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SOCIAL RESPONSIBILITY

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Academic Council MoM

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**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY**

**MINUTES OF THE
TWENTY SEVENTH MEETING OF THE ACADEMIC COUNCIL**

The twenty seventh meeting of the Academic Council was held on 15th January, 2016 at 1000 hrs at DA-IICT. The following members were present:

1. Prof R Nagaraj, Chairman
2. Prof Surendra Prasad
3. Prof Naresh Jotwani
4. Prof Sanjay Srivastava
5. Prof Binita Desai
6. Prof Anish Mathuria
7. Prof Suman Mitra
8. Shri Soman Nair, Secretary

Leave of absence was granted to Prof David Koilpillai, Shri K Narayan, Shri Suresh Rangachar and Shri Tapan Misra.

The Chairman welcomed the members to the meeting. He informed the Council that the preparations for holding the twelfth Annual Convocation of the Institute on 16th January, 2016 have been completed and Dr A Sivathanu Pillai, eminent Scientist and Honourable Distinguished Professor, Indian Space Research Organization; Bengaluru is the Chief Guest for the Convocation. The Council noted the same.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 17th August, 2015**

The Council approved and confirmed the minutes of the twenty sixth meeting of the Council held on 17th August, 2015 as placed before the meeting.

Item No. 2

**To note the action taken on the minutes of the meeting of the
Council held on 17th August, 2015**

The Council noted the actions taken in implementing the decisions taken at its last meeting. Taking note of the progress of the work of Curriculum Review Committee of B.Tech (ICT) Program, the Council opined that during the course of its work, the Committee should constantly be in contact with the Industry and Alumni and their feedback should be studied and if found practical and industry-relevant, they should be incorporated in the curriculum.

The Council opined that the Institute should plan to adopt a scheme which will continuously review and assess both learning and teaching. The learning and teaching



should be viewed as complimentary activities that aim to benefit the quality of student learning and the professional development of the Course Instructor. Assessing learning alone is not sufficient because the ultimate success of students will also be dependent upon their motivation and commitment to learning. Assessment of teaching and learning can help instructors improve and refine their teaching practices and help improve students learning and performance. The Council suggested that a system of internal assessment involving peer group based on the outcome of the course could be done on a yearly basis. The Dean reported that a scheme of internal assessment of learning and teaching is in place based on the feedback taken from the students on delivery of courses.

Item No. 3

To consider and approve the changes in the curriculum of M.Sc (IT) Programme

The Dean briefed the Council on the changes proposed in the MSc (IT) curriculum. The Council approved the following:

- Transfer of Computer Networks (IT694) course to semester-II and Open Elective to semester-III.
- Summer Internship: 3 credits
- Full Semester Project Internship: Decided that 16 credits be maintained
- The students, with the approval of the PG Committee, may take an extra course if they are doing their internship in campus with the faculty. However, this provision may also be extended to the students who are doing their internships in nearby organizations/institutions, at the discretion of the PG Committee.

The Dean informed the Council that the curriculum review of the program has failed due and it will be taken up soon.

Item No. 4

To note the status on review of the M Sc (ICT-ARD) Programme

The Dean briefed the Council on the genesis of the program and stated that in spite of several attempts, the program has not been received well by prospective students. He stated that the Committee of Experts constituted to review and recommend restructuring of the program began its work. The Council noted the progress of work of the Committee.

Item No. 5

To note the status report on review of M Des (CD) Curriculum Phase I and II

Prof Binita Desai briefed the Council on the status of review of M Des Curriculum. She stated that the Committee has received feedback from the Alumni. She clarified that the M Des is not a pure design program and the program has courses which expose the students to the application of ICT in communication design. This is one of the reasons; the expert committee felt the need to upgrade the curricular inputs in the Object Oriented Programming Course in response to the emerging needs of the design industry. She further clarified that even the students with humanities



background appreciate having Object Oriented Programming Course. The Council noted the outcome of the first and second reviews.

The Council advised the Director that the final report on restructuring of the M Sc (ICT-ARD) and M Des (CD) Programs be presented before the Council at its next meeting so that the restructured programs can be offered from the next academic year.

Item No. 6

To approve and recommend to the Board award of Degrees to the students who have completed their academic requirements in the academic year 2014-15

The Council approved and recommended to the Board a list of 379 students for award of Degrees at the Convocation to be held on 16th January, 2016. Further, the Council approved and recommended to the Board the award of President's Gold Medals to the following students:

Sr No	Student Id	Student Name	CPI	Program
1	201101058	AIMAN JAWAID HAIDER	9.62	B Tech (ICT)
2	201311024	SHAH FALAK HIMANSHU	9.96	M Tech (ICT)
3	201312003	DIKSHIT PRACHI MANOHAR	9.31	M Sc (IT)
4	201313003	JAYKUMAR DILIPBHAI JIVANI	8.49	M Sc (ICT-ARD)
5	201313004	FENEE DALSUKHBHAI AMRUTIYA	8.49	M Sc (ICT-ARD)
6	201314001	PALAK SANGHANI	8.64	M Des (CD)

Item No. 7

To approve the revised Academic Calendar for 2015-16

The Council approved the revised Academic Calendar for the year 2015-16 as placed before the meeting.

Item No. 8

Briefing by the Director

The Director informed the Council that 8 Doctoral Scholars will receive their Degrees at the Convocation on 16th January, 2016. The Council noted that, since launching of the program, the highest number of scholars is graduating this year. In response to a query, the Dean replied that three Scholars are serving academicians, one a civil servant and others are planning to go for post-doctoral studies.

The Director informed the Council that applications for accreditation by the National Assessment and Accreditation Council (NAAC) and inspection of DA-IICT on recognition under section 2(f) have been submitted. He further informed the Council that the following new faculty members have joined the Institute.



- 1) Ashutosh Bhatia, PhD (Computer Science), Indian Institute of Science Bengaluru.
- 2) Rajib Lochan Das, PhD (Adaptive Signal Processing), Indian Institute of Technology, Kharagpur.
- 3) Manish Narwaria, PhD (Computer Engineering) Nanyang University, Singapore
- 4) Yash Vasavada, PhD (Wireless Communications), Virginia Polytechnic Institute and State University, USA
- 5) Saurabh Tiwari, PhD (Software Engineering) (Thesis submitted) Indian Institute of Information Technology, Design and Manufacturing, Jabalpur
- 6) Kalyan Sasidhar, PhD (Computer Science & Engineering) University of North Texas, USA.

The meeting ended with a vote of thanks to the Chair

K. S. Das



**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY**

**MINUTES OF THE
TWENTY EIGHTH MEETING OF THE ACADEMIC COUNCIL**

The twenty eighth meeting of the Academic Council was held on 10th June, 2016 at 10.00 a.m. at DA-ICT. The following members were present:

1. Prof R Nagaraj, Chairman
2. Prof Surendra Prasad
3. Prof Naresh Jotwani
4. Prof Sanjay Srivastava
5. Prof Anish Mathuria
6. Prof Suman Mitra
7. Shri Soman Nair, Secretary

Leave of absence was granted to Prof David Koilpillai, Shri K Narayan, Shri Suresh Rangachar, Shri Tapan Misra and Prof Binita Desai.

Dr Manik Lal Das, Convenor of the B. Tech (ICT) Curriculum Review Committee, attended the meeting as a special invitee.

The following items were discussed:

Item No. 1

To confirm the minutes of the 27th meeting of the Council held on 15th January, 2016

The Council confirmed the minutes of the twenty seventh meeting of the Council held on 15th January, 2016 as placed before the meeting.

Item No. 2

To review matters arising from the minutes of 27th meeting of the Council

The Director briefed the Council on the actions taken on the minutes of the last meeting. Referring to the deliberations of the Council on M. Sc (ICT-ARD) and M. Des (Communication Design) Programs, he stated that the restructuring of these programs will not take place from the academic year 2016-17 since the respective Review Committees are still working on their reports. He further stated that the Committees will complete their work soon and the reports will be placed before the next meeting of the Council. It was clarified that the programs in the present format will be offered to the 2016-17 batches and the restructured programs will be implemented from the academic year 2017-18 after obtaining approval of the Council and the Board of Governors.



Item No. 3

To consider and approve the report of the Curriculum Review Committee for B. Tech (ICT) Program

At the invitation of the Chairman, Dr Manik Lal Das, Convenor Curriculum Review Committee for B. Tech (ICT) Program presented the Report of the Committee before the Council. Prof Das informed the Council that the Committee had extensive consultation with faculty, industry representatives, alumni and students and the report is prepared taking into consideration the input given by all the stakeholders. He reported that the Board of Studies (BoS) at its meeting held on 31st May, 2016 also examined the draft report and the recommendations as well as suggestions of the BoS have been incorporated in the report placed before the meeting.

