The following members were present in the meeting:

1. Dr. Sundarrarajan S  
2. Dr.N.Anantharaman  
3. Dr.T.K.Radhakrishnan  
4. Dr.J.Sarat Chandra Babu  
5. Dr.P.Sivashanmugam  
6. Dr.L.Cindrella  
7. Dr.P.Jayabal  
8. Dr.P.A. Krishna  
9. Dr.S.Moses Santhakumar  
10. Dr.C.Natarajan  
11. Dr.G.Swaminathan  
12. Dr.B.Ramados  
13. Dr.S.Selvakumar  
14. Dr.K.Viswanathan Iyer  
15. Dr.B.Venkataramani  
16. Dr.Ammasai Gounden. N  
17. Dr.S.Arun Daniel  
18. Dr.C.Nagamani  
19. Dr.K.Sundareswaran  
20. Dr.M.Umapathy  
21. Dr.M.Punniyamoorthy  
22. Dr.D.Deivamoney Selvam  
23. Dr.T.N.Janakiraman  
24. Dr.K.Murugesan  
25. Dr.R.Nallaswamy  
26. Dr.R.Ponlalusamy  
27. Dr.K.Sankaranarayanasamy  
28. Dr.J.Sarangan  
29. Dr.S.Shammugam  
30. Dr.M.Udayakumar  
31. Dr.V.Muthupandi  
32. Dr.S.Raman Sankaranarayanan  
33. Dr.D. Sastikumar  
34. Dr.P.Asokan  
35. Dr.S.Kumaran  
36. Dr. A.Noorul Haq  
37. Dr. M.Durai Selvam

Chairman-Senate  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Special Invitee
38. Dr. G. Subbaiyan  
39. Dr.R.Jayasankar  
40. Dr.A.Vadivel  
41. Dr. R. Leela Velusamy  
42. Dr.D.Sriramkumar  
43. Dr. M. Premalatha  
44. Dr. Vinod Balakrishnan (representing) Prof. R. Gururaj  
45. Dr .N. Sivakumaran  
46. Dr.V.J.Sivakumar  
47. Dr. P.Kumaresh Babu  
48. Dr.N.Gopalakrishnan  
49. Dr. T.Selvaraj  
50. Dr. K.Dhanalakshmi  
51. Dr. R.Jeyapaul  
52. Dr. P.Palanisamy  
53. Dr. M.Perumalsamy  
54. Prof. Goldin R Bennet  
55. Dr. P.Raja  
56. Dr. R Karvembu  
57. Dr.N. Kumaresan  
58. Shri A.Palanivel  

Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Special Invitee  
Secretary-Senate  

The following members expressed their inability to attend the meeting:

1. Dr. V. Jagadeesh Kumar  
2. Dr. Malathy Duraisamy  
3. Dr. Ashoka G. Samuelson  
4. Prof. V.Ramprasad  
5. Dr. Srinivasa Tadepalli  
6. Dr. G. Venkatesaprabhu  
7. Dr. Samson Mathew  
8. Dr.N.P.Gopalan  
9. Dr. A. Venkataswamy Reddy  
10. Dr. S. Raghavan  
11. Dr. G. Kannabiran  
12. Dr. S.Natarajan  
13. Dr.R.Narayanasamy  
14. Dr. A.K.Bakthavatsalam  
15. Dr.T.Suthakar  

External Member  
External Member  
Member  
Member  
Member  
Member  
Member  
Member  
Member  
Special Invitee  

Minutes of the 32nd Senate Meeting held on 20th November 2015 at NIT, Tiruchirappalli  
Page 2
Nominations process for the Members of the BoG by the Senate was held between 2.00 p.m. and 2.45 p.m. Following this, the 32nd Senate Meeting was held at 2.45 p.m. on 20th November 2015 in the A-11 hall. The meeting began with a two minute silence as a mark of respect to the departed Senate member Prof. C. Meenakshi Sundaram of the Humanities Department.

The Chairperson of the Senate welcomed the new Registrar Mr. A. Palanivel and the members and special invitees to the meeting. The Chairperson wishes to record the excellent services of the outgoing Registrar Dr. G. Swaminathan.

