

Minutes of the 56th Meeting of the Senate of National Institute of Technology, Tiruchirappalli held on 17th November 2021 at 2.00 PM through VC Mode (MS Teams)

The following members were present in the meeting:

1.	Dr. Mini Shaji Thomas, Director	Chairperson
2.	Dr. Ramakalyan Ayyagari, Dean (Academic)	Member
3.	Dr. M. Thamban Nair	External Member
4.	Dr. Haripriya Gundimeda	External Member
5.	Dr. A. K. Bakthavatsalam	Member
6.	Dr. AR. Veerappan	Member
7.	Dr. B. Ravisankar	Member
8.	Dr. B. Senthil Arasu	Member
9.	Dr. B. Vasuki	Member
10.	Dr. C. Mala	Member
11.	Dr. C. Nagamani	Member
12.	Dr. D. Sastikumar	Member
13.	Dr. D. Sriram Kumar	Member
14.	Dr. G. Arthanareeswaran	Member
15.	Dr. G. Lakshminarayanan	Member
16.	Dr. G. Subbaiyan	Member
17.	Dr. G. Swaminathan	Member
18.	Dr. G. Uma	Member
19.	Dr. J. Hemalatha	Member
20.	Dr. J. Sarat Chandra Babu	Member
21.	Dr. K. Baskar	Member
22.	Dr. K. Dhanalakshmi	Member
23.	Dr. K. M. Meera S. Begum	Member
24.	Dr. K. Muthukkumaran	Member
25.	Dr. K. Sundareswaran	Member
26.	Dr. L. Cindrella	Member
27.	Dr. M. Ashok	Member
28.	Dr. M. Bhaskar	Member
29.	Dr. M. Duraiselvam	Member
30.	Dr. M. Jaya Bharatha Reddy	Member
31.	Dr. M. Premalatha	Member
32.	Dr. M. Punniyamoorthy	Member
33.	Dr. M. Udayakumar	Member
34.	Dr. M. Umapathy	Member
35.	Dr. Mary Saira Bhanu	Member
36.	Dr. Michael Arock	Member
37.	Dr. N. Baskaran	Member
38.	Dr. N. Gopalakrishnan	Member

39.	Dr. N. Ramasubramanian	Member
40.	Dr. N. Siyakumaran	Member
41.	Dr. N. Thamaraiselvan	Member
42.	Dr. P.J.A. Alphonse	Member
43.	Dr. P. Muthuchidambaranathan	Member
44.	Dr. P. Palanisamy	Member
45.	Dr. P. Saikrishnan	Member
46.	Dr. P. Sathiya	Member
47.	Dr. P. Sivashanmugam	Member
48.	Dr. R.B. Anand	Member
49.	Dr. R. Jeyapaul	Member
50.	Dr. R. Karvembu	Member
51.	Dr. R. Leela Velusamy	Member
52.	Dr. R. Murugesan	Member
53.	Dr. R. Ponalagusamy	Member
54.	Dr. S. Anandan	Member
55.	Dr. S. Arul Daniel	Member
56.	Dr. S. Jayalekshmi	Member
57.	Dr. S. Kumanan	Member
58.	Dr. S. Kumaran	Member
59.	Dr. S. Moses Santhakumar	Member
60.	Dr. S. Muthukumaran	Member
61.	Dr. S. Nickolas	Member
62.	Dr. S. Sudha	Member
63.	Dr. S.P. Kumaresh Babu	Member
64.	Dr. S.P. Sivapirakasam	Member
65.	Dr. S.R. Balasundaram	Member
66.	Dr. S. Raman Sankaranarayanan	Member
67.	Dr. S. Shanmugam	Member
68.	Dr. S. T. Ramesh	Member
69.	Dr. S. Venkatachalapathy	Member
70.	Dr. T.K. Radhakrishnan	Member
71.	Dr. T.N. Janakiraman	Member
71. 72.	Dr. V.J. Sivakumar	Member
73.	Dr. V. Kumaran	Member
73. 74.	Dr. V. Ravichandran	
		Member
75.	Dr. V. Sankaranarayanan	Member
76.	Dr. V. Vinod Balakrishnan	Member
77.	Dr. M. Arivazhagan	Secretary (i/c)
78.	Dr. G. Marana Gomathi Nayagam	Special Invitee
79.	Dr. G. Muruganantham	Special Invitee
80.	Dr. K. Thirumaran	Special Invitee
81.	Dr. S. Mekala	Special Invitee

82.	Dr. T. Sivasankar	Special Invitee
83.	Dr. V. Mariappan	Special Invitee
84.	Dr. P. Srinivasa Rao Nayak	Special Invitee
85.	Dr. P. Senthil	Special Invitee
86.	Dr. R. Raghavan	Special Invitee

The following members expressed their inability to attend the meeting:

87.	Dr. K. Murugesan	Member
88.	Dr. K. Muthukumar	Member
89.	Dr. N. Kumaresan	Member
90.	Dr. P. Kalaichelvi	Member
91.	Dr. S. Velmathi	Member

The following member did not attend the meeting:

92.	Dr. G. K. Ananthasuresh	External Member
93.	Dr. A. Chandra Bose	Member
94.	Dr. B. Venkataramani	Member
95.	Dr. P. Asokan	Member
96.	Dr. R. Joseph Ponniah	Member
97.	Dr. T. Srinivas	Member
98.	Dr. T. Srinivasa Rao	Member

The Chairperson, Senate welcomed the members to the 56th Meeting of Senate and having ensured a quorum, continued with the proceedings of the Senate. She shared some of the major updates and developments since the last meeting of the Senate.