The Council reviewed the report in detail and decided as follows

- **Exchange slots of Discrete Mathematics and Calculus courses in the first and second semester.** This is in the context of Basic Electronics course slotted in the first semester. The Calculus course is to be slotted in parallel to Basic Electronics and the Discrete Mathematics course will get positioned in the second semester.
- **Create a new category of course called Mini-Project 0-1-4-3 or Supervised Project to be offered as an elective.** A student should be allowed to take maximum of two such courses, once in each semester from fifth semester onwards. Students need to have a CPI greater or equal to 7.5 to be eligible to register for such a course. The detailed procedures for Mini-Project are to be developed and recorded under free electives category. The Mini-Project credits are to be counted from free electives category.
- **Process of off-campus BTP and the role of UG Committee in approving each off-campus BTP.** This is to be articulated in the B. Tech Project (BTP) section. BTP evaluation should follow an effective evaluation process that should factor (a) supervisor assessment and evaluation committee's assessment, (b) a minimum-maximum cap on allotting the number of students per supervisor, and (c) a selection criteria for off-campus BTP. The UG Committee in consultation with Dean (Academic Programs) will devise guidelines on these factors and then advise the BTP coordinator to implement the same.
- **Graduation Requirements.** Graduation requirements section is to be tuned with clarity.
- **Redundancy of Optional electives in Semester VII and VIII.** This is to be eliminated.
- **Outcome based course content for each core course.** Highlight this in the report. The Dean (Academic Programs) will formulate a mechanism for outcome based education for the core courses. As a first step, the instructor needs to specify objectives of each component/sub-component of the course contents and assign weightage to each of them. The objectives of each course should have parity with the program outcomes/course outcomes defined broadly by NBA (National Board of Accreditation)/ABET. The faculty collectively should evolve assessment mechanism based on instructor's own assessment, students' assessment or peer's assessment. Then, Dean (Academic Programs) will examine the courses which satisfy/do not satisfy program outcomes/course outcomes and take corrective measures.



- **The course title of "Algebra" be changed to "Groups and Linear Algebra".**
- **To review contents of the Core courses and textbook.**

The Council deliberated in detail on the program outcomes and course outcomes and stressed that the Institute should devise mechanisms to document program outcome and student learning outcome and measuring them with an objective to demonstrate to the stakeholders the program accomplishments. This involves gathering, analyzing and using information from various sources about the program and measuring the outcomes in order to improve student learning. One of the components should be to assess the student learning and experience to determine whether the students have acquired the skills, knowledge and competencies.

The Council pointed out that the program outcome and course outcome are to be treated differently. While the faculty concerned has to be responsible to evolve mechanism to measure outcome of the course he/she offers, measuring program outcome has to be the collective responsibility of the faculty members involved in conducting the program with the leadership of Dean (Academic Programs). The Council felt that the faculty should be trained to sensitize the entire process since measuring the program outcome and student learning outcome are considered essential in determining the quality of the program. The Council sought the guidance and support of Prof Surendra Prasad in designing and conducting an appropriate training program to sensitize the faculty in the processes of measuring the program and course outcomes.

The Council recommended incorporating the above comments into the report and finalizing the report. The Council approved the implementation of the revised B. Tech (ICT) curriculum from the academic year 2016-17.

Item No. 4

To ratify the decision to revise the batch size of M.Sc (IT) Program from 90 to 120 students

The Council accorded its approval to revise the batch size of M. Sc (IT) Program from 90 to 120 students with effect from the academic year 2016-17.

Item No. 5

To note the NAAC Accreditation

The Council noted with concern that the National Assessment and Accreditation Council (NAAC) has accredited DA-IICT with a letter grade of 'B' with CGPA of 2.85, i.e., 16 CGPA short of an 'A' Grade, on assessment in April, 2016. The Director informed the Council that the NAAC is expected to provide the accreditation certificate and quality profile in July, 2016 and on receipt of them, it is proposed to appeal before the Appeals Committee of NAAC against the grading. The Council approved the proposal.



Item No. 6

To approve the Academic Calendar for 2016-17

The Council approved the Academic Calendar for the academic year 2016-17 and placed the meeting.

Item No. 7

To note additions to the faculty

It was pointed out that this item was placed before the last meeting of the Council and thus the brief on the new faculty members, who have joined the Institute during 2015-16 and up to January, 2016 was noted.

The meeting ended with a vote of thanks to the Chair

K. S. Das Gupta



**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY**

**MINUTES OF THE
TWENTY NINTH MEETING OF THE ACADEMIC COUNCIL**

The 29th meeting of the Academic Council was held on 17th January, 2017 at DA-IICT. The following members were present:

1. Prof R Nagaraj, Chairman
2. Prof Surendra Prasad
3. Prof David Koilpillai
4. Prof Naresh Jotwani
5. Prof Sanjay Srivastava
6. Prof Suman Mitra
7. Prof Sanjeev Gupta
8. Shri Soman Nair, Secretary

Leave of absence was granted to Shri K Narayan, Shri Suresh Rangachar, Shri Tapan Misra and Prof Binita Desai.

The Chairman informed the Council that Dr G Athithan, Distinguished Scientist and Director General, Defence Research & Development Organisation, Government of India and Prof Sanghamitra Bandyopadhyay, Director, Indian Statistical Institute are the Chief Guest and Guest of Honour respectively for the Convocation to be held on 21st January, 2017. The Council noted the same.

The Chairman also informed the Council that Prof Anish Mathuria ceased to be a member of the Council on expiry of his term of appointment as Dean (R&D) and in his place; Prof Sanjeev Gupta took over as Dean (R&D) and he became a member of the Council. The Council welcomed his membership. The Council recalled the contributions of Prof Mathuria to the deliberations of the Council and recorded its appreciation to him.

At the invitation of the Chairman, Professors Manik Lal Das and Minal Binse have made presentations before the Council on the curriculum revision of M. Tech (ICT) and appraisal of M.Sc (IT) Programs respectively.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 10th June, 2016**

The Council confirmed the minutes of the meeting held 10th June, 2016.



Item No. 2

To note the actions taken on the minutes of the meeting of the Council held on 10th June, 2016

The Council noted the actions taken on the minutes of the meeting held on 10th June 2016. It was brought to the notice of the Council that on an enquiry, it was found that the Appeal Committee of NAAC has decided on our appeal against the accreditation result and the decision is pending for approval by the Executive Committee of NAAC.

Item No. 3

To amend Clause 2(5)(c) of the Academic Requirements for Post Graduate Programs

The Dean briefed the Council that the purpose of amending Clause 2(5)(c) of the Regulations on Academic Requirements for Post Graduate Programs is to grant an opportunity to PhD Scholars to improve their CPI for them to advance for appearing in the comprehensive examination. He stated that those Scholars who acquire CPI of 7.00 and above at the end of the course work can only appear for the comprehensive examination. There are rare cases of Scholars falling short of acquiring CPI 7.00 and by providing them an opportunity to substitute/replace one course, they may be able to acquire CPI 7.00 and move for comprehensive examination. The Council opined that CPI 7.00 is generally not considered as high threshold for the PhD Scholars to become eligible for comprehensive examination in national institutions. However, the Council approved the amendment of the Regulation by adopting the following resolution:

“RESOLVED THAT Clause 2(5)(c) of the Regulations on Academic Requirements for Post Graduate Programs be and is hereby amended to read the rules as follows with immediate effect:

Clause 2(5)(c)

A student getting a DD or DE grade in a course may substitute it by another course provided his/her CPI is less than the prescribed minimum for getting the degree for which he/she is registered and the student is allowed to continue in the program. For PhD students, replacement/substitution by another course is allowed; subject to his/her CPI is less than the prescribed minimum requirement for PhD comprehensive examination.”

Item No. 4

To note the status on curriculum review of M Tech (ICT) Program and approve revision of curriculum

The Chairman briefed the Council on the status on review of curriculum of M Tech (ICT) Program. He stated that the current curriculum is excessively focused as a result the number of aspirants applying for admission to the program has been declining for the last few years. The program is currently offered in thesis mode with an objective to prepare the graduates for a career in research and academics and it has been noticed that after they go through the program the majority of them seek



employment in Industry. The program offered six specializations resulting in class sizes of 9-15 students and the Institute finds it difficult to arrange the required number of electives. The review of curriculum also has fallen due to changing technologies, industry needs and keeping in view of the aspirations of graduates.

The Chairman informed the Council that the review was carried out by a Committee with external experts, consultations with research institutions and industry. The Review Committee's recommendations have also been deliberated and approved by the Board of Studies at its meeting held on 16th January, 2017. Thereafter, he invited Prof Maniklal Das, Convenor of the Review Committee to present the findings of the Committee before the Council.

Prof Das briefed in detail the review process adopted by the Committee and stated that the Committee collected feedback from various stakeholders, followed by discussions with specialized faculty groups and the whole faculty. The entire process has gone through extensive deliberations on inputs and suggestions provided by stakeholders. He highlighted the following:

- The restructured Program will be offered in two modes -- project and thesis modes. The student will exercise this option at the time of admission.
- The curriculum will not have explicit specialization. The first semester courses will provide basic foundation in ICT and will be common to all students. This is expected to bring them on par with one another and prepare them to choose courses/research in the subsequent semesters.
- In the second semester onwards students will be given choice-based core and elective courses in interdisciplinary domains and then project/thesis by which a student can show breadth in domain knowledge in ICT and robust skills in preferred areas/specializations.
- The revised curriculum will incorporate lab components in some courses with latest technologies and tools, which will strengthen students' skills with practical knowledge.
- The curriculum structure will have compulsory foundation courses in the beginning followed by group core termed as domain knowledge in ICT and electives in ICT and finally either a Thesis spread over in third and fourth semesters or an Industry Project. The restructured curriculum will have 60 credits compared to the present curriculum of 48 credits.