In the opening remarks, the Chairperson highlighted the peer review process undertaken by the Institute. A new Research Park is being conceived and it is likely to come up soon with the assistance of NLC and Honeywell Inc. The Chairperson also briefed the members about the meeting of the Heads of Institutes of Higher Learning held in the Rashtrapati Bhavan. The President and Prime Minister were present in the meeting. The Chairperson urged the members to take active part in the Government initiatives such as IMPRINT, GYAN, SWATCH BHARAT and UNAAD BHARATH ABGYAN.

The Chairperson informed the members that NITT will be hosting CSAB 2016. The Agenda Items were subsequently taken up. Shri A. Palanivel, Secretary Senate presented the Agenda Items.

ITEM NO.I To confirm the Minutes of the 31st Senate Meeting held on 14.07.2015

Comments of Prof. C. Natarajan on the Minutes of the 31st Senate Meeting submitted to the Chairman Senate was acknowledged.

_The minutes of the 31st Senate Meeting held on 14.07.2015 is approved._

RESOLUTION 32/SENATE/2015/1 RESOLVED THAT the Minutes of the 31st Senate Meeting held on 14.07.2015 at A12 Hall in NIT Tiruchirappalli be confirmed.

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

_Ratified_

RESOLUTION 32/SENATE/2015/2 RESOLVED THAT the award of Provisional Degree to M.S./Ph.D Candidates be ratified.

ITEM NO.III To ratify the award of degrees to supplementary list of B.Tech candidates who have successfully completed and been awarded degree in the 11th Convocation held on 22nd August 2015

_The Senate ratifies the award of degrees to the following supplementary list of_
Resolution 32/SENATE/2015/3
RESOLVED THAT the decisions of the Chairman Senate for the award of degrees to supplementary list of B.Tech candidates be ratified.

Item NO.IV
To consider and approve the revised B.Tech Regulations 2015 and guidelines for writing the course plan

The new B.Tech. Regulations based on the formative assessment as approved in the 30th Senate meeting and, the flexible curriculum, content delivery and evaluation, as approved in the 31st Senate meeting are approved from the current I Semester B.Tech. programme. The Senate Subcommittee on academic reforms constituted will review the B.Tech. Regulations 2015 and suggest changes / modifications, if any, will be discussed in the next Senate meeting.

The Senate also approves the guidelines for writing course plan, course code etc. (As given in pages 37 to 42 in the Agenda and Notes of the 32nd Senate meeting). The Senate decided to follow UGC guidelines in fixing the maximum duration for all the programmes as N+2, where N is the normal duration of the programme. Hence, the maximum duration of B.Tech. programmes shall be 6 years.

The Retention policy of the new regulations shall be applicable to all UG, PG and Ph.D. programmes.

Comments, if any, from the Senate Members may be communicated to Secretary, Senate within 10 days to study on academic reforms by the Senate Sub-Committee

Resolution 32/SENATE/2015/4
RESOLVED THAT the revised B.Tech Regulations 2015 and the guidelines for writing the course plan be approved from the first semester of 2015-16 batch.
RESOLVED FURTHER THAT the Rule B 15.1 of the new regulations applicable to all Courses of all the Programmes offered by the Institute be approved.

ITEM NO.V Request of Faculty for Senate’s Consideration

a. To consider the request of Prof. K. Sankaranarayanasamy to pay a remuneration of US $ 100 per hour to Prof. Prabhakaran Ramamurthy of ODU, Virginia USA who is offering a course on Advanced Engineering Materials and also to increase the faculty strength in Mechanical Engineering department

Approved and the maximum limit of expenditure as allowed by the Ministry under GYAN scheme shall be adhered to and the matter is referred to the Finance Committee.

b. To consider the request of Prof. R. Gururaj, HOD/Humanities department to include MBA degree as one of the eligible degrees for admission to Ph.D. in the department of Humanities.