The Chairperson briefed her recent visits to all the departments which was postponed due to Covid pandemic. She thanked the Dean (Academic) and O/o Dean (Academic) for coordinating the visits. She expressed her satisfaction on the achievements and developments of the institute aligned to the Strategic Plan prepared with respect to the five focus areas. She also mentioned about the starting of 5 new PG programmes that were started during the last few years.

The Chairperson summarized that in the last 3 years the institute could recruit 119 new faculty while elevating/promoting 170 existing faculty, and recruited 20 Group A and 92 Group B & C officers. She recollected the introduction of the Postdoctoral fellow (PDF) scheme, and the direct Ph.D. and integrated Ph.D. programmes in line with NEP 2020. She acknowledged the efforts taken by the faculty to produce 174 Ph.Ds. during the 17th Convocation held on September 25, 2021. The Chairperson thanked the members of the Senate for helping the institute in taking productive and progressive decisions, focus on publishing in Q1 & Q2 journals and patent filing to name a few, and implementing the same from time to time.

The chairperson placed on record the developments of interdisciplinary self-sustaining center of excellences, in line with the "collaboration" pillar of the strategic plan, with the support of industry and alumni that are adding value to the research goals. She announced that TCS would be funding rupees 10 Crores to the CoDE in AI and ML. Further, she has also announced the signing a Memorandum of Understanding to establish Centre for System On-Chip (SoC) Design and Fabrication which would be funded by an alumnus to a tune of 1.88 Crores. The contributions of the previous and current Deans (ID & AR) have been acknowledged.

In alignment with the "Sustainability and Governance" pillar of the strategic plan, the Chairperson announced that the institute could increase internal revenue generation (IRG) significantly, and could invest diligently. She expressed happiness over the institute marching forward in adopting digitalization assisted administration.

The Chairperson congratulated all the 19 research scholars and their supervisors who bagged the prestigious PMRF fellowship so far. It is efforts such as these, she added, that helped our institute move ahead in NIRF India rankings to retain 9th position in engineering and move to 23rd in overall, while significantly improving the score. The Chairperson thanked the teams who have worked for NIRF rankings.

The Chairperson appreciated the relentless contributions of Dr. K.Viswanathan Iyer, Professor of the Department of CSE, who sought voluntary retirement scheme, Dr. B. Venkataramani, Professor of the Department of ECE, who will be superannuating from services on 30-11-2021, and Dr. T. Srinivasa Rao, Professor of the Department of MME, who has also sought VRS.

The Chairperson updated the academic activities to the Senate that first year B.Tech./B.Arch. admissions are going on, with classwork scheduled during the middle of December, and that on campus physical classes have been restored for M.Sc. (Mathematics, Physics, and Chemistry) and M.A. programmes.

Lastly, the Chairperson congratulated the recently appointed Heads of the Departments, Dr. S. Mary Saira Bhanu (CSE) and Dr. K. Dhanalakshmi (ICE), and thanked Dr. Rajeswari Sridhar and Dr. G. Uma, the outgoing HoDs, for their valuable contributions to the respective departments.

Following the welcome address, the Registrar (i/c) opened the deliberations on the agenda items.

1. Confirmation of the Minutes of 55th Meeting of the Senate held on 2nd July 2021

The Senate resolved to confirm the minutes of the 55th Meeting of the Senate.

RESOLUTION

RESOLVED THAT the Minutes of 55th Meeting of

56/SENATE/2021/1

Senate held on 2nd July 2021 be confirmed.