The Council advised the Committee to evolve a method to determine the learning outcome while finalizing the revised curriculum. The Council also advised that the Institute should draw up a plan to administer the internship part of the program effectively by guiding the students to draw up an internship plan, vetting the plan by the faculty, assigning the faculty mentors, generating structured thematic internship projects from industry with industry mentorship arrangements and continuous performance review during the internship. The Council noted the status and accorded its approval for the Committee to proceed with its work.

The Chairman informed the Council that the planned intake is 30 students in thesis mode and 50 in project mode for the academic year 2017-18. He also stated that the students opting for thesis mode may be considered for teaching assistantship @



Rs.12,400/- per month and out of the students opting for industry internship, 10% of the class may be considered for teaching assistantship.

Item No. 5

To note the status on appraisal of MSc (IT) Programme and approve proposed changes

The Chairman briefed the Council that a five member Committee comprising of an external member with Prof. Minal Bhise as Convenor has conducted an appraisal of the MSc (IT) Program. He stated that the objective of the appraisal was (a) to identify the knowledge areas required for the curriculum, map courses objectives with program objectives and align sequences of courses to tune with the industry needs.

At the invitation of the Chairman, Prof. Bhise presented the process of appraisal before the Council and summarized as follows:

- The feedback received from students, faculty and Placement Committee indicated that Programming, Data Structures, Algorithm and Communication Skills are the areas to be prioritized and strengthened.
- The core courses, Operating Systems and Computer Organization will be moved to technical electives.
- The System Programming, 'C' Programming and Web Programming will be added as Core courses.
- The core courses, Computer Networks and Software Engineering that are relevant for placement will be brought forward from third to second semester.
- The core course 'Enterprise Computing' is being redesigned based on industry needs.
- Course contents for Programming, Systems Programming and Web Programming are being developed.
- The elective courses, Cloud Computing, E-Commerce and Big Data Analytics are being restructured.
- The course on Communication skills will be made more effective by having small classes. It is planned to introduce project presentation by the students to improve their presentation skills.
- Exclusive elective courses will be designed and offered to M.Sc (IT) students
- Robust admission test will be designed and administered to ensure the entry of talented and deserving students.

The Council noted the steps taken in restructuring the MSc (IT) Program and approved offering the restructured program from the academic year 2017-18

Item No. 6

To note the discontinuation of MSc (ICT-ARD) Programme

The Council noted the decision taken by the Board of Governors at its meeting held on 11th November, 2016 to discontinue the MSc (ICT-ARD) Program based on the reviews conducted by the Expert Committees and the Academic Council.



Item No. 7

To note the special courses offered by the faculty of Nanyang Technical University, Singapore, Missouri University of Science & Technology, USA and Goa Institute of Management, Goa

The Council noted the following:

- Nanyang Technical University (NTU), Singapore has included DA-IICT as one of the Indian Institutions for the NTU-India Connect Research Internship Program.
- Professors N Sundararajan and S Suresh, faculty members, NTU and Dr. Jagannathan Sarangapani, Rutledge Emerson Distinguished Professor, Missouri University Of Science & Technology, USA have conducted a technical elective course titled 'Selected Topic in Neural Networks and their Applications' to the BTech students of 2013 and 2014 batches and MTech students during the last summer semester and winter holidays.
- Prof Nitin Upadhyay, Goa Institute of Management offered a special course on 'Computational Data Science' to the BTech (ICT), MTech and MSc (IT) students during the last winter holidays.

Item No. 8

To note the proposal to organize an International Workshop on Cyber-Physical Systems

The Council noted the proposal and commented that the Cyber-Physical System is a new area and adequate care be taken in selecting national and international experts for inclusion in the panel. The Council suggested approaching IIT Kanpur, IIIT Hyderabad and IISc Bengaluru to identify experts.

Item No. 9

To note the brief on faculty research and entrepreneurship

The Council noted the status on research, publications and entrepreneurship of faculty as on 31st December, 2016 as details placed before the meeting.

Item No. 10

To approve and recommend to the Board the award of Degrees to the students who have completed their academic requirements

The Council resolved to recommend to the Board of Governors the award of Degrees to the twelfth batch of BTech (ICT), thirteenth batch of MTech (ICT) and MSc (IT), twelfth batch of MSc (ICT-ARD), ninth batch of MDes (CD) and PhD Scholars who have successfully completed their studies during the academic year 2015-16 numbering 349 students whose names appear in the list placed before the meeting, at the forthcoming Convocation to be held on 21st January, 2017."

The Council also resolved to recommend to the Board of Governors to approve award of President's Gold Medals to the following students at the forthcoming Convocation to be held on 21st January, 2017:



Sr No	Student Id	Student Name	CPI	Program
1	201201133	DEVANSHU JAIN	9.79	BTech (ICT)
2	201411005	PARIKH SAGAR SAMIRBHAI	9.44	MTech (ICT)
3	201411019	THAKKAR DEVANG JAYANTILAL	9.44	MTech (ICT)
4	201412006	SOUNAK BANERJEE	9.39	MSc (IT)
5	201413005	MAHENDRA KUMAR YADAV	8.23	MSc (ICT-ARD)
6	201414001	RIDDHI MEHTA	8.23	MDes (CD)

Item No. 11

To approve the Academic Calendar 2017-18

The Council approved the Academic Calendar for the academic year 2017-18 as placed before the meeting.

Item No. 12

To note additions to faculty

The Council noted that the following faculty members have joined the Institute during the last three months:

- 1) Dr Arnab Kumar Ray, Associate Professor
- 2) Dr Yash Agrawal, Assistant Professor
- 3) Dr Rajendra Mitharwal, Assistant Professor

The meeting ended with a vote of thanks to the Chair.

K.S. Dasgupta



**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY**

**MINUTES OF THE
THIRTIETH MEETING OF THE ACADEMIC COUNCIL**

The 30th meeting of the Academic Council was held on 19th January, 2018. The following members were present:

1. Prof K.S. Dasgupta, Chairman
2. Prof Surendra Prasad
3. Shri Tapan Misra
4. Prof Naresh Jotwani
5. Prof Sanjay Srivastava
6. Prof Binita Desai
7. Prof Suman Mitra
8. Prof Sanjeev Gupta
9. Shri Soman Nair, Secretary

Leave of absence was granted to Prof David Koilpillai, Shri K Narayan, and Shri Suresh Rangachar.

Item No. 1

To note the appointment of Prof K.S. Dasgupta as Director of the Institute and change in the Chairmanship of the Council

The Council noted the appointment of Prof KS Dasgupta as the Director of the Institute consequent upon Prof R Nagaraj leaving the services of the Institute on 21st July, 2017. On his appointment as Director, Prof Dasgupta became the ex-officio Chairman of the Council under the provisions of Clause 14 of the DA-IICT Act, 2003. The Council welcomed the appointment and his Chairmanship of the Council.

The Council recorded its appreciation for the valuable contribution made by Prof Nagaraj as Director of the Institute and Chairman of the Council.

Item No. 2



To note the revisit of NAAC Peer Team and revision in Accreditation Grade

The Chairman briefed the Council on the revisit of the NAAC Peer Team to the Institute following the appeal submitted against the first accreditation result. He informed the Council that the four member Peer Team, chaired by Dr Avinash C Pandey, former Vice Chancellor, Bundelkhand University, Jhansi, Uttar Pradesh visited the Institute during November 13-15, 2017 and conducted the assessment and based on the recommendation of the team, NAAC has reversed the Grade of 'B' to 'A' with 3.11 GPA. He stated that the Team has shared its report with him and the report has particularly pointed out the Institute's deficiency in student diversity, skewed faculty student ratio and lesser consulting and collaborative and inter-disciplinary research.

The Council noted the result and opined that the Institute should aim at obtaining the highest NAAC accreditation grade in future which is now an 'A plus.' The Council advised the Director to consider getting the B. Tech (ICT) Programs accredited by the National Board of Accreditation (NBA).

Item No. 3

To confirm the minutes of the meeting of the Council held on 17th January, 2017

The Council confirmed the minutes of the 29th meeting of the Council held on 17th January, 2017.

Item No. 4

To note the actions taken on the minutes of the meeting of the Council held on 17th January, 2017

The Council noted that the following actions were taken on the minutes of the meeting held on 17th January, 2017:

- Incorporated the amendment made to Clause 2(5)(c) of the Academic Requirements for Post Graduate Programs to grant an opportunity to PhD Scholars to improve their CPI to advance for appearing in the comprehensive examination.
- Implemented the revised M.Tech Curriculum and restructured M.Sc (IT) Program from the academic year 2017-18.
- Discontinued the M.Sc (ICT-ARD) Program from the academic year 2017-18.
- Organised the International Workshop on Cyber-Physical Systems in July 2017.