Approved

c. To consider the request of Prof. K. Sankaranarayanasamy to offer two directed study courses for his research scholar, Mr. Kenned Jack Joseph. As per the Ph.D regulations P12 (a), a scholar can register for only one directed study course. However, the guide cites that there is lack of relevant courses in the PG curriculum.

d. To consider the request of Prof. G. Venkatesa Prabhu to offer two directed study courses for his research scholar, Mr. M Murugan. As per the Ph.D regulations P12 (a), a scholar can register for only one directed study course.

e. To consider the request of Dr. S. Saravanan, Assistant Professor/Civil to offer two directed study courses for his research scholar, Mr. A. Selvaraj. As per the Ph.D regulations P12 (a), a scholar can register for only one directed study course. However, the guide cites that there is lack of relevant courses in the PG curriculum.

f. To consider the request of Mr. M. Sashiganth (408114051) to study two directed study courses as course works for his research work. As per the Ph.D regulations P12 (a), a scholar can register for only one directed study course.

Items (c,d,e,f) above are approved. The Senate also modified the existing Ph.D. regulations (P12a) related to course work as follows: The regular Ph.D. scholars should successfully complete four courses as prescribed by the doctoral committee.
g. To consider the request of Prof. R. Gururaj, HOD/Humanities department to rename the department of Humanities as the department of Humanities and Social Sciences.

Approved

h. To consider the request of Prof. R. Jayasankar, HoD/Civil, to reckon the course work and comprehensive viva-voce, successfully completed in IITM and permit him to submit his Ph.D. thesis in NITT.

Approved in principle. Dr. P. Jayabalal (Chairman DAC) will form the doctoral committee and decide the further course of action. The written consent of the Ph.D. guide of Prof. R. Jayasankar in IITM, for submitting the Thesis in NITT, is to be obtained.

RESOLUTION 32/SENATE/2015/5 RESOLVED THAT the request of Faculty for Senate's Consideration under the subhead (a) to (h) be approved with the suggestions given under respective subhead.

ITEM NO.VI Student’s Representation for Senate’s Consideration

The MoU with IITM was approved in the 31st Senate meeting. Based on the MoU, two B.Tech. final year Civil Engineering students, Ms. Pavithraa Saravane (Roll. No. 103112071) and Mr. V. Siva Poornam (Roll No. 103112100) were granted admission for direct Ph.D. programme in IITM, Chennai. They were permitted to register for the courses in IITM in lieu of their final year courses in NITT. The credits earned in IITM will be accounted by NITT and B.Tech. degree will be awarded by NITT on successful earning of the required credits in IITM. The HoD/Civil had already agreed on the core courses to be completed in IITM for fulfilling the requirements of successful completion of B.Tech. programme.

The Senate ratifies the permission granted to two B.Tech. final year Civil Engineering students, Ms. Pavithraa Saravane and Mr. V. Siva Poornam, to pursue their direct Ph.D. studies at IITM based on MoU between IITM and NITT.

The Senate approves the courses taken by Ms. Pavithraa Saravane and Mr. V. Siva Poornam, at IITM, for the award of B.Tech. Degree in NITT.

RESOLUTION 32/SENATE/2015/6 RESOLVED THAT the decisions of the Senate be approved with the suggestions.
ITEM NO.VII  To approve the Directed Study courses for Ph.D. Course works

The following directed study courses of various departments are approved.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Department</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Civil Engineering</td>
<td>Offshore foundation engineering</td>
</tr>
<tr>
<td>2.</td>
<td>Computer Science &amp; Engineering</td>
<td>1. Topics in Cryptanalysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Memory Architectures and Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Advanced concepts in image processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Selected topics in graph algorithms</td>
</tr>
<tr>
<td>3.</td>
<td>Electrical and Electronics Engineering</td>
<td>1. Advanced analog integrated circuit design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Protection of electric power transmission systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Aero-dynamic studies for stratospheric airships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Industrial image processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Systems Engineering</td>
</tr>
<tr>
<td>4.</td>
<td>Electronics and Communications Engineering</td>
<td>1. Testability of analog/mixed-signal circuits &amp; High speed circuit design</td>
</tr>
<tr>
<td>5.</td>
<td>Energy and Environment</td>
<td>1. Principles of downstream techniques in bioprocess</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Design of heat exchangers, evaporators, separation equipment and driers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Instrumentation in assessment of water and wastewater quality</td>
</tr>
<tr>
<td>6.</td>
<td>Mechanical Engineering</td>
<td>Combustion and emissions in IC engines</td>
</tr>
<tr>
<td>7.</td>
<td>Metallurgical and Materials Engineering</td>
<td>1. Weldability of special steels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Special welding processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Welding consumables</td>
</tr>
<tr>
<td>8.</td>
<td>Physics</td>
<td>1. Laser Materials Processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Fluid Mechanics and Characteristics of Nanofluids</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Research Techniques in Physical Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Experimental Techniques for Research in Advanced Physics</td>
</tr>
<tr>
<td>9.</td>
<td>Instrumentation and Control Engineering</td>
<td>1. Integrated circuits and Systems Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Fault-Tolerant Control Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Multivariable control</td>
</tr>
<tr>
<td>10.</td>
<td>Architecture</td>
<td>1. Mathematics in Architecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The South Indian Temple Architecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Advanced Statistical Thermodynamics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Pipeline corrosion and cathodic protection</td>
</tr>
<tr>
<td>12.</td>
<td>Computer Applications</td>
<td>1. Advanced Combinatorics and Graph Theory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Visual sensor networks</td>
</tr>
</tbody>
</table>
### RESOLUTION 32/SENATE/2015/7