2. Action Taken Report on the decisions of the 55th Meeting of the Senate

The Action Taken Report of the previous meetings of the Senate were presented below:

Item No.	Resolution	Action Taken / Being Taken
a.	55/SENATE/2021/2 The academic audit report for the course CEPC15 Concrete Technology/ II Year B.Tech. Civil Engineering.	The Dean (Academic) presented the audit report for the course CEPC15. Based on the question papers and answer sheets of the course, the auditor recommended grace marks to be given. However, as the re-assessment (as per NITT regulations) conducted by the faculty had fewer F grades than those arising out of the auditor's recommendations, after a brief discussion, the Senate agreed to proceed with the results of re-assessment by the faculty.
b.	55/SENATE/2021/4 1. Award of UG / PG / M.S. (by Research)/Ph.D. degrees in the 17th Convocation. A total of 875 UG, 724 PG, 20 M.S. (by Research) and 174 Ph.D. were eligible for award of degree.	A total of 875 UG, 724 PG, 20 M.S. (by Research) and 174 Ph.D. were awarded degree during the 17 th Convocation held on 25 th September 2021 through hybrid mode.
	 Award of Medal winners in the 17th Convocation. A total of 12 UG and 29 PG students are eligible for Medal winners during the 17th Convocation. 	A total of 12 UG and 29 PG students were awarded Gold Medal during the 17 th Convocation held on 25 th September 2021. Out of these, 15 Medal Winners were awarded in person during the Convocation 2021

RESOLUTION
56/SENATE/2021/2

RESOLVED THAT the action taken by the O/o Dean (Academic) on the course CEPC15 be approved with the above-mentioned observation.

FURTHER RESOLVED THAT the action taken with respect to award of degree and medals on 17th Convocation be approved.

APPROVAL ITEMS

3. Modified curriculum and syllabi for M.A. English (Language and Literature), M.Sc. (Mathematics), M.Tech. (Construction Technology and Management) programmes & M.Tech. (Structural Engineering) programmes

The HOD's of respective departments have presented the modified curriculum and syllabus as recommended by the Boards of Studies (BoS) for the PG programmes as in Annexure - A. The department of Mathematics proposed to offer M.Sc. (Honors) as recommended by its BoS. However, the Senate advised to have a common policy for PG (Honors) programmes and to bring a recommendation from the Academic Reforms Committee soon.

RESOLUTION
56/SENATE/2021/3

RESOLVED THAT the modified curriculum and syllabus as recommended by respective Boards of Studies for M.A. English (Language and Literature), M.Sc. (Mathematics), M.Tech. (Construction Technology and Management) programmes & M.Tech. (Structural Engineering) programmes be approved.

Further resolved that the O/o Dean (Academic) shall convene the Academic Reforms Committee (PG) meeting and propose a common policy for PG (Honors) programmes during the next meeting of the Senate.

- 4. Requests from students for extension of registration beyond the prescribed period of completion citing Covid and health issues
 - a. Extension of B.Tech.

The Dean (Academic) briefed the request from the B.Tech. student – M. Vigneshwar, Roll No. 108115049, B.Tech. (ECE) – requesting extension of his registration for one semester beyond the prescribed period of completion. The student cited health and family issues for his inability to complete the course in time. The Senate after reviewing the number of courses to be completed, accepted to extend his registration for another one year, until 31st December 2022.

RESOLUTION 56/SENATE/2021/4a RESOLVED THAT the B.Tech. registration extension of M. Vigneshwar (Roll No. 108115049) for one year (until 31st December 2022) be approved.

b. Extension of Ph.D.

The Dean (Academic) briefed the requests from the Ph.D. scholars (as listed below) for extension of their registration beyond the prescribed period of completion. The students have cited Covid, health and family issues for their inability to complete the course. The Senate after reviewing their request, accepted to extend their registration as per their requested time period subject to their rapid progress towards publications, presenting synopsis, and submitting thesis within this period as per the **Senate Resolution 54/SENATE/2021/5a**.

Student Details	Guide	Extension
D. Gilbert Chandra 410914001, ICE	Dr. G. Uma	Upto Dec 22
Praveena Prabhakaran 413114054, Physics	Dr. M. Ashok	Upto Jun 22
Govardhanan B 413115008, Physics	Dr. M. Ashok	Upto Jun 22
Kirithiga R 413115007, Physics	Dr. J. Hemalatha	Upto Jun 22
Sai Guru Srinivasan S 413115010, Physics	Dr. M.C. Santhosh Kumar	Upto March 22
S. Prabhakaran 404114054, Chemistry	Dr.S.Velmathi	Upto March 2022
S. Arthi 404115009, Chemistry	Dr.S.Velmathi	Upto March 2022

RESOLUTION 56/SENATE/2021/4b

RESOLVED THAT the registration extension of all the full-time and part-time Ph.D. scholars, who have crossed the prescribed years of registration as per their requested time period be approved.

5. Requests from Departments

Requests from various departments regarding qualification in GATE for Ph.D. admissions:

• The Dean (Academic) proposed that, with reference to the minutes of the 51st Senate meeting, a valid GATE score (within the last 5 years) continues to be a pre-requisite for the admissions. Owing to a considerable number of vacant seats during AY 2020-21 and the July session of AY 2021-22, valid GATE score shall be made as a desirable requirement. However, a weightage of up to 20 marks shall be given to

those applicants with valid GATE score. The following split up of marks is proposed for the selection of Ph.D. Scholars.

