



**Report on the Academic Audit
for the year
2022-23
of
RCC Institute of Information Technology
Canal South Rd, Beliaghata, Kolkata,
West Bengal 700015**

**Schedule:
Friday, July 14, 2023 & Tuesday, July 20, 2023**

Name, Designation and address of Academic Audit Experts:

- 1). Prof (Dr) Amitava Gupta, Professor in Department of Power Engineering, Jadavpur University
- 2). Prof(Dr) Angsuman Sarkar, Professor in Electronics and Communication Engineering in Kalyani Government Engineering College
- 3). Prof (Dr) Chandan Kumar Bhattacharyya, Head, AQAC, Techno India Group Colleges
- 4). Dr. Debasis Giri, Associate Professor, Department of Information Technology, Maulana Abul Kalam Azad University of Technology
- 5). Dr. Santanu Phadikar, Associate Professor, department of Computer Science and Engineering, Maulana Abul Kalam Azad University of Technology

A. Academics

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions for Improvement</i>
Teaching-learning process	Outcome evaluation	Yes	1.PAC Policy required for gap analysis. 2.Uniform policy should be framed for mapping of PO & CO across all programs. After each semester CO-PO attainment must be submitted by each faculty and the same must be discussed and approved by PAC and DAB. 3. Course feedback should only be CO based and should be considered for indirect assessment; histogram analysis is not valid. 4. ICT resource should explicitly be mentioned in lesson plan. 5. Weak and strong student should be classified from result analysis; remedial classes for weak students and policy for quick learner should be documented and approved by PAC and DAB. 6. MOOCs can be used as encouragement for quick learners; Mentorship should be provided for NPTEL courses. 7. Subject progression for a particular subject should be shown for consecutive years, which should reflect the action taken based on gap analysis. 8. ESM (English) department may form Student
	E-learning progress		
	Remedial classes		
	Backlog		
	Any new programs introduced/ considered?		
	MOOCs/ Certificate Courses		

			<p>Film Society for English movies.</p> <p>9. Knowledge level mapping with questions needs to be introduced for quality delivery.</p> <p>10. Lab assignments need to be updated.</p> <p>11. Year-wise laboratory experiments may be varied. Innovative experiments may be added for each laboratory.</p> <p>12. Innovative teaching-learning method should be developed to attract students.</p> <p>13. ECE department should set-up characterization facility for microstrip patch antenna.</p> <p>14. In Language Lab, diagnostic tests should be conducted with British Council.</p> <p>15. Additional training and Certification programs (like Intel AI or NASSCOM) should be arranged and students should be encouraged from 1st year;</p>
Research & Innovation	<p>Journal/ Conf/ Book/ Chapter publication</p> <p>Intellectual property Right (IPR)</p> <p>Student's publication</p> <p>IIC Activities</p> <p>Funded project</p>	Yes	<p>1. Number and quality of research publication is to be enhanced. Significant research contribution needed from all faculty members across all departments. Senior faculty (Assoc Prof and higher) should take additional responsibility and make significant contribution for improvement of departmental R&I activities. Cadre-wise target should be given for paper publication, IPR etc. Professors should take initiative for Sponsored Projects and Consultancy. IRC/IIC/Administration may frame a policy considering all above – an</p>

	<p>Student Project</p>	<p>award/penalty system may be introduced.</p> <p>2. More student events like poster competition and model competition may be organized to showcase the student projects</p> <p>3. Student project publication/ patenting / copyright should be brought into regular practice for more number of final year projects.</p> <p>4. Project must be allocated at the beginning of the 5th semester (for UG) and 1st semester (for PG). Number of project evaluation should be at least 2 before final one and the final or end semester evaluation report following OBE-based departmental project rubrics must be submitted to IRC through departmental project coordinator.</p> <p>5. A project log book must be maintained by every project group. Uniform format of project logbook and report template may be circulated by IRC. Midterm project evaluation needs to be well documented.</p> <p>6. Dedicated space should be exhibited for funded project equipment set-up and industry-sponsored labs.</p> <p>7. Average impact factor for journals should be part of publication database.</p> <p>8. Citation count for all journals is required.</p> <p>9. Involvement of students as well as junior faculty members in research activity needs to be encouraged. Proper utilization of research facility (like leave etc.) given by the institute should be monitored by IRC.</p> <p>10. More financial support is required for research publications and IPR.</p> <p>11. Microwave and Antenna lab (ECE), Drives Lab (EE) and Process Control Lab (AEIE) should be used for collaborative research work due to excellent infrastructure. Brainstorming session is required for every department for identification of resources for research and generation of ideas for</p>
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			<p>project proposals.</p> <p>12. Collaborative research may be promoted from the institute.</p> <p>13. Pertinent steps should be taken by IRC/IIC/Administration for ranking of the institute in NIRF and NIRF Innovation.</p> <p>14. A clear and focused policy should be framed for different cells like IIPC, IRC, EDC, IIC, IPRC etc. that can operate in hand-shaking mode with mutual trust and support.</p>
Organizing activities	Conference	Yes	<p>1. More events (seminar/ workshops/ conference/ FDP/SDP) should be organized at department/ institute level.</p> <p>2. Each Dept. should have an active Student Chapter/Branch of professional bodies like CSI/IE(I)/IEEE</p> <p>3. Student Workshops should be conducted to compensate curricular gaps</p>
	FDP		
	Seminar/ Webinar/ Workshop		
	Student's chapter		
	Club Activities		
	Staff Development		
Placement	Industrial placement	Yes	<p>1. Status of alumni after 3 years should be collected and recorded</p> <p>2. Internship Coordinator should be allocated and Internship data should be maintained centrally.</p> <p>3. CII membership may be taken to promote placement and internship activities.</p> <p>4. Higher Study data of each POB should be systematically collected and updated; proper mechanism for collection of such data should be framed by TPC</p> <p>5. GATE training for higher study should be re-initiated.</p> <p>6. Alumni should be made involved to facilitate internship and placement.</p>
	Higher Studies		
	Internship		
	Training		

