

विश्वेश्वरय्या राष्ट्रीय प्रौद्योगिकी संस्थान नागपूर – 440010

VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY, NAGPUR - 440 010

DRAFT MINUTES OF THE 65th MEETING OF SENATE HELD IN THE SENATE HALL OF VNIT, NAGPUR ON FRIDAY THE 31st MARCH, 2022 AT 4.00 PM.

The 65th meeting of the Senate was held on 31st March, 2022 at 4.00 PM in the Senate Hall of VNIT, Nagpur.

The term of Prof Ashish Darpe, Professor, Mechanical Engg., IIT New Delhi Prof.(Ms.) Varsha Banerjee, Professor, Dept. of Physics, IIT New Delhi and Prof Vinayak Deshpande , HOD, Dept.of Business , Management, Nagpur University, Nagpur ended on 31st January 2022. VNIT places on record their contribution as Senate members.

Dr. Arti Shanware, Director, Rajiv Gandhi Biotechnology Centre, R.T.M. Nagpur University, LIT Premises, Nagpur, Dr. Akhilesh Peshwe, Principal of M. P. Deo Memorial, Dharampeth Science College, Nagpur, and Prof. Rohit Srivastava, Head & Professor of Biosciences & Bioengineering, Indian Institute of Technology, Bombay Powai, Mumbai are new Senate members and Senate welcomes them.

The following members were present:

S. N.	Name of Senate Members	Designation / Department	
1.	Prof. Pramod M. Padole	Director, VNIT, Nagpur	Chairman
2.	Dr. Arti Shanware	Director, Rajiv Gandhi Biotechnology	Member
		Centre, R.T.M. Nagpur University, LIT	
		Premises, Nagpur	
3.	Dr. Akhilesh Peshwe	Principal of M. P. Deo Memorial,	Member
		Dharampeth Science College, Nagpur	
4.	Dr. Abhay.S. Gandhi	Dean (Academic), VNIT, Nagpur	Member
5.	Dr. R R Yerpude	Dean (Faculty Welfare), VNIT, Nagpur	Member
6.	Dr. J.D. Ekhe	Dean (Planning & Development),	Member
		VNIT, Nagpur	
7.	Dr. Dilip.H. Lataye	Dean (Students Welfare), VNIT,	Member
		Nagpur.	
8.	Dr. (Smt.) Madhuri A.	Dean (Research & Consultancy),	Member
	Chaudhari	VNIT, Nagpur	
9.	Dr.L.M.Gupta	Head, Dept. of Applied Mechanics,	Member
		VNIT, Nagpur.	
10.	Dr.Akshay P Patil	Head, Dept. of Architecture &	Member
		Planning, VNIT, Nagpur.	
11.	Dr. (Smt.) Anupama	Head, Dept. of Chemistry, VNIT,	Member
	Kumar	Nagpur	
12.	Dr. P S Deshpande	Head, Dept. of Computer Science &	Member
	_	Engg., VNIT, Nagpur	
13.	Dr. G. N. Nimbarte	Head, Dept. of Humanities, VNIT,	Member
		Nagpur.	
14.	Dr. V B Borghate	Head, Dept. of Electrical Engg., VNIT,	Member
		Nagpur	
15.	Dr. Jatin Bhatt	Head, Dept. of Metallurgical &	Member
		Materials Engg., VNIT, Nagpur	
16.	Dr. I.L. Muthreja	Head, Dept. of Mining Engg., VNIT,	Member
		Nagpur.	
17	Dr.Y.B. Katpatal	Head, Department of Civil Engg.,	Member

