

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान
जयपुर

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY
JAIPUR**



**Agenda
Senate**

54th Meeting

Date: 24th April, 2024

Time: 4:00 PM

**Venue: Niti Sabhagar, Prabha Bhawan
MNIT Jaipur**

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

AGENDA FOR THE 54TH MEETING OF THE SENATE TO BE HELD ON 24TH
APRIL 2024 (WEDNESDAY) AT 4.00 PM

CONTENTS

Item No.	Agenda	Page From - To
54-1-0	To confirm the minutes of 53rd meeting of the Senate.	1
54-2-0	To note the "Action Taken" on the decisions taken in 53 rd meeting of the Senate.	1 - 6
54-3-0	Items for consideration.	
54-3.1	To consider scheme and syllabi of Minor Specialization and Honors programs proposed by various departments/centres.	6 - 7
54-3.2	To consider the scheme and syllabi of B.Tech. Artificial Intelligence and Data Engineering.	7
54-3.3	To consider the proposal submitted by the Department of Electrical Engineering to float a program elective titled 'Electric Vehicles' for PG students.	7
54-3.4	To consider the proposal submitted by the Department of Physics to revise the title and syllabus of the course 'Atomic and Molecular Spectroscopy' offered to the students of M.Sc.(Physics).	7 - 8
54-3.5	To consider the proposal to convert the open elective slot of M.Sc. (Mathematics) to program elective slot.	8
54-3.6	To consider the proposals of new PG programs on M.Tech. (Materials Engineering), submitted by the Material Research Centre and M.Tech. (Materials Engineering), submitted by the Department of Metallurgical and Materials Engineering.	8 - 9
54-3.7	To consider the proposal of the revised scheme and syllabi of M. Tech. (Earthquake Engineering), submitted by the National Centre for Disaster Mitigation & Management.	9
54-3.8	To consider the recommendation of the committee to frame guidelines for the conversion of a center of the institute to department.	9 - 10
54-3.9	To consider the composition of DREC in PG Rules and Regulations.	10
54-3.10	To consider the revision in the semester progress evaluation of Ph.D. students in PG rules.	10

	54-3.11	To consider mercy requests submitted by students.	10 - 12
	54-3.12	To consider the mercy request of Priyanka Meena (2017UCP1128) seeking permission for late registration in even semester 2023-24 without late fees.	12 - 13
	54-3.13	To consider Vishal Kumar (2011PST5125) for award of M.Tech. (Structural Engineering) degree and Ravi Rathi (050362) for award of B.Tech. (Electronics and Communication Engineering) degree.	13
54-4.0	Items for ratification		
	54-4.1	To ratify the seat matrix for admission to various UG programs for the Academic Session 2024-25.	14
	54-4.2	To ratify the seat matrix for admission to PG programs for the Academic Session 2024-25.	14
	54-4.3	To ratify the approval accorded to the names of the students, who completed the requirement for the award of degree before the 17 th Convocation.	14
54-5.0	Items for reporting		
	54-5.1	To note the minutes of the 61 st meeting of SPGB.	14
	54-5.2	To note the minutes of the 44 th meeting of SUGB.	15
	54-5.3	To note the minutes of the 39 th and 40 th meetings of the Academic Affairs Committee held on 30.01.2024 and 04.03.2024, respectively.	15
	54-5.4	To note the minutes of the meetings of the Unfair Means Committee held on 30.01. 2024 and 27.03.2024 respectively.	15
54-6.0	Any other items with permission of chair.		

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Agenda for 54th Meeting of Senate
(to be held on 24th April 2024 at 4:00 PM in the Niti Sabhagar, Prabha Bhawan, MNIT, Jaipur)

Item No. 54-1.0: To confirm the minutes of 53rd meeting of the Senate.

The draft minutes of the 53rd meeting of the Senate, held on 12th January 2024, were circulated to all the members. Comments were received from two Senators. The circulated minutes are placed before the Senate together with the comments for consideration and confirmation at *Annexure-A (Page-1 to 9)*.

The minutes are placed before the Senate for confirmation.

Item No. 54-2.0: To note the "Action Taken" on the decisions taken in 53rd meeting of the Senate.

Action Taken on the decisions made in 53rd meeting of the Senate.

