



**Minutes of 34<sup>th</sup> Senate Meeting ( Incorporating the revisions as approved in the 35<sup>th</sup> Senate) of the National Institute of Technology, Tiruchirappalli held on 12<sup>th</sup> May 2016 at 2.00 pm in A-12 Hall, NITT.**

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**The following members were present in the meeting:**

1. Dr. Sundarrarajan S	Chairman-Senate
2. Dr. Malathy Duraisamy	External Member
3. Dr..Ammasai Gounden. N	Member
4. Dr..N.Anantharaman	Member
5. Dr..T.K.Radhakrishnan	Member
6. Dr. N.P.Gopalan	Member
7. Dr.J.Sarat Chandra Babu	Member
8. Dr.P.Sivashanmugam	Member
9. Dr.L.Cindrella	Member
10. Dr.P.A. Krishnan	Member
11. Dr.S.Moses Santhakumar	Member
12. Dr.G.Swaminathan	Member
13. Dr.B.Ramadoss	Member
14. Dr.S.Selvakumar	Member
15. Dr.K.Viswanathan Iyer	Member
16. Dr.B.Venkataramani	Member
17. Dr.S.Arul Daniel	Member
18. Dr.C.Nagamani	Member
19. Dr.K.Sundareswaran	Member
20. Dr.V.J.Sivakumar	Member
21. Dr.D.Deivamoney Selvam	Member
22. Dr.T.N.Janakiraman	Member
23. Dr.K.Murugesan	Member
24. Dr. P.Kumaresh Babu	Member
25. Dr.D. Sastikumar	Member
26. Dr.N.Gopalakrishnan	Member
27. Dr.P.Asokan	Member
28. Dr. A.Noorul Haq	Member
29. Shri A.Palanivel	Secretary-Senate
30. Dr. M.Duraiselvam	Special Invitee
31. Dr Meeatchi Sundaram	Special Invitee
32. Prof R Jayasankar	Special Invitee
33. Dr A Vadivel	Special Invitee
34. Dr D. Sriram Kumar	Special Invitee
35. Dr M. Premalatha	Special Invitee
36. Prof R. Gururaj	Special Invitee
37. Dr N. Sivakumaran	Special Invitee
38. Dr T. Sudhakar	Special Invitee

*A Palanivel*

*g. Murugan*

39. Dr S.P. Kumaresh Babu	Special Invitee
40. Dr V.J. Sivakumar	Special Invitee
41. Dr M. Duraiselvam	Special Invitee
42. Dr. R.Jeyapaul	Special Invitee
43. Dr S. T. Ramesh	Special Invitee
44. Dr. P.Raja	Special Invitee
45. Dr. R Karvembu	Special Invitee
46. Dr.N. Kumaresan	Special Invitee

**The following members expressed their inability to attend the meeting:**

1. Dr. V. Jagadeesh Kumar	External Member
2. Dr. Ashoka G. Samuelson	External Member
3. Dr P. Jayabalan	Member
4. Dr. S.Kumanan	Member
5. Dr. V.Muthupandi	Member
6. Dr.R.Narayanasamy	Member
7. Dr R. Nallasamy	Member
8. Dr C. Natarajan	Member
9. Dr S. Natarajan	Member
10. Dr M. Punniamoorthy	Member
11. Dr R. Ponalagusamy	Member
12. Prof. V.Ramprasad	Member
13. Dr Raman Sankararayanan	Member
14. Dr K. Sanakaranarayanan	Member
15. Dr S. Shanmugam	Member
16. Dr J Sarangan	Member
17. Dr T. Selvaraj	Member
18. Dr M. Umopathy	Member
19. Dr M. Udayakumar	Member
20. Dr G. Venkatesa Prabhu	Member
21. Dr R. Leela Velusamy	Special Invitee
22. Dr M.Venkata Kirthiga	Special Invitee
23. Dr. A.K.Bakthavatsalam	Member

The Chairman welcomed the Members and Special Invitees to the Senate. Shri A. Palanivel Secretary Senate presented agenda items one by one.