- On recommendation of the Council and approval by the Board of Governors, the students who have successfully completed their studies in the academic year 2016-17 were awarded the Degrees at the Convocation held on 21st January, 2017.

Item No. 5

To consider the preliminary proposal to design and launch a Post Graduate Programme in Data Analytics

The Chairman briefed the Council on the proposal to design and offer a Post Graduate Program in Data Analytics. He stated that this is an emerging area and demand for data science and analytics professionals are growing fast in India and a few institutions offer teaching programs. He reported that IBM India Private Limited came forward to partner with the Institute in designing the course structure and making available their professionals as faculty for the program and a draft agreement in this regard is being finalized. The Tata Consultancy Services (TCS) has also expressed their interest in associating with the program. Initially the faculty could be outsourced from industry such as IBM and TCS particularly, for practical sessions and for theoretical sessions, faculty from national Institutes such as Indian Statistical Institute, Indian Institutes of Management and Indian Institutes of Technology until the time the Institute recruits faculty.

The Chairman reported that the faculty deliberated on the proposal and suggested to design and offer a short duration Certificate or Diploma Program initially and scale up the program as a post graduate program in two years' time based on the feedback from students and industry. The Council approved the proposal.

Item No. 6

To approve the updated regulations on Academic Requirements for Ph. D, M. Tech (ICT), M. Sc (IT) and M. Des (CD) Programs

The Council approved the updated Regulations on Academic Requirements for Ph.D., M.Tech (ICT), M.Sc (IT) and M.Des (CD) Programs as placed before the meeting. It was decided to delete Clause 4 of the Academic Requirements for Ph.D Program on Fellowships/Teaching Assistantships. As the rate of the fellowship and terms and conditions of disbursement are subject to internal review and changes, the Council suggested to issue separate notifications on Fellowships and Teaching Assistantships.



Item No. 7

To approve and recommend to the Board the award of Degrees to the students who have completed their academic requirements

The Council appreciated that the number of Doctoral Scholars graduating has been increasing for the last three years and in 2018 convocation, eleven Scholars are receiving their Degrees. The Council resolved to recommend to the Governing Body to approve award of Degrees to 437 students belonging to all teaching programs who have successfully completed their studies during the academic year 2016-17 at the Convocation to be held on 20th January, 2018. The Council also resolved to recommend to the Board of Governors to approve award of President's Gold Medals to the following students:

Sr No	Student Id	Student Name	CPI	Program
1	201301098	Panchal Parth Dixitbhai	9.41	B Tech (ICT)
2	201301177	Zarana Pareshkumar Parekh	9.37	B. Tech (Honours) in ICT with minor in Computational Science
3	201511002	Desai Meet Nitin	9.55	M Tech (ICT)
4	201512005	Sunil Suresh Chawla	9.61	M Sc (IT)
5	201513009	Patel Ashviniben Kanubhai	8.53	M Sc (ICT-ARD)
6	201514001	Saurav Sharma	8.47	M Des (CD)

The Council suggested to institute two additional Gold Medals, named as 'Director's Gold Medals' to recognize and reward all-rounders from the academic year 2017-18. It was decided to allocate one medal for undergraduate program and the other one for all post graduate programs together to be awarded to those who have not only excelled in studies but also in extra-curricular activities having demonstrated leadership qualities. The Council authorized the Director to formulate guidelines on selection and award of the medals.

Item No. 8

To note additions to faculty

The Council noted that the following faculty members have joined the Institute during the last year:

- 1) Mr Lavneet Singh, Adjunct Faculty (full time)
- 2) Dr Shantanu Kole, Assistant Professor
- 3) Dr Manish Khare, Assistant Professor

The meeting ended with a vote of thanks to the Chair.



K. S. Das Gupta

**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY
Gandhinagar**

**MINUTES OF THE
THIRTYFIRST MEETING OF THE ACADEMIC COUNCIL**

The 31st meeting of the Academic Council was held on 15th November, 2018. The following members were present:

1. Prof K.S. Dasgupta, Chairman
2. Shri Tapan Misra
3. Prof Naresh Jotwani
4. Prof Sanjay Srivastava
5. Prof Binita Desai
6. Prof Suman Mitra
7. Prof Sanjeev Gupta
8. Shri Soman Nair, Secretary

Leave of absence was granted to Prof Surendra Prasad, Prof David Koilpillai, Shri K Narayan, and Shri Suresh Rangachar.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 19th January, 2018**

The Council accepted the comments received from Prof Sanjay Srivastava on NAAC accreditation grading recorded in the minutes. It was decided to reword the sentence appearing in Item No. 2, second paragraph of the minutes as follows:

'The Council noted the result and opined that the Institute should aim at obtaining the highest NAAC accreditation grade in future which is now A++.'

With the above changes, the Council confirmed the minutes.

Item No. 2

**To note the actions taken on the minutes of the meeting of
the Council held on 17th January, 2017**



The Council noted actions taken on the minutes of the meeting held on 7 January, 2017.

Item No. 3

To reconsider the total credit requirements for B.Tech (ICT) and B.Tech (ICT) with minor in CS Programs to become eligible for Graduation

The Dean (AP) briefed the Council that the majority of B Tech students at the end of the 7th semester are getting their final placements with pre-placement internships which are treated as final year projects. At the end of the 7th semester, it has been observed that a good number of students of B. Tech (ICT) and B. Tech (Hons) in C with minor in CS programs are unable to obtain the stipulated total credits of 152 and 170 respectively to graduate and therefore, the proposal for nominal reduction in credit requirements. One of the reasons in shortfall of credits noticed is that the number of technical electives offered with 4 credits for the students to take is limited.

The Council advised to review the technical electives offered after obtaining feedback from the students and ascertain whether they are in conformity with the latest and emerging technologies and industry-relevant. The Council opined that the technical electives, if offered without Laboratory and Tutorial components, may not help the students to learn the course effectively.

The Council advised the Dean (AP) to refer the proposal to the faculty to obtain their recommendations and then place the appropriate proposal before the Council.

Item 4

To approve the proposal to partner with Indian Institute of Technology, Jammu, Kashmir to offer MTech Computer Science program

The Director placed before the Council the Memorandum of Understanding (MoU) signed between DA-IICT and IIT Jammu for academic collaboration. He briefed the Council on the meeting he and the Dean (AP) had with the Director, IIT Jammu and the decision taken to jointly design and offer an M. Tech Program in Computer Science (CS) with two specializations, i.e., in Data Science (DS) and Information Security (IS) from the academic year 2019-20 with an initial batch size of 40 students selected on national basis.

The Council noted the Memorandum of Understanding (MoU) and approved DA-IICT partnering with IIT Jammu in offering the program. The Council also noted the administrative arrangements suggested in conducting the program as follows.

- IIT Jammu shall conduct the entire admission process following the eligibility conditions, admission process and procedures set forth by them and admit the students from the academic year 2019-20. DA-IICT will participate in the final selection of students.



- The first semester courses will be offered by IIT Jammu at Jammu Campus whereas second semester onwards (course work in second semester compulsorily and thesis work in third and fourth semesters, if opted by the students), DA-IICT will enrol and host the students. The courses to be offered in the second semester, and their design and structure shall be decided in consultation with IIT Jammu prior to beginning of the semester/academic year.
- The examinations and evaluation of the second semester studies shall be conducted on the existing DA-IICT pattern. The credits and grades of students shall be computed in accordance with the academic regulations of IIT Jammu. The credits earned by the students at DA-IICT shall be transferred to IIT Jammu to complete the total required credits for the Degree. Official transcripts to the students reflecting the credits and grades attained by the students during their studies at DA-IICT shall be issued by IIT Jammu with a noting in the transcripts that the credits transferred are from DA-IICT.
- The students, during their second, third and fourth semester studies at DA-IICT, shall be subject to the academic and disciplinary rules and regulations of DA-IICT. Where applicable, DA-IICT shall periodically inform IIT Jammu the academic progress and performance of the students.
- The Students enrolled will continue as candidates for Degrees at IIT Jammu and will not be candidates for Degrees at DA-IICT.
- IIT Jammu shall collect the approved tuition fees of three semesters (second, third and fourth) and remit to DA-IICT the total tuition fee computed based on the number of students enrolled at DA-IICT.
- DA-IICT shall provide hostel accommodation on campus to the students on twin-sharing basis for which the hostel rent and electricity charges at the rate as applicable to Indian students of DA-IICT, from time to time, shall be applicable to IIT Jammu students.
- The Dean (Academic Programs) will be the coordinator at DA-IICT who will serve as the contact person, being responsible for arrangements associated with the conduct of classes, course offering, student stay and ensuring that necessary support and guidance are extended to the students. IIT Jammu will be advised to appoint a coordinator.
- The program will be reviewed jointly by IIT Jammu and DA-IICT from time to time for necessary improvements and changes.