**RESOLVED THAT** the Directed Study courses for Ph.D. Course work be approved.

---

**ITEM NO.VIII**

**To ratify the approval of Chairman – Senate regarding the Number of guideship per Faculty in Ph.D. guidance**

The Senate ratifies the following modification in the Ph.D. regulations (P8b)

> 'No guide shall have more than 4 full time Ph.D scholars with the institute scholarship and 4 part time (on campus) candidates at any point of time. Notwithstanding the above, eligible guides can take Ph.D scholars with sponsorship from various funding agencies and, Ph.D – Part time (External Candidates) from the industries.'

---

**RESOLUTION 32/SENATE/2015/8**

**RESOLVED THAT** the approval of Chairman – Senate regarding the number of guideship per Faculty in Ph.D. guidance be ratified.

---

**ITEM NO.IX**

**Nomination of faculty to the BoG by the Senate**

Since the existing faculty representatives in BOG were completing their tenure, the process of nomination of faculty members to the BOG has been initiated in the month of September 2015. Nominations were called for from the faculty members of Professors and Assistant Professors cadre to nominate one Professor and one Assistant Professor to the BOG. The ballot process of nomination was conducted on 20-11-2015, prior to the Senate Meeting. Mr. G. Ravikularaman, DR (Internal Audit) coordinated the ballot process and Dr. T. K. Radhakrishnan, Professor of Chemical Engineering and Dr. K. N. Sheeba, Assistant Professor of Chemical Engineering were declared as nominees of Senate for the Board of Governors.
The Senate placed on record the excellent services rendered by the outgoing Senate nominees of BoG, Prof. K. Sankaranarayanasamy and Dr. K. Thirumaran and also appreciated the Deputy Registrar (IA) for the smooth conduct of the nomination process.

RESOLUTION
32/SENATE/2015/9

RESOLVED THAT the Nomination of faculty members namely Prof. T. K. Radhakrishnan, Dr. K. N. Sheeba as Senate Nominees to the Board be approved.

ITEM NO.X
Any other items with the permission of the Chair

a. To a query raised by Prof. P. Jayabalan about the condonation of attendance for B.Tech. students after a detailed discussion, the Senate ratifies the decision taken by the Attendance, Disciplinary and Grievance Committee (Regulation B.20) with the following members: Associate Dean (Academic), Dean(Students Welfare), Dean(Academic) and the Director. The Senate directed the Academic office to ensure that the condonation recommended by the above committee is uniformly given to the students across various departments.

b. The Senate approved the course plan submitted by Dr. M. Venkata Kirthiga, Assistant Professor of EEE Department for the subject EE306 Micro Processors and Micro-Controllers to be offered for 6th Semester B.Tech. EEE programme.

c. The Senate ratified the decision to consider the request of Mr. Amit Kumar (101108026), B.Arch. passed out student, to redo the two courses during the winter vacation of 2015.

RESOLUTION
32/SENATE/2015/10

RESOLVED THAT the decisions of the Senate be approved with the suggestions.

A. Palanivel
Secretary-Senate

Dr. S. Sundarraj
Chairperson –Senate

Minutes of the 32nd Senate Meeting held on 20th November 2015 at NIT, Tiruchirappalli