*A Palanivel*

*gkumar*



**ITEM NO.1 To confirm the Minutes of the 32<sup>nd</sup> and 33<sup>rd</sup> Senate Meetings held on 20.11.2015 and 13.4.2016.**

*Minutes of the 32<sup>nd</sup> and 33<sup>rd</sup> Senate meeting are confirmed with the following modifications.*

*The former officiating Registrar cum Secretary-Senate has requested to remove a line appreciating the then officiating Registrar in the minutes of 32<sup>nd</sup> Senate meeting. Chairman-Senate agreed to change the minutes as per the request and directed to include the same in the minutes of 34<sup>th</sup> Senate meeting. Hence, the good services of Prof. G. Swaminathan as Officiating Registrar and Secretary of the Senate of NITT is appreciated by the senate and is recorded in the 34<sup>th</sup> senate meeting.*

*Prof. Raman Sankaranarayanan had informed the Director about his inability to attend the 31<sup>st</sup> Senate Meeting. Hence it is deemed to have been recorded in the minutes of 31<sup>st</sup> Senate meeting that Prof. Raman Sankaranarayanan had expressed his inability to attend the 31<sup>st</sup> Senate Meeting.*

The Minutes of the 32<sup>nd</sup> and 33<sup>rd</sup> Senate Meetings held on 20.11.2015 and 13.04.2016 are approved with above observations.

**RESOLUTION                      RESOLVED THAT the Minutes of the 32<sup>nd</sup> and 33<sup>rd</sup> Senate  
34/SENATE/2016/1              Meetings held on 20.11..2015 and 13.04.2016 at A12 Hall in NIT  
Tiruchirappalli be confirmed.**

**ITEM NO.2 Presentation of the Minutes of the Boards of Studies of the respective departments by the HoDs Concerned for the flexible Curriculum, new M.Tech Programme in Data Analytics by MCA department from the Academic Year 2016-17.**

*The B.Tech. flexible curriculum as approved by the respective BoS of the Departments of Civil Engineering, Chemical Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Instrumentation and Control Engineering, Mechanical Engineering, Metallurgical and Materials Engineering, Production Engineering along with the Minor courses offered for B.Tech. students of other Departments is approved by the Senate. The new curriculum will be in force from the batch of 2015-16 onwards.*

*The curriculum structure of B.Arch. programme is approved.*

*The Minor courses offered by the Departments of Humanities and Social Science, Mathematics, Computer Application, Energy and Environment, Physics, Chemistry, DoMS is approved. The curriculum of the new M.Tech. programme in Data Analytics is approved and the same will be offered from 2017-18.*





*Few changes suggested in the respective curriculum may be incorporated by the HoD concerned and the updated curriculum is to be sent to the Academic office on or before 26<sup>th</sup> May 2016*

**RESOLUTION**  
**34/SENATE/2016/2**

**RESOLVED THAT the B.Tech flexible Curriculum, B.Arch Curriculum Structure and the minor courses offered by the HSS, Mathematics, Computer Applications, Energy & Environment, Physics, Chemistry and DOMS and the Curriculum on M.Tech Programme in Data Analytics be approved.**

**RESOLVED FURTHER THAT the new B.Tech Curriculum be effected from the batch of 2015-16 onwards.**

**RESOLVED FURTHER THAT Curriculum of M.Tech Programme in Data Analytics be effected from 2017-18.**

**RESOLVED FURTHER THAT the changes suggested in the respective curriculum be incorporated by the HoD concerned and updated curriculum be sent to the Academic Office on or before 26<sup>th</sup> May 2016**

**ITEM NO.3 To ratify the award of Provisional degree to M.S/Ph.D. Candidates who have successfully completed the requirements of the degree**