		VNIT Nagpur.	
18.	Dr. S B Thombre	Head, Dept. of Mechanical Engg., VNIT, Nagpur	Member
19.	Dr. R M Patrikar	Head, Dept. of Centre for VLSI & Nano Technology, VNIT, Nagpur	Member
20.	Dr. A.G. Keskar	Head, Dept. of Electronics & Communication Engg. VNIT, Nagpur.	Member
21.	Dr. G.P. Singh	Head, Department of Maths. Engg., VNIT Nagpur.	Member
22.	Dr. Rajesh Gupta	Professor of Civil Engg. VNIT, Nagpur	Member
23.	Dr. Rahul Vasant Ralegaonkar	Professor of Civil Engg. VNIT, Nagpur.	Member
24.	Dr. Aniruddha D. Ghare	Professor of Civil Engg., VNIT, Nagpur.	Member
25.	Dr. O. R. Jaiswal	Professor of Applied Mechanics, VNIT, Nagpur	Member
26.	Dr. R K Ingle	Professor of Applied Mechanics, VNIT, Nagpur	Member
27.	Dr. U A Deshpande	Professor of Comp. Science & Engg., VNIT, Nagpur	Member
28.	Dr. Kishor M. Bhurchandi	Professor, Dept. of Electronics and Communication and Associate Dean (Trg. & Plt.), VNIT, Nagpur	Member
29.	Dr. K D Kulat	Professor, Dept. of Electronics Comm. Engg., VNIT, Nagpur	Member
30.	Dr. R.B. Deshmukh	Professor, Centre for VLSI and Nanotechnology, VNIT, Nagpur.	Member
31.	Dr. Animesh Chatterjee	Professor of Mechanical Engg., VNIT, Nagpur	Member
32.	Dr. A. M. Kuthe	Professor of Mechanical Engg., VNIT, Nagpur.	Member
33.	Dr. V. R. Kalamkar	Professor of Mechanical Engg., VNIT, Nagpur.	Member
34.	Dr. P.P. Chakravarthy	Professor, Department of Mathematics, VNIT Nagpur.	Member
35.	Dr. M.K. Khedkar	Professor of Electrical Engg., VNIT, Nagpur.	Member
36.	Dr. Makarand Ballal	Professor of Electrical Engg., VNIT, Nagpur.	Member
37.	Dr. B.S.Umre	Professor, Dept. of Electrical Engg., VNIT, Nagpur.	Member
38.	Dr. D R Peshwe	Professor, Dept. of Metallurgical & Materials Engg., VNIT, Nagpur	Member
39.	Dr. R S Kotharkar	Professor, Dept. of Architecture & Planning, VNIT, Nagpur	Member
40.	Dr. R.S. Gedam	Professor of Physics Dept., VNIT, Nagpur	Member
41.	Dr. B.R. Sankapal	Professor of Physics Dept., VNIT, Nagpur	Member
42.	Dr. N.R.Thote	Professor, of Mining Engg. and Assoc. Dean (III and Alumni Activities), VNIT, Nagpur.	Member
43.	Dr. Nita Patne	Assoc. Prof. of Electrical Engg. and Associate Dean (Electrical Works), VNIT, Nagpur	Invited Member

44.	Dr. M.R. Ramteke	Assoc. Prof., Elect. Engg. and	Invited Member
		Associate Dean (Procurement and	
		Stores), VNIT, Nagpur	
45.	Dr. J.G. Suryawanshi	Assoc. Prof. of Mech. and Associate	Invited Member
		Dean (Exams),	14
46.	Dr. K.L. Wasewar,	Assoc. Prof. of Chemical Engg.,	Invited Member
		Associate Dean (Educ. Tech. &	
		Library), VNIT, Nagpur.	
47.	Dr. R.B. Keskar	Assoc. Professor, Comp. Sci. & Engg.	Invited Member
		and Associate Dean (Information	
		Technology: MIS Network & Website)	
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48.	Dr. (Smt.) Rashmi	Assoc. Prof., Mechanical Engg. and	Invited Member
	Uddanwadikar	Associate Dean (Public Relations),	
		VNIT, Nagpur	
49.	Dr. A.S. Chaurasia	Assoc. Prof. of Chemical Engg. &	Invited Member
		Assoc. Dean (Students Activities and	
		Sports), VNIT, Nagpur	
50.	Dr. Shital Chiddarwar	Associate Professor, Mechanical Engg.	Invited Member
		Deptt. and Associate Dean	
	*	(International Affairs & Ranking)	. F
51.	Dr. Shailesh R. Sathe	Registrar, VNIT, Nagpur.	Secretary

Shri Nikhil Chingalwar, Dy. Registrar (Acd. & Exam) attended the meeting as special invitee.

