury	“ Green Marketing: Scope and Challenges”	Presented paper on All India Conference on Business Studies at DSMS Business School, Durgapur on February 2-3, 2013	Conference paper	National	

Dr. Suman Kumar Dawn Jointly With Mrinal Kanti Das	CRM: An Essential tool for the success of Airline Industry	Vol. 1, Issue 2, January 2010, pp. 52-67	Journal-Proficient	International	ISSN: 0975-475X
Dr. Isita Lahiri Jointly With Mrinal Kanti Das	Network Marketing: Looking through a new window	Vol. 8, Issue-1, January-June,2010, pp 90-99	Journal- Review of Professional Management	National	ISSN: 0972-8686

Authors (including Co-author)	Title of the Paper	Detail of Paper (including Vol., Issue, Page No. & Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/IS BN No./ISSN No.
Uttiya Kar	<i>Mobile Banking: An extension of e-commerce shaping the future of Banking</i>	Vol. IV, No. 1, January-June 2010	Journal- JIS Management Vista	National	ISSN: 0974- 0872
S.Chakrabarty, Saibal Ranjan Ghosh and H.Dasgupta	Point-Wise quasicontinuity and Baire Spaces	J.Mech.Cont. and Math. Sci.,Vol.- 4,No.- 2,January(2010) p 459-471	Journal	National	ISSN- 0973- 8975

Author (Including Co-author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No.	Nature of Paper (Journal/C onference/ Book Chapter)	National/ International	ISBN No/ISSN No.	Journal Impact factor/SCI Index No.
S. Sen, P. Seal and S. Chakrabarti	A comparative study of the nonlinear optical properties of CdnXn (X: S, Se and Te) clusters	International Journal Journal of Cluster Science, 21 (2010) 591. Journal Impact factor: 0.916	Internatio nal Journal	International Journal	ISSN: 1040- 7278 (Print) 1572-8862 (Online)	1.111
P. Seal, S. Sen and S. Chakrabarti	Ab initio Investigation on the Nonlinear Optical Properties of CdnTen (n=1-6) Clusters	International Journal Chem. Phys. 367 (2010) 152. Journal Impact factor:1.896	<u>Internatio nal Journal</u>	<u>International Journal</u>	ISSN: 0301- 0104	1.896
S.Singha Roy	Quantum confinement on the carrier contribution to the elastic constants in nonlinear optical and optoelectronic materials	14,Vol 7838/ DOI : 10.1117/ 12.864432	SPIE Optics and Photonics	International	ISBN: 978081948356 0	
S.Singha Roy	Simple theoretical analysis of the thermoelectric	10 , Vol.7646/ DOI : 10.1117/ 12.847400	SPIE Nanosens ors &	International	ISBN:9780819 480613	

	power under strong magnetic quantization in superlattices of non-parabolic semiconductors with graded interfaces		Biosensors			
Swagata Bhattacharjee and Abhijit Biswas	Evaluation of analog circuit performance of Ge channel p-DG MOSFETs with high-k dielectrics based on continuous drain current model	pp.23 (ICCCD)	Conference	International		
S. Sen and S. Chakrabarti	Negative differential resistance in fused thiophene trimer	International Journal Computational Materials Science , 45 (2009) 889. Journal Impact factor:1.878	<u>International Journal</u>	<u>International Journal</u>	ISSN: 0927-0256	1.878
Abhijit Biswas and Swagata Bhattacharjee	Analysis of the influence of gate bias and interface roughness on the threshold voltage of extremely scaled DG MOSFETs	pp.683 (IWPSD)	Conference	International	ISBN: 978-1-4244-1727-8	
Swagata Bhattacharjee and Abhijit Biswa	Influence of gate architectures on the performance of SOI MOSFETs including the strained channel	EDM21	Conference	International	ISBN: 9781424450732	
Swagata Bhattacharjee and Abhijit Biswas	Impact of high-k dielectrics and spacer layers on the electrical performance of symmetrical double gate MOSFETs	pp.41 (ELECTRO-2009)	Conference	International	ISBN: 978-0-230-63718-4	

Co-Curricular & Extra-Curricular Activities

➤ National Social Service (NSS)

The college has an active NSS Camp under the guidance of the Dr Subhamoy Singha Roy. Sizeable number of students participates in various programmes conducted under the scheme. The activities NSS volunteers have conducted are Plantation of Trees towards a Green Campus Programme, Cleaning and Developing the Campus into an Eco-friendly Campus, Blood Donation

Camp, Developing Local Area Campaign and conducted classes on morality and personality development.