Table 1

S. No.	Criteria	Max. Marks that can be awarded
111 T	UG Performance*	10
2	PG Performance	10
3	GATE** (up to a maximum of 20 marks)	10 (marks for valid score) + ((marks obtained x 10) / max. marks)
4	Awards & Prizes	5
5	Publications	5
6	Interview	10
TOTA	L MAXIMUM***	60

^{*}For Direct and Integrated Ph.D. applicants, the weightage for UG performance shall be 20 marks, and there shall not be any weightage for PG performance.

- ***In case of too many applications in any department or on the whole, a written test can be conducted for screening purpose, and these marks will not be added to the final score.
- While GATE is essential for an admission to masters in technology (M.Tech.) with fellowship, NIMCET is only a gateway to the MCA program, and no financial assistance is offered. Hence, for PhD admissions in the department of CA under HTRA category a valid GATE score, or qualification in one of the equivalent national level tests, obtained in the last 5 years is necessary, as is followed in all the IITs and other INIs.
- PMRF is awarded to those eligible within the sanctioned HTRA seats (146 at present), and hence no additional seats can be granted treating that the fellow left behind a vacant seat. Moreover, the supervisor originally allotted continues to guide, with the department and institute affiliations, the student till graduation.

^{**} For an applicant who has not appeared, or who has not qualified in GATE, this component is 0, and the maximum he/she can score is 40. However, students admitted without valid GATE score are encouraged to take GATE and get qualified at the earliest.

RESOLUTION 56/SENATE/2021/5a RESOLVED THAT consideration of a valid GATE score in the last 5 years as a desirable requirement for Ph.D. Admissions be approved, a weightage up to 20 marks, to those applicants with valid GATE score and the proposed split up of marks as in Table 1 for the selection of Ph. D Scholars, be approved.

RESOLVED FURTHER THAT Students admitted without valid GATE score be encouraged to take GATE and get qualified at the earliest.

RESOLUTION
56/SENATE/2021/5b

RESOLVED FURTHER THAT for Ph.D. admissions in the department of CA under HTRA category, the existing pre-requisite of "a valid GATE score, or qualification in one of the equivalent national level tests" be continued.

RESOLUTION 56/SENATE/2021/5c

RESOLVED FURTHER THAT no additional Ph.D. seat allotment under HTRA category to the Guide/Department in lieu of the PMRF, be approved.

RATIFICATION ITEMS

6. Results of UG (2nd Semester B.Tech./B.Arch.) and PG course (2nd Semester MCA) for the January session 2020-21

The Senate approved the results of UG and PG courses (II Semester B.Tech./B.Arch. and II Semester MCA) for the January session 2020-21 as approved by the respective Performance Analysis Committees (PACs).

RESOLVED THAT the results of UG and PG courses (II 56/SENATE/2021/6 Semester B.Tech./B.Arch. and II Semester MCA) for the January session 2020-21 as approved by the respective PACs be ratified.

7. Award of provisional degree to M.S. (by Research) and Ph.D. scholars who have successfully completed the requirements for the award of the degree

The Senate ratified the award of provisional degree to 8 Ph.D. scholars (Annexure - B).

RESOLUTION RESOLVED THAT the award of provisional degree to 56/SENATE/2021/7 Ph.D. scholars be ratified.

REPORTING ITEMS

8. Amendments to MS (by Research) and Ph.D. regulations (based on 54th Senate, i.e., Direct Ph.D., Integrated Ph.D. etc.)

The Dean (Academic) presented amendments to the existing regulations based on the resolutions of the 54th Senate on the introduction of Direct Ph.D., Integrated Ph.D., and fixing maximum duration for Ph.D. and M.S. (by research) programmes. The amended regulations have been uploaded on the institute's website.

RESOLUTION RESOLVED THAT the amendments made in the 56/SENATE/2021/8 regulations of MS (by Research) and Ph.D. be noted.

9. (i) Progress on MOOCS and Online programs

The Chairperson presented to the Senate the developments with respect to MOOCs and Online programs. As per the guidelines, the institute has started the development of infrastructure (i.e. studio, etc.) and course works based on the financial support received from Government. The Deputy Director is the overall coordinator, along with Dr. P. Jeyapaul and Dr. A. Arunagiri (coordinators – MOOCS), Dr. G. Subbaiyan (Acoustics of the studio), Dr. M. Bhaskar (Equipment purchase) and Dr. N. Thamaraiselvan & his team (Online programmes) of this project.

(ii) MOU with TCS Foundation

The Chairperson presented to the Senate that a MoU has been signed between NIT Tiruchirappalli and TCS Foundation to promote research in the areas of Artificial Intelligence and Machine learning in the Centre of Dynamic Excellence in AI & ML already established by the Institute. As a part of this MoU, TCS has committed funding to the tune of 10 crores towards infrastructure development and 14 Ph.D. fellowships for a maximum duration of 3 years per student from the date of registration; the admissions will be made as per the Institute norms.