Item No. 5

To note additions to faculty

The Council noted that the following faculty members have joined the Institute recently:

- 1) Dr Anjan Ghosh
- 2) Dr Pankaj Kumar
- 3) Dr Bakul Goel



4) Dr Srimanta Mantal

The following additional items were discussed with the permission of the Chair

Item No.6(a)

To consider launching an integrated MSc in Mathematics and Computing Program

The Director informed the Council on the proposal to launch an integrated MSc Program in Mathematics and Computing. He stated that a Committee of four faculty members with Prof V. Sunitha as Convenor has been formed to study the feasibility of launching the program. The Committee has prepared a preliminary report and with the permission of the Council, he invited Prof Sunitha to present the findings of the Committee before the Council.

Prof Sunitha briefed the Council that the Committee studied various integrated programs offered by national Institutes and Universities in the country. The Committee found that majority of these programs are in Mathematics, Mathematical Sciences and Computer Science and some of them a combination of Statistics and Mathematics and Computing and Financial Engineering. She had briefed as follows:

- The Program will be a 5 year dual Degree in Mathematics and Computing (MnC) with implicit specialisation tracks in Data Science, Mathematical Biology, Mathematical Finance and Network Science.
- Admission is planned through JEE (Advanced), Kishore Vaigyanik Protsahan Yojana (KPVY), Mathematics/Informatics Olympiad, DA-IICT Aptitude Test with certain number of seats reserved for each test.
- Curriculum will be designed to enable the students to take Graduate Aptitude Test (GATE) in Mathematics/Computer Science, JRF/NET in Mathematical Sciences.
- The curriculum structure suggested is with core courses in Mathematics Computing, Humanities and Social Sciences combined with summer training a summer research internship, a bachelor and a master thesis
- As far as faculty requirements are concerned, it was stated that at least four faculty members in the areas of Mathematics and Computing are required in each year totalling involvement of 19 faculty members by the end of the fourth year of the program.
- There are ample opportunities for summer internships research fellowships and other supplementing and networking opportunities. The graduates can look forward to career opportunities in banks, insurance companies, financial institutions, biomedical and pharmaceutical industries, consulting firms software industry, telecom industry etc.
- Intake may be 40 students in the first batch.
- Planned to hold brainstorming sessions with academia and Industry



- The Committee is examining the duration of the program, exit options, infrastructural requirements, manpower, and financial implications of the program.

The Council noted the briefing and accorded its approval to proceed with the plan to design and launch the program.

Prof Sunitha, with the permission of the Chair, withdrew from the meeting.

Item No. 7(b)

To consider the curriculum review of M Des (Communication Design) Program

The Director briefed the Council that the objective of the review of M. Des (CD) Program is to augment it as one of the leading programs of the Institute. He stated that in spite of being a well-designed program with excellent faculty input, the program is unable to attract adequate number of students. In order to find out the reasons, we have constituted an internal Committee with Prof Binita Desai as Convenor. Prof S Balram, Director, DJ Academy of Design, Coimbatore was invited as an external expert; he visited the Institute on 16th April, 2018 and participated in the review of the program.

At the Invitation of the Director, Prof Binita Desai, summarised the recommendations of the Committee as follows:

- Replace the existing semester system with modular system. This will involve deciding on credits to be assigned to each of the course, time tabling and course load.
- Eliminate Object Oriented Programing and Writing and Presentation Skills.
- In the first semester, introduce Image Sound Text and Design History Courses.
- Re-introduce Photography, Video and Thematic Seminar as independent courses.
- Move Information Design Course to the first semester, interaction design course to the second semester and web design course to the third semester.
- Total credits to be acquired for graduation be changed from 61 to 80.
- Consider revising the program duration from 2 years to 2 ½ years.

The Council examined the recommendations in detail and suggested to (a) streamline the course structure, (b) assess the impact of revising the program to 2½ years (c) continue to offer the course on Writing and Presentation Skills as this is one of the important courses for a PG Program; and (d) examine having sequential teaching which will help to strengthen research interest in students.

The meeting ended with a vote of thanks to the Chair.



K.S. Sasgaur

**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY
GANDHINAGAR**

**MINUTES OF THE
THIRTYSECOND MEETING OF THE ACADEMIC COUNCIL**

The 32nd meeting of the Academic Council was held on 10th January, 2019. The following members were present:

1. Prof K.S. Dasgupta, Chairman
2. Shri Tapan Misra
3. Prof Naresh Jotwani
4. Prof Sanjay Srivastava
5. Prof Binita Desai
6. Prof Suman Mitra
7. Prof Sanjeev Gupta
8. Shri Soman Nair, Secretary

Leave of absence was granted to Prof Surendra Prasad, Prof David Koilpillai, Shri K Narayan, and Shri Suresh Rangachar.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 15th November, 2018**

The Council approved the minutes of the meeting held on 15th November, 2018.

Item No. 2

**To note the actions taken on the minutes of the meeting of
the Council held on 15th November, 2018**

The Council noted the report on the actions taken on the minutes as follows:

- Incorporated Prof Sanjay Srivastava's comments on the minutes of the meeting held on 19th January, 2018.
- **Reduction in credit requirements for B. Tech (ICT) and CS Programs:**
The Dean recalled the suggestion made by the Academic Council to increase the number of technical electives with 4 credits to ensure that the students acquire the required credits. He also stated that one of the recommendations of the B. Tech Curriculum Review Committee is to introduce more electives with lab sessions and this may not be possible immediately since



our faculty and laboratory resources are limited. It was brought to the notice of the Council that some of the institutions have special lecture series and the students can acquire additional credits by attending them. The Council felt that such arrangements will require detailed impact analysis before adopting them. The Council suggested Dean to refer the proposal to the UG Committee and place a final proposal at the ensuing meeting of the Council.

- **Review of Electives:** The Dean briefed the Council the process through which electives are approved and included in the curriculum structure. He stated that the faculty prepare the outlines of electives, seek peer review, collect feedback from Academic Committee of SBG and then forward the final course outline to Dean (AP) and UG Committee for review and inclusion in the curriculum. The Council opined that electives being an integral part of the curriculum, there should be clarity in the process of reviewing and revamping and adopting them. The Dean informed the Council that the Director has requested Prof Sanjay Srivastava to review the electives which he would complete by this semester.
- **Partnership with IIT Jammu:** The Director reported that DA-IICT and IIT Jammu have finalised the curriculum of the M. Tech program in Computer Science (CS) to be offered jointly from the academic year 2019-20. The Director, IIT Jammu would seek approval of the Senate of IIT Jammu for the curriculum and confirm launching of the program.
- **Integrated M.Sc in Mathematics and Computing Program.** The Director informed the Council that the feedback received from the academic community on the program was positive. He stated that the Committee is seeking feedback from the industry and the plans to launch the program from the academic year 2020-21.
- **Curriculum review of M. Des Program.** Implemented the recommendations of the M. Des curriculum revisit committee as approved by the Council and replaced the semester system with modular system.

Item No. 3

To review the Report on 2018 Admissions

The Council noted the Report on the 2018 Admissions as placed before the meeting. The Council also noted the observations and recommendations of the Admissions Committee and advised the Director to examine the significance implementing them for admissions of 2019.

Item No. 4

To approve and recommend to the Board of Governors the award of Degrees to the students who have completed their academic requirements

The Council noted that there has been an increase in the number of Doctoral Scholars graduating for the last three years. The Council resolved to recommend



the Governing Body to approve award of Degrees to 464 students belonging to all teaching programs who have successfully completed their studies during the academic year 2017-18 at the Convocation to be held on 12th January, 2019. The Council also resolved to recommend to the Board of Governors to approve award of President's Gold Medals to the following students:

Sr No	Student Id	Student Name	CPI	Program
1	201401008	Akshat Dua	9.33	B Tech (ICT)
2	20401114	Damle Omkar Vishwesh	9.63	B. Tech (Honours) in ICT with minor in Computational Science
3	201611007	Lokesh Kumar	9.47	M Tech (ICT)
4	201611027	Tapkir Prasad Anil	9.47	M Tech (ICT)
5	201612009	Ashwani Tanwar	9.53	M Sc (IT)
6	201614006	Shah Shailaja Shalinbhai	8.39	M Des (CD)

Item No. 5

To note addition to faculty

The Council noted that Dr Vinjay Palpathy has joined the Institute as Assistant Professor on contract basis for two years from 4th December, 2018. He has a PhD in Engineering from Indian Institute of Technology Bombay and his research interests are Micro/Nano-sensors, Micro-Electro-Mechanical Systems and System Design.