ACTION TAKEN REPORT (53rd Senate meeting)

Item No.	Particulars	Decision	Action Taken
53-1.0	To confirm the minutes of the 52 nd meeting of the Senate held on 04 th October, 2023.	The Senate confirmed the minutes of the 52 nd meeting of the Senate.	Noted
53-2.0	To note the "Action Taken" on the decisions taken in the 52 nd meeting of the Senate.	The Senate noted the action taken report on the decision/resolutions taken in its 52 nd meeting.	Noted
53-3.0	Items for consideration		

53-3.1	To consider the recommendation of the committee constituted to review the Hindi/English names of the UG/PG program and other information to be printed on the degree certificate.	<p>Resolution No. Senate-53/2024/01: The senate, in principle, approved the format of the degree certificate and directed to prepare sample degree certificates of all the programs separately with existing fonts, colors, design, security features, etc., and circulate to all senators for approval by circulation. Recommendations of the committee to write a Hindi translation for the word computer as “कंप्यूटर” was approved.</p>	<p>The degree certificates of all the programs were reviewed in the meeting with the committee constituted by the Senate. The degree certificate of M.Tech programs was revised by adding the department name. Other details were kept unchanged. The same was circulated to all Senators for approval and was implemented in 17th Convocation.</p>
53-3.2	To consider the recommendation of the committee constituted for comprehensively examining all aspects related to the implementation of the regulations received from the Council of Architecture.	<p>Resolution No. Senate-53/2024/02: The Senate approved the recommendation of the committee except for conducting a special supplementary examination after the odd semester.</p>	Implemented
53-3.3	To consider the additional list of students eligible for the award of degrees in UG and Ph.D. programs in the forthcoming Convocation.	<p>Resolution No. Senate-53/2024/03: The Senate approved the list of the additional eligible student's names in addition to the earlier list for the award of degrees in UG and Ph.D. programs and recommended the same for consideration and approval of the Board of Governors. Further, the Senate authorized the Chairman to approve additional names, if any, of eligible students who may complete the requirements for the award of degree before the 17th Convocation if no Senate meeting takes place before the Convocation.</p>	Chairman, Senate approved the additional names of students who completed the requirement for the award of degree before the 17 th Convocation. The same is placed at Item No. 54-4.1 for ratification.
53-3.4	To consider the Name of Mr. Vishal Kumar (ID No. 2011PST5125) for award of M.Tech. degree in Structural Engineering.	<p>Resolution No. Senate-53/2024/04: Senate, after detailed deliberation, deferred the matter of Mr. Vishal Kumar (ID No. 2011PST5125) for the award of M.Tech. degree in</p>	The matter is placed as fresh agenda at Item No. 54-3.13

		Structural Engineering and directed to put the agenda along with all such cases together in the next senate meeting.													
53-3.5	To consider the matter of conducting course in hybrid mode due to revision in UG scheme.	<p>Resolution No. Senate-53/2024/05: The Senate, after detailed deliberation, approved the matter of conducting the course in hybrid mode due to revision in the UG scheme. If no other option is available in the new scheme for completion the credit requirement.</p> <p>The Senate did not approve the present case of the Mechanical Engineering Department and directed that the student should register the modified 03 credit course in even semester in the Department and earn one additional credit through NPTL. Senate further authorized AAC to take decision in similar cases in future on similar lines.</p>	Noted												
53-3.6	To consider the mercy request of the student Ms. Sakshi Mahajan (2020UEC1647) to rewrite the supplementary examination.	<p>Resolution No. Senate-53/2024/06: The Senate did not approved the mercy appeal of Ms. Sakshi Mahajan (2020UEC1647) to rewrite the supplementary examination.</p>	Noted												
53-3.7	To consider the termination of registration of UG students who failed to earn a minimum of 30 credits for promotion to II year even after opting for the Year Back option once in I year.	<p>Resolution No. Senate-53/2024/07: Senate approved the termination of enrollment of following students from the Institute roles:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Student Id</th> <th>Student Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>2021UCP1003</td> <td>AARAV MAKADIA</td> </tr> <tr> <td>2.</td> <td>2021UEC1054</td> <td>RISHU SHARMA</td> </tr> <tr> <td>3.</td> <td>2021UEC1575</td> <td>ROHIT SINGH TANWAR</td> </tr> </tbody> </table>	S. No.	Student Id	Student Name	1.	2021UCP1003	AARAV MAKADIA	2.	2021UEC1054	RISHU SHARMA	3.	2021UEC1575	ROHIT SINGH TANWAR	Implemented vide Office Order No.3460 dated-19.02.2024
S. No.	Student Id	Student Name													
1.	2021UCP1003	AARAV MAKADIA													
2.	2021UEC1054	RISHU SHARMA													
3.	2021UEC1575	ROHIT SINGH TANWAR													
53-3.8	To discuss revision in composition of DREC in PG Rules.	<p>Resolution No. Senate-53/2024/08: Senate, after detailed deliberation, deferred the revision in composition of DREC in new PG rules and suggested to go through the practices followed at other IITs and NITs and place the summary before the Senate for consideration.</p>	Practices at various IITs and NITs have been studied. The matter is placed at Agenda Item No. 54-3.9.												
			Implemented												