*The senate ratifies the award of provisional degrees to the list of M.S. and Ph.D. candidates as presented in Annexure II of the Agenda and notes.*

**RESOLUTION**  
**34/SENATE/2016/3**

**RESOLVED THAT the decision of award of Provisional Degree to M.S/ Ph.D Candidates as per Annexure II of Agenda be ratified.**

**ITEM NO.4 To ratify the results of UG & PG courses in the odd semester 2015-16 as approved by the respective PAC**

*The published results of odd semester of UG and PG courses in the examination held in 2015-16 as approved by the respective PAC are ratified. The results of the first semester B.Tech. programme under flexible curriculum, as presented by Dr. P. Raja is also approved.*

*A. S. Srinivasan*

*J. Kumar*



**RESOLUTION**  
34/SENATE/2016/4

**RESOLVED THAT** the decision of declaration of the results of UG and PG Courses in the Odd Semester 2015-16 be approved.

**ITEM NO.5 Feedback of flexible curriculum for the first year B.Tech. programme**

*Flexible curriculum is offered from the first year B.Tech. programme of the current academic year 2015-16. All the courses were offered as per the course plan. Dr. P. Raja presented the variety of the assessments and content delivery models of the various courses offered under the new regulations.*

**RESOLUTION**  
34/SENATE/2016/5

**RESOLVED THAT** the methodologies followed for implementing flexible curriculum for first year students be adopted for higher Semesters.

**ITEM NO.6 Senate sub-committee recommendations on results declaration and reassessment regulations under the flexible curriculum and regulations concerning honours course.**

*Minutes of the meeting of the Senate sub-committee on academic reforms is ratified. However, students are permitted to undergo five honours' courses, out of which best three subjects shall be considered for awarding honours degree subject to satisfying the requirements for award of honours degree.*

**RESOLUTION**  
34/SENATE/2016/6

**RESOLVED THAT** the Minutes of the Meeting of the Senate Sub-Committee on academic reforms be ratified.

**RESOLVED FURTHER THAT** the Students be permitted to undergo five honours' Courses, of which best three subjects be considered for awarding honours degree subject to satisfying the requirements for award of honours degree.

**ITEM NO.7 Senate sub-committee recommendations on restructuring of PG programmes**

*The Minutes of the meeting of the Senate sub-committee for studying PG programmes is as enclosed in Annexure-IV in the Agenda and Notes of the 34<sup>th</sup> senate meeting is approved. In addition, a high-level committee will look into M.Tech. (NDT) programme. The Inputs of the stakeholders particularly industries need to be obtained, industry linkage need to be assured,*

*A. Salim*

*J. Kumar*

*Reservations expressed by Prof. A. K. Bakthavatsalam need to be considered for the new programmes in future.*

**RESOLUTION**  
**34/SENATE/2016/7**

**RESOLVED THAT** the minutes of the meeting of the Senate Sub-Committee for studying the PG Programmes be approved.

**RESOLVED FURTHER THAT** a High-Level Committee be look in to M.Tech (NDT) Programme, inputs of the stakeholders particularly industries be obtained, industry linkage be ensured for new programmes in future.

### **ITEM NO.8 Committee report on the issuance of stipend for M.Tech. students**

*The committee report on the issuance of stipend for M.Tech. students as enclosed in Annexure - V in the agenda book was considered and decided to continue the existing process*

**RESOLUTION**  
**34/SENATE/2016/8**

**RESOLVED THAT** the existing process for issuance of stipend for M.Tech students be continued.

### **ITEM NO.9 To approve the directed study courses for Ph.D. course works**

The following courses are recommended by the Doctoral Committee of the Research Scholars of various departments for the approval of the Senate.

