

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

Minutes

128th Meeting of the Senate



MEETING No: 128th Senate Meeting
DATE : 26.04.2025 (Saturday)
TIME : 04:30 PM
VENUE : B B Auditorium

To:

Dept./Centre:

Members of the Senate, NIT, Rourkela

Members present

- | | | |
|--|---|-------------------|
| 1. Prof. K. Umamaheshwar Rao, Director | - | Chairman, Senate |
| 2. Prof. R. Dhiman, Registrar | - | Secretary, Senate |

A) External:

- | | | |
|---|---|--------|
| 3. Prof. Amitabha Bhattacharya
Electronics & Electrical Communication,
IIT, Kharagpur - 721302
amitabha@ece.iitkgp.ac.in | - | Member |
|---|---|--------|

B) All Professors:

- | | | |
|-----------------------------------|---|--------|
| 4. Prof. K. Pal, BM | - | Member |
| 5. Prof. K. Parmanik, BM | - | Member |
| 6. Prof. P. Sarkar, CE | - | Member |
| 7. Prof. S. K. Sahu, CE | - | Member |
| 8. Prof. K. C. Biswal, CE | - | Member |
| 9. Prof. K. Karar (Paul), CE | - | Member |
| 10. Prof. A. Sahoo, CH | - | Member |
| 11. Prof. B. Munshi, CH | - | Member |
| 12. Prof. S. Mishra, CH | - | Member |
| 13. Prof. S. Sen, CH | - | Member |
| 14. Prof. A. K. Turuk, CS | - | Member |
| 15. Prof. B. Sahoo, CS | - | Member |
| 16. Prof. P. M. Khilar, CS | - | Member |
| 17. Prof. S. Bhattacharya, CR | - | Member |
| 18. Prof. S. K. Behera, CR | - | Member |
| 19. Prof. S. K. Pratihari, CR | - | Member |
| 20. Prof. B. G. Mishra, CY | - | Member |
| 21. Prof. M. Jana, CY | - | Member |
| 22. Prof. N. Panda, CY | - | Member |
| 23. Prof. P. Dash, CY | - | Member |
| 24. Prof. G. Hota, CY | - | Member |
| 25. Prof. S. Chatterjee, CY | - | Member |
| 26. Prof. U. Subuddhi, CY | - | Member |
| 27. Prof. R. Dinda, CY | - | Member |
| 28. Prof. D. P. Acharya, EC | - | Member |
| 29. Prof. P. Singh, EC | - | Member |
| 30. Prof. U. C. Pati, EC | - | Member |
| 31. Prof. P. K. Sahu, EE | - | Member |
| 32. Prof. K. B. Mohanty, EE | - | Member |
| 33. Prof. S. Das, EE | - | Member |
| 34. Prof. S. Karmakar, EE | - | Member |
| 35. Prof. S. Mohanty, EE | - | Member |
| 36. Prof. Sk. Md. Equeenuddin, ER | - | Member |
| 37. Prof. J. Panda, ER | - | Member |
| 38. Prof. R. C. Pradhan, FP | - | Member |
| 39. Prof. J. Pradhan, HS | - | Member |
| 40. Prof. N. Sethi, HS | - | Member |
| 41. Prof. S. Mohanty, HS | - | Member |

42.	Prof. S. K. Bhutia, LS	-	Member
43.	Prof. S. K. Patra, LS	-	Member
44.	Prof. K. C. Pati, MA	-	Member
45.	Prof. M. R. Tripathy, MA	-	Member
46.	Prof. J. Mohapatra, MA	-	Member
47.	Prof. J. Srinivas, ME	-	Member
48.	Prof. S. K. Panda, ME	-	Member
49.	Prof. S. Murugan, ME	-	Member
50.	Prof. A. Satapathy, ME	-	Member
51.	Prof. C. K. Biswas, ME	-	Member
52.	Prof. S. C. Mohanty, ME	-	Member
53.	Prof. A. Mallik, MM	-	Member
54.	Prof. A. Basu, MM	-	Member
55.	Prof. B. C. Ray, MM	-	Member
56.	Prof. D. Chaira, MM	-	Member
57.	Prof. S. K. Sahoo, MM	-	Member
58.	Prof. A. K. Gorai, MN	-	Member
59.	Prof. M. K. Mishra, MN	-	Member
60.	Prof. S. Jayanthu, MN	-	Member
61.	Prof. A. K. Singh, PH	-	Member
62.	Prof. B. Ganguli, PH	-	Member
63.	Prof. D. K. Bisoyi, PH	-	Member
64.	Prof. D. K. Pradhan, PH	-	Member
65.	Prof. P. N. Vishwakarma, PH	-	Member
66.	Prof. S. S. Jena, PH	-	Member
67.	Prof. P. Kumar, PH	-	Member
68.	Prof. P. Mahanandia, PH	-	Member
69.	Prof. C. K. Sahoo, SM	-	Member
70.	Prof. R. K. Panda, SM	-	Member

C) Invitees:

71.	Prof. D. Verma, HOD, BM	-	Invitee
72.	Prof. S. K. Pal, HOD (I/c), CR	-	Invitee
73.	Prof. N. K. Vissa, HOD, ER	-	Invitee
74.	Prof. B. Nayak, HOD, LS	-	Invitee
75.	Prof. S. Muhuri, HOD, PA	-	Invitee
76.	Mr. A. K. Behera, AR-AC (Res. & PG)	-	Invitee
77.	Mr. D. R. Das, AR-AC (UG & Exam.)	-	Invitee
78.	Mr. Maramreddy Poornanand, AR-AC (ISC)	-	Invitee

Members absent

A) External:

- | | | |
|---|---|--------|
| 79. Prof. Sabita Tripathy
PG Department of English
Sambalpur University,
Jyoti Vihar, Sambalpur – 768019
sabitatripathy33@gmail.com | - | Member |
| 80. Prof. Saroj Nayak
Professor in Physics,
IIT, Bhubaneswar – 752050
nayaks@iitbbs.ac.in | - | Member |

B) All Professors:

- | | | |
|--------------------------------|---|--------|
| 81. Prof. A. Thirugnanam, BM | - | Member |
| 82. Prof. S. Paul, BM | - | Member |
| 83. Prof. K. K. Khatua, CE | - | Member |
| 84. Prof. M. Panda, CE | - | Member |
| 85. Prof. S. P. Singh, CE | - | Member |
| 86. Prof. C. R. Patra, CE | - | Member |
| 87. Prof. M. Kundu, CH | - | Member |
| 88. Prof. S. Paria, CH | - | Member |
| 89. Prof. D. P. Mohapatra, CS | - | Member |
| 90. Prof. P. K. Sa, CS | - | Member |
| 91. Prof. B. B. Nayak, CR | - | Member |
| 92. Prof. D. Sarkar, CR | - | Member |
| 93. Prof. R. Sarkar, CR | - | Member |
| 94. Prof. J. Bera, CR | - | Member |
| 95. Prof. H. Sahoo, CY | - | Member |
| 96. Prof. S. Mohapatra, CY | - | Member |
| 97. Prof. K. K. Mohapatra, EC | - | Member |
| 98. Prof. S. Ari, EC | - | Member |
| 99. Prof. S. K. Behera, EC | - | Member |
| 100. Prof. S. Meher, EC | - | Member |
| 101. Prof. A. K. Panda, EE | - | Member |
| 102. Prof. P. K. Ray, EE | - | Member |
| 103. Prof. D. Patra, EE | - | Member |
| 104. Prof. S. Maity, EE | - | Member |
| 105. Prof. S. Mishra, FP | - | Member |
| 106. Prof. Mohd R. Khan, ID | - | Member |
| 107. Prof. S. Das, LS | - | Member |
| 108. Prof. B. Mallick, LS | - | Member |
| 109. Prof. G. K. Panda, MA | - | Member |
| 110. Prof. S. Chakraverty, MA | - | Member |
| 111. Prof. K. P. Maity, ME | - | Member |
| 112. Prof. S. S. Mohapatra, ME | - | Member |
| 113. Prof. D. R. K. Parhi, ME | - | Member |
| 114. Prof. R. K. Behera, ME | - | Member |
| 115. Prof. S. K. Patel, ME | - | Member |
| 116. Prof. S. K. Sahoo, ME | - | Member |
| 117. Prof. A. K. Satapathy, ME | - | Member |

118. Prof. S. Datta, ME	-	Member
119. Prof. M. Kumar, MM	-	Member
120. Prof. H. B. Sahu, MN	-	Member
121. Prof. D. P. Tripathy, MN	-	Member
122. Prof. J. P. Kar, PH	-	Member
123. Prof. D. Bag, SM	-	Member

C) Invitees:

124. Prof. D. P. Jena, HOD, ID	-	Invitee
125. Prof. K. Dutta, PIC (Accreditation)	-	Invitee

D) Student Invitees:

126. Ms. Sambada Nayak, Roll No.121ID0793	-	Student Nominee
127. Mr. Pankaj Das, Roll No.122EC0338	-	Student Nominee



राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

128th MEETING OF THE SENATE

Date : 26.04.2025 (Saturday)
Time : 04:30 PM
Venue : B. Behera Auditorium

MINUTES

Senate-128[2025]-01: Welcome to the members and invitees by the Chairman, Senate.

The Chairman Senate welcomed all the members.

Senate-128[2025]-02: To confirm the minutes of the 127th Senate meeting.

The draft minutes of the 127th Senate meeting held on 22/01/2025, provisionally approved by the Chairman, Senate, were circulated to all members by group email. Some corrections, as suggested in the minutes, were recorded below:

Senate-127[2025]-05: Request for reduction of compulsory course credits and addition of courses for Ph.D. students without a mathematics background at the +3 level.

The Senate approved the proposal to reduce the number of credit requirements of Mathematics and Computer Science from 14 credits to 12 credits and course work level to 3000/2000/1000 level from 1000 and 2000 levels for Mathematics and 1000/2000/3000 from 1000 level for Computer Science.

Senate-127[2025]-08: Discussion on the proposal on reconsideration of the Gold Medal Awarding Policy

The Senate approved the proposal in principle and authorized Dean Academic to constitute a committee to look into the status of all Gold medals given by the institute. The Gold medal for Best Graduate in B.Arch. is approved in principle to be given from Convocation 2026.

[Annexure – A1, Page No. 6 – 18]

Senate confirmed the rest of the minutes. It was also decided that the draft minutes would be circulated within 15 days after every Senate meeting. All the Senators will be given 15 days to give their observations.

Senate-128[2025]-03: Report on Action Taken on the decisions of the 127th meeting of the Senate.

The Report on Action Taken on the decisions taken in the 127th meeting of the Senate is given in the Annexure for information of the Senate.

[Annexure – A2, Page No. 19 – 20]

Senate noted the report.

A



A. RULES, PROCEDURES, CURRICULA AND POLICY MATTERS:

Senate-128[2025]-04: Multiple Entry Multiple Exit Policy for UG.

The "Multiple Entry Multiple Exit Policy" as submitted by the committee, has been approved by the Chairman Senate.

[Annexure – A3, Page No. 21 – 29]

The agenda item will be finalized after a thorough discussion in the next Senate meeting.

Senate-128[2025]-05: NEP course structure for PG & Research and Entry Exit Policy.

The Chairman, Senate has approved the NEP Committee (PG&R)'s recommendation of the course structure for PG & Research, along with a Multiple Entry and Exit Policy.

[Annexure – A4, Page No. 30 – 47]

The agenda item will be finalized after a thorough discussion in the next Senate meeting.

Senate-128[2025]-06: Change in qualifying degree criteria for Ph.D. admission in Industrial Design (ID) department.

DRC of Industrial Design dept. has recommended changes in qualifying degree criteria for Ph.D. admission as follows:

<i>Existing Qualifying Degrees</i>	<i>Proposed Qualifying Degrees</i>
B.Des. (with GATE)/ BE (with GATE)/ B.Tech. (with GATE)/ M.Des./ ME/ M.Tech. in any discipline/ M.Arch.	B.Des. (with CEED)/ BE or B.Tech. (with GATE)/ M. Des./ ME/ M.Tech./ M.Arch./ in any discipline, including Ocean Engineering/ Marine Engineering/ Naval Engineering, etc. MCA/M.Sc. in any discipline.

[Annexure – A5, Page No. 48 – 49]

The Senate deferred the proposal.

Senate-128[2025]-07: Change in qualifying degree criteria for Ph.D. and Exe. Ph.D. admission in the Mechanical Engineering (ME) department.

DRC of ME dept. has recommended changes in qualifying degree criteria for Ph.D. admission as follows:

<i>Existing Qualifying Degrees</i>	<i>Proposed Qualifying Degrees</i>
BTech (with GATE)/MTech in Mechanical / Machine Design / Thermal / Cryogenic / Mechatronics / Robotics / Mechanical Vibrations / Automobile / Production / Manufacturing / Industrial Engineering / Industrial System Engineering/ Aerospace/ Aeronautical/ Composites /	B.Tech./B.E./M.Sc.(with GATE)/M.Tech./M.E. in all branches.

D



[Annexure – A6, Page No. 50]

The Senate referred back the proposal to the ME department to specify the names of M.Sc. disciplines.

Senate-128[2025]-08: Proposal of the name change of M. Tech. Specialization program of ME department.

Proposal of ME dept. to change the name of M. Tech. specialization "Thermal Science and Energy Engineering" to "Thermal Engineering" is attached in the annexure for consideration by the Senate.

[Annexure – A7, Page No. 51 – 52]

The Senate approved the name change of M. Tech. specialization "Thermal Science and Energy Engineering" to "Thermal Engineering"

Senate-128[2025]-09: Introduction of new minor degree in Quantum Technology.

CDC has reviewed the course details included under the proposed UG Minor Degree: "Quantum Technology" and found it is aligned with the Minor Degree program. The Chairman Senate has approved the "Physics & Astronomy" Dept. as the parent department for coordinating the above minor course.

[Annexure – A8, Page No. 53 – 65]

The Senate ratified the approval.

Senate-128[2025]-10: Committee report on the proposal of MoU with Govt. Engineering Colleges for Collaborative Teaching.

In pursuance of Senate resolution no. Senate-125[2024]-02 dated 27-05-2024, a committee was formed to look into the feasibility of signing MoUs with the nearby state government universities or institutes for quality students for admission to Ph.D. The committee report is attached as an annexure for the consideration of the Senate.

[Annexure – A9, Page No. 66 – 78]

The Senate referred back the report to the committee to re-examine in the light of the points raised in the 128th Senate meeting and put up a reframed report in the next Senate meeting.

B. UNDERGRADUATE AND POSTGRADUATE STUDIES:

Senate-128[2025]-11: Termination of Sri. Ankit Prusty (119BT0439).

Sri Ankit Prusty, Roll No.-119BT0439, was terminated on 09/06/2022. His father had filed a case against NIT Rourkela in Hon'ble Odisha Human Rights Commission vide case no. 545 of 2023 alleging violation of human rights.



Hon'ble Odisha Human Rights Commission has ordered vide letter no. 26136/OHRC dated 19/12/2024 to consider the case of the student Ankit Prusty afresh in accordance with regulation 5.8.2 of the regulation for Bachelor of Technology (B.Tech.), National Institute of Technology, Rourkela, dated 15.11.2019, within a period of three months, giving due opportunity to the parent and the student to be heard and report compliance.

In pursuance of the order, a committee was formed for the personal hearing of Sri Ankit Prusty and his father, Sri Ramakant Prusty. Minutes of the meeting/personal hearing are placed as annexures for the perusal of the Senate.

[Annexure – A10, Page No. 79 – 93]

The Senate decided that the request of Sri Ankit Prusty, Roll No. 119BT0439, for direct admission to the second year of the B.Tech. programme in Computer Science & Engineering being contrary to the procedure, rule and also violation of merit, there is no scope for consideration of the same. However, if interested, he can continue in the initially admitted programme in the parent department of "Biotechnology and Medical Engineering".

C. RESEARCH STUDIES:

Senate-128[2025]-12: Appeal of Mr. Malaya Padhan, Roll No.-520HS2005 to appear Registration Seminar.

Mr. Malaya Padhan, Roll No.-520HS2005, was enrolled on 21/09/2020 under the external fellowship category. He had completed his coursework and cleared the comprehensive examination with the required credits and CGPA by AY 2021-22. As per regulation, he should have completed his registration seminar by 20/09/2023. However, the student has not completed his registration seminar and is appealing to allow him to present his registration seminar. The DRC has recommended the case as per the Institute's Ph.D. guidelines.

As per Ph.D. regulation clause 11.11, "For the students with M.Tech. and M.Pharm. degrees, normally this should be done after elapse of 9 months, but within 15 months (after elapse of 18 months, but within 24 months for other degrees) of the date of enrollment. When a student with M.Tech. or M.Pharm. degree fails to clear the Registration Seminar within 15 months (24 months for other degrees), or her/his proposed research plan is found unsatisfactory by the DSC, s/he may be re-evaluated after a lapse of 3 months or more. If a student with M.Tech. or M.Pharm. degree cannot clear the course work, comprehensive examination and Registration Seminar within 2 years (3 years for other degrees) from the date of enrollment, s/he will be required to leave the PhD programme. In special cases with mitigating circumstances, the Senate can grant extra time without scholarship."

[Annexure – A11, Page No. 94 – 112]

The Senate did not accept the request of Mr. Malaya Padhan, Roll No.-520HS2005. Hence, he is required to leave the Ph.D. programme.



Senate-128[2025]-13: Inclusion of Co-Supervisors/Caretaker Supervisors regarding Ph.D. and Executive Ph.D. students.

On the recommendation of the DRC of the different departments, the Director, as the Chairman, Senate has approved the inclusion of Co-supervisors/Caretaker supervisors for some of the Ph.D. and Exe. Ph.D. students. The list is given in the Annexure.

[Annexure – A12, Page No. 113]

The Senate ratified the proposal.

Senate-128[2025]-14: Extension of Registration Seminar Date for Research Students.

On the recommendation of the DSC of the different departments, the Registration Seminar date of a few Ph.D., Exe. Ph.D. and M.Tech. Research students is extended. The list is given in the Annexure.

[Annexure – A13, Page No. 114]

The Senate ratified the proposal.

D. DISCIPLINE, ENDOWMENT AND STUDENT AFFAIRS:

Nil.

Senate-128[2025]-15: Any other matter with the permission of the Chair.

Item-1: Change in qualifying degree criteria for Ph.D. admission in the Metallurgical and Materials Engineering (MM) department.

DRC of MM dept. has recommended changes in qualifying degree criteria for Ph.D. admission as follows:

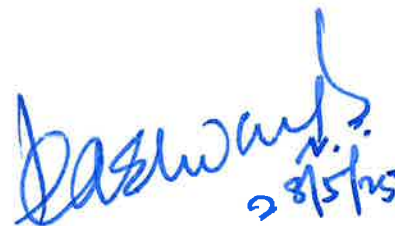
Existing Qualifying Degrees	Proposed Qualifying Degrees
B.Tech./M.Tech. in Metallurgy / Metallurgical and Materials Engineering / Ceramic / Chemical / Mechanical / Production / Manufacturing Engineering OR M.Sc. in Physics/ Chemistry /Materials Science.	B.Tech./M.Tech. in Computer Science/ Metallurgy / Metallurgical and Materials Engineering / Ceramic / Chemical / Mechanical / Production / Manufacturing Engineering OR M.Sc. in Physics/ Chemistry /Materials Science.

[Annexure – A14, Page No. 115 – 118]

The Senate approved the proposal.



(Prof. Rohan Dhiman) 28/05/2025
Registrar & Secretary, Senate



(Prof. K. Umamaheshwar Rao)
Director & Chairman, Senate

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

Minutes

127th Meeting of the Senate



MEETING No: 127th Senate Meeting
DATE : 22.01.2025 (Wednesday)
TIME : 10:30 AM
VENUE : B B Auditorium

To:

Dept./Centre:

Members of the Senate, NIT, Rourkela

- | | | | |
|----------------------------------|--|---|-------------------|
| A) | 1. Prof. K. Umamaheshwar Rao, Director | - | Chairman, Senate |
| | 2. Prof. S. K. Patel, Registrar (I/c) | - | Secretary, Senate |
| B) External: | | | |
| | 3. Prof. Sabita Tripathy
PG Department of English
Sambalpur University,
Jyoti Vihar, Sambalpur – 768019
sabitatripathy33@gmail.com | - | Member |
| C) <u>All Professors:</u> | | | |
| | 4. Prof. A. Thirugnanam, BM | - | Member |
| | 5. Prof. K. Pal, BM | - | Member |
| | 6. Prof. S. Paul, BM | - | Member |
| | 7. Prof. K. K. Khatua, CE | - | Member |
| | 8. Prof. P. Sarkar, CE | - | Member |
| | 9. Prof. S. P. Singh, CE | - | Member |
| | 10. Prof. K. C. Biswal, CE | - | Member |
| | 11. Prof. K. Karar (Paul), CE | - | Member |
| | 12. Prof. B. Munshi, CH | - | Member |
| | 13. Prof. S. Mishra, CH | - | Member |
| | 14. Prof. A. K. Turuk, CS | - | Member |
| | 15. Prof. P. K. Sa, CS | - | Member |
| | 16. Prof. B. Sahoo, CS | - | Member |
| | 17. Prof. P. M. Khilar, CS | - | Member |
| | 18. Prof. B. B. Nayak, CR | - | Member |
| | 19. Prof. R. Mazumder, CR | - | Member |
| | 20. Prof. S. Bhattacharya, CR | - | Member |
| | 21. Prof. D. Sarkar, CR | - | Member |
| | 22. Prof. S. K. Behera, CR | - | Member |
| | 23. Prof. B. G. Mishra, CY | - | Member |
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| | 25. Prof. M. Jana, CY | - | Member |
| | 26. Prof. N. Panda, CY | - | Member |
| | 27. Prof. P. Dash, CY | - | Member |
| | 28. Prof. S. Mohapatra, CY | - | Member |
| | 29. Prof. S. Chatterjee, CY | - | Member |
| | 30. Prof. U. Subuddhi, CY | - | Member |
| | 31. Prof. R. Dinda, CY | - | Member |
| | 32. Prof. D. P. Acharya, EC | - | Member |
| | 33. Prof. S. Ari, EC | - | Member |
| | 34. Prof. U. C. Pati, EC | - | Member |
| | 35. Prof. P. K. Ray, EE | - | Member |
| | 36. Prof. D. Patra, EE | - | Member |
| | 37. Prof. K. B. Mohanty, EE | - | Member |
| | 38. Prof. S. Das, EE | - | Member |
| | 39. Prof. S. Karmakar, EE | - | Member |
| | 40. Prof. S. Mohanty, EE | - | Member |

41.	Prof. Sk. Md. Equeenuddin, ER	Member
42.	Prof. S. Mishra, FP	Member
43.	Prof. R. C. Pradhan, FP	Member
44.	Prof. N. Sethi, HS	Member
45.	Prof. S. Mohanty, HS	Member
46.	Prof. Mohd R. Khan, ID	Member
47.	Prof. S. Das, LS	Member
48.	Prof. S. K. Bhutia, LS	Member
49.	Prof. S. K. Patra, LS	Member
50.	Prof. B. Mallick, LS	Member
51.	Prof. S. Chakraverty, MA	Member
52.	Prof. M. R. Tripathy, MA	Member
53.	Prof. J. Mohapatra, MA	Member
54.	Prof. K. P. Maity, ME	Member
55.	Prof. S. S. Mohapatra, ME	Member
56.	Prof. D. R. K. Parhi, ME	Member
57.	Prof. J. Srinivas, ME	Member
58.	Prof. R. K. Behera, ME	Member
59.	Prof. S. K. Panda, ME	Member
60.	Prof. S. K. Sahoo, ME	Member
61.	Prof. S. Murugan, ME	Member
62.	Prof. A. Satapathy, ME	Member
63.	Prof. C. K. Biswas, ME	Member
64.	Prof. A. Mallik, MM	Member
65.	Prof. A. Basu, MM	Member
66.	Prof. D. Chaira, MM	Member
67.	Prof. M. Kumar, MM	Member
68.	Prof. S. K. Sahoo, MM	Member
69.	Prof. A. K. Gorai, MN	Member
70.	Prof. H. B. Sahu, MN	Member
71.	Prof. S. Jayanthu, MN	Member
72.	Prof. D. P. Tripathy, MN	Member
73.	Prof. A. K. Singh, PH	Member
74.	Prof. B. Ganguli, PH	Member
75.	Prof. D. K. Bisoyi, PH	Member
76.	Prof. D. K. Pradhan, PH	Member
77.	Prof. J. P. Kar, PH	Member
78.	Prof. P. N. Vishwakarma, PH	Member
79.	Prof. S. S. Jena, PH	Member
80.	Prof. P. Kumar, PH	Member
81.	Prof. P. Mahanandia, PH	Member

D) Invitees:

82.	Prof. D. Verma, HOD, BM	Invitee
83.	Prof. B. Nayak, HOD, LS	Invitee
84.	Prof. S. Muhuri, HOD, PA	Invitee
85.	Prof. K. Dutta, PIC (Accreditation)	Invitee
86.	Mr. A. K. Behera, AR-AC(Res&PG)	Invitee
87.	Mr. D. R. Das, AR-AC(UG&E)	Invitee

Members absent:

External

- | | | |
|----|--|--------|
| 1. | Prof. Amitabha Bhattacharya
Electronics & Electrical Communication,
IIT, Kharagpur – 721302
amitabha@ece.iitkgp.ac.in | Member |
| 2. | Prof. Saroj Nayak
Professor in Physics,
IIT, Bhubaneswar – 752050
nayaks@iitbbs.ac.in | Member |

All Professors

- | | | |
|-----|---------------------------|--------|
| 3. | Prof. K. Parmanik, BM | Member |
| 4. | Prof. M. Panda, CE | Member |
| 5. | Prof. S. K. Sahu, CE | Member |
| 6. | Prof. C. R. Patra, CE | Member |
| 7. | Prof. A. Sahoo, CH | Member |
| 8. | Prof. M. Kundu, CH | Member |
| 9. | Prof. S. Paria, CH | Member |
| 10. | Prof. S. Sen, CH | Member |
| 11. | Prof. D. P. Mohapatra, CS | Member |
| 12. | Prof. R. Sarkar, CR | Member |
| 13. | Prof. J. Bera, CR | Member |
| 14. | Prof. S. K. Pratihari, CR | Member |
| 15. | Prof. G. Hota, CY | Member |
| 16. | Prof. K. K. Mohapatra, EC | Member |
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| 19. | Prof. S. Meher, EC | Member |
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| 21. | Prof. P. K. Sahu, EE | Member |
| 22. | Prof. S. Maity, EE | Member |
| 23. | Prof. J. Panda, ER | Member |
| 24. | Prof. J. Pradhan, HS | Member |
| 25. | Prof. G. K. Panda, MA | Member |
| 26. | Prof. K. C. Pati, MA | Member |
| 27. | Prof. A. K. Satapathy, ME | Member |
| 28. | Prof. S. C. Mohanty, ME | Member |
| 29. | Prof. S. Datta, ME | Member |
| 30. | Prof. B. C. Ray, MM | Member |
| 31. | Prof. B. K. Pal, MN | Member |
| 32. | Prof. M. K. Mishra, MN | Member |
| 33. | Prof. D. Bag, SM | Member |
| 34. | Prof. C. K. Sahoo, SM | Member |
| 35. | Prof. R. K. Panda, SM | Member |

Invitees

- | | | |
|---|---|---------|
| 36. Prof. N. K. Vissa, HOD, ER | - | Invitee |
| 37. Prof. D. P. Jena, HOD, ID | - | Invitee |
| 38. Mr. Maramreddy Poornanand, AR-AC(ISC) | - | Invitee |

Student Invitees

- | | | |
|--|---|-----------------|
| 39. Ms. Sambada Nayak, Roll No.1211D0793 | - | Student Nominee |
| 40. Mr. Pankaj Das, Roll No.122EC0338 | - | Student Nominee |



राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

127th MEETING OF THE SENATE

Date : 22.01.2025 (Wednesday)
Time : 10:30 AM
Venue : B. Behera Auditorium

MINUTES

Senate-127[2025]-01: Welcome to the members and invitees by the Chairman, Senate.