Feedback	360° feedback as per AICTE norms	Yes	<ol style="list-style-type: none"> 1. It is recommended to configure program-centric feedback from stakeholders through digital system for proper and seamless evaluation of outcome. 2. Action-taken SOP also needs to be developed and well-structured. 3. New 360° feedback system for faculty as prescribed by AICTE should be institutionalized. 4. Alumni meet should be organized at dept. and institute level regularly.
	Meeting with Guardians		
	Meeting with Alumni		
	Feedback from employers		
Library	Book Bank	Yes	<ol style="list-style-type: none"> 1. Subscription required for Elsevier for selected journals (only Scopus). 2. Similarity checking software is required. 3. Increase in the no. of Volume and Title of books in the departmental library is required
	Lending/ Reading		
	Digital section		
	NDLI Activities		
	Footfall		
Collaboration	MOU with leading industries	Yes	<ol style="list-style-type: none"> 1. Academic collaboration required at Individual/Departmental/Institutional level. MoUs should be functional.
	Academic collaboration		
Faculty Outreach	Membership	Yes	<ol style="list-style-type: none"> 1. Faculty membership/outreach should be used for organizing activities.
	BoS		
	Invited Talk		
	Committee member		
	Examiner/ Moderator		
	Session Chair/Judge/ Panelist		

B. Administration

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions for Improvement</i>
Extracurricular and co-curricular activities	Technical activities	Yes	<ol style="list-style-type: none"> 1. Best practices of individual departments for various aspects need to be institutionalized.
	Sports activities		
	Cultural		

	activities		
	Outreach program/ NSS activities		
Student-Faculty Ratio	Gap with accreditation norms	Yes	1. Quite appropriate
Development of non-movable assets	ICT based infrastructure	Yes	<p>1. LMS is mandatory.</p> <p>2. Video lectures and presentations for each specific course are required for development of e-Learning portal. Faculty members should be encouraged to make videos of their lectures.</p> <p>3. More smart classrooms may be developed.</p> <p>4. Lab N114, N115, N214 have empty spaces, which may be optimized.</p> <p>5. To maintain documentations as well as quick retrieval of information of various aspects of operations, it is recommended to implement any standard ERP system.</p>
	New classroom/ lab/ seminar room etc.		
New instruments & computer procurement	New Instruments	Yes	<p>1. Additional toolboxes can be purchased with existing MATLAB ® for AI & ML courses</p> <p>2. Yearly purchase update is required.</p> <p>3. Balancing of resource utilization across the departments needs to be encouraged.</p> <p>4. Laboratories, as required for multiple departments, needs to be shared rationally for optimum and effective utilization of infrastructure and resources.</p>
	Computer		
	Software Availability (Licensed)		
	Maintenance		
Systems	Bandwidth	Yes	<p>1. FTP Server is must.</p> <p>2. Dedicated storage space should be kept for video lectures.</p> <p>3. Internet bandwidth is OK but campus Wi-Fi is inadequate and should be augmented</p>
	Wi-Fi		