		The matter of inviting external expert out of the institute in DREC was discussed and it was decided that if it is found necessary, case specific approval shall be needed from Chairman, Senate on basis of case specific justification. It was also decided that participation of external DREC members can be online without any sitting charges/honorarium.		
53-3.9	To discuss revision in Semester progress evaluation of Ph.D. students in PG Rules.	Resolution No. Senate-53/2024/09: Senate after detailed deliberation deferred the revision of Semester progress evaluation of Ph.D. students in new PG Rules and suggested to go through the practices of other IITs and NITs and place the summary before the Senate.		Practices at various IITs and NITs have been studied. The matter is placed at Agenda Item No. 54-3.10.
53-4.0	Item for ratification			
53-4.1	To ratify the name of the students issued duplicate/revised Degree Certificates.	Item was ratified.		Noted
53-4.2	To ratify the minimum qualification for Ph.D. admission entrance examination from Even Semester 2023-24 and onwards for the Department of Chemical Engineering and Centre for Energy and Environment.	Item was ratified.		Noted
53-5.0	Item for reporting			
53-5.1	To note the minutes of the 60 th meeting of SPGB.	Noted		No action required
53-5.2	To note the minutes of the 43 rd meeting of SUGB.	Noted		
53-5.3	To note the minutes of the 37 th and 38 th meetings of the Academic Affairs Committee held on 01.11.2023 and 21.12.2023 respectively.	Noted		No action required

53-5.4	To note the minutes of the meetings of the Unfair Means Committee held on 01.11. 2023 and 21.12.2023 respectively.	Noted	No action required
53-6.0	Any other items with permission of the Chair		
53-6.1	To consider the proposals for the conversion of two Centers of the institute to Department.	<p>Resolution No. Senate-53/2024/10: The Senate after deliberation constituted a committee of the following members to frame guidelines for the conversion of any Center of the Institute to Department:</p> <ol style="list-style-type: none"> 1. Prof. Ashok Pradhan (External member of Senate) – Chairman 2. Prof. Vipul Rastogi –(External member of Senate) Member 3. Prof. Shuchi Srivastav –(External member of Senate) Member 4. Associate Dean (UG), Convener 	The recommendations of the committee are placed at Item No. 54-3.8
53-6.2	To introduce a course of Human Values and Professional Ethics for all UG students.	<p>Resolution No. Senate-53/2024/10: The Senate after deliberation constituted a committee of the following members to suggest a course on Human Values and Professional Ethics for all UG students, along with details about its delivery;</p> <ol style="list-style-type: none"> 1. Dr. Preeti Bhatt, HoD HSS, Chairperson 2. Prof. Rajesh Kumar, Member 3. Prof. Jyoti Joshi, Member 4. Dr. Sushant Upadhyay, Member 5. Dr. Deepak Verma, Member 	The recommendations of the committee are awaited
53-6.3	To consider the institution of the Institute Internship Program.	<p>Resolution No. Senate-53/2024/11: The Senate after deliberation constituted a committee of the following members to give recommendations to start an internship program at the institute and suggested that the institute may start Institute internship in under undergraduate program with 50 Institute funded students :</p> <ol style="list-style-type: none"> 1. Prof. S.D. Bharti, Chairman 	The recommendations of the committee are awaited

	2. Prof. Rajesh Kumar, member
	3. Prof. Amar Patnaik, member

Item No. 54-3.0: Items for consideration.

Item No. 54-3.1 To consider scheme and syllabi of Minor Specialization and Honors programs proposed by various departments/centres.