Dr. Sachin Mandavgane, Head, Dept. of Chemical Engg., Dr. V. K. Deshpande, Head, Dept. of Physics, Dr. Y.

M. Deshpande, Professor, Dept. of Humanities, Dr. S.G. Sapate, Professor, Metallurgical & Materials Engg.,

Dr. Ratnesh Kumar, Assoc. Prof. of Applied Mechanics & Assoc. Dean (Hostel Affairs), have submitted leave of absence.

Prof. Rohit Srivastava, Professor of Biosciences & Bioengineering, Indian Institute of Technology, Bombay Powai, Mumbai could not attend the meeting online.

Dr. A. R. Tembhurkar, Professor, Dept. of Civil Engg., Dr.Vishrut Suresh Landge, Professor of Civil Engg., Dr. S.S. Umare, Professor of Chemistry, Dr. M. V. Aware, Professor of Electrical Engg., Dr. A.P. Patil, Professor, Dept. of Metallurgical & Materials Engg., Dr. V. S. Adane, Professor, Dept. of Architecture & Planning, Dr. S.V. Bakre, Assoc. Prof. of Applied Mechs. & Associate Dean (Civil Works), VNIT, Nagpur could not attend the meeting.

The draft Minutes of the 65^{th} Meeting are as follows:

S65.01: To note and confirm the minutes of the 64th meeting of the Senate held on 31st December 2021.

The minutes of the 64th meeting of the Senate were circulated to all the members. One correction was suggested by Prof. M. A. Chaudhari (Dean R&C). Her suggestion is incorporated in the minutes. (Annexure-65-I).

The Senate is requested to confirm the minutes.

Resolution: The draft minutes confirmed.

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S65.02: To note and confirm the Action Taken Report on resolutions of the 64th meeting of the Senate.

S64.03: To consider and approve addition of new courses and modification of course contents proposed by BoS (Electrical Engg.)

The BoS of Electrical Engg. have proposed introduction of three new courses

1. Electrical vehicle subsystem modelling, as DE for eight semester

Electrical Engg. and OC for students of other departments.

- 2. Special Electrical Machines- DE for seventh semester Electrical Engg.
- 3. Introduction to Robotics- DE for seventh semester Electrical Engg,

They have also proposed modifications to contents of several courses.

The APPEC has gone through the proposals in its 57th meeting.

It is not recommended to have the same course as DE for a department and OC for students of other department. The BoS is requested to propose it either as OC for other department students or DE for EEE students.

The BoS is also requested to ensure at least four Course Outcomes in each course. Also, in the course articulation matrix, CO to PO mapping strength be specified numerically in the range 1, 2 or 3. No mapping to be denoted by blank box.

The proposal is forwarded to the senate after the corrections. (Annexure-64-II)

Senate is requested to approve.

Resolution: The Senate approved the proposal with the following correction. The new OC course Electrical vehicle subsystem modelling, has to be offered as an open course to the students of all the branches and not a selected few branches as proposed.

Action Taken Report: Implemented

S64.04: To consider the suggestions submitted by Prof. O. R. Jaiswal, Department of Applied Mechanics.

Prof. O. R. Jaiswal has made a suggestion.

a) For M Tech Project-II examination, the external examiner (from NIT/ IIT) will join in online mode, even after the institute resumes normal functioning after the pandemic.

The APPEC recommended it on a pilot basis. With the approval of the Director, M Tech project examination of some of the students may conducted in this manner. The proposal is forwarded to the Senate.

Senate is requested to approve.

Resolution: The Senate approved the proposal with suggested modifications.

- 1. M.Sc. projects to be also evaluated in the similar manner.
- 2. Departments will suggest additional institutes/ universities of repute from where the external examiners will be invited

Action Taken Report: Implemented

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S64.05: Nomination of External Members on Senate.

As per Senate Item no 45.04 , the following external members are nominated on Senate till 31st January 2022.