RESOLUTION

56/SENATE/2021/9

RESOLVED THAT the progress on MOOCS & Online programs and MOU with TCS Foundation as reported by the Chairperson be noted.

10. Any other item with permission of the Chairperson, Senate

As this 56th Senate meeting happened to be the last one for the chairperson, the Deputy Director, Registrar, Dean (Academic), Prof. M.T. Nair (External Member) and few other members of the Senate spoke appreciating the efforts put by the Director Prof. Mini Shaji Thomas in elevating the institute to the highest standards and bid her adieu.

Prof. M. Umapathy mentioned that the Director conducted 21 Senate meetings starting from the 36th during February 2017. He emphasized on the discipline brought in by the Director in the conduct of the meetings setting a healthy trend towards improving the academic quality of the institute. Prof. G. Uma observed that all these meetings were disciplined and fruitful and thanked the Director for promotions and recruitment of faculty, and the much-awaited B & C recruitment. Prof. L. Cindrella, having worked with the Director in various capacities, placed on record the exemplary leadership qualities of the Director instilling responsibility and accountability among all the faculty in building up the institution to greater heights. Prof. M.T. Nair (External Member of the Senate) recalled his association with the Director in the recruitment of faculty and appreciated her sincerity and commitment to elevating the institute's academic standards. Prof. S.T. Ramesh reminisced the Director's diplomatic moves amidst the directors of IITs and other NITs during the high-level meetings of JoSAA/CSAB 2019 and shared a few instances which brought favourable winds, particularly winning the legal issues that arose during the admissions as well as generating a significant IRG, to NIT Tiruchirappalli. Prof. G. Lakshminarayanan, Prof. V. Leela and Prof. M. Bhaskar expressed their gratitude on behalf of the institute for the immensely productive tenure of the Director.

Prof. Meera S Begum fondly remembered the personal touch of the Director, in addition to being a role model professionally. Prof. S. Muthukumaran pointed out the rise in IPR activities during the Director's tenure. Prof. C. Nagamani recollected the manner in which any meeting was meticulously conducted with an eye on every detail thereby goading the faculty to work harder to achieve higher goals in their careers. Prof. B. Vinod remarked that Prof. Mini Shaji Thomas has been a history-making director who will be remembered not only by the employees of the institute but also the flora and fauna she has created by way the Miyawaki forests. He has also mentioned Prof. Thomas' excellent communication skills that shone brightly everywhere. Prof. Arivazhagan briefly put forth the Director's administrative acumen as he witnessed being Registrar-in-charge for the last seven months.

In reciprocation, Prof. Mini Shaji Thomas expressed her satisfaction working at NIT Tiruchirappalli, and stated humbly that it was she who learnt most from this place and the people. She went on to acknowledge that if it were not the dutiful implementation by everyone of the faculty and the staff her plans would have been wasted. She

cheerfully noted that she was breathing, eating, and sleeping NIT Tiruchirappalli for the last five years.

The meeting was closed with a final note of thanks from the Chairperson.

Secretary, Senate

Chairperson, Senate

Annexure - A



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015

Recommendations of the Board of Studies (BoS)

Department

: Humanities and Social Sciences

Degree

: B. Tech

Name of the Programme

: All undergraduate programmes

Batch

: 2019 onwards

Date of BoS

: 27th October 2021

Sl. No.	Existing Curriculum/Syllabus	Proposed changes in the Curriculum/Syllabus	Remarks, if any
ľ,		The two open electives 'Health Education' and 'Holistic Sports Education' proposed by faculty members of Physical Education under the aegis of the Humanities and Social Sciences have been approved.	
2.	The two open electives 'Philosophy, Science and Language' and 'Technical Writing' have been offered as Minor courses in the Department of Humanities and Social Sciences.	The two open electives, 'Philosophy, Science and Language' and 'Technical Writing' have been approved, from the list of Minor courses offered in the Department of Humanities and Social Sciences.	

Signature of the HoD

Date: 16.11.2021



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015

Recommendations of the Board of Studies (BoS)

Department

: Humanities and Social Sciences

Degree

: M.A

Name of the Programme

: English (Language and Literature)

Batch

: 2022 onwards

Date of BoS

: 27th October 2021

Sl.	Existing	Proposed changes in the	Remarks, if any
No.	Curriculum/Syllabus	Curriculum/Syllabus	
1.	Chronology of courses in the MA curriculum: The paper on 'Second Language Acquisition' is offered in the first semester and the introductory paper on 'English Language Teaching' is offered in the third semester.	It has been approved to offer the introductory paper on 'English Language Teaching' in the first semester and 'Second Language Acquisition' in the third semester.	