The Chairman Senate welcomed all members to the Senate.

Senate-127[2025]-02: To confirm the minutes of the 125th and 126th Senate meetings.

The draft minutes of the 125th and 126th Senate meetings held on 27.05.2024 and 22.07.2024 provisionally approved by the Chairman, Senate, were circulated to all members by group email. No comments/suggestions on the correctness of the recording of the minutes have been received from any member.

[Annexure – A1, Page No. 8(a) – 16]

Senate approved the minutes.

Senate-127[2025]-03: Report on Action Taken on the decisions of the 125th and 126th meeting of the Senate.

The Reports on Action Taken on the decisions taken in the 125th and 126th meetings of the Senate are given in the Annexure for information of the Senate.

[Annexure – A2, Page No. 17]

Senate noted the report.

A. RULES, PROCEDURES, CURRICULA AND POLICY MATTERS:

Senate-127[2025]-04: Changes in the late fine after the due date of semester fee payment.

In the 235th Meeting of the Deans and Heads of the Departments held on 12.09.2024, it was decided that for Ph.D. and M. Tech. (Res.) students, the period after the last date of normal payment will be considered absent till the payment of outstanding dues. Further, it was decided that no further progress on their academic activity will be performed by the Academic office till their outstanding dues are cleared.

It was also unanimously decided to increase the late fine after the due date for the current semester (Autumn of AY 2024-25) and thereafter as per the following:

S. No.	After due date	Fine amount
1.	Till 2 weeks	1,000
2.	After 2 weeks to 4 weeks	2,000
3.	After 4 weeks to 6 weeks	4,000
4.	After 6 weeks to 8 weeks	8,000
5.	After 8 weeks onwards	10,000

However, in the 237th Meeting of the Deans and Heads of the Departments held on 30.12.2024, it was decided to reduce the late fee fine slabs introduced during the Autumn Semester of AY 2024-25 by 50% for each slab (duration will remain the same as decided earlier) from Spring Semester of AY 2024-25 onwards.

The Chairman Senate had approved the above proposals.

[Annexure – A3, Page No. 18 – 20]

The Senate ratified the proposals.

Senate-127[2025]-05: Request for reduction of compulsory course credits and addition of courses for Ph.D. students without a mathematics background at the +3 level.

Ph.D. regulation 2.2.iii states that "Science students admitted to the PhD program in Engineering/Physics/Mathematics must have passed Mathematics at +3 level. Students without Mathematics at +3 level may be admitted under the condition that they will have to register for 14 credits of 1000 and 2000 level Mathematics and 1000 level Computer Science courses (Theory and Practical) in addition to their normal course requirement, and secure at least C grade in each course".

However, the DRC of BM dept. has proposed to reduce the number of credit requirements of Mathematics and Computer Science from 14 credits to 12 credits and course work level to 3000 from 1000 and 2000 level for Mathematics and to 2000/3000 from 1000 level for Computer Science.

[Annexure – A4, Page No. 21 – 22]

The Senate approved the proposal to reduce the number of credit requirements of Mathematics and Computer Science from 14 credits to 12 credits and course work level to 3000 from 1000 and 2000 levels for Mathematics and to 2000/3000 from 1000 level for Computer Science.

Senate-127[2025]-06: Change of nomenclature from Chairman (Extra Academic Activities) to HOD (Extra Academic Activities).

In the 234th Meeting of Deans and Heads held on 14.08.2024, it was decided that a three-member Committee chaired by the Dean (AC) will place their recommendations in this matter.

The Committee met on 03.09.2024 and submitted their recommendations to the Director on 05.09.2024 wherein it was recommended to change the nomenclature of Chairman (EAA) to Head of Center (EAA).

Subsequently, in the 235th Meeting of Deans and Heads held on 12.09.2024, the recommendations of the Committee to change the nomenclature of Chairman (EAA) to Head of the Centre (EAA) was



considered subject to the necessary approval with defined roles of Head as per the Statutes.

[Annexure – A5, Page No. 23 – 25]

Senate decided to change the nomenclature of Chairman (EAA) to Head of Center (EAA).

Senate-127[2025]-07: Inclusion of M. Plan./M. Arch./MURP/MCP and other similar Master's degrees in Planning and Architecture program in Ph.D. regulation at par with M.Tech. program.

DRC of Planning and Architecture dept. has recommended considering M.Arch./M.Plan./MURP/MCP and other similar Master's degrees in Planning and Architecture with various nomenclature at par with M.Tech. degree for coursework exemption, research project, STW credit requirement, registration seminar completion duration, the earliest date of thesis submission determination, etc. in Ph.D. regulation.

[Annexure – A6, Page No. 26]

The Senate approved the proposal to include M. Plan./M. Arch./MURP/MCP and other similar Master's degrees in Planning and Architecture program in Ph.D. regulation at par with M.Tech. program.

Senate-127[2025]-08: Discussion on the proposal on reconsideration of the Gold Medal Awarding Policy.

A proposal has been received from Prof. S. Bhattacharya on the introduction of Gold Medals for Best B.Arch. graduate and Best B.Arch. Project for the Planning & Architecture department in place of combined category of Gold Medal for B.Tech. and B.Arch. A copy of the proposal is attached as an annexure.

[Annexure – A7, Page No. 27 – 29]

The Senate approved the proposal in principle and authorized Dean Academic to constitute a committee to look into the status of all Gold medals given by the institute.

Senate-127[2025]-09: Discussion on the proposal for the grading system.

Prof. S. Bhattacharya has proposed the following:

- To include the contribution of the Thesis Supervisor in the award of Grades in the semester evaluation of UG, PG, and Ph.D. students.
- To review the Grading System in Summer and Supplementary Examination and to abolish Clause 6.2.4 of the Academic Regulation.

The detailed proposal is attached as an annexure.

[Annexure – A8, Page No. 30 – 31]

The Senate did not accept the above proposal as, the above in point 1 is already present in the regulation, and point no 2 has been deliberated earlier in the previous Senate.

B. UNDERGRADUATE AND POSTGRADUATE STUDIES:

Senate-127[2025]-10: Publication of results of 1st, 3rd, 5th, 7th & 9th Semester examinations of B. Arch, Integrated M.Sc., Dual Degree; 1st, 3rd, 5th & 7th semester of B.Tech.; 1st and 3rd Semester of MA, MBA, M.Sc., M.Tech. and results of Ph.D., Exec. Ph.D. and M.Tech. (Res) students for Autumn End-Semester Examination 2024-25 & Winter (Crash Course)-2024.

The results of 1st, 3rd, 5th, and 7th Semester examinations of B. Tech; 1st, 3rd, 5th, 7th, and 9th Semester examinations of B. Arch, Dual degree B. Tech & M. Tech and Five-year Integrated M.Sc. programs; 1st, 3rd Semester examination of MA, MBA, M.Sc., M.Tech. and coursework results of Ph.D., Executive Ph.D., M. Tech. (Res.), Winter (Crash Course)-2024 as recommended by the UGPEC & PGPEC was published after due approval by the Chairman, Senate. The same will be presented by PIC (Exam.) on the table for ratification by the Senate.

[Annexure – A9, Page No. 32 – 33]

Senate ratified the above.

Senate-127[2025]-11: Introduction of a new M. Tech. course in Semiconductor Devices and Technology by PH Dept.

The GOI vide letter No. D.O./MoS(E&IT)/2023/348 proposed that IITs/IISc/NITs offer postgraduate/doctoral/post-doctoral programs in specialized semiconductor domain and research areas aligned with "Semicon India Future Skills Talent Committee Report". In pursuance to the above, the proposal from DAC of PH dept. along with the CDC recommendation to introduce a new M. Tech. course in "**Semiconductor Devices and Technology**" is put up to the Senate for consideration.

[Annexure – A10, Page No. 34 – 35(j)]

The Senate approved in principle the introduction of a new M.Tech. course in "Semiconductor Devices and Technology" and "Centre of Excellence for Semiconductor Devices" and recommended it to BOG.

Senate-127[2025]-12: Proposal for Introduction of new M. Tech. specialization "Machine Learning and Signal Processing" by EC Dept.

Proposal by DAC of EC dept. along with the CDC recommendation for the introduction of a new specialization in the M. Tech. program named "Machine Learning and Signal Processing" with a strength of 12 students and keeping the overall M.Tech. student strength same is put up to the Senate for consideration.

[Annexure – A11, Page No. 36 – 45]

The Senate approved in principle the introduction of a new M.Tech. specialization "Machine Learning and Signal Processing" by EC Dept. and recommended it to BOG.

Senate-127[2025]-13: Status of the programs where enrolment of students is less than 6.

In pursuance of the Senate decision vide resolution no. Senate-126[2024]-08 dated 22.07.2024, a committee was formed by Dean Academic to look into the matter of M. Tech. Programs where enrolment of students is less

than 6. The committee recommendation is put up to the Senate for deliberation.

[Annexure – A12, Page No. 46 – 47]

Senate decided to revert the recommendations back to the committee and put up a fresh recommendation.

C. RESEARCH STUDIES:

Senate-127[2025]-14: Reconsideration of Executive Ph.D. program duration requirement for thesis submission.

An application received in the Academic Office for reconsidering the minimum duration requirement of 6 years for thesis submission in the Executive Ph.D. program for working professionals is put up to the Senate for deliberation.

[Annexure – A13, Page No. 48 – 56]

The Senate authorized Dean Academic to form a committee to look into the whole aspect of the Regular and Executive Ph.D. program.

Senate-127[2025]-15: Appeal of Mr. Subhasish Pandav, Roll No.-519EC6020 for Autumn 2024-25 Semester fee waiver.

Mr Subhasish Pandav, Roll No.-519EC6020 submitted his thesis on 30.08.2024 and appealed to waive his Autumn 2024-25 semester fee. As per Senate decision vide Senate-121[2023]-19 dated 13.12.2023, Ph.D. students who had submitted their thesis within one month of semester registration i.e. 22.08.2024 for Autumn 2024-25 were exempted from paying the semester fee. The student fellowship ended in December 2023 and he was in a financial crisis. Hence, requesting for fee waiver.

[Annexure – A14, Page No. 57]

The Senate approved Mr. Subhasish Pandav's (519EC6020) appeal to waive his Autumn 2024-25 semester fee.

Senate-127[2025]-16: Change of Supervisors in respect of Ph.D. and Executive Ph.D. students.

On the recommendation of the DRC of the different departments, the Director as the Chairman, Senate has approved the change of supervisors for some of the Ph.D. students, and some cases are put up to the Senate for approval. The list is given in the Annexure. Work done with the previous supervisor will be included in the thesis of the Research student with the changed supervisor.

[Annexure – A15, Page No. 58]

The Senate approved/ratified the proposal.

Senate-127[2025]-17: Inclusion of Co-Supervisors/Caretaker Supervisors in respect of Ph.D. and Executive Ph.D. students.

On the recommendation of the DRC of the different departments, the Director as the Chairman, Senate has approved the inclusion of Co-



supervisors/Caretaker supervisors for some of the Ph.D. students, and some cases are put up to the Senate for approval. The list is given in the Annexure.

[Annexure – A16, Page No. 58]

The Senate approved/ratified the proposal.

Senate-127[2025]-18: Extension of Studentship period in respect of Ph.D. students.

On the recommendation of the DRC of the different departments, the Director as the Chairman, Senate has approved the extension of studentship for some of the PhD students and some cases are put up to the Senate for approval. The list is given in the Annexure.

[Annexure – A17, Page No. 59]

The Senate approved/ratified the proposal.

Senate-127[2025]-19: Extension of Registration Seminar Date in respect of Ph.D. students.

On the recommendation of the DSC of the different departments, the Registration Seminar date of a few Ph.D. students is extended. The list is given in the Annexure.

[Annexure – A18, Page No. 60]

The Senate approved/ratified the proposal.

Senate-127[2025]-20: Recommendation of 57th RPEC meeting on new Enrollment, Provisional Registration, and Registration of PhD, Executive Ph. D, and M Tech (Res.) students.

The recommendation of the 57th RPEC meeting is put up for consideration and approval by the Senate.

[Annexure-A19, Page No. 61 – 84]

The Senate approved the recommendations of the 57th RPEC meeting.

D. DISCIPLINE, ENDOWMENT AND STUDENT AFFAIRS:

Senate-127[2025]-21: Senate Nominee to the Preliminary Screening Committee for “Distinguished Alumnus Award”.

The Board vide resolution no. BOG-22(2009)-18 dated 18.09.2009 & BOG-29(2012)-12 dated 16.03.2012 approved the presentation of the “Distinguished Alumnus Award” for which the compositions of the Preliminary Screening Committee is defined as follows:

Preliminary Screening Committee:

- | | |
|--|------------|
| 1. Dean (AR) | - Chairman |
| 2. One internal member of the Board | - Member |
| 3. Two Faculty members nominated by the Senate | - Member |

Chairman Senate has approved Prof. Abanti Sahoo, CH, and Prof. B. G. Mishra, CY as Senate nominees.

The Senate ratified the nomination of the above two faculties to be the members of the Preliminary Screening Committee for the "Distinguished Alumni Award".

Senate-127[2025]-22: List of degree recipients of UG, PG, and Research programs for the XXII Convocation.

The consolidated list of degree recipients of UG, PG, and Research programs who will be conferred respective degrees in the XXII Convocation of the Institute is given in the Annexure for the information and approval of the Senate. The list containing the number of students graduating from various programs is as under:

<u>Program</u>	<u>No. of Students passed</u>
B. Arch.	21
B. Tech.	1061
Dual-Degree B. Tech. & M. Tech.	39
Integrated M. Sc.	68
M. Tech.	469
MA	06
M. Sc.	180
MBA	43
M. Tech. (By Research)	01
PhD	177
Total	2065

The Senate approved the list of degree recipients of UG, PG, and Research programs for the XXII Convocation.

Senate-127[2025]-23: List of various medal/award winners for the XXII Convocation:

The consolidated list of various medal/award winners for the XXII convocation of the Institute is given in the Annexure for the approval of the Senate.

The selection process for some Endowment Awards has not been completed. Chairman, Senate may be authorized to approve the same once the selection is completed.

The Senate approved the list of various medal/award winners for the XXII Convocation and authorized the Chairman Senate to approve the pending list of Endowment Awardees.

Senate-127[2025]-24: Modification of Examination Answer Book and Question Paper.

As per the resolution in the 237th HOD meeting vide resolution no HODM-237(2024)-04 dated 02-Jan-2025, it was decided to implement the examination answer books as per the requirement of NBA from the Spring Semester AY 2024-25. The question paper format also needs to be as per the requirements of the NBA. The format of the examination answer book and question paper is placed before the Senate.

[Annexure – A22, Page No. 91 – 92]

The Senate approved the proposal in principle. PIC (Accreditation) is advised to conduct training programs for all faculties regularly by February 2025 for better understanding and proper implementation of the above.

Senate-127[2025]-25: Inclusion of Defense/Completion date in the final Ph.D. Certificate given in Convocation.

Senate vide resolution **Senate-124[2024]-15** on meeting held on 22nd April 2024 approved in principle for the addition of the date of defense/approval to be added in the Degree certificate.

[Annexure – A23, Page No. 93]

The Senate approved the modification in the Ph.D. degree certificate format given in Convocation to be implemented from XXIII Convocation 2026 onwards.

Senate-127[2025]-26: Any other matter with the permission of the Chair.

Item 1 - Extension of studentship of Mr. Sonam Zangpo, Roll No. – 118EE0810 and Jitender Mahali, Roll no – 118EC0244

Mr. Sonam Zangpo, Roll No. – 118EE0810 a foreign student was admitted to B.Tech. (EE) program at NIT Rourkela in 2018. One more student, Jitender Mahali, Roll no – 118EC0244, was admitted to the B.Tech (EC) program at NIT Rourkela in 2018. As per Academic regulations, as the student has completed 6 years from the date of admission, the studentship stands terminated w.e.f. 01st July 2024. However, he has not been able to complete his courses. He has requested for one more year to complete the same. Director as Chairman, Senate has approved the same.

The Chairman Senate had approved the above proposals.

[Annexure – A24, Page No. 94 - 96]

The Senate ratified the proposals.

Item 2 - Case of Mr. Md. Moniruzzaman Monir Salman, Roll No. – 119CS0161

Md. Moniruzzaman Monir Salman, Roll No. – 119CS0161, a Bangladeshi student admitted in B.Tech. (CS) program at NIT Rourkela in 2019. The student cites that due to a health issue, he was unable to complete the course on time and states that he will not be able to come to India on time. He is left with 4 theory papers and one Research project, the RP-II course. He has requested to allow him to complete the courses in online mode.

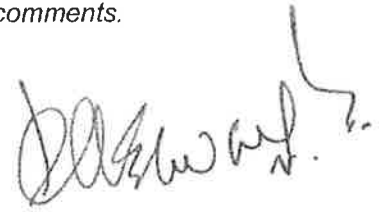
[Annexure – A25, Page No. 97]

The Senate reverted the matter to HOD-CS for comments.



(Prof. Rohan Dhiman)

Registrar & Secretary, Senate



(Prof. K. Umamaheshwar Rao)

Director & Chairman, Senate

ACTION TAKEN REPORT ON 127th SENATE MEETING

Minutes Sl. No of 127th meeting	Subject	Action taken
Senate-127[2025]-04	Changes in the late fine after the due date of semester fee payment.	Implemented
Senate-127[2025]-05	Request for reduction of compulsory course credits and addition of courses for Ph.D. students without a mathematics background at the +3 level.	Implemented
Senate-127[2025]-06	Change of nomenclature from Chairman (Extra Academic Activities) to HOD (Extra Academic Activities)	Implemented
Senate-127[2025]-07	Inclusion of M. Plan./M. Arch./MURP/MCP and other similar Master's degrees in Planning and Architecture program in Ph.D. regulation at par with M.Tech. program.	Implemented
Senate-127[2025]-08	Discussion on the proposal on reconsideration of the Gold Medal Awarding Policy.	Implemented
Senate-127[2025]-10	Publication of results of 1st, 3rd, 5th, 7th & 9th Semester examinations of B. Arch, Integrated M.Sc., Dual Degree; 1st, 3rd, 5th & 7th semester of B.Tech.; 1st and 3rd Semester of MA, MBA, M.Sc., M.Tech. and results of Ph.D., Exec. Ph.D. and M.Tech. (Res) students for Autumn End-Semester Examination 2024-25 & Winter (Crash Course)-2024.	Implemented
Senate-127[2025]-11	Introduction of a new M. Tech. course in Semiconductor Devices and Technology by PH Dept.	Recommended to BOG
Senate-127[2025]-12	Proposal for Introduction of new M. Tech. specialization "Machine Learning and Signal Processing" by EC Dept.	Recommended to BOG
Senate-127[2025]-13	Status of the programs where enrolment of students is less than 6.	Implemented
Senate-127[2025]-14	Reconsideration of Executive Ph.D. program duration requirement for thesis submission.	Implemented
Senate-127[2025]-15	Appeal of Mr. Subhasish Pandav, Roll No.-519EC6020 for Autumn 2024-25 Semester fee waiver.	Implemented
Senate-127[2025]-16	Change of Supervisors in respect of Ph.D. and Executive Ph.D. students.	Implemented
Senate-127[2025]-17	Inclusion of Co-Supervisors/Caretaker Supervisors in respect of Ph.D. and Executive Ph.D. students.	Implemented
Senate-127[2025]-18	Extension of Studentship period in respect of Ph.D. students.	Implemented
Senate-127[2025]-19	Extension of Registration Seminar Date in respect of Ph.D. students.	Implemented

Minutes Sl. No of 127th meeting	Subject	Action taken
Senate-127[2025]-20	Recommendation of 57th RPEC meeting on new Enrollment, Provisional Registration, and Registration of PhD, Executive Ph. D, and M Tech (Res.) students.	Implemented
Senate-127[2025]-21	Senate Nominee to the Preliminary Screening Committee for "Distinguished Alumnus Award".	Implemented
Senate-127[2025]-22	List of degree recipients of UG, PG, and Research programs for the XXII Convocation.	Implemented
Senate-127[2025]-23	List of various medal/award winners for the XXII Convocation.	Implemented
Senate-127[2025]-24	Modification of Examination Answer Book and Question Paper.	Implemented
Senate-127[2025]-25	Inclusion of Defense/Completion date in the final Ph.D. Certificate given in Convocation.	To be implemented
Senate-127[2025]-26, Item-1	Extension of studentship of Mr. Sonam Zangpo, Roll No. – 118EE0810 and Jitender Mahali, Roll no – 118EC0244.	Implemented
Senate-127[2025]-26, Item-2	Case of Mr. Md. Moniruzzaman Monir Salman, Roll No. – 119CS0161	Implemented

Multiple Entry Multiple Exit PolicyAnnexure – A3

(Effective from admission batch 2023-24)

A. BTech Programme

1. **Entry in 1st Year:** Admission in the 1st year of the programme will continue through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present). BTech students will be allowed a maximum of 8 years to complete the programme since admission in 1st year. Students admitted in other institutes will not be allowed to take admission in any of the first two semesters of the BTech programme.
2. **Exit during 1st Year:** If a student exits before the completion of 1st year, he/she will be allowed to exit but without any certificate.
3. **Exit after 1st Year:** If a student successfully completes a minimum of 40 credits of 1st year course work (without any backlog) and opts for an exit at the end of 1st year, he/she will be allowed to exit with a certificate called 'Foundation in Engineering'.
4. **Re-entry during 1st year:** Re-entry is allowed during 1st year only for students who were admitted in NIT Rourkela in the previous years and not for the students who were admitted in other institutes. If he/she takes exit after completion of 1st semester, he/she will be allowed to register in the 2nd semester otherwise in the 1st semester.
5. **Re-entry during 2nd year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of 1st year and qualifies the minimum requirement for promotion to 2nd year as per the prevailing academic regulations, he/she will be allowed to re-enter in 2nd year.
6. **Entry in 2nd year for students of outside NIT Rourkela:** A student, who has not studied 1st year in NIT Rourkela, is also eligible to take admission in the 2nd year, subject to the following conditions:
 - The student must have taken admission in BTech programme in any Centrally Funded Technical Institutes (CFTI) of MoE, GOI through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present)
 - The student must have secured a minimum CGPA of 8.5 on a 10-point scale or equivalent.
 - Re-entry will be permitted in the same branch only or equivalent branch if his/her branch is not available in NIT Rourkela.
 - The student must have successfully completed a minimum of 40 credit points (without any backlog) in courses equivalent to that offered at NIT Rourkela in the 1st year of the BTech programme.