1.Prof. Ashish Darpe, Dept.of Mechanical Engg., IIT, New Delhi.

2. Prof. Vinayak Deshpande, Dept. of Business Management, Nagpur University, Nagpur

3.Prof.(Mrs.)Varsha Bannerjee, Dept.of Physics, IIT, New Delhi

Consequent to completion of term of non-institutional members, the nominations of externals experts members is to be done. The NIT Act 14(d) stipulates that, "The Senate shall have three persons one of whom shall be woman, not being employee of the Institute, to be nominated by the Chairperson, in consultation with the Director from amongst educationalist of repute, one each from the field of Science, Engineering and Humanities."

Accordingly, it is proposed that Chairman, Senate be empowered to nominate the external members.

The Senate is requested to approve

Resolution: Approved.

Action Taken Report: The following external members have been nominated for the period of 01st February 2022 to 31st January 2024.

- 1. Prof. Rohit Srivastava, Professor, Department of Bio-Sciences and Bio-Engineering, Indian Institute of Technology, Bombay.
- 2. Dr. Arti Shanware, Director, Rajiv Gandhi Biotechnology Centre, RTM Nagpur University, Nagpur
- 3. Dr. Akhilesh Peshwe, Principal of M. P. Deo Memorial, Dharampeth Science College, Nagpur.

S64.06: Any other items with the permission of Chairman.

S64.06.01: Regarding encouraging PG students to publish their research work.

It is observed that contribution of M.Tech students in research publications is not visible and that reflects in NIRF ranking of the institute. Since we have restructured our M.Tech schemes to facilitate one year for project, the students have ample time to do research and they can now produce at least on research paper.

Hence, it is resolved that in Project Phase-II, a student will be eligible for the top grade AA only if there is an accepted or published paper in at least Scopus indexed journal, based on the work done during the project. The students will have to be the first author of such paper. The same criteria will also be applicable to M.Sc. projects. Filling of patent with final specifications will also earn the eligibility for the topmost grade.

Action Taken Report: The decision will be communicated to all the stake holders after the minutes are confirmed.

S64.06.02 Procedure for enhancement in scholarship of PhD students.

There is a need to specify a suitable procedure to recommend enhancement in scholarship of PhD students from Rs. 31000 pm to Rs. 35000 pm. The item was deferred for further deliberations. The changes, if any, will be applicable to July 2022 admission onward.

Action Taken Report: Item is deferred.

Resolution: Action Taken Report is confirmed.

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S65.03: Item for information: Teacher representative on BoG.

Prof. H. M. Suryawanshi, Professor, Department of Electrical Engg. has been appointed as Director, NIT Hamirpur. Hence, Prof. O. R. Jaiswal, Department of Applied Mechanics has been nominated to the Board of Governors, as Teacher Representative, in place of Prof. Suryawanshi

Resolution: Noted

S65.04: To consider some of the recommendations from the 60th APPEC meeting

- 1. It is observed that department of chemistry has proposed one OC course on Energy and Environment. Hence, it is not necessary to offer such course at 1st year UG as a compulsory course for all branches.
- 2. Code MR may be used for minor type courses, as MN is already allotted to department of mining.
- 3. APPEC recommends that a student may be permitted to register for maximum 7 no, of 'L' type courses and maximum 5 No. of 'P' or 'D' type courses, to allow registration for minor courses. This facility is to be used only for minor courses, as minor courses are to be registered over and above the normal registration of the student for his/her UG branch. Other rules in clause 4.5 of the Academic Rule Book (June 2021) continue to be in force.
- 4. For multi-exit option, the students will have to register for suitable "exit courses" such as mini-projects. It is not necessary to introduce compulsory mini-projects in the scheme for this purpose. Hence, our credit distribution among different type of courses remains un-altered.
- 5. For minor, the no. of 'L' type courses may be from 4 to 5 and no. of credits may be from 14 to 18.
- 6. Currently, in M Tech programs, the credits for Project Phase-I are 3 and for Project Phase-II are 9. In view of the recent restructuring of M Tech schemes, now the credits may be 6 for Project Phase-I and 6 credits for Project Phase-II.