Mentorship	Student's Attendance	Yes	<p>1. Proper framing of SIP is required.</p> <p>2. Active Mentoring system should be implemented involving all faculty members across all departments; student's attendance, curricular, co-curricular and extra-curricular activities/performance should be maintained in student portfolio. Each faculty should maintain a Mentoring log where interaction with students should be recorded.</p>
	Student's performance in various co-technical, sports, cultural, co-curricular & extracurricular activities		
	Induction program		
Green initiative	Waste disposal	Yes	<p>1. There is scope for more green initiative, clean & renewable energy use</p>
	Renewable energy		
	Beyond campus activities		
Auditorium	Events organized with beneficiaries	Yes	<p>1. Fire Extinguisher is must in Auditorium.</p> <p>2. Better screen viewing and sound system is required</p>
	Resources available		
Central computing	Instruments/ Accessories	Yes	<p>1. Fire Extinguisher is must in Central Computing labs.</p> <p>2. Overhead projector is must.</p>
	Licensed Software		
Institute outreach	Connect-to-School	Yes	<p>1. Good initiative to familiarize students about engineering programs and also indirect promotion of institute; presentations should be given on recent advancement in science and technology</p>

C. Facilities

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions for Improvement</i>
Room	Class room		<p>1. No faculty room available for faculty to be</p>
	Faculty Room		

	Lab	Yes	<p>newly recruited for additional intake in CSE and CSE (AI & ML)</p> <p>2. No advanced lab found for CSE (AI & ML)</p> <p>3. Departmental Library facility not functioning properly in CSE & IT.</p>
	Library		
ICT & Computer	ICT	Yes	<p>1. ICT facility not adequate in CSE & IT with respect to intake. Need to arrange low-cost ICT facility like tablet for faculty conducting lab & theory classes</p> <p>2. Overhead projector or smartboard is required in every lab and classroom.</p>
	Computer		
Student data	1. Student Profile	Yes	1. No system found for maintaining student profile.

C. Club/Cell/Committee

C1: EDC (Entrepreneurship Development cell)

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions for Improvement</i>
Achievement in last academic year	No of entrepreneur with details:	Yes	<p>1. Overlapping observed between functioning of EDC and IIC. EDC should be a part of IIC which should be the apex body. EDC may conduct event in coordination with IIC</p> <p>2. Entrepreneurship Development Cell Network (EDCN) membership may be taken.</p> <p>3. Entrepreneurship record/documentation is not at all substantial.</p>
Present Status	Total no of entrepreneur in last five years (with details):	Yes	
Type of activities organized for promoting culture		Yes	
Contribution received	No of internships/jobs facilitated in last five years (with details):	Yes	

C2: IRC (Institutional Research Committee)

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
No of publications	Journal:	Yes	<p>1. Non-PhD faculty may work under doctorate faculty for PhD work. PhD guidance by doctorate faculty needs substantial improvement.A target of atleast one (1) PhD scholar (enrolled) each year under each doctorate faculty should be fulfilled till a maximum of 4 PhD scholar under each doctorate faculty is achieved. This should be monitored and facilitated by the IRC.</p> <p>2. Overall research culture of the institute needs to be improved across the departments.</p> <p>3. Interdisciplinary research needs to be encouraged.</p> <p>4.Senior faculty members should apply for funded projects. Project applications needed to be recorded centrally. A target of atleast one (1) funded project to be applied by each Associate Professor and Professor in a year should be fulfilled and the same should monitored by IRC.</p> <p>5.Sponsored Project and Consultancy Monitoring Committee may be formed along with proper policy.</p> <p>6. All publications/IPR/ projects/innovations by faculty should contain affiliation of the Institute only.</p> <p>* Other comments given in A above</p>
	Conference:		
	Book Chapter:		
	Book/Ed. Vol.:		
No of student publications	Journal:	Yes	
	Conference:		
	Book Chapter:		
	Book/Ed. Vol.:		
No of IPR	Copyright:	Yes	
	Patent (applied):		
	Patent (published):		
	Patent (granted):		
No of funded Projects	Received (ongoing):	Yes	
	Completed:		
No. of Consultancies	Received (ongoing):	Yes	
	Completed:		
No of prototypes exhibited	Exhibited:	Yes	
	Awarded:		
Type of activities organized for promoting culture		Yes	

C3: IIPC (Industry-Institute Partnership Cell)