- The entry will be based on the rank in the entrance examination conducted centrally by NIT Rourkela and vacancy of seats.
7. **Exit during 2nd Year:** If a student exits before the successful completion of the 2nd year but after the 1st year, he/she will also be awarded the certificate called 'Foundation in Engineering', provided he/she has secured a minimum of 40 credits of 1st year subjects (without any backlog).
 8. **Exit after 2nd Year:** If a student exits at the end of 2nd year, and he/she has successfully completed a minimum of 80 credits (without any backlog), then he/she will be awarded the certificate called 'Diploma in <parent discipline> Engineering'. Otherwise, he/she will be given the certificate called 'Foundation in Engineering' if he/she this certificate was not issued to him earlier and has successfully completed a minimum of 40 credits of 1st year subjects (without any backlog).
 9. **Re-entry during 3rd Year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of courses of first two years and qualifies the minimum requirement for promotion to 3rd year as per the prevailing academic regulations, he/she will be allowed to re-enter during 3rd year.
 10. **Entry in 3rd year for Students of Outside NIT Rourkela:** A student, who has not studied 1st and 2nd years in NIT Rourkela, is also eligible to take admission in the 3rd year, subject to the following conditions:
 - The student must have taken admission in BTech programme in any Centrally Funded Technical Institutes (CFTI) of MoE, GOI through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present)
 - The student must have secured a minimum CGPA of 8.5 on a 10-point scale or equivalent.
 - Re-entry will be permitted in the same branch only or equivalent branch if his/her branch is not available in NIT Rourkela
 - The student must have successfully completed a minimum of 80 credit points (without any backlog) in courses equivalent to that offered at NIT Rourkela in the 1st and 2nd years of the BTech programme.
 - The entry will be based on the rank in the entrance examination to be conducted by the concerned department and vacancy of seats.
 11. **Exit during 3rd Year:** If a student exits before the successful completion of the 3rd year but after the 2nd year, he/she will also be awarded the certificate called 'Diploma in <parent discipline> Engineering', if it has not been issued to him/her earlier and he/she has secured a minimum of



80 credits (without any backlog) of 1st and 2nd year subjects. If he/she has successfully completed 40-79 credits (without any backlog), she/he will be issued the certificate called 'Foundation in Engineering', provided it has not been issued to him/her earlier.

12. **Exit After 3rd Year:** If a student exits at the end of 3rd year, and successfully completes a minimum of 80 credit points (without any backlog), he/she will be offered the certificate called 'Diploma in <parent discipline> Engineering' provided it has not been issued to him/her earlier. If he/she has successfully completed 40-79 credits (without any backlog), she/he will be issued a 'Foundation in Engineering' certificate, provided it has not been issued to him/her earlier. He/she will not be issued any other certificate even if he/she successfully completes 120 credits.
13. **Re-entry during 4th Year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of courses of first three years and qualifies the minimum requirement for promotion to 4th year as per the prevailing academic regulations, he/she will be allowed to re-enter during 4th year.
14. **Entry in 4th year for Students of Outside NIT Rourkela:** A student, who has not studied 1st – 3rd years in NIT Rourkela, is also eligible to take admission in the 4th year, subject to the following conditions:
- The student must have taken admission in BTech programme in any Centrally Funded Technical Institutes (CFTI) of MoE, GOI through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present)
 - The student must have secured a minimum CGPA of 8.5 on a 10-point scale or equivalent.
 - Re-entry will be permitted in the same branch only or equivalent branch if his/her branch is not available in NIT Rourkela
 - The student must have successfully completed a minimum of 120 credit points (without any backlog) in courses equivalent to that offered at NIT Rourkela in the 1st – 3rd years of the BTech programme.
 - The entry will be based on the rank in the entrance examination conducted by the concerned department and vacancy of seats.
15. **Exit after 4th Year:** A student will be awarded the 'BTech' degree after the successful completion of 4th year (without any backlog), if he/she completes a minimum of 160 credits out of which a minimum of 80 credits are earned from subjects studied in NIT Rourkela. The minimum credit requirement for the award of degree may vary across the departments in the range 160-170. Accordingly, the credit points earned by the students per year may vary in the range 40-45.



16. **Termination:** If a student fails to take re-entry within 4 years of leaving the BTech programme, it will be treated as a termination of studentship assuming that he/she is no longer interested in continuing study at NIT Rourkela.

B. 5-Year Dual Degree Programme (BTech & MTech)

1. Admission in the 1st year of the programme will continue through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present). Dual degree students will be allowed a maximum of 10 years to complete the course since admission in 1st year.
2. The multiple exit/entry policy for first four years will be the same as that of the BTech programme. However, after the 4th year, he/she will be allowed to take exit with a certificate 'Foundation in Engineering' or 'Diploma in <parent discipline> Engineering' whichever is applicable, but not the BTech degree.
3. **Re-entry during 5th Year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of courses of first four years and qualifies the minimum requirement for promotion to 5th year as per the prevailing academic regulations, he/she will be allowed to re-enter during 5th year. This entry is allowed only for students who are admitted to 5-year Dual Degree programme.
4. **Entry at 5th year for Students of Outside NIT Rourkela:** A student, who has not studied 1st – 4th years at NIT Rourkela, is also eligible to take admission in the 5th year, subject to the following conditions:
 - This entry is allowed only for students who are admitted in any 5-year Dual Degree BTech & MTech programme.
 - The student must have taken admission in any Centrally Funded Technical Institutes (CFTI) of MoE, GOI through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present).
 - The student must have secured a minimum CGPA of 8.5 on a 10-point scale or equivalent.
 - The student must have successfully completed a minimum of 160 credit points (without any backlog) in courses equivalent to that offered at NIT Rourkela in the 1st – 4th years of the Dual Degree programme.
 - The entry will be based on the rank in entrance examination conducted by the concerned department and vacancy of seats.



5. A student will be awarded two degrees such as BTech and MTech at the end of 5 years, if he/she successfully completes a minimum of 200 credits (without any backlog) in the relevant subjects out of which a minimum of 100 credits are earned from subjects studied in NIT Rourkela..
6. **Termination:** If a student fails to take re-entry within 5 years of leaving the Dual Degree programme, it will be treated as a termination of studentship assuming that he/she is no longer interested in continuing study at NIT Rourkela.

C. 5-Year Integrated MSc Programme

1. Admission in the 1st year of the programme will continue through all India Entrance Examination approved by GOI (i.e., JoSSA/CSAB at present). Integrated MSc students will be allowed a maximum of 10 years to complete the course since admission in 1st year
2. The multiple exit/entry policy for the first four years will be the same as that of the BTech programme. However, the names of the degrees while taking exits at the end of the first, second and third years will be termed as 'Foundation in Engineering', 'Diploma in <parent discipline>', 'BSc in <parent discipline>' respectively.
3. **Re-entry during 5th Year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of courses of first four years and qualifies the minimum requirement for promotion to 5th year as per the prevailing academic regulations, he/she will be allowed to re-enter during 5th year. This entry is allowed only for students who are admitted to 5-year Integrated MSc programme.
4. **Entry at 5th year for Students of Outside NIT Rourkela:**

A student, who has not studied 1st – 4th years at NIT Rourkela, is also eligible to take admission in the 5th year, subject to the following conditions:

- The student must have taken admission in 5-year Integrated MSc programme in any Centrally Funded Technical Institutes (CFTI) of MoE, GOI through all India Entrance Examinations approved by GOI (i.e., JoSSA/CSAB at present)
- Students of IISERS, NISERS, Central Universities under MoE, GOI admitted through CUET/NEST/IAT are also allowed.
- The student must have secured a minimum CGPA of 8.5 on a 10-point scale or equivalent.
- The student must have successfully completed a minimum of 160 credit points (without any backlog) in courses equivalent to that offered at NIT Rourkela in the 1st – 4th years of the 5-year Integrated MSc programme.
- The entry will be based on the rank obtained in the entrance examination conducted by the concerned department and vacancy of seats.



5. The students will be awarded two degrees such as BSc (Honours) in <parent discipline> and MSc in <parent discipline> at the end of 5 years, provided he/she successfully completes a minimum of 200 credits (without any backlog) in the relevant subjects out of which a minimum of 80 credits are earned from subjects studied in NIT Rourkela.
6. **Termination:** If a student fails to take re-entry within 5 years of leaving the 5-year Integrated MSc programme, it will be treated as a termination of studentship assuming that he/she is no longer interested in continuing study at NIT Rourkela.

D. General Guidelines Applicable to All Programmes

1. Degrees will be issued to only those students who take admission in NIT Rourkela in 1st year and successfully completes minimum credit without any backlog papers as tabulated below:

BTech Programme		
After Year	Min. credits	Name of Degree
1st	40	Foundation in Engineering
2nd	80	Diploma in <parent discipline>
3rd		
4th	160	BTech in <parent discipline>



BTech & MTech Dual Degree Programme		
After Year	Min. credits	Name of Degree
1st	40	Foundation in Engineering
2nd	80	Diploma in <parent discipline>
3rd		
4th		
5th	200	BTech in <parent discipline> & MTech in <specialization>

5-year Integrated MSc Programme		
After Year	Min. credits	Name of Degree
1st	40	Foundation in Engineering
2nd	80	Diploma in <parent discipline>
3rd	120	BSc in <parent discipline>
4th		
5th	200	BSc (Hons) in <parent discipline> & MSc in <parent discipline>

2. No degree will be awarded by NIT Rourkela to the students of outside institutes even if they may have taken admission at any stage after 1st year in NIT Rourkela through proper procedure. They will get degrees from their respective parent institutes.



3. Vacancy of Seats for Readmission in the 2nd year and onwards: The total number of students in any academic year after students from outside institutes are admitted and students of NIT Rourkela of previous batches are readmitted in any branch must not exceed the sanctioned strength in that branch. The vacancy list will be prepared category-wise and branch-wise before the starting of every academic year. The NIT Rourkela students will always be preferred for readmission. Outside students will be allowed to take admission at the beginning an academic year (i.e. in autumn semester) only if there is any vacancy of seats created after the readmission of NIT Rourkela students is over. Only NIT Rourkela students will be readmitted in spring semester. NIT Rourkela students can be readmitted even if there is no vacancy of seats at any point of time.
4. Branch Change: The branch change is not allowed at any stage after taking admission.
5. One can avail any number of exits and entries during the entire course duration, but only one entry and one exit will be allowed in any particular academic year.
6. The academic section will keep track of all its students who have taken exit and send reminder to all these students to reenter to continue their academic programme at least one month before the beginning of every semester.
7. A student must take prior approval from Dean(AC) through proper channel before taking an exit at any stage clearly mentioning the reasons and duration of absence. He/she must submit no dues certificate along with his/her application in the prescribe format. Similarly, prior approval must be taken at least one month before taking re-entry.
8. If a student does not like to take the exit, he/she will continue his academic programme as per the prevailing academic regulations of NIT Rourkela.
9. If a student takes an exit at any stage along with a certificate issued to him/her as per his/her eligibility, it will be presumed that he has taken the final exit and will not be allowed to re-enter in future to continue his/her study in the same programme.
10. It is mandatory for every student to open an account in the academic bank of credit (ABC) at the time of admission. As and when a semester is completed and result is declared, all the credits earned by a student in that semester will be credited to his/her account in the ABC, which can be transferred/redeemed in future.
11. After taking an exit, if a student has undergone any academic courses outside NIT Rourkela and earned some credits, the redemption of these credits may be considered for waving off some of the courses offered at NIT Rourkela in higher semesters on the recommendation of the concerned Department Academic Committee (DAC).



12. Credit for Experiential Learning: After taking an exit, if a student has undergone a job in any outside organization or his/her own start-up company, his/her on-the-job experiential learning will be given some credits on the basis of some evaluation conducted by the respective DAC depending upon the ranking/reputation of the concerned organization and number of years he/she has served as suggested by National Credit Framework.
13. The students admitted in other institutes and later taken entry in NIT Rourkela at any stage after 2nd year will not be allowed to avail the campus training and placement facility provided at NIT Rourkela.
14. Re-entry for students of NIT Rourkela will be permitted at the beginning the semester as per his/her eligibility that means on the day of corresponding semester registration only if he/she will be able to complete the programme within the maximum time duration of the corresponding programme.
15. The students of NIT Rourkela are not required to pay fee during the period of his/her exit from the institute provided his/her exit is permitted by the competent authority. Otherwise he/she has to pay the full semester fees during the entire period of absence from the institute.
16. At the time of entry, the students of outside NIT Rourkela are required to pay the caution money and other related entry fees as per the prevailing institute rules in addition to the corresponding semester fees.

The multiple entry multiple exit policy as stated above has been finalized after multiple brain storming sessions with the NEP implementation committee members. This proposal has also been presented by me in the workshop on "NEP Implementation in HEIs and Way Forward" organized at NIT-Harangal during Feb 1-2, 2025 and in front of NEP co-ordinators/Deans (Academic) of all NITs and IIST, Shibpur.

Submitted for your kind approval and order for the implementation.

The Director (Through Dean-AC)


4/2/25

For your kind approval please.

Dt. Ranjan Dm
4/2/25

✓ AR-AC/Ph. Y.R.
For N.A. Pl.
05/02/25

Associate Dean (AC-UG)

Recommended for your kind approval.

Dean (AC)

Recommended for kind approval and implementation. It will be ratified in the next Senate.

✓ DIRECTOR

Approved Signature

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05/02/25

Date: 07th March 2025



To

The Dean (Academic)

Sub. : Submission of NEP course structure for PG & Research and Entry Exit policy – reg.

Dear Sir,

Please find enclosed herewith the Entry Exit policy and curriculum structure for the following PG programmes for implementation of NEP in PG & Research programs as recommended by the committee constituted vide letter No. NITR/ES/2025/M/0581 dated 18-02-2025:

1. M. Tech. program
2. B. Tech.-M. Tech. Dual Degree program
3. M. Sc. program
4. MA program
5. MBA program

Submitted for your kind information and necessary action.

10/3/25

Prof. Saroj Kumar Patel

Chairman, NEP Committee for PG&R

0.5 (K-PH)
Nov 2023

Agenda
Senate File
Mail sent to
all HODs

17-03-25

Draft NEP course structure for PG & Research and Entry Exit Policy has been framed by the above committee.

Permission may please be given to circulate this to all HODs so that it may be discussed in the Academic and it to be started very soon (for clear visualization). Further, it may be recommended to put in the next senate for discussion and final implementation.

Approved as recommended

13-03-25

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DIRECTOR

Multiple Entry Multiple Exit Policy **for Postgraduate and Research Programmes**

(Effective from admission batch 2025-26)


This policy is applicable for all the 2-year postgraduate (PG) programmes namely MTech, MSC, MA and MBA and all Research Programmes namely MTech by Research, Regular PhD and Executive PhD.

A. General Guidelines

1. PG students will be allowed a maximum of 6 years to complete the programme since admission in 1st year, at the parent Institute. For PhD and executive PhD students, the maximum duration will continue to be same as per regulations.
2. Degrees will be awarded to only those students who take admission in NIT Rourkela in 1st year and successfully completes minimum credit, without any backlog papers, as tabulated below:

MTech Programme		
After Year	Min. credits	Name of Degree
1st	40	PG Diploma in <discipline> Engineering with <specialization>
2nd	80	MTech in <discipline> Engineering with <specialization>

2-Year MA/MSc/MBA Programme		
After Year	Min. credits	Name of Degree
1st	40	PG Diploma in <discipline>
2nd	80	MA/MSc/MBA in <discipline>

Sumit Das  *Pranav* *J. Pradhan*
Krushnakali
Shruti
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Research Programme	
Qualifying criteria	Name of Degree
For UG student enrolled in regular PhD programme who has completed a minimum of 3 years and satisfies all requirements of MA/MSc/MTech	MSc/MA/MTech in <discipline>
For any regular PhD student who wants to take exit without completing PhD and satisfies all requirements of MTech by Research	MTech by Research in <discipline>
For any regular PhD student who has completed Registration Seminar and is interested in switching over to Executive PhD programme, he/she may be permitted. On completion of all requirements of Executive PhD as per regulations	PhD in <discipline>
NO REENTRY WILL BE ALLOWED IN ANY RESEARCH PROGRAMME AFTER TAKING AN EXIT.	

3. No degree will be awarded by NIT Rourkela to the students of outside institutes even if they have taken admission at any stage after 1st year in NIT Rourkela through proper procedure. They must ensure that they will get degrees from their respective parent institutes. **NIT ROURKELA shall not be responsible for award of degree for such students.**
4. Vacancy of Seats for Readmission of outside students in the 2nd year and onwards:
The total number of students in any academic year i.e after students from outside institutes are admitted and students of NIT Rourkela of previous batches are readmitted in any discipline/specialization must not exceed the sanctioned strength in that discipline/specialization. The vacancy list will be prepared category-wise and discipline/specialization-wise before the starting of every academic year. The NIT

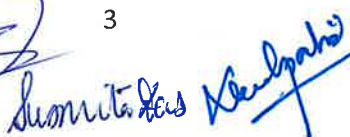
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Prakash *J. Prakash*

Rourkela students will always be preferred for readmission. Outside students will be allowed to take admission at the beginning an academic year (i.e. in autumn semester) only if there is any vacancy of seats created after the readmission of NIT Rourkela students is over. Only NIT Rourkela students will be readmitted in spring semester only upon satisfying the eligibility conditions. **However, under special circumstances, NIT Rourkela students can be readmitted even if there is no vacancy of seats at any point of time.**

5. The change in discipline/specialization is not allowed at any stage after taking admission.
6. Only one entry and one exit will be allowed in any particular academic year. However, one can avail any number of exits and entries during the entire course duration.
7. The academic section will keep track of all its students who have taken exit and **send reminder to all these students before the beginning of every semester to re-enter to continue their academic programme.**
8. A student must take prior approval from Dean(AC) through proper channel before taking an exit at any stage clearly mentioning the reasons and duration of absence. He/she must submit no dues certificate along with his/her application in the prescribe format. Similarly, prior approval must be taken at least one month before taking re-entry.
9. If a student does not like to take the exit, he/she will continue his/her academic programme as per the prevailing academic regulations of NIT Rourkela.
10. If a student takes an exit at any stage along with a certificate issued to him/her as per his/her eligibility, it will be presumed that he has taken the final exit and will not be allowed to re-enter in future to continue his/her study in the same programme.
11. It is mandatory for every student to open an account in the academic bank of credit (ABC). **ABC Id is mandatory at the time of admission.** As and when a semester is completed and result is declared, all the credits earned by a student in that semester will be credited to his/her account in the ABC, which can be transferred/redeemed in future.
12. After taking an exit, if a student has undergone any academic courses outside NIT Rourkela and earned some credits, the redemption of these credits may be considered for waving off some of the courses offered at NIT Rourkela in higher semesters on the recommendation of the concerned Department Academic Committee (DAC).



13. Credit for Experiential Learning: After taking an exit, if a student has undergone a job in any outside organization or his/her own start-up company, his/her on-the-job experiential learning will be given some credits on the basis of some evaluation conducted by the respective DAC depending upon the ranking/reputation of the concerned organization and number of years he/she has served. This credit recognition shall be in line as suggested by National Credit Framework.
14. The students admitted in other institutes and later taken entry in NIT Rourkela at any stage after 1st year will not be allowed to avail the campus training and placement facility provided at NIT Rourkela.
15. Re-entry for students of NIT Rourkela will be permitted at the beginning the semester as per his/her eligibility that means on the day of corresponding semester registration only if he/she will be able to complete the programme within the maximum time duration of the corresponding programme.
16. The students of NIT Rourkela will be waived off tuition fee, Establishment fee and Medical fees during the period of his/her exit from the institute provided his/her exit is permitted by the competent authority. Otherwise he/she has to pay the full semester fees during the entire period of absence from the institute.
17. At the time of entry, the students of outside NIT Rourkela are required to pay the caution money and other related entry fees as per the prevailing institute rules in addition to the corresponding semester fees.

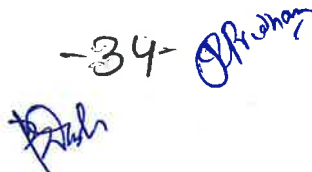
B. Entry/Exit at various Stages

1. **Entry in 1st Year**: Admission in the 1st year of the programme will continue as per the prevailing institute rules. Students admitted in other institutes will not be allowed to take admission in any of the first two semesters of any PG programme.
2. **Exit during 1st Year**: If a student exits before the completion of 1st year, he/she will be allowed to exit but without any certificate.
3. **Exit after 1st Year**: If a student successfully completes a minimum of 40 credits of 1st year course work (without any backlog) and opts for an exit at the end of 1st year, he/she will be allowed to exit with a certificate called 'PG Diploma'. **If a student exits by obtaining a certificate, he/she will not be allowed for re-entry to the Institute in the current program.**
4. **Re-entry during 1st year**: Re-entry is allowed during 1st year only for students who were admitted in NIT Rourkela in the previous years and not for the students who

Sumita Das





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were admitted in other institutes. If he/she takes exit after completion of 1st semester, he/she will be allowed to register in the 2nd semester otherwise in the 1st semester.

5. **Re-entry during 2nd year for NIT Rourkela Students:** If a student of NIT Rourkela has taken exit earlier after completion of 1st year and qualifies the minimum requirement for promotion to 2nd year as per the prevailing academic regulations, he/she will be allowed to re-enter in 2nd year.
6. **Entry in 2nd year for PG students of outside NIT Rourkela:** A student, who has not studied 1st year in NIT Rourkela, is also eligible to take admission in the 2nd year, subject to the following conditions:
- The student must have taken admission in PG programme in any Central/State Govt. Funded Institutes/Universities.
 - Re-entry will be permitted in the same discipline/specialization only or equivalent discipline/specialization to be decided by the concerned Department Academic Committee (DAC) if his/her discipline/specialization is not available in NIT Rourkela.
 - The student must have completed all courses of 1st year of the PG programme with a minimum of 40 credit points (without any backlog) and must have secured a minimum CGPA of 8.0 on a 10-point scale or 80% mark or equivalent.
 - The entry will be based on the rank in the entrance examination to be conducted discipline/specialization-wise centrally by the institute and number of vacant seats.
7. **Exit during 2nd Year:** If a student exits before the successful completion of the 2nd year but after the 1st year, he/she will also be awarded the certificate called 'PG Diploma', provided he/she has secured a minimum of 40 credits of 1st year subjects (without any backlog).
8. **Exit after 2nd Year:** A student will be awarded the MTech/MSc/MA/MBA degree to NIT ROURKELA students only, after the successful completion of 2nd year (without any backlog), if he/she completes a minimum of 80 credits **or as prescribed by department** out of which a minimum of 40 credits earned from subjects studied in NIT Rourkela. The minimum credit requirement for the award of degree may vary across the departments in the range 80-84. Accordingly, the credit points earned by the students per year may vary in the range 40-42.



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9. **Termination:** If a student fails to take re-entry within 4 years of leaving the PG programme, it will be treated as a termination of studentship assuming that he/she is no longer interested in continuing study at NIT Rourkela.
10. **Entry for PhD students of outside NIT Rourkela:** A student, who has taken admission in outside institute may be eligible to do PhD research work in NIT Rourkela subject to the following three conditions. However, no institute fellowship will be given and no degree will be awarded by NIT Rourkela to such students.
- The student must have taken admission in PhD programme in any Central/State Govt. Funded Institutes/Universities.
 - The student must have completed course work and Registration Seminar.
 - Entry will be permitted subject to the consent of a faculty to supervise him/her and on the recommendation by the concerned DRC.
11. A student who is enrolled in BTech programme and is subsequently interested to switch over to one of the existing dual degree programmes available in his/her department, may be allowed to do so after the completion of 6th sem for which the willingness may be asked in the 1st week of April.

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M.Tech.

1st Semester		
S.no	Course	Credit
1	Stream core-I	3
2	Stream core-II	3
3	Stream Elective-I	3
4	Stream/Cluster Elective-I	3
5	Stream/Cluster Elective-II(AI/ML)	3
6	Stream Core Lab-I	2
7	Stream Elective Lab	2
8	Product Development Lab	1
Total		20

2nd Semester		
S.no	Course	Credit
1	Stream core -III	3
2	Stream core -IV	3
3	Stream Elective-II	3
4	Stream/Cluster Elective-III	3
5	Interdisciplinary/Multi-Disciplinary/ONLINE Elective-I	3
6	Stream Core Lab-II	2
7	Advanced Skill Development Lab	2
8	Seminar and Technical Writing	1
Total		20

3rd Semester (PLAN A)		
S.no	Course	Credit
1	Research Project –I (Summer)/ Summer Industrial Research Experience/EPICS *	2
2	Research Project-II	17
3	Special Topics by Industry Experts (Hybrid Mode)	1
Total		20

*To be evaluated at the beginning of semester

4th Semester (PLAN A)		
S.no	Course	Credit
1	Research Project-III	18
2	Comprehensive viva-voce	2
Total		20

3rd Semester (PLAN B)		
S.no	Course	Credit
1	Internship/Start-UP Experience	11
2	Stream/Cluster /Multidisciplinary Elective-II(ONLINE mode)	3
3	Stream/Cluster /Multidisciplinary Elective-III(ONLINE mode)	3
4	Summer Industrial Research Experience/EPICS	2
5	Special Topics by Industry Experts (Hybrid Mode)	1
Total		20

4th Semester (PLAN B)		
S.no	Course	Credit
1	Internship/Start-UP Experience	12
2	Stream/Cluster /Multidisciplinary Elective-IV(ONLINE mode)	3
3	Stream/Cluster /Multidisciplinary Elective-V(ONLINE mode)	3
4	Comprehensive viva-voce	2
Total		20

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3rd Semester (PLAN C)		
Sl.no	Course	Credit
1	Research Project –I (Summer)/ Summer Industrial Research Experience/EPICS *	8
2	Stream/Cluster/Multidisciplinary/ONLINE Elective-II	3
3	Stream/Cluster/Multidisciplinary/ONLINE Elective-III	3
4	Stream/Cluster/Multidisciplinary/ONLINE Elective-IV	3
5	Research Project-II	2
6	Special Topics by Industry Experts (Hybrid Mode)	1
Total		20

4th Semester (PLAN C)		
Sl.no	Course	Credit
1	Research Project-III	9
2	Stream/Cluster/Multidisciplinary/ ONLINE Elective-V	3
3	Stream/Cluster/Multidisciplinary/ ONLINE Elective-VI	3
4	Stream/Cluster/Multidisciplinary/ ONLINE Elective-VII	3
5	Comprehensive viva-voce	2
Total		20

Note:

- 1- Maximum 20% of total credit of the Programme can be earned through ONLINE courses approved by DAC against Elective Courses of respective departments.
- 2- Minimum 1 Scopus Publication including conference proceedings with DOI no. is required for Research Project under Plan-A.