✓ **Awareness Programme**

Awareness Programme conducted on Dengue, Malaria and Enteric Diseases at the area in vicinity during 12 March 2010.

✓ **Blood Group Identification Camp**

The blood group identification camp for the college students was organized on 13th, 14th March 2010.

✓ **Anti-Drug Campaign**

The NSS wing organized a camp **on ANTI-DRUG** from 4th to 8th February 2010. The camp was inaugurated by Dr A Guha, Director of the College. Different social organizations from various parts of the locality all came together on a common platform for interactive learning and exposure

✓ **Bank loan Assistance Counseling** and support Cell helps students in getting financial help and interact daily with the students during second half of the day.

✓ NSS conducted **Adult and Child education** in 5 villages skirting the city.

➤ **National Cadet Corps (NCC)**

JIS College of Engineering has been in touch with 49 Bengal Battalion to incorporate NCC as a course and for C Certification programme. JISCE is also participating in different programme organized by 49 Bengal Battalion.

➤ **SIFE**

Students participated in different initiatives of SIFE and also compete at the national level in business plan and other competitions.

➤ **Green Team**

The Institution is located away from metropolitan in a lush green Campus. It's a declared energy saving Green zone. Initiatives are taken by the group to ensure an eco friendly and environmentally sustainable atmosphere.

➤ **EDC**

Entrepreneurship Development has been a key focus of the College and guidance and assistance is provided to the students as well as to the local enthusiasts in this regards. The college in collaboration with NSIC conducted Entrepreneurship Development Programme and the College has been selected to have an Incubation Center jointly with NSIC. The Coordinator of the cell is Ms Sila Singh Ghosh, GM Corporate Development, JIS Group and the cell collaborates with Ministry of Small and Medium Enterprises, CII, BCCI, local industry houses. JIS Group provide financial assistance to the willing students to start own ventures.

➤ **IIPC**

The Institution from its inception has been emphasized and was instrumental in having a strong bonding with Corporate Houses / Software Development Industry. Various Faculty members of different disciplines are trained through these events and impart training to the students:

- IBM The Great Mind Challenge Competition
- Organizing International Conclave named ESQUIRE.
- MICROSOFT Faculty Connection – MICROSOFT Students to Business
- WIPRO Mission 10X Learning Approach (17 faculty members are
- Mission 10Xians)
- INFOSYS Campus Connect Programme.
- ORACLE Database Admin Programme
- Texas Instrument Project Partnership

➤ **Women's Cell**

Mission

To enlighten the women students and employees about their legal right and to strive towards the empowerment of the women through the promotion of gender amity and programmes concerning women welfare

Vision

To create a platform where all women can express their needs and priorities , where every women is respected and is able to achieve their potential, living free from harm and discrimination

Objectives

- To sensitize the JIS College of Engineering community on gender equity issues through organizing sensitivity programmes like seminars, publishing handouts etc.
- To promote general harmony and prevent discrimination of women and sexual harassment in the institutes by providing practical suggestions to the administration from time to time,.
- To deal with any instance of discrimination of women or sexual harassment by an employer or students in respect of any other employee or students of JIS College of Engineering.
- To make students aware of Gender Equity.
- To help students to change their mindset and attitude towards life in terms of women.
- To build a society with social and economic gender equality as envisaged in the Indian Constitution through social service.
- To reach out to women in the rural areas and make them aware of their social and legal rights and to equip them to stand against gender violence and gender discrimination.
- To create awareness, instill values and develop the personality and leadership quality.

Events organized by Women Cell, JISCE

One day Seminar on “HOW WE CAN OVERCOME EARLY WOMEN’S HEALTH PROBLEM” on 29th September, 2010. To address such a sensitive and vital issue Dr. Dilip Kr. Dutta ,MD (Gynae),Ph.D, was invited . Dr.Dutta also holds the prestigious position of Vice President of All India Gynecological Society. The event witnessed a grand success with the presence of cent percent of spectators.

Academic Audit or other external review of the academic provision

Academic Audit is conducted annually by an Academic Audit Committee appointed by the Management. Generally an expert in the field of specialization is appointed to Audit the whole academic system and report to the Management.

The affiliating University also conducts an audit annually. In this elaborative procedure where all particulars related to admission, staff and pedagogy, Programmes, student activities, library information, results etc. and various details are and others are taken into account and submitted to the University. The University appoints a committee review the data and scrutinizes every details and reports to the University. Any non-compliance is to be addressed as early as possible.