S.No.	Department	Course
1.	Civil Engineering	<ol style="list-style-type: none"><li>1. Hyperspectral Image Processing</li><li>2. Application of wavelet transform for satellite image processing</li><li>3. Simulation modeling in water resources</li><li>4. Highway design and safety</li><li>5. Advanced spatial analysis techniques</li><li>6. Flood modeling and drought assessment</li></ol>
2.	Computer Science & Engineering	<ol style="list-style-type: none"><li>1. Cache coherence for multi core architectures</li><li>2. GPU architecture and programming</li><li>3. Artificial intelligence</li></ol>
3.	Electrical and Electronics Engineering	<ol style="list-style-type: none"><li>1. Solar PV systems</li><li>2. Design of embedded controllers for smart micro-grid</li></ol>

*A. K. Bakthavatsalam*

*[Signature]*



4.	Electronics and Communications Engineering	<ol style="list-style-type: none"> <li>1. Microwave interaction with biological tissues</li> <li>2. Dynamic spectrum access using cognitive radio mobile ad-hoc networks</li> <li>3. Substrate integrated waveguide technology: design and analysis</li> <li>4. Functional verification using hardware verification languages</li> <li>5. Pattern recognition and machine intelligence</li> </ol>
5.	Mechanical Engineering	Advances in engineering materials (for structural applications)
6.	Physics	<ol style="list-style-type: none"> <li>1. Cloud computing for big data</li> <li>2. Embedded networking</li> <li>3. Embedded systems design</li> <li>4. Basic course on thermoelectric materials</li> </ol>
7.	Instrumentation and Control Engineering	<ol style="list-style-type: none"> <li>1. Analysis and design of smart materials and structures</li> <li>2. Introduction to biomaterials</li> <li>3. Basics of theoretical computer science for control applications</li> <li>4. Industrial automation and control</li> <li>5. Utility boilers for subcritical and supercritical plants</li> <li>6. Advanced control systems</li> </ol>
8.	Architecture	<ol style="list-style-type: none"> <li>1. Urban Microclimate</li> <li>2. Theory and principles of thermal comfort</li> </ol>
9.	Chemical Engineering	1. Design and Analysis of Liquid Air Membrane Energy Exchanger
10.	Computer Applications	1. Data Analytics
11.	Humanities and Social Sciences	<ol style="list-style-type: none"> <li>1. Narratives of visual culture and Indian humour</li> <li>2. Representation of humour in Indian comics</li> <li>3. Cognitive visual culture – special emphasis on comics</li> </ol>

*Approved*

*A. Balasubramanian*

*G. S. Srinivasan*

RESOLUTION  
34/SENATE/2016/9

RESOLVED THAT the courses recommended by  
the Doctoral Committee of the Research Scholars  
of various departments be approved

**ITEM NO.10 Request of faculty for Senate's Consideration**

a. To ratify the request of Dr. S. Natarajan, Chairman/CECASA to consider the educational qualifications for admission to Ph.D programme in CECASA.

*Ratified*

b. To consider the request of Dr. N. Gopalakrishnan, HOD/Physics to rename the Practical –I (PH607) and Practical-II (PH608) offered for M.Tech. (NDT) as Conventional NDE Laboratory and Advanced NDE Laboratory respectively.

*Approved.*

c. To consider the request of Dr. N. Sivakumaran, HOD/ICE to ratify the course plans of the following subjects offered in 2015-16 as available in courseplan.nitt.edu.

1. CE285 Thermodynamics and Fluid mechanics Laboratory
2. IC205 Digital Electronics
3. IC203 Circuit Theory
4. IC207 Devices and Circuits Laboratory
5. CE283 Thermodynamics and fluid mechanics
6. MA102 Mathematics- III
7. MT211 Analytical instrumentation
8. IC403 Engineering Mechanics
9. IC102 Analog Electronic Circuits
10. IC206 Microprocessors and Microcontrollers Laboratory
11. IC498 Project work

*The course plans of the above courses are ratified.*

RESOLUTION RESOLVED THAT the requests of Faculty 10(a) to (c) be  
34/SENATE/2016/10 approved and ratified

**ITEM NO.11. Students' Representations for Senate's Consideration.**

a. To ratify the approval of Chairman Senate on the request of Mr. Manoj Kumar Das (213114022) – M.Tech. NDT student to relax the M.Tech. Regulations for the extension of project report submission on or before 05<sup>th</sup> February 2016. This has the recommendation of HOD/Physics.