Resolution: Approved with the following addition to recommendation 4. "The exit course will be specified by the concerned BoS"

S65.05.01: To consider the proposal submitted by Board of Studies of Chemistry Dept.

They have proposed

- a) Two courses of chemistry for 1st year B.Tech. Chemistry 1 and Chemistry 2
- b) Updated CHP101 chemistry practical
- c) Open course on Energy and Environmental Science
 Details are available in **Annexure-65-II**

S65.05.02: To consider the proposal submitted by Board of Studies of Chemical Engg. Dept.

They have proposed

- a) Minor in Chemical Engineering
- b) D type additional course in M.Tech. Chemical Engineering scheme. Details are available in **Annexure-65-III**

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S65.05.03: To consider the proposal submitted by Board of Studies of Civil Engg. Dept.

They have proposed

- a) Minor in Infrastructure Engineering and Management
- b) Mini project with 2 credits in 6th semester of UG curriculum and 2nd semester of PG curriculum for early exit.

Details are available in Annexure-65-IV

S65.05.04: To consider the proposal submitted by Board of Studies of Computer Science & Engg. Dept.

They have proposed

- a) Updated UG CSE scheme
- b) Updated PG CSE scheme
- c) Minor in CSE
- d) Updated contents of CSL101 Computer programming for 1st year UG. Details are available in Annexure-65-V

S65.05.05: To consider the proposal submitted by Board of Studies of CVN

They have proposed

- a) Minor in VLSI design
- b) Minor in Nano electronics

 Details are available in **Annexure-65-VI**

S65.05.06: To consider the proposal submitted by Board of Studies of Electrical Engg. Dept.

They have proposed

- a) Two courses for 1st year UG Electrical Engineering A and B
- b) New DE for 8th semester B.Tech EEE named as IoT
- c) Minor in Electric Vehicles
- d) Minor in Smart Grids

 Details are available in **Annexure-65-VII**

S65.05.07: To consider the proposal submitted by Board of Studies of Electronics & Comm. Engg. Dept.

They have proposed

- a) Updated scheme for B.Tech ECE
- b) Minor in Internet of Things (IoT)
 Details are available in **Annexure-65-VIII**

S65.05.08: To consider the proposal submitted by Board of Studies of Humanities & Social Science Dept.

They have proposed

a) Minor in Humanities

Details are available in **Annexure-65-IX**

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S65.05.09: To consider the proposal submitted by Board of Studies of Mechanical Engg. Dept.

They have proposed

- a) New course for I yr UG Engineering Drawing and Graphics (Theory and Lab)
- b) Updated contents of MEP 102 WORKSHOP
- c) Minor in Robotic Engineering
- d) Minor in Renewable Energy
- e) Minor in Advanced Manufacturing
- f) Updated contents of some more courses in B Tech (Mechanical Engineering)

Details are available in Annexure-65-X

S65.05.10: To consider the proposal submitted by Board of Studies of Metallurgical & Materials Engg. Dept.

They have proposed

- a) Updated scheme of B.Tech. MME, M.Tech (Materials Engineering) and M.Tech (Process Metallurgy)
- b) Modified course contents
- c) Introduction of new UG elective courses. Details are available in **Annexure-65-XI**

S65.05.11: To consider the proposal submitted by Board of Studies of Mining Engg. Dept.

They have proposed

- a) Updated scheme for B.Tech. Mining
- b) Minor in Safety Engineering Details are available in Annexure-65-XII

S65.05.12: To consider the proposal submitted by Board of Studies of Physics Dept.

They have proposed

a) Two courses Physics A for ECE/EEE/CSE/MEC and Physics B for MME/MIN/CIV/CHE for I yr B Tech

Details are available in **Annexure-65-XIII**

S65.05.13: To consider the proposal submitted by Board of Studies of Mathematics Dept.

They have proposed

a) Two courses Mathematics-1 and Mathematics-2 with updated contents for I yr B Tech

Details are available in Annexure-65-XIV

S65.05.14: To consider the proposal submitted by Board of Studies of Applied Mechanics Dept.