B. Tech. - M.Tech. DUAL Degree Course Structure

1 st Sem	Same as 1 st sem of BTech
2 nd Sem	Same as 2 nd sem of BTech
3 rd Sem	Same as 3 rd sem of BTech
4 th Sem	Same as 4 th sem of BTech
5 th Sem	Same as 5 th sem of BTech
6 th Sem	Same as 6 th sem of BTech

7 th Semester		
S.no	Course	Credit
1	Stream core-I (M.Tech)	3
2	Stream core-II (M.Tech)	3
3	Multidisciplinary Elective - III	3
4	Capstone Project - I	2
5	SIRE / EPICS	2
6	Stream Core Lab-I (MTech)	2
7	Stream / Cluster Laboratory Elective - I	2
8	Stream / Cluster Laboratory Elective - II	2
9	Special Topics by Industry Experts	1
Total		20

8 th Semester		
S.no	Course	Credit
1	Stream core -III (M.Tech)	3
2	Stream core -IV(M.Tech)	3
3	Stream/Cluster Elective-III (BTech)	3
4	Multidisciplinary Elective - IV	3
5	Multidisciplinary Elective - V	3
6	Capstone Project - II	2
7	Seminar and Technical Writing	1
8	Stream Core Lab-II (MTech)	2
Total		20

9 th Semester (PLAN A)		
S.no	Course	Credit
1	Capstone Project – III (Summer) *	2
2	Capstone Project – IV **	9
3	Stream Elective (M Tech level)-VI	3
4	Stream/Cluster Elective (M Tech level)-VII	3
5	Stream/Cluster Elective (M Tech level)-VII (AI/ML)	3
Total		20

10 th Semester (PLAN A)		
S.no	Course	Credit
1	Capstone Project - V	18
2	Comprehensive viva-voce	2
Total		20

* to be evaluated at the beginning of semester

**to be evaluated at the end of semester

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9 th Semester (PLAN B)		
S.no	Course	Credit
1	Internship/Start-UP Experience II	9
2	Internship/Start-UP Experience I (Summer)-VI	2
3	Stream Elective (M Tech level) (online mode)-VI	3
4	Stream/Cluster Elective (M Tech level)(online mode)-VII	3
5	Stream/Cluster Elective (M Tech level) (Online mode)-VIII (AI/ML)	3
Total		20

10 th Semester (PLAN B)		
S.no	Course	Credit
1	Internship/Start-UP Experience III	12
2	Stream/Cluster /Multidisciplinary Elective(ONLINE mode)-IX	3
3	Stream/Cluster /Multidisciplinary Elective(ONLINE mode)-X	3
4	Comprehensive viva-voce	2
Total		20

Note:

- 1- Dual degree students in Final Year can opt for any one, Plan A or Plan B.
- 2- Maximum 20% of total credit of the Programme can be earned through ONLINE courses approved by DAC against Elective Courses of respective departments.



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1) M.Sc. in Applied Geology

#	Subject Code		L-T-P	Credit
1st Semester				
1	ER4111	Geochemistry (Stream core-I)	3-1-0	4
2	ER4113	Structural Geology (Stream core-II)	3-0-0	3
3	ER4115	Palaeontology (Stream core-III)	3-0-0	3
4		Stream/Multidisciplinary Elective - I	3-0-0	3
5	ER4161	Mineralogy Laboratory (Stream Core Lab -I)	0-0-3	2
6	ER4163	Palaeontology Laboratory (Stream Core Lab -II)	0-0-3	2
7	ER4171	Structural Geology Laboratory (Stream Core Lab -III)	0-0-3	2
8	ER4555	Special Topics by Industry Experts	0-0-0	1
				20
2nd Semester				
1	ER4112	Igneous Petrology (Stream core-IV)	3-0-0	3
2	ER4114	Metamorphic Petrology (Stream core-V)	3-0-0	3
3	ER4116	Geology of Ore Deposits (Stream core - VI)	3-0-0	3
4	ER4118	Sedimentology and Stratigraphy (Stream core-VII)	3-1-0	4
6	ER4162	Igneous and Metamorphic Petrology Laboratory (Stream Core Lab -IV)	0-0-3	2
7	ER4164	Ore Microscopy laboratory (Stream Core Lab -V)	0-0-3	2
7	ER4274	Stream Elective Lab - I	0-0-3	2
8	ER4902	Seminar and Technical Writing	0-0-2	1
				20
3rd Semester				
1		Stream / Cluster Elective - I	---	3
2		Stream / Cluster Elective - II	---	3
3		Stream/Multidisciplinary Elective - II	---	3
4		Stream/Multidisciplinary Elective - III	---	3
5	ER4165	Hydrogeology Laboratory (Stream Core Lab -VI)	0-0-3	2
6	ER5993	Research Project - I	0-0-0	6
7	ER5991	Summer Industrial Research Experience	0-0-0	2
				22
4th Semester				
1		Stream / Cluster Elective - III	---	3
2		Stream/Multidisciplinary Elective - IV	---	3
3		Stream/Multidisciplinary Elective - V	---	3
4		Research Project - II	---	9
5	ER5992	Comprehensive Viva Voce	0-0-0	2
				20
Total				82

NOTE

ALL OTHER MSC PROGRAMS HAVE OPTED FOR SAME CURRICULUM STRUCTURE AS FOR 7TH, 8TH, 9TH AND 10TH SEMESTER OF INT MSC. STUDENTS OF THEIR RESPECTIVE BRANCH.

Sumitadas

Heem

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P. Prakash

J. Prasad

K. Subbarao

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2) M.Sc. in Atmospheric Sciences

#	Subject Code		L-T-P	Credit
1st Semester				
1	ER4211	Physics of Atmosphere (Stream core-I)	3-0-0	3
2	ER4213	Dynamics of Atmosphere (Stream core- II)	3-1-0	4
3	ER4215	Physics of Ocean (Stream core- III)	3-0-0	3
4		Stream/Multidisciplinary Elective - I	3-0-0	3
5	ER4261	Atmospheric Instrumentation Laboratory (Stream Core Lab -I)	0-0-3	2
6	ER4263	Programming Laboratory (Stream Core Lab -II)	0-0-3	2
6		Stream/Cluster Elective Lab - I	0-0-3	2
8	ER4555	Special Topics by Industry Experts	0-0-0	1
				20
2nd Semester				
1	ER4212	Satellite Meteorology and Oceanography (Stream Core- IV)	3-0-0	3
2	ER4214	Boundary Layer Meteorology (Stream Core- V)	3-0-0	3
3	ER4216	Dynamics of Ocean (Stream Core -VI)	3-0-0	3
4	ER4220	Weather Analyses and Forecasting (Stream Core-VII)	3-0-0	3
5	ER4262	Climate Diagnostics Laboratory (Stream Core Lab - III)	0-0-3	2
6		Stream/Multidisciplinary Elective Lab - I	0-0-3	2
7		Stream/Cluster Elective Lab - II	0-0-3	2
8	ER4902	Seminar and Technical Writing	0-0-2	1
9	ER4880	Field Work	0-0-0	1
				20
3rd Semester				
1		Stream / Cluster Elective - I	---	3
2		Stream / Cluster Elective - II	---	3
3		Stream/Multidisciplinary Elective - II	---	3
4		Stream/Multidisciplinary Elective - III	---	3
5	ER5263	Numerical Weather Prediction Laboratory (Stream Core Lab - IV)	0-0-3	2
6		Research Project - I	0-0-0	6
7	ER5995	Summer Industrial Research Experience	0-0-0	2
				22
4th Semester				
1		Stream / Cluster Elective - III	---	3
2		Stream/Multidisciplinary Elective - IV	---	3
3		Stream/Multidisciplinary Elective - V	---	3
4		Research Project – II	---	9
5	ER5992	Comprehensive Viva Voce	0-0-0	2
				20
Total				82

Leonilla Das

Meenu

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Shalpa

Pradham

J. Pradham

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42

3. MSc in Physics

1 st sem	Same as 7 th sem of Integrated MSc in Physics
2 nd sem	Same as 8 th sem of Integrated MSc in Physics
3 rd sem	Same as 9 th sem of Integrated MSc in Physics
4 th sem	Same as 10 th sem of Integrated MSc in Physics

4. MSc in Chemistry

1 st sem	Same as 7 th sem of Integrated MSc in Chemistry
2 nd sem	Same as 8 th sem of Integrated MSc in Chemistry
3 rd sem	Same as 9 th sem of Integrated MSc in Chemistry
4 th sem	Same as 10 th sem of Integrated MSc in Chemistry

5. MSc in Mathematics

1 st sem	Same as 7 th sem of Integrated MSc in Mathematics
2 nd sem	Same as 8 th sem of Integrated MSc in Chemistry
3 rd sem	Same as 9 th sem of Integrated MSc in Chemistry
4 th sem	Same as 10 th sem of Integrated MSc in Chemistry

6. MSc in Life Science

1 st sem	Same as 7 th sem of Integrated MSc in Life Science
2 nd sem	Same as 8 th sem of Integrated MSc in Life Science
3 rd sem	Same as 9 th sem of Integrated MSc in Life Science
4 th sem	Same as 10 th sem of Integrated MSc in Life Science

Sumanita Das



Suman

Pranab

J. Prasad

Kumbhakar 



राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

CURRICULA AND SYLLABI

Development Studies (MA - 2yrs)

1st Semester

Subject Code		L-T-P	Credit
HS4401	Stream Core I: Economics for Development Studies	3-0-0	3
HS4201	Stream Core II: Psychological Perspectives of Development	3-0-0	3
HS4303	Stream Core III: Socio-Anthropological Perspectives on Development	3-0-0	3
HS4001	Stream Core IV: Research Methodology in Social Sciences	3-0-0	3
HS4471	Stream Core Lab-I: Quantitative Research Laboratory - I	0-0-3	2
HS4371	Stream Core Lab-II: Qualitative Research Laboratory	0-0-3	2
HS4373	Stream Core Lab-III: Community Engagement Laboratory - I	0-0-3	2
HS4071	Stream Core Lab-IV: Social Science Research Laboratory	0-0-3	2
			20

2nd Semester

Subject Code		L-T-P	Credit
HS4424	Stream Core V: Poverty, Inequality and Human Development	3-0-0	3
HS4412	Stream Core VI: Development Theories and Practices	3-0-0	3
HS4312	Stream Core VII: Ecology and Sustainable Development	3-0-0	3
	Stream/Multi-disciplinary Elective-I	3-0-0	3
HS4472	Stream Core Lab-V: Quantitative Research Laboratory - II	0-0-3	2
HS4374	Stream Core Lab-VI: Community Engagement Laboratory - II	0-0-3	2
HS4474	Stream Core Lab-VII: Computational Development Studies (AI/ML) Laboratory	0-0-3	2
HS4992	Special Topics by Industry Experts (Hybrid Mode)		1
HS4882	Seminar and Technical Writing - I		1
			20

3rd Semester

Subject Code		L-T-P	Credit
	Stream Elective-I	3-0-0	3
	Stream Elective-II	3-0-0	3
	Stream Elective-III	3-0-0	3
	Stream/Multidisciplinary Elective-II	3-0-0	3
HS5993	Research Project - I	0-0-0	6
HS5995	Summer Industrial/Research Experience		2
			20

4th Semester

Subject Code		L-T-P	Credit
	Stream Elective-IV	3-0-0	3
	Stream Elective-V	3-0-0	3
	Stream Elective-VI	3-0-0	3
HS5992	Comprehensive Viva Voce	0-0-0	2
HS5994	Research Project - II		9
			20

Note: Maximum 20% of total credit of the Programme can be earned through ONLINE courses approved by DAC against Elective Courses of respective departments.

Sumitadas

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Kalyani

Pradyuman

J. Pradyuman

[Signature]

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA
SCHOOL OF MANAGEMENT

COURSE STRUCTURE 2025 – 26

Programme: Master of Business Administration (MBA)

Semester - I			
Subject Code	Subject Name	L-T-P	Credit
SM5101	Financial and Cost Accounting (Stream Core I)	3-0-0	3
SM5201	Marketing Management (Stream Core II)	3-0-0	3
SM5301	Organizational Behaviour and Structure (Stream Core III)	3-0-0	3
SM5501	Management Information Systems (Stream Core IV)	3-0-0	3
SM5601	Managerial Economics (Stream Core V)	3-0-0	3
SM5611	Business Research Methodology (Stream Core VI)	3-0-0	3
SM5572	Business Analytics Laboratory (Stream Core Lab - I)	0-0-3	2
Total Credits			20
Semester - II			
Subject Code	Subject Name	L-T-P	Credit
SM5102	Financial Management (Stream Core VII)	3-0-0	3
SM5302	Human Resource Management (Stream Core VIII)	3-0-0	3

- 45 -








SM5402	Production and Operations Management (Stream Core IX)	3-0-0	3
SM5602	Quantitative Methods in Management (Stream Core X)	3-0-0	3
SM5612	Business Environment (Stream Core XI)	3-0-0	3
SM5622	Entrepreneurship and Start-up Ecosystem (Stream Core XII)	3-0-0	3
SM5372	Personality Grooming Lab (Stream Core Lab-II)	0-0-3	2
SM6881	Seminar and Technical Writing	0-0-0	1
Total Credits			21
Semester - III			
Subject Code	Subject Name	L-T-P	Credit
Core Courses			
SM6632	Strategic Management (Stream Core XIII)	3-0-0	3
SM6642	Business Ethics and Corporate Governance(Stream Core XIV)	3-0-0	3
Major and Minor Electives			
Major Specializations (Marketing/Human Resource/Finance/Operations/ Business Analytics)	Stream Major Elective – I (AI/ML)	3-0-0	3
	Stream Major Elective - II	3-0-0	3
	Stream Major Elective - III	3-0-0	3
Minor Specializations (Marketing/Human Resource/Finance/Operations/ Business Analytics)	Stream Minor Elective - I	3-0-0	3
SM6991	SIRE/Start-up experience/ Internship	0-0-0	2








		Special Topics by Industry Experts		0-0-0	1
Total Credits					21
Semester - IV					
Subject Code	Subject Name			L-T-P	Credit
Major and Minor Electives					
Major (Marketing/Human Resource/Finance/Operations/ Business Analytics)	Stream Major Elective – IV			3-0-0	3
	Stream Major Elective - V			3-0-0	3
	Stream Major Elective - VI			3-0-0	3
Minor (Marketing/Human Resource/Finance/Operations/ Business Analytics)	Stream Minor Elective - II			3-0-0	3
	Stream Minor Elective – III			3-0-0	3
	Stream Minor Elective - IV			3-0-0	3
SM6992	Research Project / Venture Creation			0-0-0	4
Total Credits					22

Semester wise Distribution of Courses						
Semester	Credits for Theory Courses	Credits for Lab Courses	Credits for SIRE / Start-up Experience / Internship	Credits for Research Project	Talk By Industry Experts / Seminar and Technical Writing	Total Credits (Semester wise)
Semester - I	18	02	-	-	-	20
Semester - II	18	02	-	-	01	21
Semester - III	18	-	02		01	21
Semester - IV	18	-	-	04	-	24
Total Credits for MBA Programme						84

Sumit Das

Munir

Shahabuddin

Dr. Prasenjit

S. Prasad

Pranav

Annexure - A5

To

Dean Academic

NIT Rourkela

Date: 11-02-2022

Subject: Approval for Ph.D. student admission criteria.



Respected Sir,

I am requesting you to be kind and approve below criteria which also have been there for other departments for PhD admission. We are requesting you to consider this from Academic session 2025-26 onwards as we are not getting a single PhD scholar from last three years.

Present: B. Des. / BE / B. Tech. with M. Des. / ME / M. Tech. in any discipline.

Proposed: B. Des. (with CEED) / BE or BTech (with GATE) / M. Des./ ME / M. Tech./M. Arc./ in any discipline including Ocean Engineering/ Marine Engineering/Naval Engineering/Naval Architecture etc. MCA / M. Sc. in any discipline.

The said criteria will help the department in getting the good scholars; hence, I am requesting you for your kind approval for which I will be obliged.

Dena
11/02/2025

With Regards,

Dibya Prakash Jena

HOD, Department of Industrial Design

NIT Rourkela

Sourish
11/02/23

S
11/02/25

upadhyay
11/02/2025

upadhyay
11/2

DAC/DRC Members (ID)

HOD-ID

Dena
11/02/2025

DRC has recommended change of qualifying degree for admission to PhD programme of "ID" dept. The same is put up for your kind perusal. - 48 -

JRB
18/02/2025

P.T.O.

AR(AC)

may be allowed to be placed in Senate

Allen
21-02-25

Mr. Dean (H)

Please put up in Senate

Proctor
22-2-25

Dt: 04/04/2025

Department of Mechanical Engineering, NIT Rourkela

Minutes of the DRC Meeting held at 12.00 noon on 24-03-2025 in HOD's room

Agenda: Proposal for changes in eligibility criteria for admission to PhD and Executive PhD programmes in ME Dept.

The members present in the meeting were Prof. SK Patel, Prof. S. Murugan, Prof. RK Behera, Prof. S. Datta and Prof. Alok Satapathy. Prof. CK Biswas and Prof. J. Srinivas were absent. As the proposal was received from Prof. SK Panda, he was invited to the meeting and he participated in the discussion.

In reference to the proposal given by Prof. Subrata K. Panda, a DRC meeting was held in the office of HOD, ME at 12 noon on dated 24th March 2025, 12 PM. The members discussed the matter in different aspects of the proposal, considering the inter/ intra/ trans/ multidisciplinary aspects of today's research trend and also in line with NEP-2020 guidelines. Accordingly, DRC resolved to revise the eligibility criteria for admission to PhD and Executive PhD programmes in ME Dept to meet the current research needs and improve departmental visibility without hampering departmental interests as stated below:

Existing Eligibility Criteria for admission to PhD (Regular and Executive)

BTech (with GATE)/MTech in Mechanical / Machine Design / Thermal /Cryogenic / Mechatronics / Robotics / Mechanical Vibrations / Automobile / Production / Manufacturing / Industrial Engineering / Industrial System Engineering/ Aerospace/ Aeronautical/ Composites / Tribology / Fluid Flow and Heat Transfer/Energy Technology/ Energy Engineering.

Revised Eligibility Criteria for PhD (Regular and Executive)

BTech/BE/MSc (with GATE)/MTech/ME in in all branches.


 Prof. C.K. Biswas


 Prof. Alok Satapathy


 Prof. Murugan


 Prof. R.K. Behera


 Prof. J Srinivas


 Prof. S. Datta


 Prof. S. K. Patel

DRC Chairman & HOD (ME)

To Dean(AC) for the necessary approval of Senate/Senate Chairman

The recommendation of DRC for change in eligibility criteria for Mechanical dept applicants interested for PhD is put up for kind approval

pleasure
of 24-25

Asso-Dean (Ac-Res)

 criteria for adm. to PhD
 Dean-AC

As per DRC recommendation change in eligibility criteria for adm. to PhD program is put up for your kind approval. Pl. put in the next senate agenda - 50-Office

09/04/25
08.4.25

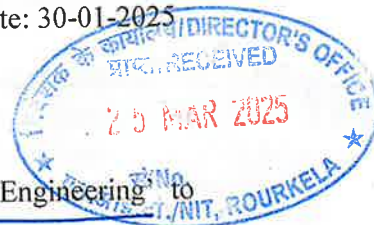
No. NITR/ME/2025/M/0279

Annexure - A7 05/02/2025

National Institute of Technology, Rourkela
Department of Mechanical Engineering

No. NITR/ME/2025/M/0279

Date: 30-01-2025

To
Dean(AC)Sub: Renaming of MTech specialization 'Thermal Science and Energy Engineering' to
"Thermal Engineering"

In view of the poor enrolment in the MTech Programme in the specialization "Thermal Science and Energy Engineering", it was decided in the department faculty meeting held at 10:00 am on 06.11.2024 to change to MTech in "Thermal Engineering" because of the following reasons:

1. Thermal Engineering and Energy Engineering are two vast areas. It is difficult to combine both into one M.Tech program of limited duration.
2. As a result, we are doing justice neither to the Thermal Engg nor the Energy sciences. Due to the restrictions in the number of courses in the course structure of the M.Tech program (5 theory and 1 lab; total credit limits of 17), it is not possible to accommodate all the advanced subjects of the Thermal Engineering domain and Energy Engineering domain within a single M.Tech program.
3. This difficulty is clearly visible in the current curriculum of the 'Thermal Sciences and Energy Engineering' specialization of the ME department. The subjects offered in Energy Engineering are not advanced subjects but merely B.Tech level subjects.
4. In the Thermal Engineering specialization, we teach many advanced subjects that are essential and crucial to understanding the fundamentals of fluid flow and heat transfer occurring anywhere in the universe. These subjects from thermal engineering are essential and vital to grasping the fundamentals of fluid flow and heat transfer happening in various other specializations (including Energy Engineering). Almost all real-life problems in society involve fluid flow and heat transfer activities. Then, how can one think of removing those fundamental subjects of thermal engineering from the Thermal Engineering specialization only to club another vast specialization with the existing vast specialization and make it attractive in an unscientific way?
Earlier, it was done without arranging any meeting with the concerned faculty members in an unjust way. That was a mistake by the department. After understanding the mistake, we should not continue with the mistake; rather, we should rectify it at the earliest opportunity.
5. Energy engineering is multidisciplinary in nature; it may be offered separately with the assistance of faculty members from disciplines like Mechanical Engineering, Chemical Engineering, Electrical Engineering, Civil Engineering, etc.
6. However, if we understand, explore and design the curriculum within the ambit of Mechanical Engineering, we must use the expertise of faculties working in Advanced

(PTO)

~~DIRECTOR~~

Approved

25.03.25

Senate Agenda
Nov 2023

7. Therefore, it has been agreed strongly by almost all the faculty members (all the present faculty members except two members) that Energy Engg should be a separate interdisciplinary M. Tech specialization and should not be clubbed with the Thermal Engg specialization.
8. Further, it has been noticed that changing the Thermal Engg's basic structure has not led to a significant increase in GATE-qualified M.Tech administrations for the year 2024-25. However, the spot round admission is better this year, mostly due to the better advertisement and visibility, and it has no relation with the name change of the specializations.

1. The decision to re-change the name to its original name just after six months without getting clear consequence is not advisable.
2. Department float its programs as per present societal need and make changes accordingly dynamically. It is felt that by returning to old one violate this very principles.
3. It is also opined that changes are made as per requirements then facilities and expertise are created in due course of time, not the reverse.

~~Dean-Ae~~

30/1/25

~~Assoc. Dean (Ph & R)~~
Pl. let me know your views.
05/02/24

may be put up in senate for
discussion. 19.3.25

30/1/25

30/01/2025

Not agreed
SMD

1/1/025



Enak

[Handwritten signature]

30/1/25

~~Shuck~~ 30/01/25

Original
28/1/25
+

RK B

2/2 ✓

30.1.8

30/11/25

30/11/25

Sumner
31/1/25

5/2/2025

Ok

2018/2019

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Altu
3/1/25

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3/1/25

Shay 04/02/25

31/01/2025

Abt. 1

P. S. Dargy

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31/01/2025

Khaly

Prof. S. Anbarasu

34
31-01

7/5/25 30.1.25

30.1.2015

M. m. h.
31.1.25

12/1/2017

is on leave.
K. Mohan

VP

NITR/PH/2025/M/0326

FTS:-250305-8646



Annexure – A8

Syllabus

for

Minor Degree (UG)

in

Quantum Technology



Department of Physics and Astronomy

Department of Computer Science and Engineering

National Institute of Technology Rourkela

Chairman, CDC
for necessary recommendation
Phan. Dip2

Rajen Dm
12/3/25

✓ AR-AC (Ph & R)
Approval of Director is
attached to place it in the
next session. As such
pl. include in the next
session agenda.
09/04/25

Course/Credit Details for UG Minor Degree: Quantum Technology

Sl. No.	Semester (UG)	Course	Type	(L-T-P)	Credits	Dept.
1	Third	PH2011:Foundations of Quantum Technology	Theory	3-0-0	3	PH
2	Fourth	PH2012:Quantum Materials and Devices	Theory	3-0-0	3	PH
3	Fifth	CS3092: Introduction to Quantum Computation	Theory	3-0-0	3	CS
4	Fifth	CS 3097: Quantum Computing Programming Lab.	Practical	0-0-3	2	CS
5	Sixth	CS3092:Quantum Machine Learning	Theory	3-0-0	3	CS
Total Credits					14	PH & CS


HOD-PH


HOD-CS

Chairman-CDC

Asso. Dean (AC, UG)

Dean (AC)

Director

Dean (AC)

CDC reviewed the course details included under the proposed UG Minor degree: Quantum Technology- 4 Theory courses and 1 Lab course to be offered are found aligned with the minor degree programme.

However, CDC couldnot take a conclusive decision regarding the parent department which will be mentioned in the ^{degree} certificate. At present, in the NEP implementation

cc A student can register for any course offered by a particular department other than parent department for earning a Minor degree.

Hence an administrative approval is needed for offering such interdisciplinary course and deciding the department which will be the parent department for coordination.

For necessary action pl.

Sumita Das.
20.03.2025.