Signature of the HoD

Date: 16.11.2021



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015

Recommendations of the Board of Studies (BoS)

Department

: Humanities and Social Sciences

Degree

: PhD

Name of the Programme

: Doctoral programme

Batch

: 2021 onwards

Date of BoS

: 27th October 2021

Sl. No.	Existing Curriculum/Syllabus	Proposed changes in the Curriculum/Syllabus	Remarks, if any
1.		The proposed elective course, 'Social and Emotional Learning' has been approved for PhD course work and is added to the basket of electives in the MA curriculum.	
2.	Existing course code of PhD-directed study courses: HM800, HM830, HM805, HM806, HM807, HM808, HM812	The overlapping course codes of the PhD-directed study courses have been sorted: HM830, HM800, HM853, HM854, HM855, HM856, HM857	

Signature of the HoD

Date: 16.11.2021



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI - 620 015

Recommendations of the Board of Studies (BoS)

Department

: DEPARTMENT OF MATHEMATICS

Degree

: M. SC.

Name of the Programme: M. SC. MATHEMATICS

Batch

: 2021 - 2023 batch onwards

Date of BoS

: 08.11.2021

SI. No.	Proposed changes in the Curriculum/Syllabus	Remarks, if any	
1	 ELIGIBILITY FOR AWARD OF M.SC. HONOURS IN MATHEMATICS DEGREE: a. After the completion of first year in MSc Mathematics student should have a minimum of 8.5 CGPA for registering to get the degree as MSc Honours in Mathematics. b. Students should not have obtained "V" or "X" grade in any course. c. Continued to maintain the CGPA of 8.5 in all semesters excluding honors courses. d. Student should register and successfully complete an additional three electives from the basket of honours electives/pre – phd courses (generally in the research level) offered by the department, maintaining an aggregate of at least B grade in Honours courses. e. One of the additional electives can be chosen as open elective offered by other departments at PG/Research level. 	These conditions are similar to Honours in B.Tech. Extra Courses must be in Research level from Honours Electives Open Electives may be taken from any PG / Research level Elective from any department	
2	MINOR CHANGES TO CURRICULUM FOR THE FOLLOWING COURSES: 1. MA703: Linear Algebra 2. MA710: Numerical Analysis	Some sections added for better understanding and flow	
3	NEW HONOURS ELECTIVES: Moved from existing elective Courses: 1. MA 716 2. MA 722 3. MA 725 New Addition Of Honours Electives/Pre-Phd Courses: 1. Graphs And Matrices 2. Applied Functional Analysis 3. Particulate Processes: Theory And Modelling 4. Fixed Point Theory And Applications 5. Advanced Functional Analysis 6. Theory And Geometry Of Banach Spaces	No change in curriculum structure in MSc Mathematics (65 credits). 3 Honours Electives are included in curriculum structure for MSc Honours (74 credits)	

- 7. Fitted Mesh And Fitted Operator Methods For Singular Perturbation Problems
- 8. Mathematical Theory Of Water Waves
- 9. Introduction To Hydrodynamic Stability

Existing Direct/Self-Study Courses for Converting as Honours Electives/Pre-PhD Courses:

- 1. MA 802 Introduction To Fuzzy Mathematics And Its Applications
- 2. MA 803 Advanced Fuzzy Mathematics And Its Applications
- 3. MA 804 Advanced Numerical Computations
- 4. MA 805 Advanced Numerical Analysis On Differential Equations
- 5. MA 806 Matrix Theory And Stochastic Programming
- 6. MA 850 Advanced Numerical Analysis For Singularly Perturbed Differential Equation
- 7. MA 852 Biorheology
- 8. MA 854 Introduction To Singularly Perturbed Equation And Differential Equations
- 9. MA 855 Advanced Complex Analysis
- 10. MA 856 Geometric Function Theory
- 11. MA 857 Approximation Theory
- 12. MA 858 Convex Analysis
- 13. MA 859 Matrix Analysis
- 14. MA 860 Optimization Techniques

9 New courses, 3 existing MSc electives and 14 existing PhD course works are given in research level for Honours Electives

Signature of the HoD with Seal

Date: 16-11-2021



NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015.

OFFICE OF THE DEAN (ACADEMIC)

Minutes of the Board of Studies for M. Tech in Construction Technology and Management, Department of Civil Engineering, held on 09.07.2021 at 3:00 PM through online mode.

The meeting of Board of Studies for the M. Tech. in Construction Technology and Management was held on 09.07.2021, 3:00 PM online. The following members were present.