The following additional items were discussed with the permission of the Chairman:

Item No. 6(a)

To consider the proposal to offer joint M. Tech Programme in ECE with Specialization In Wireless Communication And Embedded Systems

The Director informed the Council that DA-IICT and C. R. Rao Advanced Institute of Mathematics Statistics and Computer Science (CR Rao AIMSCS), Hyderabad have entered into an MoU on 5th March, 2018 for academic exchange and co-operation in teaching and research. CR Rao AIMSCS is an institute actively involved in research and training in the areas of Information Security, Cryptography and Cryptanalysis etc., and is also offering an M. Tech Program in Information Security for which the Degree is awarded by the University of Hyderabad. As part of the MoU, CR Rao AIMSCS and DA-IICT have agreed to offer a joint M. Tech program in Electronics and Communication Engineering with specialization in Wireless Communication and Embedded systems from the academic year 2019-20; a four semester duration program with an initial intake of 18 students nationally and 5 sponsored students. The Director summarized the features of the program as follows:



- The Program is being designed by DA-IICT faculty in consultation with the faculty of CR Ro AIMSCS. The design of the program will be finalized by the end of March, 2019.
- The students will be on the rolls of DA-IICT. The Degree will be awarded by DA-IICT.
- The students will spend first and second semesters at DA-IICT campus attending core and elective courses.
- The third and fourth semester focuses on research and the students based on their research interest, will opt either DA-IICT or CR Rao AIMSCS to work for their thesis.
- The course structure will contain courses having more focus on Wireless Communication and Embedded Systems like Digital Communication System, Space Time Wireless Systems, VLSI and FPGA Design, Cognitive and Software Defined Radio, Side Channel Analysis, Internet of Things, etc. The next generation wireless technologies like 5G, IOTs and Wi-Fi6 all hold great promise for the future world which are structured on the blend of Wireless Communication and Embedded systems.
- The students will be eligible for fellowship/Taship. The fellowship/Taship for the first and second semesters will be paid by DA-IICT. The next two semesters will be paid by CR Rao AIMSCS.

Item No.(b)

To approve the Academic Calendar for 2019-20

The Council approved the Academic Calendar for the academic year 2019-20 as placed before the meeting.

Item No.(c)

To approve the evaluation scheme applicable to the M.Tech (CS)

Programme offered jointly with IIT Jammu

The Academic Council approved the evaluation of students of M Tech (CS) Program with specialization in Data Sciences (DS) and Information Security (IS) offered jointly with IIT Jammu as follows:

The evaluation scheme of IIT Jammu will be followed in the proposed program with two minor in-semester examinations and one major written end-semester examination in every semester, along with some weightage for the continuous evaluation in the form of class quizzes, surprise test and other components. The weightage of these evaluations shall be as per the direction of the Course Coordinator, but announced in the first class or prior to beginning of the classes.

The meeting ended with a vote of thanks to the Chair

K.S. Das Gupta



Note

The following policies have been approved in principle and the same will be placed before the next Academic Council for ratification

1. Seed Grant Policy,
2. Consultancy Policy and
3. Intellectual Property Right (IPR) Policy

Copy of the detailed policy is attached for records.

K.S. Dasgupta

(K.S. Dasgupta)

Director and Chairman of Academic Council

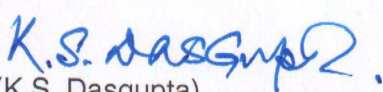
Date: 01/09/2018

**Addendum to Minutes of the Meeting of
32nd Meeting of Academic Council held on 10th January, 2019**

The Director has placed the following extra agenda items in the form of Policies before the Academic Council for its perusal

1. Seed Grant Policy,
2. Consultancy Policy and
3. Intellectual Property Right (IPR) Policy

The above policies were missed out inadvertently off the main agenda of the Academic Council. The Council Members deliberated on it and ratified it accordingly.


(K.S. Dasgupta)

Director and Chairman of Academic Council

**DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY
GANDHINAGAR**

**MINUTES OF THE
THIRTYTHIRD MEETING OF THE ACADEMIC COUNCIL**

The 33rd meeting of the Academic Council was held on 7th January, 2020. The following members were present:

1. Prof K.S. Dasgupta, Chairman
2. Shri Tapan Misra
3. Prof Naresh Jotwani
4. Prof Sanjay Srivastava
5. Prof Binita Desai
6. Prof Suman Mitra
7. Prof Sanjeev Gupta
8. Shri Soman Nair, Secretary

Leave of absence was granted to Prof Surendra Prasad, Prof David Koilpillai, Shri K Narayan, and Shri Suresh Rangachar.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 10th January, 2019**

The Council confirmed the minutes of the 32nd meeting of the Council held on 10th January, 2019.

Item No. 2

**To note the actions taken on the minutes of the meeting of
the Council held on 10th January, 2019**

The Council noted the actions taken on the minutes of the meeting held on 10th January, 2019 as details placed before the meeting. Referring to the remark 'no action taken' recorded against the decision on reduction in credit requirements for B.Tech (ICT) and (CS) Programs and review of technical electives, the Council pointed out that the failure in implementing the decision of the Council is dishonouring its decision. In future, if the decision of the Council could not be implemented, the reasons with justification should be presented before the Council.



Item No. 3

To ratify the approval of Chairman, Academic Council to implement separate Academic Requirements for PhD Programme in Humanities, Social Sciences and Design

The Chairman, Academic Council, invited Prof Manik Lal Das PG Convenor to brief the Council on agenda items 3 to 4. He briefed the Council on the recommendations of the PG Committee to introduce separate academic requirements for PhD Programme in Humanities, Social Sciences and Design streams. He stated that they included (a) introduction of part time sponsored and external registration categories, (b) revision of credit requirements from 96 to 80 for MSc/BTech/MCA/MA graduates and (c) comprehensive examination consisting of two parts an examination, and viva-voce. He also informed that with the approval of the Chairman, Academic Council, the recommendations of the PG Committee were implemented effective from the academic year 2019-20.

The Council ratified the approval accorded by the Chairman Academic Council.

Item No. 4

To ratify the approval of Chairman, Academic Council to implement the Academic Requirements for PhD Programme in Engineering in ICT disciplines, Science and Mathematics

Prof Manik Lal Das informed the Council that Academic Requirements for PhD Programme in Engineering in ICT disciplines, Science and Mathematics have been drawn up separately on recommendation of the PG Committee. He explained that the changes made in these streams were the same as of the PhD Programme in Humanities, Social Sciences and Design streams except that the comprehensive examination consisted of written or oral and proposal defense. The recommendations were implemented effective from the academic year 2019-20 with the approval of the Chairman, Academic Council.

The Council ratified the decision taken by the Chairman.

Item No. 5

To approve the report of MTech (ICT) Revisit Committee and the revised Academic Requirements

Prof Manik Lal Das briefed the Council on the report of the MTech (ICT) Revisit Committee. He informed the Council that based on the recommendations of the Committee, specializations in Communication and Signal Processing Machine Learning, Software Systems and VLSI and Embedded Systems have been introduced. The other changes made were (a) introduction of resident and external registrations, (b) fixation of semester load requirements to 14/15 credits per semester in the first year and second year, (c) reduction in credit requirements from 60 to 55 of which 36 credits for coursework, and (d) discontinuation of project mode and group



core courses and instead, introduction of program core and specialization core courses. He brought to the notice of the Council that these changes were implemented from the academic year 2019-20 with the approval of the Chairman of the Council.

The Council ratified the decision taken by the Chairman.

The Council suggested that besides the formal graduation certificates, PhD Scholars and M.Tech students be issued with separate specialization certificates. In case of PhD Graduates, the Certificates should state broad areas in which the Scholars have prepared his dissertations. The Council advised the Director to constitute a Committee to identify and classify the possible areas of specializations for PhD Scholars. It was decided that these Certificates are to be issued separately by the Registrar's Office.

Item No.6

To ratify the decision taken by the Chairman, Academic Council to approve the course structure of MTech Program in EC with specialization in Wireless Communication and Embedded Systems and the Academic Requirements

Prof Suman Mitra, Dean (AP) briefed the Council on the genesis of launching the MTech (EC) with specialization in Wireless Communication and Embedded Systems (EC) jointly with CR Rao Advanced Institute of Mathematics Statistics and Computer Science, Hyderabad. He informed the Council that the Board of Studies of PG Programs at its meeting held on 12th April, 2019 approved the course structure and the total credit requirements for award of Degree at 61 credits out of which 40 credits are to be earned through coursework and 21 credits through research. He informed the Council that with the approval of the Chairman, Academic Council, the academic requirements have been implemented from the academic year 2019-20.

The Council ratified the decision taken by the Chairman.

Item No.7

To ratify the decision taken by the Chairman, Academic Council to approve the curriculum, scope and program outcome of M.Tech Programme in Computer Science & Engineering with specialization in Data Sciences and Information Security

Prof Suman Mitra, Dean (AP), briefed the Council on the curriculum, scope and program outcome of the M.Tech Programme in Computer Science and Engineering with specialization in Data Sciences and Information Security offered in collaboration with IIT Jammu. He informed the Council that with the approval of the Chairman, Academic Council the curriculum has been implemented and 26 students are undergoing their winter semester studies at DA-IICT.

The Council ratified the approval of the Chairman.



Item No. 8

To approve the proposal to launch B.Tech (Mathematics and Computing) Programme

The Chairman recalled that at the meeting of the Council held on 15th November 2018, a proposal was mooted to launch an integrated MSc Program in Mathematics and Computing. He stated that on studying the report prepared by the Working Committee and on consultation with academia and Industry, it was felt that it would be more worthwhile to launch a B.Tech Program in Mathematics and Computing. Based on this conclusion, the Working Committee with Prof V Sunitha as Convenor had prepared a proposal. With the permission of the Council he invited Prof Sunitha to brief the Council on the program.