They have proposed

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- a) Three versions of Engineering Mechanics for Group A (Civil, Mechanical, Metallurgy, Mining), Group B (Electrical, ECE, CSE, Chemical) and Group C (Architecture)
- b) Minor in Disaster Risk Reduction
- c) Minor in Structural Engineering
- d) Updated scheme of M Tech (Structural Engineering)
- e) Updated scheme of M Tech (Structural Dynamics and Earthquake Engineering) **Details are available in Annexure-65-XV.**

Resolutions:

- 1 The proposals submitted by various Board of Studies for minor are approved in principle.
- 2 Minor course depth should be set in view of the fact that the students of other branches will be opting for it. Hence, BoS Chemical Engg is requested to review the course on Heat and Mass Transfer offered in minor. BoS of CVN is requested to re-submit minors in Nanoelectronics and VLSI Technology.
- 3 The general rules for minor registration will be as follows.
 - 3.1 Minors will be available to the B. Tech. students after the first year of their course.
 - 3.2 Students from one branch could register at the minor offered by any other department.
 - 3.3 A student having CGPA of minimum 8.0 and no backlog (W or FF grade) after the first year will be eligible for minor. Registration for minors will be optional for all the eligible students.
 - 3.4 Students will give preferences and their registration will be conducted as per the merit list prepared for the purpose.
 - 3.5 Maximum number of students in a minor will be 30 and minimum will be 5. If the number of students interested in a minor is less than 5, whether to run the minor course or not will be at the discretion of the BoS. Teacher's load will not be counted for less than 5 students in the course. When the BoS cancels the minor due to less registration, reallotment of minor will be done, based on the students' preference, among the remaining minors
 - 3.6 Minor, once registered, can not be changed. Also, the student will have to complete the minor along with his/her degree. No separate or additional semesters will be permitted to complete the minor.
 - 3.7 If a student fails in a course in minor, even in the re-exam, repeat registration for the course will not be allowed.
 - 3.8 Credits registered for minor will be over and above the minimum credits required for award of degree.
 - 3.9 CGPA for minors will be calculated separately, independent of that calculated for award of degree.
 - 3.10 Minor will be mentioned with CGPA in the degree, only if the student completes all the prescribed courses in a minor.
- 4 The proposals for restructuring of 1 yr UG courses are approved in principle. APPEC will evaluate the proposals critically and come out with an implementation plan.
- 5 All the updations in the schemes, related to multi-exit option, will have to be reviewed in the context of resolution on S65.04 above.

S65.06: To consider the report on suggestions by the committee regarding issues related to submission of PhD thesis.

A committee was constituted in this regard. The suggestions of the committee are in **Annexure-65- XVI.**

The senate is requested to approve.

Resolution: Approved with the following modifications.

- 1. Re-registration fee for FT to PT program conversion will be shown separately.
- 2. For counting the number of years for FT to PT conversion, "excluding approved semester drop" to be the part of the guidelines.
- 3. Point 5.3 to be repeated in 10.1 of the document.

S65.07: To consider and approve prizes constituted by Ms. Usha Ekbote.

The proposed prizes are in memory of her husband Mr. Avinash D. Ekbote, who was an alumnus of VRCE. He completed BE Civil engineering in 1973. One prize is for second topper of B.Tech. Civil having scored second highest CGPA after completing 8th semester. The other prize is for third topper of B.Tech Civil having scored third highest CGPA after completing 8th semester. The detailed proposal is in **Annexure-65-XVII**.

Resolution: Approved.

S65.08: To consider and approve Academic calendar for higher semesters of UG and PG courses for Winter-2022 session.

The proposed calendar is in **Annxure-65-XVIII.** The senate is requested to approve.

Resolution : Approved with suggested modifications. Sessional examinations to utilize Saturdays so that "no instruction" days after Diwali can be earmarked.

S65.09: Any other matter with the permission of the chair.

NIL.

The meeting concluded with the vote of thanks to the chair.

Chairman-Senate

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