SL No.	Name	Designation
1.	Dr. G. Swaminathan	Chairman
2.	Dr. K. Swaminathan	External Expert
3.	Ms. A. Saikeerthana	External Expert
4,	Ms. Manishita Das	External Expert
5.	Dr. J. Karthikeyan	Member
6.	Dr. N. Siva Shanmugam	Member

The Board of Studies had an extensive discussion and the following resolutions were made,

- The inclusion of new ten courses as listed below is approved.
 - 1. CE760 Construction Engineering and Information Laboratory
 - 2. CE763 Advanced Concrete Technology
 - 3. CE765 Construction Supply Chain Management
 - 4. CE766 Forensic Engineering and Rehabilitation Techniques
 - 5. CE767 Project Risk Analysis and Mitigation Techniques
 - 6. CE771 Value Engineering
 - 7. CE772 Strategic Management in Construction
 - 8. CE773 Lean Construction Concepts, Tools and Practices
 - 9. CE774 Quantitative Methods in Construction Management
 - 10. CE775 Formwork Design
- The following eight courses which are found in the list in Syllabi of CTM course are removed. The students are free to choose such courses from the list from other PG curriculum of Civil Engineering and Mechanical Engineering divisions.
 - 1. CE763 Soil Exploration and Field Test
 - 2. CE765 Offshore Engineering
 - 3. CE766 Port and Harbor Structures
 - CE767 Airport Planning and Design
 - CE768 Welding Technology
 - 6. CE771 Design of Material Handling Equipment
 - 7. CE772 Welding safety in construction Environment
 - CE773 Heating, Ventilation, Air Conditioning (HVAC) Systems and their Applications
- The Board of Studies approved the changes/ contents added to the following courses,
 - 1. CE759 Construction Management Software Laboratory
 - 2. CE761 Modern Construction Materials

- 3. CE762 Functional Efficiency of Building
- 4. CE768 Planning of Prefabricated Structures
- The Board approved the syllabus for M.Tech. Degree in Construction Technology and Management effective from 2022-23 with few suggestions.
- The Board of Studies authorize Chairman of the Board is empowered to incorporate the corrections of the syllabus and forward to the appropriate academia.

SI. No.	Name	Designation	Signature
1.	Dr. G. Swaminathan	Chairman	12
2.	Dr. K. Swaminathan	External Expert	In mallo
3.	Ms. A. Saikeerthana	External Expert	Cailette
4.	Ms. Manishita Das	External Expert	Manishita Das .
5.	Dr. J. Karthikeyan	Member	J. Kosthiker
6.	Dr. N. Siva Shanmugam	Member	3.477

Chairman (BoS)

NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015.

DEPARTMENT OF CIVIL ENGINEERING

MINUTES OF THE MEETING OF THE BOARD OF STUDIES HELD ON 19.07.2021 AT 10 AM via Video Conferencing Mode

Department : Civil Engineering
Division : M.Tech (Structural Engineering)

Members Present:

SI. No.	Name	Designation
1.	Dr G. Swaminathan, Professor & Head, Dept. of Civil Engineering, NIT Trichy	Chairman
2.	Dr S R Satish Kumar, Professor, IIT Madras, Chennai.	Academic Expert
3.	Dr Hemalatha T, Senior Scientist, SERC, Chennai,	Alumni Expert
4.	Mr R Saravanakumar, Senior Design Engineer, Mithran Structures Private Limited, Coimbatore	Industry Expert
5.	Dr K Baskar, Professor, Dept. of Civil Engineering, NIT Trichy	Member
6.	Dr V Ravichandran, Professor, Department of Mathematics, NIT Trichy	Member
7.	Dr V Lakshmana Gomathi Nayagam, Associate Professsor & Head, Department of Mathematics, NIT Tricky	Member
8.	Dr J Karthikeyan, Associate Professor, Dept. of Civil Engineering, NIT Trichy	Member
9.	Dr R Senthilkumar, Assistant Professor, Dept. of Civil Engineering, NIT Trichy	Member
10.	Dr R Raghavan, Assistant Professor, Dept. of Civil Engineering, NIT Trichy	Member
11.	Dr Prabha M, Assistant Professor, Dept. of Civil Engineering, NIT Trichy	Member
12.	Dr Mashudha Sulthana U, Assistant Professor, Dept. of Civil Engineering, NIT Trichy	Member
13.	Dr Greegar George, Assistant Professor, Dept. of Civil Engineering, NIT Trichy	Member
14.	Dr Kamal Krishna Bera, Assistant Professor, Dept- of Civil Engineering, NIT Trichy	Member

The following resolutions were made in the BoS,

Sl. No.	Resolutions made				
Lie	Changes in Curriculum: (Refer Annexure-1) 1. CE653 Matrix Methods of Structural Analysis is moved to elective, and CE65. Structural Dynamics is made as Core in the first semester 2. CE652 Stability of Structures and CE656 Theory of Plates and Shells are moved to elective, and CE667 Advanced Reinforced Concrete Design and CE 664 Advanced Design of Metal Structures are made as core subjects in the second semester (Refer Annexure – II for the updated curriculum)				
n.	Major syllabus change is made and approved in the meeting for the following subjects (Refer Annexure-III)				