The reports are discussed in detail at the meeting of Board of Governors and necessary actions are taken.

The internal quality mechanisms are measuring and fully aligned with the requirement of NAAC and NBA. Also aligned with the accredited agencies like ISO and International Accreditation Agency (IAA).

The IQAC plans to review the mission, vision and quality policy and required changes.

Institution communicate on quality assurance policies, mechanism and outcomes-

- Institutional website
- Annual calendar and prospectus
- Quality manual

Examination reforms have been made for quality assurance. Continuous evaluation system was introduced.

Best Practices:

- Personalized attention to students through mentoring System:

JISCE caters the need of the students who need the help of some seniors for moral and academic help.

- Some students need financial help, weakness in some subjects, physical disabilities etc. Particularly Girls students face several difficulties.
- Student Support and progression:

The main objective of mentoring system is to go beyond purely academic concern towards the all round well being of the student and to help them for emotional and mental stability.

Context:


- The students in each class are divided in groups of Ten(10) students and one faculty member is attached to each group. A date sheet is given to faculty concerned who notes the meeting of the students in each week. The faculty gives special attention for the 10 students regarding his Co-curricular activities and extracurricular activities. Extensive remedial teaching is given to the academically weaker students who are identified by some diagnostic test.
- The students are counseled for other problems like financial, health, personal etc.
- The girl students are guided and counseled by the lady faculties.
- Career guidance and counseling is done for all students.

The Practice:

- The placement cell gives career guidance to the students from 2nd year to 4th year as well as job guidance.
- The college trains the students in
 1. Communicative English
 2. Domain knowledge
 3. Social orientation work through NSS
 4. Book Bank has been formed to give at least 5 text book to each student from 1st year to 4th year. Besides these books normal lending at the library persists.
 5. The library remains open from 8 a.m. to 8 p.m.
 6. E-library facilities are provided and E-books and journals are available for the students.

Outcome:

- Most of our students are working in reputed corporate companies like TCS, CTS, Tech Mahindra etc.
- More than 200 students of 4th yr. appearing in the GATE examinations regularly. In 2009 , 45 students scored high in GATE examination.

 **Research:** An integral part of the project work

Context: UG students acquire limited knowledge through lectures in the class room and reference work at library. But this exposure is not enough for them to the real life situation.

Adaptation of Participatory approach is very important. In this way they can identify a problem, analyze the causes and finding the solution. This way of learning process is meaningful and interesting. JISCE introduced the Project work in the 3rd and 4th year courses as compulsory topic and it is within the curriculum of the courses.

Objective of the Practice:

This enables students to adopt scientific approach in the study of any problem and helps them to develop analytical skill for data collection and analysis and learn to prepare a project report and develop the attitude for research.

Preliminary Preparatory Work:

The faculty who is guiding the students for project divide the students into groups on their Choices and select a research project, research design, collection of reference data, journal consultation etc.

Project Work:

For every project a faculty is allotted as a guide based on the areas of specialization and choice of the student.

The student constantly interacts with the guide.

The prospect for project is submitted by the student. The guide and the Department Council approves the proposals on the basis of time constrains, availability of resources, financial implication and complexity of the project.

Collection of Data and Analysis:

After the project proposal is finalized the students collect the reference work from the journals. Guide shows him/her how to study the journals.

Both hardware and software projects the students work in the lab and collects the data, tabulates them, Analyze them with various research tools and interprets the data.

Submission of Project Report:

Finally the students submit the project report to the Department.

Continuous Evaluation of the work by the guide is made at every stage of work. An external examiner is appointed to evaluate the project report after Viva-voce marks is allotted.

Impact of the practice:

The project work undertaken by the students helps them to develop confidence and motivates them to prepare and take up projects in research and innovation. Write up of a project are implement them is the major impact. Moreover the students who works as internee in some industries can identify the industrial problem, suggest for their solution.

Outcome:

The departments collect feedback from the students regarding their project work after completion. The feedback shows that students achieve some scientific approach to any problem. Even an average student does well in project work and publishes papers on the project.

3. Title: Value Education

Objective of the Practice:

To create awareness among the students about Indian Cultural values, Secularism, Values and Ethics in Industry. JISCE organizes cultural festivals and teaches them about the ethical values in industry and aware them about it. College focuses on both academic as well as cultural programs in order to bring a linkage with theory and practice and between knowledge and actions.