Dip2 Rajan Dm
20/3/25

B. Kumar
20/3/2025

~~Plz~~ The above is recommended to place in the next senate agenda, All Physics Dept. may be the parent dept. for the above minor course.

DIRECTOR
Approved by
9/4/25

09/04/25

Course Details

Subject {L-T-P / C}: PH2011: Foundations of Quantum Technologies {3-0-0 / 3}

Subject Nature: Theory

Faculty: Dr. Shraddha Sharma

Syllabus**Module 1 (6 Lectures)**

Introduction to quantum mechanics, wave-particle duality, double-slit experiment, photoelectric effect, linear algebra: vectors, matrices, inner products, Hermitian operators, state vectors, superposition, and Dirac notation, postulates of quantum mechanics: state space, observables, measurement, and time evolution of quantum states.

Module 2 (7 Lectures)

Classical vs. quantum particle in a box, quantization of energy levels, potential wells: finite, and step potentials, classical vs. quantum harmonic oscillator, zero-point energy, orbital angular momentum, spin angular momentum, bosons and fermions.

Module 3 (8 Lectures)

Basics of statistical mechanics, microstates and macrostates, ensembles, postulate of equal a priori probabilities, Boltzmann factor, partition function, example two-Level system, thermal equilibrium and Gibbs principle, ideal gas: partition function and thermodynamic quantities, Fermi-Dirac and Bose-Einstein distributions, indistinguishability of particles, Pauli exclusion principle, Fermi-Dirac: Electron gas in metals, Bose-Einstein statistics: blackbody radiation.

Module 4 (8 Lectures)

Classical vs. quantum Information, Born rule, no-cloning theorem, single qubit gates: Pauli-X, Pauli-Y, Pauli-Z, Hadamard gate, CNOT gate, SWAP gate, entanglement generation using CNOT, quantum circuits, universality of quantum gates, quantum entanglement and uses in quantum algorithms, quantum speed-up, decoherence, noise, and errors, basics of quantum error correction, threshold theorem and error correction overhead, brief introduction to entanglement entropy and mutual information.

Module 5 (7 Lectures)

Introduction to Turing machine, computational complexity, complexity classes, P vs. NP problem, advanced computational complexity: NP-completeness, PSPACE, EXP, quantum

Turing machine, components of a quantum Turing machine, quantum complexity classes: BQP, QMA, quantum vs. classical classes, quantum supremacy, post quantum cryptography.

Course Objective:

1. Provide students with foundational knowledge of quantum mechanics, linear algebra, and quantum information science as tools for better understanding of quantum technology's basics.
2. Introduce the fundamentals of quantum computation and the essential differences between classical and quantum systems.
3. To impart an understanding of quantum information theory basics.
4. Provide understanding of real-world quantum computing technologies.

Course Outcome:

1. The students will gain an overall understanding on the fundamental principles of quantum mechanics and their application in quantum computation.
2. The students will be able to appreciate the significance of quantum correlations in comparison of classical correlations useful for quantum speed-ups.
3. The students will be able to demonstrate knowledge of quantum information protocols, including quantum key distribution.
4. The students will be able to identify and discuss different complexities of quantum or classical problems.

Essential Reading:

1. Quantum Mechanics: Concepts and Applications, Nouredine Zettili, Wiley, (2009).
2. Statistical Mechanics, R. K. Pathria, Butterworth-Heinemann, (2016).
3. Quantum Computation and Quantum Information, Nielsen, M. A., & Chuang, I. L., Cambridge University Press, (2010).

Supplemental Reading:

1. Introduction to Quantum Mechanics (3rd edition), David J. Griffiths, Cambridge University Press (2024).
2. Principles of Quantum Mechanics (2nd edition), R. Shankar, Springer (1994).
3. Modern Quantum Mechanics (revised edition), J. J. Sakurai, Addison-Wesley publication company, (1994).
4. Statistical Physics: Volume 5 (3rd edition), L. D. Landau, E. M. Lifshitz, Elsevier, (2013).
5. Dancing with Qubits: How Quantum Computing Works and how it Can Change the World, Robert S. Sutor, Packt Publishing, (2019).

Prerequisite:

Basic knowledge on modern physics and linear algebra

Course Details

Subject {L-T-P / C}: PH2012: Quantum Materials and Devices {3-0-0 / 3}

Subject Nature: Theory

Faculty: Dr. Nilay Maji

Syllabus

Module 1 (7 hours)

Introduction to Quantum Mechanics, Schrödinger equation, Wave packet, Normalization, Uncertainty principle, Infinite square well, Particle in a box, Free particle, Barrier potential, Quantum tunneling

Module 2 (7 hours)

Basics of Solid-State Physics, Crystal structure and Bravais lattices, Reciprocal lattice and Brillouin zones, Energy bands in solids: Free electron model and nearly free electron model, Bloch's theorem and origin of bandgap, Concept of effective mass and holes

Module 3 (6 hours)

Concept of low-dimensional systems: Quantum wells (2D), wires (1D), and dots (0D), Density of states in 0D, 1D, and 2D systems, Quantum Confinement in Low Dimensions, Graphene and Carbon Nanostructures, Band structure and properties of graphene, Introduction to carbon nanotubes and their properties, Applications of graphene and carbon nanotubes

Module 4 (7 hours)

Basic Quantum Materials, 2D Materials Beyond Graphene and their bandgap properties, Introduction to magnetic quantum materials: Ferromagnetism, antiferromagnetism, and paramagnetism, Superconducting Materials, High-temperature superconductors and their applications, Fabrication and Characterization of Quantum Materials

Module 5 (9 hours)

Basic Quantum Devices, Quantum Dot based Single-Electron Devices, Single-electron transistors (SETs), High-electron-mobility transistors, Quantum Wells based Optoelectronic Devices, Graphene based transistors, Spintronic Devices, Giant magnetoresistance (GMR) and tunneling magnetoresistance (TMR) devices, Magnetic sensors and memory (MRAM)

Course Objectives

To impart knowledge on

1. Introduction of the fundamental concepts of quantum mechanics and solid-state physics relevant to quantum materials.
2. Providing a basic understanding of key quantum materials, including low-dimensional systems like quantum wells, graphene, and nanostructures.
3. Explaining the working principles of elementary quantum devices and their practical applications.
4. Developing problem-solving skills and basic experimental knowledge required for studying quantum systems.
5. Encouraging students to think critically about how quantum materials and devices impact modern technologies.

Course Outcomes

Upon successful completion of the course, students will be able to:

- CO1: Explain key quantum phenomena in materials, such as quantum confinement, Dirac fermions, and topological states.
- CO2: Analyze the properties of low-dimensional materials and predict their behavior in devices.
- CO3: Demonstrate understanding of quantum device architectures, including quantum dots, single-electron transistors, and spintronic devices.
- CO4: Demonstrate the ability to apply quantum principles to solve real-world problems in nanotechnology and materials science.

Essential Reading

1. Semiconductor Physics and Devices, D. A. Neamen, Tata McGraw-Hill (2002)
2. Nanotechnology for Electronic Applications. N. Mubarak, S. Gopi, P. Balakrishnan. Springer (2022)
3. Introduction to Spintronics, S. Bandyopadhyay, M. Cahay, CRC Press (2008)

Supplementary Reading

1. Introduction to Quantum Mechanics, D. J. Griffiths, 3rd Edition, Cambridge university press (2022)
2. Synthesis and Applications of Nanomaterials and Nanocomposites, I. Uddin, I. Ahmad, Springer Verlag (2024)
3. Physics of Optoelectronics, M. A. Parker, Taylor & Francis, CRC Press (2005)

Prerequisite

Basic knowledge on Modern Physics and Electronics

Course Details

Subject	<u>Introduction to Quantum Computation</u>
Course Code	<u>CS3091</u>
L-T-P / Credits	3-0-0 / 3
Subject Nature	Theory
Course Coordinator	<u>Dr. Shyamapada Mukherjee</u>

Prerequisites:

Linear Algebra (Matrices, Eigenvalues), Probability & Statistics, Calculus, Python Programming, Linear Algebra (Matrices, Eigenvalues), Probability & Statistics, Calculus, Classical Algorithms, Complexity Theory

Course Objectives:

No.	Objective
1	Introduce fundamental concepts of quantum computing.
2	Explain the principles of quantum mechanics relevant to computation.
3	Develop an understanding of quantum circuits and algorithms.
4	Explore applications of quantum computing in cryptography and optimization.

Course Outcomes:

No.	Outcome
1	Understand the fundamental postulates of quantum mechanics.
2	Analyze and design quantum circuits using quantum gates.
3	Apply quantum algorithms like Deutsch-Jozsa and Grover's search.
4	Explore quantum error correction techniques.
5	Understand the fundamental postulates of quantum mechanics.

Course Syllabus:

Module No.	Module Name	Lecture Topics	No. of Lectures
1	Linear Algebra and Classical vs Quantum Computing	Vector spaces, Matrices, Inner products, Tensor products, Dirac notation, Classical vs Quantum information processing	6
2	Quantum Fundamentals	Wave-particle duality, Superposition, Interference, Coherence, Decoherence, Entanglement, Bell States, Quantum Postulates	6
3	Quantum Gates and Circuits	Reversible gates (Toffoli, Fredkin), Qubit representation, Multi-qubit systems, Quantum gates (Hadamard, Pauli, CNOT, SWAP, Phase gates), Quantum circuits, No-Cloning theorem, Bloch Sphere	8
4	Quantum Algorithms and Protocols	Deutsch-Jozsa Algorithm, Grover's Search Algorithm, Quantum Fourier Transform (QFT), Shor's Algorithm, Quantum Key Distribution (BB84), Quantum Teleportation	8

5	Quantum Error Correction and Applications	Quantum error correction codes (Shor Code, Steane Code, Surface Codes), Fault-tolerant quantum computation, Quantum supremacy, Applications in cryptography, optimization.	8
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Essential Reading

No.	Book Title	Author(s)	Publisher
1	Quantum Computation and Quantum Information	Nielsen, M. A., & Chuang, I. L.	Cambridge University Press
2	Quantum Computer Science: An Introduction	Mermin, N. D	Cambridge University Press

Supplementary Reading Resources:

No.	Resource Title	Author/Source
1	Quantum Computing: A Gentle Introduction	Quantum Computing: A Gentle Introduction. MIT Press
2	Quantum Mechanics and Quantum Computation	John Preskill, Lecture Notes

Course Details

Subject	Basic Quantum Computing Programming
Course Code	CS2097
L-T-P / Credits	0-0-3 / 2
Subject Nature	Practical
Course Coordinator	<u>Dr. Shyamapada Mukherjee</u>

Prerequisites:

Linear Algebra (Matrices, Eigenvalues), Probability & Statistics, Calculus, Python Programming, Basic Understanding of Qubits and Quantum Mechanics

Course Objectives:

No.	Objective
1	Introduce students to quantum computing concepts through practical implementation.
2	Provide hands-on experience with quantum programming using Qiskit.
3	Implement fundamental quantum gates and circuits.
4	Explore basic quantum algorithms and their applications.

Course Outcomes:

No.	Outcome
1	Demonstrate proficiency in using Qiskit for quantum programming.
2	Implement and simulate quantum circuits with fundamental gates.
3	Analyze quantum measurement outcomes and entanglement properties.
4	Implement basic quantum algorithms like Deutsch-Jozsa and Grover's search.

Course Syllabus:

Module	Topic	Sessions	Experiments
1	Introduction to Quantum Programming	3	Installation and setup of Qiskit, Understanding Qubits and Bloch Sphere representation, Implementing Basic Quantum Gates (Hadamard, Pauli, CNOT, Toffoli, etc.)
2	Quantum Circuits and Measurement	3	Building and simulating quantum circuits, Quantum Measurement and State Collapse, Bell States and Quantum Entanglement Experiments
3	Basic Quantum Algorithms	4	Implementing the Deutsch-Jozsa Algorithm, Grover's Search Algorithm and its applications, Quantum Fourier Transform (QFT), Simple demonstration of Shor's Algorithm
4	Quantum Computing Applications	4	Implementing Quantum Key Distribution (BB84 Protocol), Quantum Random Number Generation, Quantum Teleportation Experiment, Superdense Coding Implementation

Essential Reading

No.	Book Title	Author(s)	Publisher
1	Quantum Computation and Quantum Information	Nielsen, M. A., & Chuang, I. L.	Cambridge University Press
2	Qiskit Textbook: Learn Quantum Computing using Qiskit	IBM Research	Online Resource

Supplementary Reading Resources:

No.	Resource Title	Author/Source
1	Qiskit Tutorials	https://qiskit.org/learn/
2	Quantum Computing in the NISQ era and beyond	Preskill, J. (2018), Quantum, 2, 79

Course Details

Subject	Quantum Machine Learning
Course Code	CS3092
L-T-P / Credits	3-0-0 / 3
Subject Nature	Theory
Course Coordinator	<u>Dr. Shyamapada Mukherjee</u>

Prerequisites:

Linear Algebra (Matrices, Eigenvalues), Probability & Statistics, Calculus, Python Programming, Supervised and Unsupervised Learning, Neural Networks

Course Objectives:

No.	Objective
1	Understand the fundamental principles of quantum computing and its advantages over classical computing.
2	Explore the theoretical and practical aspects of quantum machine learning algorithms.
3	Develop the ability to implement quantum neural networks and variational quantum circuits.
4	Apply quantum techniques to real-world problems in image and signal processing.

Course Outcomes:

No.	Outcome
1	Demonstrate a solid understanding of quantum mechanics and quantum computing principles.
2	Implement quantum machine learning algorithms using quantum programming frameworks such as Qiskit and PennyLane.
3	Apply quantum feature extraction and classification techniques to complex datasets.
4	Utilize quantum computing techniques for image and signal processing tasks.
5	Develop an understanding of the limitations and potential future advancements in quantum AI.

Course Syllabus:

Module No.	Module Name	Lecture Topics	No. of Lectures
1	Introduction to Quantum Computing	Classical vs. Quantum Computing, Qubits, Superposition, Entanglement, Quantum Gates, Quantum Measurement, Basic Quantum Algorithms	6
2	Fundamentals of Machine Learning	Supervised & Unsupervised Learning, Neural Networks, Optimization, Bias-Variance Tradeoff, Model Generalization	6
3	Quantum Machine Learning	Quantum Data Encoding, Variational Quantum Circuits (VQCs), Quantum Kernel Methods, Quantum Neural Networks, Quantum GANs	8
4	Quantum Image and Signal Processing	Quantum Image Representation, Quantum Fourier Transform, Quantum Edge Detection, Quantum Image Compression	8

5	Applications and Future Trends in Quantum Computing	Quantum Reinforcement Learning, Quantum Optimization, AI in Finance & Cryptography, Challenges & Future Research Directions	8
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Essential Reading

No.	Book Title	Author(s)	Publisher
1	<i>Quantum Computation and Quantum Information</i>	Nielsen, M. A., & Chuang, I. L.	Cambridge University Press
2	<i>Supervised Learning with Quantum Computers</i>	Schuld, M., & Petruccione, F.	Springer

Supplementary Reading Resources:

No.	Resource Title	Author/Source
1	<i>Quantum Machine Learning</i>	Biamonte, J., et al., Nature, 549(7671), 195-202
2	<i>Quantum Machine Learning: A Classical Perspective</i>	Ciliberto, C., et al., Proc. Royal Society A, 474(2209)



FTS ID: 250318 - 0424

125th Senate - 02

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Annexure - A9

NITR/DN/2025/M/0022

Date: 18.03.2025



Registrar & Secretary, Senate

Sub: Committee report against office order no. NITR/ES/2024/M/359, 22/11/2024

Please find the attachment for the report of the committee as per the subject reference.

18/3/25

Prof. A. Basu

Encl: As mentioned above

Sir, the committee report is placed for your kind perusal.

*O.S. (Ac-PhD)
Senate agenda
24-03-25*

*Prof. S. Chakraverty,
Dean-Ac*

*Amj
19/3/2025*

*DIRECTOR
Approved
20/3/25*

Recommended for kind approval to place in next senate for discussion/deliberation of the report.

20/03/25

Committee Report

(against office order no. NITR/ES/2024/M/359, 22/11/2024)

1. Introduction

The institute has formed a committee to look into the feasibility to consider signing MoUs with the nearby State Government Universities or institutes for quality students for admission to PhD.

2. Background

Currently, all universities and institutions that are advertising mainly for PhD admission in engineering/technology are not obtaining sufficient students/quality students to fill up the seats. These include institutions/universities of higher ranking also. In the same way, NIT Rourkela also strives to get quality students for PhD admission in sufficient numbers to fill up the seats. To cope with the national phenomenon, different CFTIs have initiated different schemes to attract more students to pursue PhD full-time PhD with scholarship. Some of these schemes can also be adopted by NIT Rourkela. Some are described below:

- (i) Signing MoU with good institutes so that their students can join directly for PhD after their undergraduate studies with specific CGPA. In some MoUs, there are provisions for the undergraduate students to study the last semester/year in the admitting institute (degree certificates would be from the undergrad institute only) before possibly joining the PhD to get accustomed to the culture or to get examined by the admitting institute during that stay for his/her eligibility in PhD.
- (ii) Allowing students from any CFTI (admitted through JEE main) with a CGPA of 8.0 (on a 10-point scale) or above with B.E./B. Tech/Integrated M. Tech/Integrated M.Sc degree to join their PhD program. Many IITs and NITs have already adopted this practice.
- (iii) Allowing students from any institute ranked within the top 100 in the overall NIRF rankings, with a CGPA of 8.0 or above (on a 10-point scale) with B.E./B. Tech/Integrated M.Tech/Integrated M.Sc. degree to join the Ph.D. program. Some IITs have adopted this.

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Current PhD admission advertisements/guidelines of some IITs are attached to this document.

3. Committee Suggestions

The committee has met several times, studied different aspects and deliberated the following:

- A. Given the national character of NIT Rourkela, the committee opines that limiting MoUs to nearby State Government Universities only would be partial. Therefore, Clause 2(i) has been struck out. However, the original agenda of the committee was this one.
- B. The committee recommends 2(ii) in toto. Moreover, 2(iii) may also be implemented, However, a stringent written admission test should be introduced to ensure the quality of selected candidates. **And**, the quality of comprehensive examination/training should be maintained.
- C. For candidates admitted under the provisions of Section 3B, different scholarship scales may be considered, as the admission criteria do not require GATE.

Encl: As mentioned above

Signatures of the committee members:

U2
(A-Bank)
17/3/2025

Sangita
17/3/2025

17.03.25

17/3/25

17/3/25

17/3/25

17/3/25

17/3/25

17/3/25

IIT BOMBAY

A.5) ELIGIBILITY CRITERION FOR PH.D. ADMISSION

A.5.1) General eligibility criterion for Admission in all academic units : Departments, Centres, Schools and Interdisciplinary Groups:

Qualifying Degree:

- 1a. Master's or equivalent degree in Engineering/Technology
 - 1b. M.B.A (with B.Tech./ B.E. or equivalent an degree)
 - 2a. Bachelor's degree in Engineering/Technology/Medicine (4 year)
 - 2b. Bachelor degree in Science (BS) (4 year degree)
 3. Master's or equivalent degree in science
 4. Master's or equivalent degree in Arts/Commerce (or allied subjects)
- For qualifying degree listed under (2), (3) & (4), candidates must also fulfil ONE of the following additional requirements:
- a) a valid GATE/JEST (for Physics) score
 - b) Selected through National Eligibility Test – UGC NET including lectureship (Assistant Professorship)
 - c) Selected through a National level examination conducted by MoE or its agencies / Institutions such as UGC/ IIT/ IISc./ IISER/ IIIT etc.
 - (d) Selected provisionally for the DST-INSPIRE Fellowship (provisional award letter to be produced)
 - e) Minimum of TWO years of professional experience (acquired after obtaining the qualifying degree and completed before the starting of the semester in which admission is sought)

Marks / CGPA / CPI requirement in Qualifying Degrees (listed above):

For GN/EWS/OBC (NC) category

- (a) a minimum of 60% marks in aggregate, OR
- (b) a First Class as specified by the University, OR
- (c) a minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 6.0 on the scale of 0-10, OR
- (d) an equivalent to 6.0 on other corresponding proportional requirements when the scales are other than 0-10.
- (e) For master's or equivalent degree in Arts or equivalent degree in Humanities and Social Sciences subjects, a minimum of 55% marks will be considered for admission to the Ph.D. programmes offered ONLY by Department of Humanities & Social Sciences.

For SC/ST/PwD category

- (f) a minimum of 55% marks in aggregate, OR
- (g) a First Class as specified by the University, OR
- (h) a minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 5.5 on the scale of 0-10, OR
- (i) an equivalent to 5.5 on other corresponding proportional requirements when the scales are other than 0-10.
- (j) For master's or equivalent degree in Arts or equivalent degree in Humanities and Social Sciences subjects, a minimum of 55% marks will be considered for admission to the Ph.D. programmes offered ONLY by Department of Humanities & Social Sciences

A.5.2) All Bachelor's degree undergraduate course leading to a Bachelor's, Integrated Master's or Bachelor-Master Dual Degree in Engineering, Sciences or Architecture offered by IITs (admitted through JEE) having a CGPA/CPI score of 8.00 (on 10 scale) and above from an Indian Institute of Technology or any of the CFTIs is exempted from the requirement of a valid GATE score for the consideration of General Eligibility Requirement for admission.

In addition to general eligibility criterion, the applicants must also satisfy the eligibility criteria specified for the respective Departments / Centres / Schools / Interdisciplinary Groups.

A.6.1) Teaching Assistantship (TA) [Financial support as per MoE norm]

A candidate, selected for the Ph.D. Programme, at IIT Bombay will be eligible for the financial support under the TA category subject to the fulfilment of any one of the following three criteria:

- 1a. Master's or equivalent degree in Engineering/Technology
 - 1b. M.B.A (with B.Tech./ B.E. or equivalent an degree)
 - 2a. Bachelor's degree in Engineering/Technology/Medicine (4 year)
 - 2b. Bachelor degree in Science (BS) (4 year degree)
 3. Master's or equivalent degree in science
 4. Master's or equivalent degree in Arts/Commerce (or allied subjects)
- For qualifying degree listed under (2), (3) & (4), candidates must also fulfil ONE of the following additional requirements:
- a) a valid GATE/JEST (for Physics) score
 - b) Selected through National Eligibility Test - UGC NET including lectureship (Assistant Professorship)
 - c) Selected through a National level examination conducted by MoE or its agencies / Institutions such as UGC/ IIT/ IISc./ IISER/ IIIT etc.

A B.Tech./B.S./B.E. (or equivalent) degree from any Indian Institute of Technology (IIT) with a CGPA/ CPI score of 8.00 (on 0-10 scale) and above is exempted from the mandatory requirement of a valid GATE score.

The assistantship is payable for a maximum duration of 5 years or up to the thesis submission, whichever is earlier. The monthly rate of assistantship is Rs. 37,000/- for the first 2 years and enhanced rate of Rs. 42,000/- for the remaining period.

The continuation of assistantship under TA category will be subject to serving as a teaching assistant in a course / laboratory for 8 hours per week as assigned by the concerned academic unit as well as satisfactory academic performance. The assistantship will be paid on the basis of monthly attendance.


As per MoE directives, the employees on the rolls (with or without pay) of any organization are not eligible for admission under this category.

A.6.2) Research Assistantship (RA)

A candidate, selected for the Ph.D. Programme, at IIT Bombay will be eligible for the financial support under the RA category subject to the fulfilment of any one of the following three criteria:

- 1a. Master's or equivalent degree in Engineering/Technology
 - 1b. M.B.A (with B.Tech./ B.E. or equivalent an degree)
 - 2a. Bachelor's degree in Engineering/Technology/Medicine (4 year)
 - 2b. Bachelor degree in Science (BS) (4 year degree)
 3. Master's or equivalent degree in science
 4. Master's or equivalent degree in Arts/Commerce (or allied subjects)
- For qualifying degree listed under (2), (3) & (4), candidates must also fulfil ONE of the following additional requirements:
- a) a valid GATE/JEST (for Physics) score
 - b) Selected through National Eligibility Test - UGC NET including lectureship (Assistant Professorship)
 - c) Selected through a National level examination conducted by MoE or its agencies / Institutions such as UGC/ IIT/ IISc./ IISER/ IIIT etc.

A B.Tech./B.S./B.E. (or equivalent) degree from any Indian Institute of Technology (IIT) with a CGPA/ CPI score of 8.00 (on 0-10 scale) and above is exempted from the mandatory requirement of a valid GATE score.

Yes, IIT Bombay does conduct an entrance test for engineering PhD admissions, typically using the Graduate Aptitude Test in Engineering (GATE) score as a primary selection criterion, along with a written test and interview for shortlisted candidates depending on the department and specific program; a valid GATE score is often required for those without a Master's degree. 