*Ratified*

*A. G. Srinivasan*

*Manoj Kumar Das*



**b. To ratify the approval of Chairman Senate to extend the period of study for Mr. Atul Jee Rai (111107086) beyond the maximum duration of study.**

*Ratified*

**RESOLUTION            RESOLVED THAT the students representations 11 (a) to (b) be  
34/SENATE/2016/11    ratified.**

**ITEM NO.12. Any other items with the permission of the Chairperson.**

**a. A MoU was executed with Indian Navy in 2014 for offering admission to the sponsored officers of the directorate of Naval Education in M.Tech. programmes offered under various departments of the institute. The Directorate of naval education has requested for two seats, one in each of M.Tech. Computer Science and Engineering and M.Tech. Communication Systems for the academic year 2016-17. Admission to the sponsored officers of Indian Navy shall be carried out as per clause 6(c) in the MoU between NITT and Indian Navy.**

*The senate approves the seats allotted to Indian Navy, Ministry of Defence, Government of India.*

**b. The revised B. Arch. Regulations is enclosed in Annexure – XIII of the agenda book for the approval of the Senate**

*Approved*

**c. To ratify the approval of Chairman Senate on the request of Mrs. Jeeva Stella, Assistant Engineer, ECE department to pursue her M.S. (By Research) programme by relaxing the eligibility condition of 60% in the qualifying degree as a special case. She has a B.E. Degree with 58.1%.**

*Ratified*

**d. A MoU was signed between NITT and Institute for Development and Research in Banking Technology on 29<sup>th</sup> April 2016 to collaborate in research for M.Tech. and Ph.D programmes.**

*Noted and approved*

**e. Council of Architecture has decided to regularize all the B.Arch. students admitted through DASA scheme to grant the enrolment number for registration as an architect under the Architects Act, 1972 as a onetime measure. In future, all students shall be admitted only through NATA/an aptitude test in architecture conducted by the competent authority.**

*Noted*





**f. A MoU was signed between NITT and NITK Suratkal on 5<sup>th</sup> April 2016 to carry out collaborative research works and sharing of facilities.**

*Noted*

**g. The Chairman of the senate read the e-mail request sent by the student council.**

- (i) *It is resolved that the attendance for the students who undergo training during the summer vacation as part of the curriculum requirement shall be counted from the date of joining the programme in the subsequent odd semester (i.e. the beginning of the next academic year).*
- (ii) *The maximum number of theory courses and laboratory courses that can be registered for Formative Assessment during the summer vacation of the academic year 2015-16 for the 2012-2016 batch and earlier shall be 10 and 4 respectively.*
- (iii) *The percentage for OD in attendance computation for all the courses offered to final year B.Tech. programmes (2013-17 and 2014-18) to be given to final year B.Tech. students shall be decided by the following committee: Dean(SW) – Convener, Dr. M. Venkata Kirthiga, AP/EEE, Dr. U. Srinivasulu Reddy, AP/CA as members.*

**h. Resolution to thank the Chairman-Senate Dr. S. Sundarrajan, who is demitting office in June 2016, for his excellent leadership in facilitating important academic decisions during his tenure.**

*The Senate sincerely expressed its deep appreciation for the successful tenure of Dr.S.Sundarrajan as Chairman of the Senate during 2011-16. His immense contribution to changing the academic environment of the Institute was acknowledged.*

**RESOLUTION                      RESOLVED THAT the any other items 12 (a) to (h) be noted/  
34/SENATE/2016/12              approved/ ratified as per above.**

The Meeting ended a vote of thanks to the Chair

  
**Secretary-Senate**

**Chairperson –Senate**