Prof Sunitha briefed the Council that the Committee has designed the program after soliciting feed back from stakeholders such as faculty, alumni, prospective employers. She stated that the curriculum is designed in such a way that the students will acquire a wide variety of competence that will be apt for a whole range of occupations and for research and managerial careers. Prof Sunitha also briefed in detail the curriculum of the program.

The Council studied the curriculum and accorded it approval to the program. It was decided to launch the program from the academic year 2020-21

Item No. 9

To approve the proposal to launch M.Sc Program in Data Science

The Chairman briefed the Council on the report submitted by the Working Committee under the convenorship of Prof Bhaskar Chaudhury to launch an M Sc Program in Data Science. He invited Prof Chaudhury to brief the Council on the program. Prof Chaudhury summarised the important aspects of the program and stated that unlike M.Sc(IT) Program, the admission to the Program will be for Science Statistics Mathematics and Engineering Graduates. After detailed discussions, the Council made the following recommendations:

- The course titled 'Critical Thinking and Term Paper Presentations' in second semester be replaced with 'Mini Project 1' with same credit structure. Mini Project 1 will provide the required foundation for the students to prepare detailed proposal for 'Mini Project 2' in semester 3.
- Credit Structure for 'Big Data Processing' course be changed to 2-0-2-3
- Credit Structure for 'Optimization' course be changed to 2-0-2-3
- The title of the course 'Numerical Methods for Data Science' be changed to 'Numerical Methods.'
- Depending on the duration of SAS training, the course on SAS should be assigned a proper credit structure with a well defined evaluation methodology
- Offer more electives on emerging areas as Technical Electives.



Item No. 10**To consider the appeal of Mr Nileshkumar M. Banker, deregistered PhD Scholar**

The Council approved the request of Mr Nilesh M Banker, the deregistered PhD Scholar, to rejoin the PhD program and authorised Dean (AP) to complete the procedures for his readmission.

Item No. 11**To approve and recommend to the Board of Governors the award of Degrees to the students who have fulfilled their academic requirements for graduation**

The Council approved and recommended to the Board of Governors the award of Degrees to 475 students including 8 PhD Scholars who have successfully completed their studies in the academic year 2018-19 as per the list placed before the meeting. The Council also resolved to recommend to the Board of Governors to approve award of President's Gold Medals to the following students:

Sr No	Student Id	Student Name	CPI	Program
1	201501020	SHUBHAM D ANNADATE	9.60	B Tech (ICT)
2	201501099	AGAM ALKESHKUMAR SHAH	9.51	B. Tech (Honours) in ICT with minor in Computational Science
5	201712001	RANADE ARCHAN CHANDRASHEKHAR	9.14	M Sc (IT)

The Council noted that as per rules on award of President's Gold Medals, Mr Shah Ketul Tejabhai, M.Tech (ICT) Student who is the topper in the class (CPI 9.49) became ineligible for award of Gold Medal since he received an 'F' Grade in the Course 'Computational Optimization' which he registered as an Audit course in Autumn 2018-19 semester. The Council felt that the student who has obtained the next highest CPI deserves award of Gold Medal. Accordingly, the Council recommended award of Gold Medal to Ms. Dimple Jayendrabhai Shah, M.Tech (ICT) student who obtained the next highest CPI of 9.32. It was also recommended to make appropriate provisions in the Gold Medal Rules to award the Gold Medal to the next topper in the list of merit in case the first topper becomes ineligible for award of the Medal.

The Council noted that out of the 7 graduating students of M.Des (CD) Programme, no student is found to be eligible for award of Gold Medal as all of them have obtained less than CPI 8.



Item No. 12**To note the Report on 2019 Admissions**

At the invitation of the Chairman, Prof Mukesh Tiwari briefed the Council on Admissions 2019. He highlighted that a comparative analysis of the applications received shows that the negative trend of applications during the years 2015-18 was halted in 2019. While DA-IICT is able to attract applications from outside Gujarat, the final acceptance of admission by the students from other States was quite less especially in the B.Tech Programs. Most of the high JEE ranked candidates did not participate in the online counselling and a few who did, cancelled their admission at DA-IICT when they received admit from IITs, IIITs, NITs and private Institutes like VIT and SRM. It was pointed out that the applicants preferred B.Tech (Hons.) with minor in Computational Science compared to B.Tech (ICT) Program.

Regarding admission to PG Programs, Prof Tiwari stated that Introduction of specializations in M.Tech (ICT) Program had an overall impact on the number of applications received and Machine Learning was the most preferred specialization. Average GATE score in Machine Learning and VLSI and Embedded Systems specializations were higher than Communication and Signal Processing and Software Systems. For M.Tech (EC), the GATE score of candidates applied was low. Applicants with high GATE score who got admission in higher ranked Institutes preferred those over DA-IICT.

The Council noted the Admissions Report 2019.

Item No. 13**To note addition to faculty**

The Council noted that the following faculty members have joined the Institute during April to December, 2019:

- 1) Dr Priyanka Singh, Assistant Professor
- 2) Dr Supantha Pandit, Assistant Professor
- 3) Dr Ahlad Kumar, Assistant Professor
- 4) Mr Avijit Dutta, Assistant Professor
- 5) Dr Abhishek Jindal, Assistant Professor
- 6) Dr Tapas Kumar Maiti, Associate Professor

The following additional items were discussed with the permission of the Chair

Item No. 14(i)**Proposal to introduce one credit core course for extra-curricular activities**

The Council discussed the proposal in detail and felt that it is not advisable to award credit for extra-curricular activities since they are outside the realm of normal curriculum.

Item No. 14(ii)

To approve the Academic Calendar 2020-21

The Council approved the Academic Calendar 2020-21.

The meeting ended with a vote of thanks to the Chair.

K.S. Das Gupta



FOR APPROVAL OF CHAIRMAN
CONFIRMED BY DEAN (AP).

Approved
K.S. Dasgupta



DHIRUBHAI AMBANI INSTITUTE OF
INFORMATION AND COMMUNICATION TECHNOLOGY
Gandhinagar

MINUTES OF THE
THIRTYFOURTH MEETING OF THE ACADEMIC COUNCIL

The 34th meeting of the Academic Council was held online on 12th March, 2021.
The following members were present:

1. Prof K.S. Dasgupta, Chairman
2. Shri Tapan Misra
3. Prof Ranjan Bose
4. Prof Tathagata Bandyopadhyay
5. Shri Pavitar Singh
6. Prof Sanjay Srivastava
7. Prof Binita Desai
8. Prof Manjunath Joshi
9. Prof Maniklal Das
10. Prof V Sunitha
11. Shri Soman Nair, Secretary

The Chairman informed the Council that on expiry of the term of the Academic Council, the Council has been reconstituted with effect from 1st February, 2021. In the reconstituted Council, Mr Pavitar Singh, Alumnus of the Institute, Professors Ranajan Bose, Tathagata Bandyopadhyay, Manjunath Joshi, Maniklal Das and V Sunitha have been nominated. He welcomed them to the Council.

Item No. 1

**To confirm the minutes of the meeting of the Council
held on 7th January, 2020**

The Council confirmed the minutes of the 33rd meeting held on 7th January, 2020.

Item No. 2

Briefing on Academics

Prof Maniklal Das, Dean (Academic Programs) made a detailed briefing on faculty profiles, their research interests, teaching programs including the PG programs offered in collaboration with CR Rao Advanced Institute for Mathematics, Statistics



and Computer Science, Hyderabad and the Indian Institute of Technology, Jammu. The Committee noted the same.

Item No. 3

To consider the report of the B.Tech (ICT) Curriculum Review Committee

The Chairman informed the Council that a Committee with Prof Sanjay Srivastava as Convenor has completed the fifth cycle of review of the B.Tech (ICT) Program curriculum. At his invitation, Prof Srivastava presented before the Council the process of review and recommendations of the Committee. He stated that the process comprised of (a) examining the curriculum models in peer Institutes in India and abroad, (b) consultation with the Institute's Alumni and present batches of students, (c) ascertaining the requirements of employers of DA-IICT graduates, (d) model curricula of apex professional bodies such as the Association of Computer Machinery and All India Council for Technical Education (AICTE), and (e) the guidelines of the National Education Policy 2020. He summarized the recommendations of the Committee as follows:

- Provide an option for students to have a career beyond engineering by creating a flexible curriculum that will prepare them for more than one career path.
- Make the program broadly compatible with Washington Accord/NBA accredited Institutes and also compatibility of curriculum on International patterns.
- Incorporate the spirit of NEP-2020 guidelines.
- Reduce core component and bring selected co-curricular activities as part of the curriculum.
- For flexibility in the curriculum, introduce the option for Honours Degree. Those opt for Honours Degree should take a minimum of 5 courses from the Honours Basket with a minimum of 15 additional credits than the vanilla B.Tech (ICT) degree. There would be flexibility to choose Honours sequences from the fourth semester. There is also an option to overload the semester credits for outperforming students. Honours may require course work upto eighth semester. For Honours Degree, minimum CPI should be 6.5/10.
- The curriculum provides a structure for Minors in future. Once the resources are in place, create these Minors to provide more freedom to the students.
- From Semesters 1 to 4, make a provision for Pass/Fail (0-0-2-1) core courses on co-curricular activities. The students can register alternately for sports, cultural and club activities in these four semesters. Evaluation would be based on a participation threshold and appropriate mechanism is to be worked out by the UG Committee in consultation with relevant stake holders.
- Allow Students to take MOOC Courses (Massive Open Online), especially in the areas where the Institute does not have faculty and elective offerings and mini-project courses with a condition to secure a minimum CPI of 6.5 for each of the course. UG committee to evolve detailed mechanism for this purpose.
- Introduce a 1-0-2-2 core course titled 'Introduction to ICT' in the first semester with a mandate for the course instructor to use the lecture hours to expose the students to diverse facets of ICT through engagement of different faculty members and external experts. The lab component is to be used for teaching basic workshop techniques.