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions for Improvement</i>
No of internships/ placements offered to students	Internships offered:	Yes	<p>1. IIPC should fetch consultancies from industries on live projects. Atleast one (1) consultancy in the domain-expertise of institute faculty should be earned every year.IIRC should actively work with IIPC in this regard.</p> <p>2. IIPC should actively help faculties and the Institute to earn revenue and resources through industry-sponsored projects, CSR funding and consultancies. This has not become a regular practiceof the Institute.Every year a target of CSR funding or sponsored project from atleast one (1) industry should be achieved.</p> <p>3. IIPC role is presently insignificant while making liaison with TPC and industries. Number of placement and internship arranged so far through IIPC is very less.Atleast one (1) new company (offering internship in PPO model and package of 10 LPA or higher) account should be added each year.</p> <p>4. IIPC should work with IIC to earn incubation support and start-up promotion by industry.</p> <p>5. A target of developing atleast one (1) industry-sponsoredlab (where students should work on projects/problem statements from industry) in each dept. should be fulfilled in next 2 years.</p>
	Placements offered:		
No. of students availed internships/ placement offers	Internships offered:	Yes	
	Placements offered:		
No of project grants received	Total amount:	Yes	
No of MoUs signed	No:	Yes	

C4: IIC (Institutions Innovation Council)

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
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No of statutory events organized:		Yes	1. Innovation Lab should be set up with AutoCAD or SolidWorks/SolidCAM, 3-D Printer, CNC Machine, Micro controller and other minimum hardware equipment.
No of hackathons/prototype design competitions organized:		Yes	2.A common "Innovation Gallery" may be developed to show-case best achievements as well as student projects across all academic depts.
Incubation Center	No of prototypes developed:	Yes	3. A circular should be provided for using central facilities slot-wise.
	No of IPRs registered:		4. Facility may be opened for start-up ventures; Start-up laboratory should be formed with defined policy. This should support technical incubation as per NISP norms. 5. MoU may be initiated for prototype development and further incubation. 6. Hackathon and prototype design competitions should be organized regularly * Other comments given in A above

C5: Social Media Cell:

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
No of outreach/awareness programs organized:		Yes	1. "RCC Horizon" - a platform may be developed for upload of popular lectures in English as well as in mother language (Bengali) on latest technological trends in Electrical, Electronics and Computer Engineering and on latest scientific innovations world-wide. 2. All inhouse events, awards and achievements may be highlighted by Social Media Cell.

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C6: Training & Placement:

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
Industrial training	No of students successfully completed self-opted training:	Yes	1.Internship policy required along with Internship Coordinator. 2. Same provision for internship of B.Techand MCA students should be kept. 3. New accounts of MNCs offering higher packages(more than 10 LPA)need to be created; a target of creating atleast 2 new accounts every year should be pursued and achieved. 4. Industrial training need to be standardized through MoU with industry; existing MoU with MSME Tool Room may be utilized fully * Other comments given in A above
	No of students successfully completed training organized by Institution		
Placement	Total no of students:	Yes	
	Total no of eligible students:		
	Total no of placed students:		
Company details	No of companies recruited:	Yes	
	No of new accounts created:		

C7: MOOC Committee:

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
Honors certifications	Type of courses completed for Honors degree	Yes	1. Policy needed for credit consumption objective. 2. Policy for MOOCs and NPTEL should be framed. 3. Composite MOOCs data set is required for year-wise and department-wise.

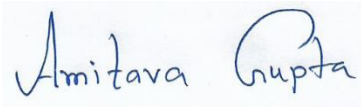
C8: Grievance Redressal Cell:

<i>Criterion</i>	<i>Sub-criterion</i>	<i>Verification Yes/No</i>	<i>Suggestions forImprovement</i>
Honors certifications	Type of courses completed for Honors degree	Yes	1. Grievance record and action taken against at least one grievance to be made available. 2. Student Grievance Redressal Cell mechanism should be documented. It should be separated from ICC.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> - Teaching-Learning is quite appropriate. -Existing infrastructure is well maintained. - Faculty strength and retention rate are high. - Faculty remuneration is quite standard 	<ul style="list-style-type: none"> - Institute is not earning revenue from sources other than student fees (and hosting exams of different bodies) in spite of having 50% PhD holders out of total faculty strength. - IIPC role is below par in terms of earning funded project, consultancy, CSR funding, paid internship and placement. - Insignificant contribution from senior faculty (Assoc. Prof. and higher) - 24 year's college, yet alumni contribution in institute's development 	<ul style="list-style-type: none"> - To become one of the best engg. colleges in the state given its location, resources and reputation - To feature in NIRF ranking - To improve NAAC and NBA score - To earn academic autonomy - To improve research activity and IPR - To improve industry connect - Annual Report must be published. This will become the face of the Institute. 	<ul style="list-style-type: none"> - Both ERP and LMS are required to handle the bulk volume of data, otherwise delay and inappropriateness in operations and decisions will affect outcome - More discipline and accountability on part of faculty is needed else outcome will be less than investment - Need to excel in placement, industry connect, research and ranking else there

	is poor		is threat of sustenance from competitors
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Prof (Dr) Amitava Gupta



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