Practice

JISCE organizes most of the festivals in the college such as Independence Day celebration, Republic Day celebration, Navaratri, Saraswati Puja, Annual Fest and many more.

These festivals are observed in a wholesome manner involving total participation by students. Besides these Quiz programme are organized.

Evidence of Success:

Organizing such cultural events help in building strong bondage among the students. Students participate very enthusiastically in these events which helps them to build positive attitude.

Innovations and Best Practices

Environmental Consciousness:

JISCE considers the ecology and environment as the important parameter for mankind. Hence JISCE pushes forward strong eco-friendly program that are financially valuable and sustainable in the long term. Through this program the students, faculties and staff aware and learn about safe guarding our natural environment. In the curriculum environmental study is included as a part of the curriculum.

JISCE has the responsibility of conducting Green-Audit on yearly basis and take effective measures to protect and preserve green atmosphere in the college campus.

The IQAC focuses on:

1. To make the college campus greenery by planting more sapling.

2. Make the campus as plastic free zone
3. To take initiative to keep the campus clean.
4. To give botanical name of each plant/tree
5. To plant flower trees

Energy Conservation:

The class rooms are well ventilated. There is a free flow of natural sunlight and air which reduces the power consumption. All the rooms are illuminated with CFL bulbs.

Use of renewable energy is partly made:

- A. Rain water harvesting: This important measure adopted by the college. In rain water harvesting the main object is to store the rain water and use them.
- B. The storage water is used in the garden and other purposes.
- C. Excess water flowing in the drainage system is avoided.
- D. Check day – Construction- No application
- E. An effort for Carbon neutrality- Plantation of trees in the campus works towards maintaining the Carbon Neutrality.
- F. Plantation- Every year in the month of August Green day is observed and students are motivated to plant saplings in the college.
- G. Hazardous Waste Management – Till now JISCE have no Chemical Engineering Department and as such there is no hazardous chemicals. But the wastes from Chemistry Dept. are dumped in a pit.
 - E-Waste Management- As and when IT facilities are upgraded the older system including Computer peripherals are donated to needy schools and association and this practice reduces the accumulation of E-Wastes.

Innovations:

In view of the challenges existing in today's employment sector there is demand to equip the students with global exposure. In this regard JISCE encourages the students and faculties to do the Project work very seriously and sincerely and publish their project work.

- A. Some of the project work can be made patent.
- B. JISCE encourages the students and faculties to apply for Patent. In this regard a Patent Cell is formed and already there are five applications for Patent. All cost for Patent is paid by the college.
- C. This created an impact and students and faculties are taking initiative to innervate application on old and new technology.

Roadmap for Future

Plans of the Institution for the Forth Coming Year

In line with the guide line of NAAC and the JISCE policy of **QUALITY-CONSISTENCY-DEVELOPMENT**, the college plans to take up a number of initiatives through proper and functioning of IQAC. The activities of the IQAC to augment the quality movement in the Institution towards quality assurance.

➤ To renovate the Electrical and water supply facilities of the college with iron removal plant and installing energy saving CFL lights.
➤ Improve infrastructure of all the departments.
➤ Re arranges the laboratory support systems and makes it more users friendly.
➤ Encourage teachers to take up Research Projects.
➤ To improve the class room facilities and creation of at least one smart class room per department.
➤ To organize seminar in association with UGC, TEQIP & AICTE.
➤ To organize conduct International Conferences.
➤ Make internet knowledge compulsory to prepare the assignments and projects.
➤ Provide an orientation programme to the students to introduce the many programmes of the college.
➤ Avail the value education hours to introduce the many programmes.
➤ Conduct training programmes in Personality development and soft skills more intensively.
➤ Continue the value addition programmes as part of the curriculum: Each department may start a diploma or certificate course as part of improving the curriculum content and issue certificates.
➤ Interdisciplinary programmes will be organized by way of invited talks, seminars etc. with the assistance of subject associations and various clubs functioning in the college.
➤ To organize a workshop for +2 students in the state to inspire them in technological subjects.
➤ Human Resource Development Training for students (HRD Training)
➤ Staff Training programmes will be organized periodically to train the staff in ICT based teaching
➤ Departmental meetings be arranged every month to review the progress of the academic plan for the current year
➤ All departments will introduce at least one worthy practice to be emulated by other departments and colleges, with a definite goal and evidence of success.
➤ To covert the campus into an echo friendly campus.