- Introduce two 1 credit Exploration Projects Pass/Fail Courses in second and third semesters. The students in small groups will choose a faculty mentor and work on building a hardware product (preferably) over the two semesters, culminating in a project exhibition. The faculty mentors will be responsible for evaluation of students.
- Reduce foundation course credits from 111 credits to 90 credits. This will allow the students to take sequence of electives in the areas of their choice from 5th semester. The total credits required for ICT students to graduate will be 154 (148 + 6 co-curricular credits) that should include internships and BTP credits 19 and minimum grade points 5, and for Honours students 169 (163 + 6 co-curricular credits) that should include internships and BTP credits 19 and minimum grade points 6.5.

The Council examined the report in detail. The Council suggested to introduce an elective course on 'startup and entrepreneurship' focusing on innovation, creativity and entrepreneurship and the course be designed in such a way that it should lead the students through the process of creating a start-up from an idea to an enterprise. The other possibilities are (a) to introduce a minor in entrepreneurship, (b) encourage students to take BTP on start-ups and also invite entrepreneurs to share their experience with the students. The Council accepted the recommendations and authorized the Chairman to take necessary steps in implementing the recommendations of the Committee and suggestions made by the Council.

Item No. 4

To consider changes in M.Tech (ICT) curriculum

Prof Aditya Tatu, PG Convenor, briefed the Council on the proposed changes in the M.Tech (ICT) curriculum. He informed that the program has four specializations -- Communications and Signal Processing, Machine Learning, Software Systems and VLSI and Embedded Systems with one year Research thesis. He summarized the recommendations as follows:

- Change the 'Communication and Signal Processing' specialization as 'Signal Processing and Machine Learning.' The rationale is to bring the program in tune with the current research directions, wide range of placement possibilities and good faculty strength at the Institute.
- Shift the course 'Probability and Random Variables' from Program Core to Specialization Core for 'Machine Learning and Software Systems' specialization in the first semester.
- Introduce a new course titled 'Introduction to Embedded Systems' for VLSI and Embedded Systems specialization.
- In the second semester, the students could choose any three specializations for each of the specialization stream among the 4-5 courses offered.
- There would be two specialization core courses in the third semester along with two research courses and the thesis.
- In the fourth semester there will be 4 research courses and the final thesis.



The updated curriculum was placed before the meeting. The Council approved the proposed changes and the updated curriculum and their implementation from the academic year 2021-22.

Item No. 5

To consider the report on review of M. Tech (EC) Program

Prof Yash Vasavada, Convenor presented before the Council the report on the review of the M.Tech (EC) with Wireless Communication and Embedded System program launched in partnership with CR Rao AIMSCS, Hyderabad from the academic year 2019-20. He stated that the program has not been attracting sufficient number of qualified students and this has led to a review of the program by the faculty in consultation with external faculty and industry experts. He presented the following recommendations:

- Change the title of the program as 'M.Tech (Communication Systems and Machine Learning)' and restructure the course offerings and content to match the changed title.
- The course work will be in the first and second semester during and research and thesis during third and fourth semester. For research, the students can either opt for DA-IICT or CR Rao AIMSCS. There is provision for sponsorship and the sponsored students will have an option to conduct their final thesis at their sponsoring organization.

Prof Vasavada placed before the Council the restructured curriculum. The Council suggested examining whether the program is overlapping with other M. Tech program. It was also suggested to consider inclusion of IOT as a core course. The Council opined that the program may become popular if an aggressive advertisement strategy focusing more on social media channels is followed independently for the program.

The Council approved (a) renaming of the program, and (b) restructuring of the courses as details placed before the meeting.

Item No. 6

To consider the report on the initiatives taken to offer online teaching programs

Prof Suman Mitra, Program Director, Distance Education Committee, briefed the Council on the plan to offer selective distance education programs by the Institute. He recalled the National Education Policy 2020 which articulates higher educational Institutions to offer open distance learning and online programs. He informed the Council that the Institute has submitted applications to UGC for approval to offer two post graduate programs -- M.Sc (Data Science) and M. Tech (CSE) Data Science in distance learning mode. Prof Mitra also presented a draft semester-wise course



structure of the programs. Once finalized, the mode of teaching will be a combination of recorded video lectures, study materials and online live sessions.

The Chairman briefed the Council on the meetings the Distance Education Committee had with Upgrad, a Company facilitating prominent Institutes and Universities in the country and abroad in conducting distance education degree and diploma programs using their online Platform.

The Council appreciated the initiative. However, the Council cautioned that the ODL PG Degree Programs will not be qualitatively comparable with the campus-run programs. The Council also expressed its concern that the emphasis of both the programs is on Data Science and this may, to an extent, affect the campus-run M.Sc Data Science Program.

Item No. 7

Any other matter with the permission of the Chair

The following items were discussed with the permission of the Chair:

Item No. 7(a)

**To consider certain changes in the curriculum of
B.Tech (Mathematics & Computing) Program**

Prof Mukesh Tiwari, Convenor, Academic Monitoring Committee, B. Tech (Mathematics and Computing) Program, briefed the Council on the deliberations of the Committee on the proposed changes in the curriculum. He stated that in spite of these changes (a) knowledge areas and semester credit requirements remain unaltered; and (b) pre-requisite requirement will be maintained. The changes are as follows:

1. Change sequences of the Core Courses.
2. Replace Mathematical and Computational tools by Digital Logic Design.
3. Rename Data Storage and Management as Database Management Systems.

1) Discrete Mathematics in first semester. A good control over mathematical logic and proof techniques will help the first year students to prepare better for subsequent heavy courses of Mathematics and this will provide a smooth transition for them.

2) Functions of Single and Several Variables in second and third semesters to maintain the required continuity.

3) Linear Algebra in second semester and Abstract Algebra in fifth semester. Algebraic Structures is more advanced than Linear Algebra. Concepts of Abstract Algebra are required for elective courses in sixth and seventh semesters.



4) Theory of Computation in fourth semester. This will help the students to think in an abstract way. Moving the course to fourth semester will further help build the ability to think about abstract concepts due to mathematical maturity.

5) Machine Learning in sixth semester. Uses some ideas from Mathematical Optimization that comes in fifth semester.

6) Digital Logic Design instead of Mathematical and Computational Tools in first semester. Mathematical and Computational tools are envisioned as a course that provides hands-on learning. This learning without proper context does not seem appropriate. Digital Logic Design lies at the interface of logic in Mathematics and Computer Science. It fits well with other courses such as Discrete Mathematics and Computer Organization. It will also be useful for other electives such as Quantum Computation.

The Council approved the updated curriculum.

Item No. 7(ii)

To consider the proposal to invite external PhD Co-Supervisors

Prof Maniklal Das, Dean (AP), presented before the Council the proposal to invite external PhD Co-Supervisors as follows:

- Invitation will be to faculty, scientists, senior researchers and professionals from nationally reputed Universities, Institutes, Research and Development organizations and Industries with whom the Institute has active MoUs.
- A minimum qualification of PhD with adequate professional/research experience in the relevant field is requisite. Research publications in refereed journals are preferable.
- Consent from the employer.
- A Committee constituted by the Director comprising of Dean (AP), Dean (R&D) and a faculty from the relevant research domain will evaluate the application as and when received and make appropriate recommendations to the Director.
- The Director will be the authority to approve the appointment.

The Council approved the proposal. The Council advised that the requirement of PhD may be relaxed for those with outstanding research, innovation, product development and consultancy credentials.

Item 7(iii)

To ratify the approval accorded by the Chairman, Academic Council for the Academic Requirements for M. Sc (DS) and B. Tech (Mathematics and Computing) Programs



The Council ratified the approval accorded by the Chairman, Academic Council for the Academic Requirements of for M. Sc (DS) and B. Tech (Mathematics and Computing) Programs.

The meeting ended with a vote of thanks to the Chair.



A handwritten signature in blue ink, appearing to read "R. K. Singh".

Executive Registrar
DA-IICT, Gandhinagar