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IV	Course name renamed to the following subjects: 1. Advanced Concrete Structures - Advanced Reinforced Concrete Design 2. Finite Element Methods - Finite Element Analysis of Structural Members 3. CAD in Structural Engineering - Structural Design & Computation Laboratory			
III.	6. CE 652 Stability of Structures 7. CE 670 Selsmic Design of Structures 8. CE 664 Fracture Mechanics 9. CE 667 Advanced Concrete Structures 10.MA 602 Applied Mathematics Non-Linear Analysis subject is included as a new elective course (Refer Annexure-III)			
	1. CE651 Theory of Elasticity and Plasticity 2. CE656 Theory of Plates and Shells 3. CE 660 CAD in Structural Engineering 4. CE654 Finite Element Methods 5. CE 668 Advanced Design of Metal Structures			

The Chairman, BoS, is empowered to make necessary modifications while finalizing the curriculum and syllabus. $_$

Name	Signature
Dr S R Satish Kumar	A R Satish Kuman
Dr Hemalatha T	n
Mr R Saravanakumar	R. Sanawarak
Dr K Baskar	9.10
Dr V Ravichandran	CR
Dr V Lakshmana Gomathi Nayagam	Vape
Dr J Karthikeyan	3. Karkikey
Dr R Senthilkumar	P. Smy
Dr R Raghavan	A-Wharr
Dr Prabha M	Meabja
Dr Mashudha Sulthana U	Marie
Dr Greegar George	Jany
Dr Kamal Krishna Bera	(Person)

Chairman (BoS) Page 2 of 15

Annexure - B

List of Ph.D. scholars to be awarded provisional certificate

SI. No	Roll No. & Name	Title of the Thesis	Name of the Guide	Co- Guide	Date of Admission	Date of Viva voce	Indian Examiner	Foreign Examiner
1	408116003 Mr. S. Bibin Sam Paul	High Performance VLSI Architectures for Power- of-two and Non-Power- of-two Size DFT computations	Dr.G.Lakshminarayanan	-	03.08.20216	20.10.2021	Dr. Roy Paily Palathinkal, Professor, Indian Institute of Technology, Guwahati (IITG)	Prof. Seok-Bum Ko, Professor, University of Saskatchewan, Canada
2	405913006 Ms. P.Krishnaveni	Models For Generating Summaries Of Text- Based Learning Materials Using Maximum Cliques And Itemset Mining For E- Learners	Dr. S. R.Balasundaram		30.08.2013	20.10.2021	Dr. Kiran Kumar Pattanaik, Associate Professor, Indian Institute of Information Technology and Management, Gwalior - 474 015 (Madhya Pradesh)	Dr. Francisco J. García- Penalvo, Professor, University of Salamanca, Spain
3	410116001 Ms. Sharmila Devi Kumaravel	Graph Theoretic Modeling and Control for Decongesting Transportation Networks	Dr. A. Ramakalyan	-	02.08.2016	21.10.2021	Dr. Indrajit Ghosh, Associate Professor, Indian Institute of Technology Roorkee	Dr. Andreas A Malikopoulos, Associate Prof. & Director, University of Delaware, Newark, USA
4	415915053 Mr. Maruthamuthu A	A Performance Analysis of Machine Learning Techniques in Healthcare Sector – Prediction of Carotid Atherosclerosis in Patients with Impaired Glucose Tolerance and A New Methodology to Arrive at the Membership Weights for Fuzzy SVM	Dr. M. Punniyamoorthy		08.01.2016	26.10.2021	Prof. B. Koteswararao Naik, Associate Professor, National Institute of Industrial Engineering, Mumbai – 400087	Dr. Tzong-Ru Lee, Full Professor, National Chung-Hsing University, Taiwan 402, ROC.

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5	403116052 Ms. Nigitha D	Behaviour of a Monopile under Two - Way Lateral Cyclic Loading	Dr. Deendayal R	-	27.01.2017	01.11.2021	Dr. Dasaka Murty, Professor, Indian Institute of Technology, Bombay	Dr. Krishna R. Reddy, Professor, University of Illinois Chicago, USA
6	408115005 Ms. G.J. Brindha	Investigations on Pattern recognitions and Computational Intelligence techniques for Off-type Identification in Sunflower Plants and Related Works	Dr. E. S. Gopi	-	13.08.2015	09.11.2021	Prof. Sumantra Dutta Roy, Professor, Indian Institute of Technology, Delhi	Prof. Eva Cernadas García, Associate professor, Universidade de Santiago de Compostela, Spain
7	414914052 Mr. J. Kesavan	Experimental investigations on machining of Hastelloy C276 under cryogenic condition	Dr.V.Senthilkumar	-	16.02.2015	10.11.2021	Dr.A.Arockiarajan, Professor, Indian Institute of Technology- Madras	Dr. Yusuf Kaynak, Professor, Marmara University, Turkey
8	408115010 Mr. P. Gopinath	Methods for enhanced visualization of retinal features and fovea detection in color fundus images	Dr.P.Palanisamy	-	10.08.2015	12.11.2021	Dr.Basant Kumar, Associate Professor, National Institute of Technology Allahabad	Dr. Xiaohui Yuan, Professor, University of North Texas, US