Ph.D. Admission : Date of Entrance Test and/or Interview and Contact Details			
No	Particulars	Date for Entrance Test and/or Interview	Department Contact details
7	Computer Science and Engineering (CS)	Written Test : 02 nd December 2024 Interview : 02 nd December 2024 to 04 th December 2024 Candidates are requested to kindly refer to the admission page of Dept. of CSE, https://www.cse.iitb.ac.in/admissions/pg for any updates.	022-2576 7901/7902/7702 office.cse@iitb.ac.in
8	Industrial Design Centre (ID)	Written Test (online) 04 th & 05 th December 2024 Admission will be based on Presentation & Interview, for more details visit: http://www.idc.iitb.ac.in/admission/phd-admission	022-2576 7801/7802/7803 office.idc@iitb.ac.in
12	Energy Science & Engineering (EN)	Entrance Test : In-person (offline mode) during 03 rd December 2024. Interview : In-person (offline mode) 04 th December 2024. It is a two-stage selection - written test followed by interview. Selection of candidates for the interview will be based on the performance in the written test.	022-2576 7890 office.es@iitb.ac.in phdadmission.esed@gmail.com
13	Environmental Science and Engineering (ESED)	Written Test and/ Or interview (OFFLINE MODE only) Date: 6 th December 2024 and 7 th December 2024 Venue for Written Test: ES 321 Computer classroom, DESD – ESED building, time : 9.00 AM. Venue for Interview: ES 210 Seminar Hall, 2 nd Floor DESE – ESED building, time 11.00 AM	022-2576 7851/7852 office.esed@iitb.ac.in phdadmission.esed@gmail.com
16	Industrial Engineering & Operations Research (IO)	Written Test & Interview (In-person offline mode): 29 th November 2024 to 30 th November 2024. Written Test: Friday 29/11/2024, 09:30 AM – 1:00 PM Venue: LH 101, Lecture Hall Complex, IIT Bombay Reporting: 09:00 am (LH 101) https://www.ioor.iitb.ac.in/index.php/mode3219 https://www.ioor.iitb.ac.in/admissions/phd	022-2576 7651 office.ioor@iitb.ac.in admissions@ioor.iitb.ac.in
17	Shallesh J. Mehta School of Management	Written Test & Interview (In-person offline mode) : 06 th December 2024. https://www.som.iitb.ac.in/contact-us-3/ https://www.som.iitb.ac.in/iitb-citadel-security/	022-2576 7781/7782 phdcoord@som.iitb.ac.in
18	Mathematics (MA)	Written Test & Interview (In-person offline mode) : 02 nd December 2024 starting at 9 AM (the venue will soon be announced on the department webpage) and the oral interviews (for the candidates selected in the written test) for confirmation to the program will start in the afternoon of the 2nd and will continue on to the 3rd and 4th, and possibly 5th of December. Website link: https://www.math.iitb.ac.in/index.php Page containing details link: https://www.math.iitb.ac.in/Academics/phd_curricula.php	022-2576 7451/7452/2762 office.math@iitb.ac.in
19	Mechanical Engineering (ME)	Written Test & Interview : 05 th & 06 th December 2024 Admission will be based on IN-PERSON written-test & Interview, for more details visit: https://www.me.iitb.ac.in/phd-admissions	022-2576 7501/7502 office.me@iitb.ac.in

IIT DELHI

Ph.D.

Minimum Eligibility for Admission :

Full Time

Master degree in Engineering / Technology or master degree in Science / Humanities or equivalent in relevant discipline with CGPA 6.00 on 10 point scale or 60% marks in aggregate for General / OBC / EWS category. Full time students who do not possess M.Tech. or equivalent degree are required to have a valid GATE/CEED* Score or UGC / CSIR / DBT / ICMR / INSPIRE fellowship examination for Sciences / Humanities and Social Sciences disciplines. OR B.Tech. or equivalent with CGPA of 7.0 on a 10 point scale or 70% aggregate marks and qualified GATE or UGC / CSIR / DBT / ICMR / INSPIRE fellowship. For Biomedical Engg., candidates having M.B.B.S. with 60% marks or more are eligible provided they have qualified ICMR. The Candidates having Postgraduate degree of Doctor of Medicine (MD) / Master in Surgery (MS) with 60% marks or more after MBBS will also be eligible for admission to Ph.D. Programme in CBME

- For the currently registered students in Centrally Funded Technical Institutes (CFTIs) having CGPA of 8.0 or above (on a 10 point scale) at the end of 6th semester or later, in B.Tech. / B.E. / Integrated M.Tech. / Integrated M.Sc. programmes (or any other programme of minimum four years duration, admission to which is on the basis of JEE), the requirement of GATE / National Examination is waived for consideration of admission the Ph.D. programme in IIT Delhi. Moreover, such students must have obtained CGPA of 8.0 or above at the time of graduation (and before they formally register for the Ph.D. programme).
- The requirement of GATE/National Examination is waived for consideration for admission to the Ph.D. programme for all graduates of CFTIs with B.Tech./B.E./Integrated M.Sc. (or any other programme of minimum four years duration, admission to which is on the basis of JEE) with CGPA of 8.0 or above at the time of graduation.
- The Requirement of GATE/National Examination is also waived for MA or M.Sc. graduated from IITs with CGPA 8.0 or above.

Selection basis : Written test and / or interview

Part Time

Same as for Ph.D. full time and minimum experience (as per table 3.5-1) and No Objection Certificate from the employer.

Selection basis : Written test and / or interview

SPONSORED FULL TIME OR PART TIME

Same as for Ph.D. full time and Certificate from employer (as per Note 8.) No GATE / National examination required (Note.11)

Selection basis : Written test and / or interview

Part Time Foreign National posted in Delhi

Same as for full-time Subject to conditions stipulated in Note* 12.

Selection basis : Written test and / or interview

IIT Kharagpur

3.2. Additional Requirements for admission under different categories

a) Regular with Institute Assistantship

Candidates having minimum qualifying degree as mentioned in 3.2.(b) above must possess a valid GATE score that is above the cut-off level of students admitted for M.Tech/MCP admission in a particular year or NET qualification with Assistant Professorship for the award of Institute Research Assistantship. For admission in Ph.D programme, the validity of NET qualification with Assistant Professorship is for three (3) years from the date of declaration of NET results.

- 1) If a person who is in employment and is applying for Institute Assistantship and is selected for admission, he/she must resign from the current employment and produce the acceptance of resignation by the employer at the time of joining or produce a document that he/she is not receiving any salary from his/her employer along with proper document of sanctioned leave.
- 2) The Institute Research Assistantship shall be awarded for a maximum period of 5 years. At present the amounts are as follows:
 - Rs. 37,000/- pm for the first 2 years
 - Rs. 42,000/- pm for the next 3 years
- 3) No Research Student shall be permitted to receive any emoluments, salary, stipend or any other scholarship/assistantship during the tenure of Institute Research Assistantship.

b) Individual Fellowship (CSIR/UGC/DBT/ICAR/INSPIRE etc.)

- 1) All candidates applying for Individual Fellowship category must have valid award letter with fellowship issued by the respective funding agency (i.e. CSIR/UGC/ DST/DBT/ICMR etc.).
- 2) Candidates admitted under Individual Fellowship category shall not be entitled for Institute Research Assistantship.
- 3) Candidates having provisional Individual Fellowship award letter must give an undertaking that "In case of cancellation/withdrawal of Provisional award of fellowship by the funding agency, the admission at IIT Kharagpur will be cancelled from the date of joining the Ph.D programme and there is no liability on the part of IIT Kharagpur in this regard".

c) Sponsored

- 1) Persons who possess the minimum prescribed qualifications as mentioned in 3.2.(a) OR 3.2.(b) (without GATE/NET) and are in service in any of the following establishments with Minimum of two-year job experience shall be eligible for admission to the Ph.D program as sponsored candidates:
 - a) Defense or other ministries of the Government of India or any other government organizations;
 - b) Established industrial research and development organizations;
 - c) Autonomous bodies and public undertakings;
 - d) Universities/colleges;
 - e) Reputed industries as may be recognized by the Institute.

3.3. Candidates with undergraduate degrees (B.Tech/B.S or dual degree) from IITs

- 1) B.Tech/B.S degree and Dual Degree (B.Tech & M.Tech or B.S and M.S) holders having final CGPA ≥ 8.00 from Indian Institutes of Technology (IITs) will be given direct admission in Ph.D programme with Institute Research Assistantship, subject to the suitability of these candidates to the specific departments/centres/schools to which they apply for Ph.D.

3.4. Ph.D program for Working Professionals with Minimum Residential Requirements

Discipline	Minimum eligibility criteria
Engineering and Basic Sciences	B.Tech/BE/B.S(4-year)/M.Sc or equivalent degree with a minimum CGPA of 7.5 on a 10 point scale or 70 % marks and with a minimum working experience of 2 years



4. Selection and Admission:

The admission of a candidate to the Ph.D program is recommended by the Departmental Academic Committee (Post-Graduate and Research), abbreviated as DAC (PG&R), of the Department/Centre concerned on the basis of-

- Overall Academic Performance
- Written Test (Through offline mode) and
- Personal Interview (Through offline mode)

The final shortlisting criteria for written test may vary from academic unit to academic unit. The academic units shortlist the candidates for written test based on Overall Academic Performance. Short listing for final interview will be based on overall academic performance and performance in written test. Final selection and offer will be based on overall academic performance, performance in written test and final interview.

IIT (ISM) Dhanbad

	<p>(https://www.iitism.ac.in/) (https://www.iitism.ac.in/) भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD Ph.D. Admission</p>	
Ph.D. Admission		
ELIGIBILITY OF CANDIDATES		
<p>A candidate, who has qualified GATE/NET/Appropriate National Level Examination, is ELIGIBLE for Ph.D. admission ONLY in Engineering, Science, Management Studies and Humanities & Social Sciences under the IA.</p>		
<p>A. Qualifying NET/GATE is not mandatory for application in Ph. D. in Engineering / Science, if the candidate -</p> <ol style="list-style-type: none">Has done M. Tech/M.E. with First Class or First Division or with minimum 60% marks or equivalent CGPA orHas done B. Tech/ B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any CFTI orHas done B. Tech/ B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any Institute/University having 1 to 100th rank in the Overall category in NIRF India rankings (either in the year of application or in the last year).		
<p>B. Except for the candidates mentioned in the para A above, all other eligible candidates as per para 3.2 below, will have to qualify NET/GATE to apply for Ph. D. admission in Engineering/ Science.</p>		
<p>C. Qualifying CAT/GMAT will be mandatory for applying for Ph. D. in Management.</p>		
<p><i>It may be noted that based on number and quality of applications received in an admission cycle, the respective department may also impose additional shortlisting criteria (and shall also publish it while sending calls for interview) to restrict number of eligible applicants to be called for interview.</i></p>		
1. Essential criteria for Ph.D. in Engineering		
<p>● An applicant must have a Master's degree in Engineering in the relevant subject with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale),</p> <p>OR</p> <p>● An applicant must have a Bachelor's degree in Engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale), as per Table 1.</p> <p>OR</p> <p>● An applicant must have a Master's degree in Science or an allied area with first-class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).</p>		
2. Essential criteria for Ph.D. in Science		
<p>● An applicant must have a Master's degree in the relevant subject with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10-point scale),</p> <p>OR</p> <p>● An applicant must have a Bachelor's degree in Engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale), as per Table 1.</p> <p>OR</p> <p>● An applicant must have a Master's degree in Science or an allied area with first-class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).</p>		

INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI - 600 036

Updated on September 1, 2024

Applications are invited for January 2025 Admission

Registration of Online Application	::	11.04.2024
Last date of Receipt of Online Application	::	31.10.2024 upto 5.00 p.m.
Written Test and Interview	::	<i>Intimation on "written test and interview" or "interview" indicating the date, time & venue will be communicated by the respective Departments through email to the shortlisted candidates.</i>

5. MINIMUM EDUCATIONAL QUALIFICATIONS FOR ADMISSION

5.1 Minimum Educational Qualifications for Ph.D.:

5.1.1 For Regular Research Scholars:

Ph.D. in Engineering:

- a) Candidates with a Master's degree in Engineering/Technology with a good academic record / Master's degree by Research in Engineering/Technology with a good academic record / 5 Year Dual Degree in Engineering or 5 Year BS+MS Dual degree with a good academic record.
- b) 2 Year M.Sc. from IITs (entry through JAM) with 8.0 and above are exempted from qualifying in National Level Examinations otherwise with valid National Level Examination score is required.
- c) Candidates with Master's degree in Sciences with a good academic record and of exceptional merit are eligible, for the relevant Engineering disciplines (as decided by admitting departments). Candidates must have a valid GATE score or UGC-JRF/NET/CSIR-JRF or equivalent qualification in the relevant area tenable for the year of registration.

In the case of candidates with Bachelor's degree in Engineering / Technology AND possess more than 5 years relevant work experience after the Master's degree in Engineering/Technology, the requirement of a test score may be waived by the Selection Committee.

Ph.D. in Data Science and Artificial Intelligence:

Candidates need to have completed a PG degree in Engineering/Technology.

Ph.D. in Sciences:

1. Master's degree in Sciences with a good academic record and having a valid GATE score or UGC-JRF/NET/CSIR-JRF/NBHM/INSPIRE/JEST or equivalent qualification tenable for the current year in the relevant area.
2. Master's degree in Engineering/Technology or 5 Year BS+MS Dual degree/ 5 Year Integrated degree are eligible with a good academic record.
3. 2 Year M.Sc. from IITs (entry through JAM) with 8.0 and above are exempted from qualifying in National level examinations otherwise valid national level examination score is required.
4. Students who get more than 8.0 CGPA in M.Sc. in Science Departments of IIT Madras can be admitted directly to their Ph.D programme in Sciences with interview at departmental level.

7 Ph.D. ADMISSION REQUIREMENTS

7.1 Common Minimum Eligibility Criteria For Ph.D. Admission:

An applicant should possess one of the following minimum qualifications in appropriate area(s) and she/he is required to fulfil the Department/ Centre/ School wise minimum educational qualification to be eligible to apply for admission for the Ph.D. programmes of the Institute.

1. Applicants with Master's degree should satisfy the following:

- i. General, GEN-EWS and OBC category: Minimum Cumulative Grade Point Average (CGPA) of 6.0 on a 10-point scale, or 60% marks.

SC / ST / PWD category: Minimum Cumulative Grade Point Average (CGPA) of 5.50 on a 10-point scale or 55% marks.

- ii. Qualified in a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship.

2. Applicants of all categories (GEN/GEN-EWS/OBC/ST/PWD) having B.Tech. degree or M.Sc. with a CGPA of 8.0 and above obtained from the Ministry of Education funded Technical Institutions (erstwhile CFTIs of MoE), the requirement of the national level tests such as GATE/NET is exempted.

3. Applicants of all categories (GEN/GEN-EWS/OBC/ST/PWD) with 4-Year Bachelor's degree from institutions other than CFTIs having a minimum CGPA of 7.50 on a 10-point scale or 75% marks and Qualified a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship.

4. Applicants of all categories (GEN/GEN-EWS/OBC/SC/ST/PWD) with Bachelor's or Master's degree from IITs with a CGPA of 8.0 and above on a 10-point scale. Such candidates are exempted from the requirement of qualifying in a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship.
5. Applicants of all categories (GEN/GEN-EWS/OBC/SC/ST/PWD) with MBBS / BAMS / BHMS / BDS degree from Indian Universities / Institution shall have minimum CGPA of 6.0 on a 10-point scale, or 60% in the qualifying degree. Such candidates are exempted from the requirement of qualifying in a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship.
6. Applicants with Master of Surgery (MS) / Doctor of Medicine (MD) degree from Indian Universities / Institutions are exempted from the minimum CGPA as well as the requirement of qualifying in a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship.
7. Candidates pursuing master's programs in Engineering / Architecture / Planning / M.Sc. / M. Des. in IIT Roorkee shall have a choice of lateral entry / switch-over to the Ph.D. program after completing the following:
 - i. First three semesters of the Master's program with CGPA 8.0 or above for the candidates of M.Sc. program.
 - ii. First two semesters of the master's program with CGPA 8.0 or above for candidates of other master programs.

Note:

- A. CGPA or percentage of marks in aggregate (in case marks are awarded) of all years / semesters will be considered. If the CGPA is awarded on a scale other than a 10-point scale, proportionate conversion to a 10-point scale will be considered.
- B. The requirement of qualifying in a national level test, such as- GATE / CEED / JEST / UGC-NET / CSIR-NET including lectureship (Assistant Professorship) or equivalent or holding a national level fellowship is not applicable to candidates in ISERS or P-ISIRS or P-ISERS category.

Brochure very carefully before applying Online.



Other Information, Terms & Conditions

1. Selection process is purely based on merit. Stipulated dates for a written test and/or interview shall be communicated by the concerned Departments/Centres/ School to the shortlisted candidates. Simultaneously, the dates shall be uploaded in the portal of each Departments/Centres/School.

IISc Bangalore

Indian Institute of Science, Bangalore (Mid Year Admission Notice for the Academic Year 2024-25)

Sl. No.	Qualifying degree	Qualifying in national entrance tests (Mode of entry)
1	Bachelor's degree in Engineering/ Technology/ 4-year Bachelor of Science	Valid GATE score / NET JRF* is mandatory
2	Master's degree in Science / Master's degree in Economics, Geography, Psychology, Management, Commerce, Operations Research, Computer Science/ Application	Valid GATE score / NET JRF is mandatory
3	Master's degree in Engineering / Technology / Agriculture / Pharmacy / Veterinary Sciences	Desirable to have valid GATE score / NET JRF/GPAT.
4	Graduates of any course with a minimum duration of FOUR years, from any Centrally Funded Technical Institution (including IITs in PPP mode) with a minimum CGPA of 8 out of 10 or its equivalent.	Desirable to have valid GATE score / NET JRF.
5	MBBS/MD/MDS/Pharm D	Desirable to have valid GATE score/NET JRF.
6	B Pharm	Valid GPAT score/ NET JRF is mandatory
7	BE/ B.Tech. equivalent examinations of Professional Societies, recognized by MoE/UPSC/AICTE (e.g. AMIE by Institutions of Engineers). Note: Candidates enrolled upto 31.05.2013 with professional societies (e.g AMIE) recognized by MoE are only eligible to apply.	Valid GATE score/NET JRF is mandatory
8	Master's degree in Life Sciences/ Chemical Sciences from IISc with a minimum CGPA of 8.5 or equivalent (for PhD only).	Valid GATE score/NET JRF is mandatory (no minimum cutoff)

Notes

1. The GATE/GPAT/NET JRF/other National entrance test passing certificate/score card should be valid as on 01st January 2025.

2. *NET JRF includes -Joint CSIR-UGC NET for JRF; UGC-NET for JRF; DBT JRF; ICMR JRF; JEST; NBHM Research Award; INSPIRE. Applicants must be qualified for Junior Research fellowship (JRF) to be eligible to apply through NET JRF mode.

3. Applicants applying through INSPIRE mode must be in possession of a valid provisional INSPIRE offer for consideration of their application at level II of the selection, issued by DST at the time of interview).

4. Applicants who have qualified in Joint Graduate Entrance Examination for Biology and Interdisciplinary Life Sciences-2024 (JGEEBILS) are also eligible to apply.

Note: Candidates who were called for the interview held in May 2024 in any one of the above mentioned departments are also eligible to apply again.

Page 2 of 4

1.3 Selection procedure: Candidates will be shortlisted for the interview based on their performance in the National Entrance Test and/or the qualifying degree as detailed in the above table. The selection is based on the performance in the interview (in some of the departments, an aptitude test/preliminary interview will precede the final Interview).



Annexure – A10

राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला
National Institute of Technology Rourkela

No.

119B10439

Date:

**MINUTES OF THE MEETING HELD ON 01.04.2025 (TUESDAY) IN THE CHAMBER OF REGISTRAR
REGARDING THE TERMINATION OF THE STUDENTSHIP OF MR. ANKIT PRUSTY**

Members Present:

1. Prof. R. Dhiman, Registrar
2. Prof. S.K. Patel, HOD-ME
3. Prof. S. Ari, Associate Dean (AC-UG)
4. Prof. R.C. Pradhan, Associate Dean (AC-PG&R)
5. Mr. D.R. Das, Assistant Registrar (AC-UG)

Members Absent:

1. Prof. S. Chakraverty, Dean (AC)
2. Prof. S. K. Panda, PIC-Examination

In reference to Odisha Human Rights Commission's letter no. 26136/OHRC dated 19.12.2024 in connection with OHRC Case No. 545 of 2023, the committee met on 01.04.2025 in the chamber of Registrar at 11.00 A.M. with Shri Ankit Prusty & his father Shri Ramakant Prusty for a personal hearing regarding the termination of the studentship of Mr. Ankit Prusty. A detailed discussion related to the case in line with the order of OHRC took place. It was apprised to Shri Ramakant Prusty & his son that their request can be submitted in writing to the committee. The committee will forward their request and the recommendation to the competent authority to make a suitable decision that will be intimated to them later.

The committee also discussed with Shri Ankit Prusty & his father Shri Ramakant Prusty with assuring the education of Shri Ankit Prusty at NIT Rourkela in his previous course with the same program under the same Department to which he had taken admission (i.e., Department of Biotechnology and Medical Engineering). However, both the student and his father categorically stated 'NO' and insisted on continuing at NIT Rourkela only if given admission in Computer Science & Engineering. Subsequently, Mr. Ankit Prusty has submitted his request vide letter dated 01.04.2025 (attached) for consideration for his admission to the second year of Computer Science & Engineering at NIT Rourkela.

The committee feels that the request submitted by Shri Ankit Prusty is not feasible as per the Academic guidelines of NIT Rourkela. However, the same may be placed before the Competent Authority for necessary decisions.

Prof. S. Chakraverty

Prof. R. Dhiman

Prof. S.K. Patel

Prof. S. Ari

Prof. R.C. Pradhan

Prof. S. K. Panda

Mr. D.R. Das

Recommended for kind approval and
for placing in the next senate for final decision

DIRECTOR

Approved

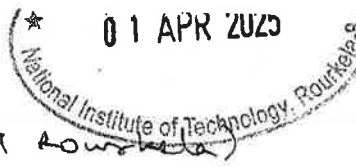
11/4/25

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07/04/25

The Director,
NIT Rourkela.

(Through Registrar NIT Rourkela)



1 April, 2025.

Sub-Personal Opinion regarding outcome of the hearing.

Ref. - NITR/RG/2025/L/0126 of dated 07-03-2025

Dear Sir,

With reference to letter NO. NITR/RG/2025/L/0126 of dated 07-03-2025, regarding the personal hearing for the termination of my studentship, I have been advised to state my personal opinion.

I am writing to state that, if permitted, I wish to be admitted into B.Tech CSE (2nd year) in NIT Rourkela.

Kindly consider my opinion if permissible.

With regards,

Yours sincerely,

Ankit Prusty
(ANKIT PRUSTY)

Please append along with
the committee minutes.

AR(Acad. UG)

1. Roy on
6/2

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1/4/2025

MOST IMMEDIATE

FORM 9

[Regulation No. 17 (b)]

ODISHA HUMAN RIGHTS COMMISSION
Toshali Bhawan, 2nd Floor, Satya Nagar
Bhubaneswar-751 007

Case No. 545 of 2023 / Ltr 010-26136/OHRC
19-12-24

To
The Registrar, National Institute of Technology, Rourkela,
At/Po - Rourkela,
Dist. Sundargarh

(Name/Designation and complete address
of the authority to whom notice is directed
to be issued).

WHEREAS, the complaint received from Ramakanta Prusty

(Name and address of the complainant)



was placed before the Commission on 25.10.2024

AND WHEREAS, upon perusing the complaint, the Commission has passed the following
order:—

Copy of the order dated - 25.10.2024 enclosed.

(here reproduce the order/direction)

or

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WHEREAS, the Commission has taken *suo motu* cognizance on consideration of

(here give brief details of the subject matter

on which *suo motu* cognizance has been taken)

and has passed the following order on

"
.....
....."

(here quote the order/direction)

NOW, THEREFORE, TAKE NOTICE that you are required to submit the requisite information / report to the Commission on or before

NOW, TAKE FURTHER NOTICE that in default, the Commission may proceed to take such action as it deems proper.

Given under my hand and the seal of the Commission, this the 11th
day of 2024
(month & year)

BY ORDER

for
REGISTRAR

Encl : Copy of the Complaint

Copy of the order dated 29.10.2024 en closed.
NOTE—The information/report shall be furnished only by the authority which is called upon to do so.

ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET

545

2023

Case No. Ramakanta Prusty of 20 _____

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	29.10.24	<p style="text-align: center;"><u>ORDER</u></p> <p>1. The petitioner files the present case alleging violation of Human Rights.</p> <p>2. The factual matrix of the case of the petitioner is that the petitioner's son Ankit Prusti was pursuing his study in the National Institute of Technology, Rourkela during the academic year 2019-2023. He was promoted to 2nd year after completion of 1st year study. During COVID Pandemic lock down, the NIT was closed for two years. The 2nd year students continued their study through online basis. The institution was reopened on April, 2022. The mentor of the petitioner's son called the petitioner and advised him to take his son for a break for his poor performance. She also told the petitioner that his son will be debarred for</p>	

ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET 2023

Case No. 545 of 20 Ramakanta Prusti

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
Cond...1 29.10.24		<p>a year to complete his study. Accordingly, he brought his son to Puri with him for a break. But, later, the mentor informed the petitioner that the NIT has terminated his son's studentship due to his poor performance. He made correspondence with the Registrar and the Director of NIT, Rourkela but to no avail. Now, his son's career is finished. So he has prayed for giving direction to allow his son to complete the study or to pay heavy compensation for his future livelihood.</p> <p>3. On the other hand the Registrar, NIT, Rourkela has filed the report stating that the matter was enquired into and found that Sri Ankit Prusti could not achieve the requisite CGPA grade due to his poor performance and relinquished his studentship at NIT, Rourkela. As per norms his studentship stands terminated w.e.f. 09.06.2022 in pursuance Clause 5.8.2 of the Regulations for Bachelor of Technology, National Institute of Technology, Rourkela. He has submitted the photostat copy of the Regulation. Further it is stated by the Registrar, NIT, Rourkela that Sri Ankit Prusti is not a student of NIT, Rourkela since he has applied for transfer certificate and left the</p>	

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545

2023

Case No. ~~Ramakanta Prusty~~ of 20

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
Cond...2 29.10.24		<p>studentship. He did not deposit the outstanding dues of the institution amounting to Rs.80,500/-. The plea of the student attributing the cause of his failure due to the CORONA Pandemic is not correct since several other students, during the same situation pursued their courses online and offline and secured better CGPA for which they were promoted to the next semester.</p> <p>4. The petitioner has filed the response to the report of the Registrar, NIT, Rourkela. He has stated in the response that it is the responsibility of the institute to take care of his son in study matter. The averment regarding termination of the studentship w.e.f. 09.06.2022 is false and totally denied by the petitioner. The opposite party is to prove the same. With regard to abandoning the studentship of the student Ankit Prusti from NIT, Rourkela, the NIT authority is to prove the same. He also denies about the outstanding dues of the institution against the petitioner's son. The four years career of his son is being lost. He is not psychologically fit to continue his study in other stream with four year junior student. The act of</p>	

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29.10.24

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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET

545

2023

Case No. Ramakanta Prusty of 20____

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...3 29.10.24	<p>NIT authorities has ruined his career which is against the principle of Right to Education. The responsibility lies on the NIT, Rourkela to take proper care of their students. So the petitioner has prayed for issue of necessary direction and order and compensation.</p> <p>5. The term Human Right as defined U/s.2(1)(d) of the Protection of Human Rights Act, 1993 which reads as hereunder :</p> <p style="padding-left: 40px;">“2(1)(d) - “human rights” means the rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants and enforceable by courts in India.”</p> <p style="padding-left: 40px;">Right to life as Human Right as enshrined in Article 21 of the Constitution would also include Right to Education. The Rights relating to life include all those aspects of life which go to make a man’s life meaningful complete and worth leaving (<i>Menaka Gandhi vrs. Union of India</i> reported in <i>AIR 1978 SC 597</i>).</p> <p>6. In the present case the petitioner has filed the complaint stating that son Ankit Prusti, a 2nd year student of NIT Rourkela has been wrongfully</p>	



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29.10.24

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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET

545

2023

Case No. Ramakanta Prusti of 20

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...4 29.10.24	<p>deprived of his career by the NIT authorities who terminated his studentship thereby destroying his career. So he has prayed for allowing his son to complete his study or to pay heavy compensation. He has filed the joint sheet allocation letter and identity card. On the other hand the NIT, Rourkela represented by its Registrar has filed the report stating that Sri Ankit Prusti could not achieve the requisite CGPA grade due to his poor performance and relinquished his studentship at NIT, Rourkela. As per norms the studentship stands terminated w.e.f. 09.06.2022 in pursuance of the Clause 5.8.2 of the Regulation for Bachelor of Technology, NIT, Rourkela. Examining the rival contention of both the parties the Commission finds that both the parties admit in their respective pleadings that Sri Ankit Prusti was a student of NIT, Rourkela and pursuing his 2nd year studentship. The petitioner has filed the Xerox copies of the identity card and the joint allocation letter of his son. The petitioner denies about the fact of relinquishment of studentship by his son on account of poor grading and performance. The Registrar, NIT, Rourkela, though he avers in the report that due to the poor</p>	



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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET

545 2023

Case No. Ramakanta Prusti of 20____

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...5 29.10.24	<p>performance of a student who fail to achieve the requisite CGPA grade due to his poor performance and relinquished his studentship at NIT Rourkela, he does not produce any official documents showing that the student Ankit Prusti could not achieve the requisite CGPA grade due to his poor performance. He also does not produce any document showing that the said Ankit Prusti voluntarily relinquished his studentship at NIT, Rourkela. The relevant portion of the Regulation 5.8.2 following which the studentship of a student Ankit Prusti stands terminated reads as hereunder:</p> <p><i>"5.8.2 When a student of 1st semester gets an SGPA score below 6.0 or a student of any other semester scores CGPA below 6.0 for two consecutive semesters, Parents/guardians must visit the institute and promise to monitor and counsel their child. Students of 3rd or higher semesters will be permitted to register in the next higher semester only in slow pace, and in a manner to maximize the possibility of improving</i></p>	

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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET 2023

Case No. 545 of 20 Ramakanta Prusty

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...6 29.10.24	<p><i>CGPA above 6.0. If at the end of 3rd consecutive semester of poor performance, a student still fails to improve CGPA above 6.0, he may still be permitted to register with following restrictions: (only if the CGPA has improved over the previous semester) Parents/guardians will visit the Institute in person on or before the date of registration and give an undertaking that they will do everything possible including professional psychological counseling (or treatment if necessary) to improve motivation of the student. The student will enroll only in the Backlog, X, Y or UR courses and courses with 'P' grade with no new course of current semester. There should be a reasonable chance of improving his score, beyond 6.00 before permission is accorded.</i></p> <p><i>If a student gets CGPA below 6.0 in the 4th consecutive semester, he must leave the Institute to pursue other avenues of study instead of ruining his career at NIT, Rourkela.</i></p>	



ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET
545 2023

Case No. Ramakanta Prusty of 20____

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...7 29.10.24	<p><i>In truly exceptional circumstances, if the arithmetic of the grade card at the end of 3rd unsuccessful semester dictates that the required improvement can only be achieved in at least 2 semesters, the Senate, at its discretion may sanction 2 semesters instead of one to improve CGPA above 6.0. A maximum of 3 new courses may be taken spanning over two semesters. The reasons for such exception should be recorded. Such a decision needs to be made at the beginning of the 4th semester of failure and not after a student fails to raise his CGPA in the 4th semester itself."</i></p> <p>7. The above regulation shows the formalities to be undergone when the student must leave the institution to pursue other avenues of study instead of ruining his career at NIT, Rourkela. It also mandates that the Senate has discretion to sanction two semesters instead of one to improve CGPA above 6.0. There is not any material documentary evidence produced by the opposite</p>	



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29.10.24

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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET

545

2023

Case No. —Ramakanta Prusti— of 20 —

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
	Cond...8 29.10.24	<p>party Registrar, NIT, Rourkela showing the adherence to the Regulation 5.8.2 of the Regulation for Bachelor of Technology (B. Tech), National Institute of Technology, Rourkela filed herewith. It appears that the studentship of the student Ankit Prusti is being terminated during 2nd semester. The Registrar, NIT, Rourkela has averred in the report in an omnibus manner stating that the student Ankit Prusti relinquished his studentship at NIT, Rourkela as he could not achieve the requisite CGPA due to his poor performance. As per norms his studentship stands terminated w.e.f. 09.06.2022. But the Commission does not find any such provision in Clause 5.8.2 prescribing the termination of the studentship of a student by the NIT authority who fails to achieve the requisite CGPA grade. The NIT, Rourkela authority also does not file any documents showing that the student Ankit Prusti has voluntarily relinquished his studentship. Therefore, it can be safely held that the NIT authority has failed to discharge the burden of proof incumbent on it U/s.106 of The Bharatiya Sakshya Adhiniyam, 2023 as the institution has</p>	

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29/10/24



ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET
545 2023

Case No. Ramakanta Prusty of 20

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
Cond...9 29.10.24		<p>failed to prove the facts on which it relies. But, it seems that a regulation is being framed by the NIT authority to promote excellence in the NIT which plays a crucial role in the development of the country. But, the concerned authority should adhere to the provisions of the regulation scrupulously in the matter which is designed to promote excellence in the institution. As per Section 13(1) of the Protection of Human Rights Act, 1993 the State Human Rights Commission shall, while inquiring into the complaints under this Act, have all the powers of a civil court trying a suit under the Code of Civil Procedure, 1908. Further, Section 18(a) of the Protection of Human Rights Act, 1993 provides that the Commission, where the inquiry discloses the commission of violation of human rights by a public servant, it may recommend the Government or the authority to take such further action as it may think fit. So, in furtherance of the Human Right of the son of the petitioner, in exercise of power conferred U/s.13(1) & 18(a) of the Protection of Human Rights Act, 1993 the Commission hereby</p>	

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ODISHA HUMAN RIGHTS COMMISSION

ORDER SHEET
545

2023

Case No. Ramakanta Prusti of 20____

Name of the Complainant _____

Sl. No.	Date	Order passed by the Commission	Office action taken with date
Cond...10 29.10.24		<p>recommends the following action to be taken by the NIT, Rourkela authority i.e. the Senate:</p> <ul style="list-style-type: none"> To consider the case of the student Ankit Prusti afresh in accordance with the regulation 5.8.2 of the Regulation for Bachelor of Technology (B.Tech), National Institute of Technology, Rourkela dated 15.11.2019 within a period of three months giving due opportunity to the parent and the student of being heard and report compliance. <p>In view of the above, the OHRC case is closed with the above recommendation.</p> <p>Communicate the order by e-mail/speed post.</p>	



Sd/-

Dr. C. R. Mohapatra
Member



Annexure – A11

Date: 20/02/2025



To
The Dean (Academic)
National Institute of Technology, Rourkela

Subject: Request regarding Approval for the PhD Registration
(Through proper channel)

Dear Sir/Madam,

Respectfully, I, Malaya Padhan having Roll No. 520HS2005, enrolled on 21.09.2020 for the PhD programme with an external fellowship (UGC JRF). The outbreak of the COVID-19 pandemic affected me severely, being COVID-19 positive in 2nd wave period, followed by continued post-COVID health concerns (Documents attached).

In addition, the delays in the allotment of my new Supervisor, waiting for about a year, adversely affected and delayed the finalisation of my research proposal. Consequently, my PhD Registration is yet to be completed. However, I have successfully completed my Coursework and Comprehensive examination.

In this regard, I request your consideration of my situation and your kind approval for completing my PhD Registration.

Thanking you
Yours Sincerely,

Malaya Padhan

Malaya Padhan
Roll No. 520HS2005
Mob: 9776254554, 8260279381

Enclosure:

- Order sheet regarding Allotment of New Supervisor
- Grade Sheet regarding Course Completion
- My Covid Positive and related health documents

student already took 4 four
years and failed to give
registration seminar in core
time period. After 4008
in all 7 yrs. Bsc as he with no
give seminar. He may be
His case may be looked into
as per PhD guidelines.

N. Setu
(170, 175) 24/2/25

Request of the scholar may be considered as per rule.

To be considered as per PhD regulations.

Recommended for one chance
to be given to the scholar
to carryout his research.

(S.P. Ray) 21.02.25
Supervisor
21.2.2025
Kant 21.2.25
-94-
21/2/25

Status of the student along with justified reasons of delay may kindly be specified. Comments of DSC & DRC may kindly be attached

Shree
28-02-25

Asso-Dean (H-PhD)

Justification to consider the case and comment by DSC & DRC may kindly be given.

Pradham
28.2.25

HOD HS

DRC members may comments:

"A" [Request of the student may be considered as per institute's PhD guideline.

J. Pradham
11.03.2025

Bhaskar Ranjan Mishra
11 March 2025

R. K. Mishra
11.03.25

* The new supervisor has been allotted within three months departure of his old supervisor.

(Complied)

N. S. Sethi 12/3/25
(HOD, HS)

AR-AC (H&R)

please put the institute PhD guideline as per DRC "A".

Pradham
18.3.25

O.S (H-PhD)

please put up slides as desired above

Shree
19-03-25 95

Mr. Malaya Padhan, Roll No.-520HS2005 was enrolled on 21/09/2020 and his last qualifying degree was MA, M-Phil. As per Ph.D. regulation he needs to complete his registration seminar within 3 years of enrolment i.e. 20/09/2023. However, he ^{is} unable to complete his registration seminar till date and requesting for permission for appearing registration seminar. Ph.D. regulation 11.11 and 20.1.iv in this regard is attached for your ^{kind} perusal. DSC and DRC recommendations may also be referred.

JPB
21/03/2025.

ARCAC)

Notes above may kindly be perused. As per Ph.D. regulation clause 11.11, a student should submit Regⁿ seminar within max. 3 years of enrolment failing which he shall leave the Ph.D. program. However under special case with mitigating circumstances, the Senate may grant extra time without fellowship/scholarship.

The student is under external fellowship & has not submitted Regⁿ seminar even after elapse of 4 years & 5 months. Now he has requested for permission to submit Regⁿ seminar. The supervisor, DSC & DRC have recommended to consider the case as per Ph.D. regulation.

The case is put up for kind perusal & further orders.

Silence
21-03-25

Asst. Dean (H-PR)

DSC & DRC have recommended to consider the case as per Ph.D. regulation.

As per Ph.D. regulation clause 11.11 & 20.1.iv the student need to leave the Ph.D. program or Senate may grant extra time without fellowship. put up for your kind advice.

- 96 - JPB
01.4.25

Dean AC may be discussed in Senate Smt 1/4/2025

- the Department as recommended by DRC under intimation to Dean (Academic). The qualifying grade in Comprehensive Examination shall be minimum 'C' Grade.
- 11.3 Comprehensive Examination will be held twice a year i.e. on 10th January and 10th August for Autumn and Spring semesters respectively. If either of these two dates falls on holiday or weekend, then it will be held on next working day.
- 11.4 Results of the comprehensive examination will be published after approval by Dean (Academic). The HODs will submit syllabus, question papers and answer sheets for review by Dean (Academic). If Dean (Academic) is not satisfied with the coverage, standard and clarity of questions or with the process followed, s/he will put up a proposal to Chairman, Senate for taking remedial measures. Chairman's decision shall be final and binding.
- 11.5 A student is eligible to appear at comprehensive examination only after the completion of minimum requirement of course work.
- 11.6 A student will get maximum 3 chances to clear the Comprehensive Examination. If s/he does not, s/he must leave the PhD programme or may switch over to MTech (Research).
- 11.7 Every student enrolled in the PhD programme is given provisional registration soon after her/his enrollment. The provisional registration defines: a) the broad area of research and b) the course work to be carried out by the student. The student continues to work for close to a year before her/his research plan is properly formulated.
- 11.8 A PhD student, provisionally registered, will be formally registered for the degree of PhD on completion of certain steps. The registration can be done only after (a) the candidate has successfully completed all assigned course work with at least 7.0 CGPA (8.0 CGPA for admission batches before AY 2019-20 Autumn) in the course work alone, (b) worked out a road map of the programme and submitted (including uploading on Institute website) a formal work plan to the DSC, (c) successfully cleared the comprehensive examination, and (d) delivered an open seminar to the satisfaction of the DSC.
- 11.9 In special cases, the Senate may permit registration with a commitment to complete up to 2 courses after Registration, if the minimum course requirement with the required CGPA is satisfied.
- 11.10 The written document and the seminar should outline the planned research work and identify the milestones. Both excessive vagueness, as well as exact description of the work to be done are discouraged at this stage to facilitate focused research work without being unduly constrained. The broad objective stated in provisional registration order may be further focused at the time of registration.
- 11.11 For the students with MTech and MPharm degrees, normally this should be done after elapse of 9 months, but within 15 months (after elapse of 18 months, but within 24 months for other degrees) of the date of enrollment. When a student with MTech or MPharm degree fails to clear the Registration Seminar within 15 months (24 months for other degrees), or her/his proposed research plan is found unsatisfactory by the DSC, s/he may be re-evaluated after a lapse of 3 months or more. If a student with MTech or MPharm degree cannot clear the course work, comprehensive examination



and Registration Seminar within 2 years (3 years for other degrees) from the date of enrollment, s/he will be required to leave the PhD programme. In special cases with mitigating circumstances, the Senate can grant extra time without scholarship.

- 11.12 Any credit of early submission approved at the time of provisional registration by virtue of past work is to be given while fixing the date of Registration Seminar. In such case, Registration Seminar can be advanced by the duration condoned for early submission. After registration there will be no time credit for submission of thesis. The date of Registration Seminar will be the effective date of registration.
- 11.13 HOD forwards the printout of duly signed application form for registration to Dean (Academic) along with a copy of Registration Seminar Report and recommendation of DSC. Registration is further verified and recommended by Research Programme Evaluation Committee (RPEC) and finally approved by the Senate. Office Order is issued confirming the registration after approval by Senate.
- 11.14 At the end of every semester, the Academic Section will issue an unsigned "grade card" on Form AC/325 listing all the courses and the grades obtained including research credits and Seminar and Technical Writing courses. At the end of the academic programme, a signed grade sheet will be issued by the Academic Section. A signed grade card may also be issued on a student's request.
- 11.15 If a student with Institute fellowship fails to complete registration formalities within 24 months (18 months for students with MTech, MPharm etc. degrees), payment of fellowship will be suspended (with permanent loss) till registration formalities are over.
- 11.16 For all the students of Executive PhD programme irrespective of background qualification Registration Seminar should be arranged after elapse of 24 months, but within 36 months of the date of enrolment. When a student fails to clear the Registration Seminar within 36 months, or her/his proposed research plan is found unsatisfactory by the DSC, s/he may be re-evaluated after a lapse of 6 months or more. If a student cannot clear the Registration Seminar within 4 years from the date of Enrollment, her/his studentship will be terminated.

12. FELLOWSHIP

- 12.1 A doctoral student may be self-financed or can get a scholarship. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute, the rules shall be governed by the provisions specified by the sponsor. Institute doctoral fellowships shall be governed by the rules of Central Govt.
- 12.2 Institute fellowships may not be awarded to candidates above 32 years of age (35 years for SC/ST candidates and women candidates with at least one child) on the closing date of receipt of application. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects. Project fellows who transfer to Institute fellowship on termination of the project need to be within the prescribed age bar at the time of their PhD enrollment.
- 12.3 Institute fellowship to the students admitted as "Full Time Student with Institute Fellowship" is paid every month depending on their attendance. Supervisors need to



17.9 If a QIP student cannot complete her/his academic programme before the end of her/his period of deputation (from her/his parent institution), s/he is required to seek withdrawal from the Institute to join her/his parent institution, prior to the expiry of her/his deputation. Her/his request for withdrawal will be examined by her/his DRC and its recommendations will be forwarded to the Academic Section. The student should make arrangement for completion of her/his academic programme.

17.10 A QIP student will be given release order on completion of or taking withdrawal from the academic programme, surrendering accommodation, and clearing all dues to the Institute.

17.11 In addition to the forms used by other students, a QIP student shall use forms AC/351-360 for various activities related to QIP.

18. CONDUCT AND DISCIPLINE

18.1 Students shall conduct themselves within and outside the campus of the Institute in a manner befitting the students of an Institution of National standing.

18.2 Apart from Academic Regulations, the Institute has also well laid SAC Regulation, Hostel Regulation, Disciplinary Manual, etc. Students are advised to maintain strict discipline all the time particularly during examinations and behave cordially with everyone within and outside the Institute.

18.3 The rules regarding conduct and discipline are given in Appendix-X. The conduct rules for students staying in Halls of Residence are given in Appendix-XI.

19. PROGRESS OF RESEARCH PROGRAMME

19.1 The progress of the research programme of a student shall be continuously monitored by the DSC. In practice, the committee will depend on inputs from the supervisors, HOD and the student. It will be the responsibility of the student to ensure that her/his papers remain up to date in matters of registration, course work, extension of fellowship, withdrawal and other formalities. In case of any deficiency, s/he should draw attention of her/his supervisor(s) and HOD, and if unsuccessful, that of the Dean (Academic) and Chairman, Senate.

19.2 Although rare, sometimes there may be a breakdown of communication between a student and her/his supervisor due to physical distance or due to personal reasons. It shall be the responsibility of the student to bring such matters to the attention of HOD, Dean (Academic) and Director. The Institute shall do the needful to establish communication or to make alternative arrangement.

20. TERMINATION OF STUDENTSHIP

20.1 The studentship of a PhD student may be terminated by the Senate on exceptional grounds as listed below:

- i) Recommendation of Institute's Disciplinary Committee.
- ii) Failure to do semester registration for two consecutive semesters.
- iii) Failure to clear comprehensive exam in three chances.
- iv) Failure to complete registration within two years from the date of enrollment.
- v) Poor progress as noted by the DSC and DRC. Such a decision may be



implemented only after approval of the Senate.

- vi) Prolonged absence (exceeding six months) from the Institute without sanctioned leave or withdrawal.

20.2 If a student likes to discontinue the programme on her/his own, this may be permitted by Chairman of Senate on the recommendation of Supervisor, HOD and Dean (Academic).

21. TRANSITION ISSUES

These revised regulations shall come into effect from AY 2021-22 Autumn Semester. Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf) on case-to-case basis.

22. DISSEMINATION OF INFORMATION

22.1 A copy of this document shall ordinarily be given in print or electronic form to every PhD student on admission to NIT Rourkela. It will also be made available on the Institute's website. Not possessing a copy, however, shall not exempt a student from complying with these regulations.

22.2 The Assistant/Deputy/Joint Registrar (Academic) is authorized by the Institute to issue formal certificates of studentship (Form AC/115) and Expenditure Certificate (Form AC/116). Dean (Academic) will sign all certificates of studentship on behalf of the Director when external agencies seek such certificates from Head of Institution.

22.3 On publication of final results a student will be issued a course completion certificate on Form AC/127 and an Institute leaving-cum-migration-cum-conduct certificate on Form AC/126. Both forms AC/127 and AC/126 will be signed by Assistant/Deputy/Joint Registrar (Academic) and Dean (Academic) on behalf of the Director. The final degree certificate will be signed by Registrar and Director.

23. EXCEPTIONS

23.1 Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

23.2 In emergency situations, the Director in capacity of the Chairman of Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

0^0





NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA
GRADE CARD FOR INFORMATION OF STUDENT ONLY
DOCTOR OF PHILOSOPHY

Roll No. : 520HS2005

Date of Enrolment: 21-SEP-2020

Effective Date of Registration :

Name : MALAYA PADHAN

Department : HUMANITIES AND SOCIAL SCIENCES

A. Research Project					
Session	Subject Code	Subject Name	Credits	Units	Grade
Spring 2020-21	HS7999	Research Project	24	8	8S 0U
Autumn 2021-22	HS7999	Research Project	12	4	4S 0U
Spring 2021-22	HS7999	Research Project	24	8	8S 0U
Autumn 2022-23	HS7999	Research Project	24	8	8S 0U
Spring 2022-23	HS7999	Research Project	24	8	8S 0U
Autumn 2023-24	HS7999	Research Project	24	8	8S 0U
Spring 2023-24	HS7999	Research Project	24	8	8S 0U
Credits / Units Completed			156	52	52S 0U

B. Seminar and Technical Writing				
Session	Subject Code	Subject Name	Credits	Grade
Autumn 2020-21	HS7998	Seminar and Technical Writing	2	B
Spring 2020-21	HS7998	Seminar and Technical Writing	2	B
Autumn 2021-22	HS7998	Seminar and Technical Writing	2	B
Spring 2021-22	HS7998	Seminar and Technical Writing	2	A
Autumn 2022-23	HS7998	Seminar and Technical Writing	2	A
Spring 2022-23	HS7998	Seminar and Technical Writing	2	A
Autumn 2023-24	HS7998	Seminar and Technical Writing	2	B
Spring 2023-24	HS7998	Seminar and Technical Writing	2	F
Credits Completed : 16			CGPA : 7.63	

C. Course Credits				
Session	Subject Code	Subject Name	Credits	Grade
Autumn 2020-21	HS7100	English for Research Writing	3	B
Autumn 2020-21	HS7308	Ethics and Values	3	B
Autumn 2021-22	HS7301	Research Methodology	3	B
Autumn 2021-22	HS7306	Environment and Society	3	B
Credits Completed : 12			CGPA : 8.00	

Summary:	
Total Credits Completed (A+B+C) :	184
Overall CGPA :	7.79

REMARKS :	Performance	Grade	Grade Point	Performance	Grade	Grade Point	Performance	Grade	Grade Point
	Excellent	Ex	10	Fair	C	7	Fail	F	2
	Very Good	A	9	Average	D	6	Incomplete Assessment	I	-
	Good	B	8	Pass	P	5	Debarred	X	0

Date : 19 Jul 2024

National Institute of Technology, Rourkela-769008 (Orissa), Phone: 0661-2462031, Fax: 0661-2462033 Website : www.nitrkl.ac.in

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FTS - C 670W

राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

No. – NITR/AC/RES/2023/M/ 581

Date – 22.03.2023

OFFICE ORDER

The Doctoral Scrutiny Committee [DSC] of Mr. Malaya Padhan, Roll No. 520HS2005 is hereby reconstituted as follows:-

Description	Existing	New
Chairperson	Prof. Sthitapragyan Ray(HS)	Prof. Seemita Mohanty(HS)
Supervisor	Prof. Nihar Ranjan Mishra(HS)	Prof. Sthitapragyan Ray(HS)
Co-Supervisor	-----	-----
Member – 1	Dr. Koteswara Rao Kodirekkala(HS)	Dr. Koteswara Rao Kodirekkala(HS)
Member – 2	Prof. Chandan Kumar Sahoo(SM)	Prof. Chandan Kumar Sahoo(SM)
Member – 3	Prof. Chandan Kumar Biswas(ME)	Prof. Chandan Kumar Biswas(ME)

This issues with the approval of the competent authority.


21/3/2023

Joint Registrar (Aca-Res and Exam.)

Copy to –

1. Student Concerned [Through – HOD (HS)]
2. Prof. Seemita Mohanty(HS)
3. Prof. Sthitapragyan Ray(HS)
4. Personal File

TIME : { Morning - 9.00 AM to 1.30 PM
Evening - 6.00 PM to 8.30 PM
Sunday - Evening Closed



- ❖ Diabetes
- ❖ Hypertension
- ❖ Rheumatism
- ❖ Infectious Disease
- ❖ Asthma
- ❖ Thyroid Diseases
- ❖ Fever

ସମୟ : { ସକାଳ : ସକାଳ ୯.୦୦ଟା ରୁ ୧.୩୦ ଟା (ଦିବା)
ସଞ୍ଜ : ୬.୦୦ ଟାରୁ ୮.୩୦ ଟା
ରବିବାର ସଞ୍ଜ ବନ୍ଦ



OPD Registration No. 429/05

Name: Malaya Padhan. Age/Sex: 24yrs/M

Weight: Address: Khudeda Mob.

C/o- Fever,

runny nose

sneezing

dehydration, fever BP 100/60

PR 81/min.

1 Tab. Par (500) 1 tab x 00 x 500

2 Tab. Levocetifenex

1 tab x 0.5 x 5 days

3 Sy. Levosalbutamol 10ml

x 5 x 10 combine

4 Cap. Calcitriol (0.25) 1 tab x 02

x 15 x 50 days

ଗୋଟା କଲ୍ୟାଣ ସମିତି, ଗୋଷା ସାମୁଦ୍ରେଇ, ଡେମରା

ଶ୍ରୀ ସାମୁଦ୍ରେଇ ପ୍ରହରୀ "ଆମ ଗାଁର ଆଶା"

ସଚେତନ କରେ ଗାଁକୁ ତାହେଁ ଆମ ଭରସା

29/05/24

Online Billing

PRESCRIPTION (PATIENT COPY)	ORIGINAL
-----------------------------	----------

Date :- 03 Jul 2024

Bill No :- 07240298

Disease Details

Complain

sneezing . headache

Investigation

Remarks

Patient : MALAYA PADHAN (HS) EC / Roll No. : 520HS2005

M.C. No. : S520HS2005 Prescribed By : Dr. Anirban Ghosh

S/no	Medicine Name	Quantity	Type	Dose	Billing Qty
1	Teczine m tab 10's	10	Before Food	0	10
2	Aceclo plus tab 15's	5		0/0	5

Note : * mark medicines are not Reimbursable

Do Not Submit it to Apollo

In case of non availability of medicine within 72 hours in Apollo pharmacy, please report it to Asst. Registrar (Establishment)

Please update your investigation/blood report in computer section for reference

HEALTH CENTRE NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

Online Billing

PRESCRIPTION (PATIENT COPY)	ORIGINAL
-----------------------------	----------

Date :- 04 Nov 2022

Bill No :- 11221491

Disease Details

Complain MOUTH CYST

Investigation

Remarks

Patient : MALAYA PADHAN (HS) EC / Roll No. : 520HS2005
M.C. No. : S520HS2005 Prescribed By : Dr. Itishree Khatua

S/no	*	Medicine Name	Quantity	Type	Dose	Billing Qty
1		Mucopain gel oint 15g	1			1
2		Enzomac forte tab 10's	6	Before Food	0/0	6

Note : * mark medicines are not Reimbursable

Do Not Submit it to Apollo

In case of non availability of medicine within 72 hours in Apollo pharmacy, please report it to Asst. Registrar (Establishment)

Please update your investigation/blood report in computer section for reference

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HEALTH CENTRE NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

Online Billing

PRESCRIPTION (PATIENT COPY)	ORIGINAL
-----------------------------	----------

Date :- 28 Feb 2022

Bill No :- 02223535

Disease Details

Complain toothache

Investigation

Remarks

Patient : MALAYA PADHAN (HS) EC / Roll No. : 520HS2005
M.C. No. : S520HS2005 Prescribed By : Dr. Sameer Patnaik

S/no	*	Medicine Name	Quantity	Type	Dose	Billing Qty
1		Pantop 40mg tab 15's	5	Before Food	0	5
2		Xoclave 625 tab (1x10)	10	After Food	0/0	10
3		Serax - d tab 10's	10	After Food	0/0	4

Note : * mark medicines are not Reimbursable

Do Not Submit it to Apollo

In case of non availability of medicine within 72 hours in Apollo pharmacy, please report it to Asst. Registrar (Establishment)

Please update your investigation/blood report in computer section for reference

**HEALTH CENTRE
NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA**

Online Billing

PRESCRIPTION (PATIENT COPY)		ORIGINAL
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Date :- 19 Apr 2024

Bill No :- 04243445

Disease Details

Complain

Investigation

Remarks

EYE INFN

Patient : MALAYA PADHAN (HS) EC / Roll No. : 520HS2005

M.C. No. : S520HS2005 Prescribed By : Dr. Soumya Ranjan Behera

S/no	*	Medicine Name	Quantity	Type	Dose	Billing Qty
1		Olopat od 3ml drops	1		0	1
2		Gate dm bak free 5ml eye drops	1		0 0 0 0	1

Note : * mark medicines are not Reimbursable

Do Not Submit it to Apollo

In case of non availability of medicine within 72 hours in Apollo pharmacy, please report it to Asst. Registrar (Establishment)

Please update your investigation/blood report in computer section for reference

**HEALTH CENTRE
NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA**

Online Billing

PRESCRIPTION (PATIENT COPY)		ORIGINAL
-----------------------------	--	----------

Date :- 27 Mar 2024

Bill No :- 03248442

Disease Details

Complain

Investigation

Remarks

eye irritation

Patient : MALAYA PADHAN (HS) EC / Roll No. : 520HS2005

M.C. No. : S520HS2005 Prescribed By : Dr. Anirban Ghosh

S/no	*	Medicine Name	Quantity	Type	Dose	Billing Qty
1		Ergomont 1 tab 10's	5		0	5
2		Moxicip eye drops - 5ml	1		0 0 0 0	1
3		Freshlar eye drops	1		0 0 0 0	1

Note : * mark medicines are not Reimbursable

Do Not Submit it to Apollo

In case of non availability of medicine within 72 hours in Apollo pharmacy, please report it to Asst. Registrar (Establishment)

Please update your investigation/blood report in computer section for reference



DHH SAMBALPUR

CR No: 211302201314731

OPD CARD



Patient Name: MALAYA PADHAN

S/O: UPENDRA PADHAN

Address: AT DEHERIPALI Sambalpur, Odisha, India

Mobile: 9776254554

Category: Free

Department: Dental-Dental Unit

Counter Operator: Jyotshnamayee Meher

Age/Sex : 35 Yr/M

Date & Time : 25-Jul-2022 11:03

Queue No. : 18

Dental Room

OPD Days : Mon, Tue, Wed, Thu, Fri, Sat

Patient Type: Non MLC

Vitals:

Ht:.....(Cms)

Wt:.....(Kg)

Pulse:...../min

BP:.....mm/Hg

Temp:.....*F

RR:...../min.

SPO2:.....%

Investigations:

CBC/LFT/KFT

Blood Sugar(R/F/PP)

HB/TLC/DLC

ESR/Bood Urea

S.Creatinine/S Uric
Acid
Serum Bilirubin

SGOPT/SGPT

Lipid Profile

Blood Group

T3,T4,TSH

Urine R/M

X-Ray Chest PA View

USG Abdomen

TMT/Echo, ECG

Others

Chief Complaints:

Examination:

Treatment(Rx):

81 Pericoronitis

1. Pando 5 tabs

2. Metro (400) 10 tabs

3. Dexameth (400) 4 tabs

Diagnosis/

Diagnosis(Prov.):

Past History:

Hyper

Tension: (Y/N)

Diabetes: (Y/N)

COPD: (Y/N)

Oncology: (Y/N)

CAD: (Y/N)

Tuberculosis: (Y/N)

Thyroid: (Y/N)

Surgery: (Y/N)

Other: (Y/N)

Signature & Full Name of the Doctor



ସରକାରୀ ଡାକ୍ତର ଖାନା ରେ ମିଳୁଥିବା ସମସ୍ତ ଔଷଧ ଗୁଣାମୁକମାନ ପରୀକ୍ଷା
ପରେ ବଣ୍ଟନ କରାଯାଏ। ଏହାକୁ ବ୍ୟବହାର କରନ୍ତୁ।



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ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ବିଭାଗ
Department of Health & Welfare
(Government of Odisha)

DHH Sambalpur

☎ 7655800760 ✉ hdsambalpur@igmail.com

Sambalpur

OPD CARD

Episode No. : 1931100

MO : 24152401137109

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Specialist : OPHTHALM

Department

Specialist

Specialist

Specialist

Specialist

Specialist

Specialist

Specialist

Token No.:

50

Room No.:

Opthal Room

C/O Redm of BGS

①

Betoact eye drop b.d

②

Cotegate eye drop

o o o o X 7 dr
o o o o X 1)

ସରକାରୀ ଡାକ୍ତରଖାନାରେ ମିଳୁଥିବା ସମସ୍ତ ଔଷଧ ଆୟାତ୍ମକମାନ ପରୀକ୍ଷଣ ପରେ ନିରାପଦ କେନ୍ଦ୍ରରେ ବଣ୍ଟନ କରାଯାଏ । ଏହାକୁ ବ୍ୟବହାର କରନ୍ତୁ ।



Patient should reach the OPD at least 1 hour before

OPD timing

③

Tab

Aceclo b.d AF X 5dy

④

Tab

Levocarb

5dy 5 bt X 10dy

[Signature]

15.04.27



DHH SAMBALPUR

CR No: 211302400441734

OPD CARD



Patient Name: MALAYA PRADHAN

Age/Sex : 39 Yr/M

S/O: UPENDRA PRADHAN

Date & Time : 12-Feb-2024 10:52

Address: khulia Sambalpur, Odisha, India

Queue No. : 50

Category: Free

Skin Record

Department : Skin-Skin Unit

OPD Days : Mon, Tue, Wed, Thu, Fri, Sat

Counter Operator: Laxmi Narayan Sipka

Patient Type: Non MLC

Vitals:

Chief Complaints:

Diagnosis/

Diagnosis(Prov.):

Ht:(Cms)

Wt:(Kg)

Pulse:/min

BP:mm/Hg

Temp:°F

RR:/min

SPO2:%

Investigations:

CBC/LFT/KFT

RBC/PCV/RMP

HB/TLC/DLC

ESR/Blood Urea

S.Creatinine/S Uric Acid

Serum Bilirubin

SGOT/SGPT

Lipid Profile

Blood Group

T3,T4,TSH

Urine R/M

X-Ray Chest PA View

USG Abdomen

TMT/Echo, ECG

Others

Examination:

Treatment(Rx):

Tinea

1. Tab Fluconazole 150
2 tab/weekly x 4 wks.

2. cream clotrimazole
LA x 30x 20 days.

3. Tab cetirizine
1 tab ODX 20 days.

Signature
12.2.24.

Past History:

Hyper

Tension: (Y/N)

Diabetes: (Y/N)

COPD: (Y/N)

Oncology: (Y/N)

CAD: (Y/N)

Tuberculosis: (Y/N)

Thyroid: (Y/N)

Surgery: (Y/N)

Other: (Y/N)



ସରକାରୀ ଡାକ୍ତର ଖାନା ରେ ମିଳୁଥିବା ସମସ୍ତ ଔଷଧ ଗୁଣାଗୁଣାମାନ ପରୀକ୍ଷା

Signature & Full Name of the Doctor

ପରେ ବଣ୍ଟନ କରାଯାଏ। ଏହାକୁ ବ୍ୟବହାର କରନ୍ତୁ।



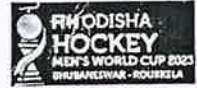


ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ବିଭାଗ

Department of Health & Family Welfare

(Government of Odisha)

DHH Sundergarh



OPD Regd No: 21132040020712 OPD REGISTRATION

Patient Name: MALAYA PRADHAN

Department:

Token No:

Age/Sex: 38 Years /M

Skin Vd

S/O: UPENDRA PRADHAN

Visit Date & Time: 30/12/2023 11:48:57

Address: MAHESDIHI TOWN, Sundargarh, Odisha, India



Room No:

Vitals:

Investigations:

△ PITYRIASIS
ROSEA

R - COBETASOL 100
Lerry OD X

⊖ MA - (C2 C5)
1 + OD B F = 100

8

Signature of the Doctor



ସରକାରୀ ଡାକ୍ତର ଖାନା ରେ ମିଳୁଥିବା ସମସ୍ତ ଔଷଧ ଗୁଣାବୁଜମାନ ପରୀକ୍ଷଣ ପରେ ବଣ୍ଟନ କରାଯାଏ । ଏହାକୁ ବ୍ୟବହାର କରନ୍ତୁ ।



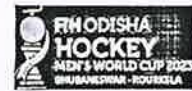


ସ୍ୱାସ୍ଥ୍ୟ ଓ ପରିବାର କଲ୍ୟାଣ ବିଭାଗ

Department of Health & Family Welfare

(Government of Odisha)

DHH Sundergarh



OPD Regd No: 21132040011212 OPD REGISTRATION

Patient Name: MALAYA PRADHAN

Department:

Token No:

Age/Sex: 38 Years /M

Casualty

S/O: UPENDRA PRADHAN



Visit Date & Time: 25/11/2023 17:47:02



Address: MAHESHDHI, Sundargarh, Odisha
, India

Room No:

Vitals:

BP
HR

Investigations:

① P₁ 120/80 mmHg
② P₂ 120/80 mmHg
③ P₃ 120/80 mmHg
④ P₄ 120/80 mmHg

Signature of the Doctor



ସରକାରୀ ଡାକ୍ତର ଖାନା ରେ ମିଳୁଥିବା ସମସ୍ତ ଔଷଧ ଗୁଣାଗୁଣମାନ ପରୀକ୍ଷା ପରେ ବଣ୍ଟନ କରାଯାଏ। ଏହାକୁ ବ୍ୟବହାର କରନ୍ତୁ।



A-12

Sl. No.	Dept.	RollNo	FullName	Existing Supervisor	Co-supervisor	Caretaker supervisor
1	CY	517CY6011	Ms. BARNALI ROY	Prof. Debayan Sarkar(CY)		Prof. G.Hota(CY)
2	MA	523MA2009	Ms. SHRUTI REKHA MOHANTY	Prof. Bikash Sahoo(MA)	Prof. Vagesh Narasimhamurthy,IITM	-----
3	EE	920EE5014	Ms. IPSITA PAHI	Prof. Kanungo Barada Mohanty(EE)	Prof. Rabi Narayan Mishra, Professor, Deptt of EEE, Silicon Univ.	-----

Annexure – A12

Annexure – A13**Ph.D. Registration Seminar Extension**

Sr No.	Roll No.	Name	Due Registration Date	Extended by
1	920EC5010	Peela Ramanarjuna Srisatya	23-10-2024	30-04-2025
2	522EC1002	Samikshya Das	25-07-2024	30-04-2025
3	522MN6008	Priyadarshi Onam	10-02-2025	30-04-2025
4	522CH3002	Sayan Mukherjee	25-07-2024	28-02-2025
5	919EE5049	Shyama Sundar Padhi	03-09-2024	30-04-2025
6	919EE5115	Kalyanchakravarthi P	09-09-2024	28-02-2025
7	919EC5028	Prateek Kumar Jana	28-09-2024	28-02-2025
8	919EC5029	Sagar Krishna S	12-11-2024	31-01-2025
9	919EC5110	Sandeep Sivvam	12-11-2024	31-01-2025
10	920EC5011	Krushna Chandra Rout	12-11-2024	31-01-2025
11	522CE3010	Piyush Paritosh Sarangi	04-01-2025	31-01-2025
12	920EE5001	Devasis Pradhan	15-10-2024	31-01-2025
13	919EE5113	A. Susmitha	01-10-2024	31-01-2025

M.Tech. Research Registration Seminar Extension

Sr No.	Roll No.	Name	Due Registration Date	Extended by
1	623EC6001	Mirza Amanullah Baig Asadullah Baig	30-08-2024	28-02-2025



FTS - 250403 -
2068

DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING
Annexure - A14
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Date: 2nd April 2025

To

Dean Academic,

Sub: Inclusion of B.Tech/M.Tech computer science (CS) as academic eligibility for admission to Ph.D. programme in Metallurgical and Materials Engineering Department.


Dear Sir,


With reference to the above mentioned subject, the Department is interested to include B.Tech/M.Tech computer science (CS) for admission to Ph.D. programme as one of the academic eligibility. There is continuous demand for computational material scientists and the usage of AI and ML tools in materials development has increased in the last few years. So, admitting a B.Tech/M.Tech CS student for PhD programme in the Department would be an added advantage.


The CS student can take the courses such as Materials Engineering, Mechanical Behavior of Materials, Computational Modelling of Materials and Process Modelling. Further, the job prospects of CS student obtaining a PhD in MME using AI and ML are huge, viz., aerospace, manufacturing, data analytics, etc. Currently, Department has sufficient expertise in above mentioned fields. Relevant publications in the above fields are attached.


So, kindly consider the request to include B.Tech/M.Tech computer science as one of the academic eligibility from the forthcoming Autumn Semester (2025-2026) PhD Admission.



2nd April/2025
DRC Members

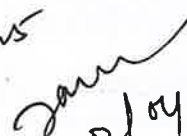

02/04/2025



02/04/25


2.4.25


2/4/25


02/04/2025


02/04/25


02.04.2025
HOD-MM

Enclosure: List of publications

- 115 -

The inclusion of B.Tech/M.Tech computer science as academic eligibility for admission to Ph.D. in Metallurgical and materials Engineering dept. as recommended by the DRC, HOD of MM is put up for your kind consideration.

(R)
09/04/2025

Asst. Registrar (AC-PG and Res)

Recommendation of DRC for inclusion of B.Tech/M.Tech Computer Science as academic eligibility for admission to PhD in MM Engg dept is put up for kind approval of competent authority

Sharma
11-04-25

Asso. Dean (Ac-PGR)

Recommendation to DRC is put up for your kind approval.

Pradhan
11.4.25

Dean-AC Pl. comment whether it need to go to senate?

AR-AC (PG & R)

Sharma
11/04/25

May be allowed as Senate agenda

Sharma
11-04-25

O.S (Ac-PHD)

Dean (Ac)

Pl. include this in the next senate agenda.

Sharma
15/04/25

List of SCI journal publication using computational methods in MME Department

1. K. Ganesh, K. S. Jungalwala, and N. Yedla, "Cyclic stress-strain behavior and microstructural features in copper-Cu50Zr50 metallic glass core-shell structures: molecular dynamics and deep machine learning predictions", *Materials Chemistry and Physics*, vol.331, no.130183, pp.23, Elsevier, February 2025, 10.1016/j.matchemphys.2024.130183
2. K. Ganesh, Md. S. Ali, K. S. Jungalwala, and N. Yedla, "Predicting Stress-Strain Characteristics of Hot Deformed Cu-Zr Metallic Glass Alloy Composite Nanowires Using Supervised Machine Learning Algorithms", *Journal of Materials Engineering and Performance*, pp.17, Springer, June 2024, <https://doi.org/10.1007/s11665-024-09739-2>
3. Katakam, K. C., Katakareddi, G., Mehta, K. K., & Yedla, N. (2023). Mechanical stability and microstructural evolution during torsion in pristine and defect nickel nanowires of different orientations: a molecular dynamics simulation study. *Molecular Simulation*, 49(8), 829-844.
4. Katakareddi, G., & Yedla, N. (2022). The effect of loading methods on the microstructural evolution and degree of strain localization in Cu50Zr50metallic glass composite nanowires: A molecular dynamics simulation study. *Journal of Molecular Graphics and Modelling*, 108216.
5. Katakam, K. C., & Yedla, N. (2022). Tensile and creep behavior of nickel nanowires containing volume defects: Insight into the deformation mechanisms and microstructural evolution using molecular dynamics simulations. *Materials Chemistry and Physics*, 277, 125560.
6. Yedla, N. (2021). Strain controlled fatigue response of large-scale perfect and defect nickel nanowires: A molecular dynamics study. *Journal of Molecular Graphics and Modelling*, 106, 107885.
7. Gupta, P., Majumdar, B., Katakareddi, G., & Yedla, N. (2021). Cu50Zr50 metallic glass flakes reinforced Al composites: Experimental and molecular dynamics nanoindentation response of matrix, interface, and reinforcement. *Journal of Non-Crystalline Solids*, 564, 120837.
8. Katakam, K. C., & Yedla, N. (2020). Crack velocities and microstructural investigations in nickel nanowires with crack, crack-defect under mode-I and bending using large-scale molecular dynamics simulations. *Superlattices and Microstructures*, 146, 106674.
9. Nandy, J., Sahoo, S., Yedla, N., & Sarangi, H. (2020). Molecular dynamics simulation of coalescence kinetics and neck growth in laser additive manufacturing of aluminum alloy nanoparticles. *Journal of molecular modeling*, 26(6).
10. Gupta, P., Katakam, K. C., Katakareddi, G., & Yedla, N. (2020). Crack and its interaction with defects in Al coated with Cu 50 Zr 50 metallic glass thin film: an MD simulation study. *Journal of Molecular Modeling*, 26(4), 1-17.
11. Gupta, P., Vaduganathan, K., & Yedla, N. (2020). Elevated Temperature Compression Behavior of Al-Cu 50 Zr 50 Nano-laminates. *Transactions of the Indian Institute of Metals*, 1-7.
12. Singh, R., Gupta, P., & Yedla, N. (2019). Single-crystal Al-Cu50Zr50 metallic glass cold welds: tensile and creep behaviour. *Molecular Simulation*, 45(18), 1549-1562.
13. Nandy, J., Yedla, N., Gupta, P., Sarangi, H., & Sahoo, S. (2019). Sintering of AlSi10Mg particles in direct metal laser sintering process: A molecular dynamics simulation study. *Materials Chemistry and Physics*, 236, 121803.
14. Dora, J. K., Sengupta, A., Ghosh, S., Yedla, N., & Chakraborty, J. (2019) Stress evolution with concentration-dependent compositional expansion in a silicon lithium-ion battery anode particle. *Journal of Solid State Electrochemistry*, 1-12.
15. Gupta, P., & Yedla, N. (2019). Tensile-compression loading and pre-strain effects on the evolution of stacking fault tetrahedra, dislocation density, and free volume in crystal-amorphous thin film interface: A large-scale molecular dynamics study. *Journal of Non-Crystalline Solids*, 514, 25-34.
16. Katakam, K. C., Gupta, P., & Yedla, N. (2019). Large-Scale Molecular Dynamics Simulation Studies on Deformation of Ni Nanowires: Surface Profile, Defects and Stacking Fault Width Analysis. *Journal of Materials Engineering and Performance*, 28(1), 63-78.

17. Shubham, B. C. Ray, and R. K. Prusty, "Influence of interphase characteristics on the elastic modulus of unidirectional glass-reinforced epoxy composites: a computational micromechanics study", *International Journal of Materials Research*, vol.114, De Gruyter, April 2023, 10.1515/ijmr-2022-0032
18. S. K. Dinda, D. Li, F. Guerra, C. Cathcart, and M. Barati, "Bubble size determination in a half scaled curved water model mold for various casting conditions using imaging and machine learning", *AIST Transactions, Iron and steel technology*, February 2024, 10.33313/TR/0224
19. "Sampling Strategy of Bubble Characteristics in a 1: 2 Scale Curved Continuous Casting Mold: Parametric and Prediction Study", SK Dinda, D Li, F Guerra, C Cathcart, M Barati, *ISIJ International* 64 (14), 2031-2041
20. Continuous Casting Tundish Dead Volume Study by Physical Modeling and Computational Investigation", SK Dinda, D Li, F Guerra, C Cathcart, M Barati, *Steel Research International*, 1-12
21. Continuous Casting Tundish Quality Study by Mathematical & Physical Simulations, Economics with Plant Result Justifications", SK Dinda, *Journal of Alloys & Metallurgical Systems*
22. A sequential modelling approach to determine process capability space during laser welding of high-strength aluminium alloys", A Mohan, Q Hayat, SK Dinda, VV Pamarthi, P Franciosa, D Ceglarek, *Journal of Advanced Joining Processes*, <https://doi.org/10.1016/j.jajp.2024.1002>
23. Bubble Size Measurement in a Continuous Casting Mold Using Physical Modeling and Shadowgraphy", A Srivastava, SK Dinda, A Asgarian, J Sengupta, K Chattopadhyay, *Metallurgical and Materials Transaction B*, 1-18
24. "Ensemble prediction of mean bubble size in a continuous casting mold using data driven modeling techniques", A Srivastava, R Wang, SK Dinda, K Chattopadhyay, *Machine Learning with Applications* 6, 100180
25. "Numerical Modeling of Volatile Organic Compounds (VOC) Emissions during Preheating of Magnesite-Carbon Bricks in a Basic Oxygen Furnace", SK Dinda, K Chattopadhyay, *Journal of Metals* 10 (10.3390/met10101277), 1-13
26. Gupta, P., & Yedla, N. (2017). Dislocation and Structural Studies at Metal–Metallic Glass Interface at Low Temperature. *Journal of Materials Engineering and Performance*, Volume 26, Issue 12, pp 5694–5704.
27. Yedla, N., Gupta, P., Ng, T. Y., & Geethalakshmi, K. R. (2017). Effect of loading direction and defects on the strength and fracture behavior of biphenylene based graphene monolayer. *Materials Chemistry and Physics*, 202, 127-135.
28. Meraj, M., Dutta, K., Bhardwaj, R., Yedla, N., Karthik, V., & Pal, S. (2017). Influence of Asymmetric Cyclic Loading on Structural Evolution and Deformation Behavior of Cu-5 at.% Zr Alloy: An Atomistic Simulation-Based Study. *Journal of Materials Engineering and Performance*, 26(11), 5197-5205.
29. Krishan, J., Gupta, P., Vaduganathan, K., & Yedla, N. (2017). Superplastic Pd50Pt50 monocrystalline bimetallic alloy nanowire: a molecular dynamics simulation study. *Metallurgical Research & Technology*, 114(3), 302.
30. Pradeep Gupta, Snehanu Pal, Natraj Yedla (2016) Molecular dynamics based cohesive zone modeling of Al (metal)–Cu₅₀Zr₅₀ (metallic glass) interfacial mechanical behavior and investigation of dissipative mechanisms, *Materials and Design*, Vol. 105, pp.41-50.