Following Minor specialization and Honors programs have been proposed by various departments/centres to be offered to UG students:

MINOR PROGRAMS

S. No.	Title of the Program	Offering Department	Open for Branches
1.	Minor in Industrial Safety	Chemical Engineering	All branches except offering department
2.	Minor in Computer Science and Engineering	Computer Science and Engg.	All branches except offering department
3.	Minor in Electronics and Communication Engineering	Electronics and Communication Engg.	All branches except offering department
4.	Minor in Electric Vehicle	Electrical Engineering	All branches except offering department
5.	Minor in System and Control		
6.	Minor in Advanced Manufacturing Technologies	Mechanical Engineering	B.Tech. (MME)
7.	Minor in Robotics and Automation		
8.	Minor in Physics	Physics	B.Tech. (CSE, ECE and EE)
9.	Minor in Sustainable Energy	Centre for Energy and Environment	All branches
10.	Minor in Management	Department of Management Studies	All branches

HONORS PROGRAMS

S. No.	Title of the Program	Offering Department
1.	Honors in Chemical Engineering	Department of Chemical Engineering
2.	Honors in Civil Engineering	Department of Civil Engineering
3.	Honors in Computer Science and Engineering	Department of Computer Science and Engineering
4.	Honors in Electrical Engineering	Department of Electrical Engineering
5.	Honors in Machine Learning and Signal Processing	Department of Electronics and Communication Engineering
6.	Honors in VLSI Design	Department of Electronics and Communication Engineering

7.	Honors in Embedded & Intelligent Systems	Department of Electronics and Communication Engineering
8.	Honors in Advanced Communication Engineering	Department of Electronics and Communication Engineering
9.	Honors in Advanced Manufacturing Technologies	Department of Mechanical Engineering
10.	Honors in Supply Chain Analytics	Department of Mechanical Engineering
11.	Honors in Robotics and Automation	Department of Mechanical Engineering
12.	Honors in Advanced Thermal Systems	Department of Mechanical Engineering
13.	Honors in Metallurgical and Materials Engineering	Department of Metallurgical and Materials Engineering

The schemes of the all the above programs are placed at **Annexure-B (Page-10 to 40)**. The syllabi of the courses of different programs shall be placed on table.

Item No. 54-3.2 To consider the scheme and syllabi of B.Tech. Artificial Intelligence and Data Engineering.

A new B.Tech. program in Artificial Intelligence and Data Engineering was started from academic year 2023-24. The teaching scheme of I year of above program was approved by the Chairperson, Senate. The complete teaching scheme and syllabi of B.Tech. Artificial Intelligence and Data Engineering after the approval of the Chairperson, SUGB, is placed at **Annexure-C (Page-41 to 46)** (the syllabi will be placed on table).

Item is placed for consideration.

Item No. 54-3.3 To consider the proposal submitted by the Department of Electrical Engineering to float a program elective titled 'Electric Vehicles' for PG students.

DPGC, Department of Electrical Engineering had submitted a proposal to offer a new program elective on 'Electric Vehicles' to be offered to the PG students of all the three PG programs of the department. SPGB, in its 61st meeting, recommended the same for approval of the Senate.

The detailed syllabus is placed at **Annexure-D (Page-47 to 51)**.

Item is placed for consideration.

Item No. 54-3.4 To consider the proposal submitted by the Department of Physics to revise the title and syllabus of the course 'Atomic and Molecular Spectroscopy' offered to the students of M.Sc. (Physics).

The Department of Physics conducted a Curriculum Development Workshop on the 1st and 2nd of March 2024. As per the suggestion of experts in the CDW, the department had submitted to rename the course 'Atomic and Molecular Spectroscopy' to 'Atomic and Molecular Physics' as well as some revisions in the syllabus. The proposal was approved and recommended by SPGB, for approval of the Senate, in its 61st meeting.

The revised syllabus of the course is placed at **Annexure-E (Page-52 to 54)**.

Item is placed for consideration and approval.

Item No. 54-3.5 To consider the proposal to convert the open elective slot of M.Sc. (Mathematics) to program elective slot.

The Department of Mathematics has proposed to convert the slot of open elective in the scheme of IV semester M.Sc. (Mathematics) program to program elective slot. The students of IV semester M.Sc. (Mathematics) are facing issues as they are not getting an appropriate choice of the course against the open elective slot. The conversion of slot to program elective slot will permit offering specialized courses aligned with the syllabi of competitive examinations such as NET/GATE and also to enhance the academic and professional prospects of the students. This will help the M.Sc. students to cover the syllabus of NET exam in a better manner.

The SPGB, in their 61st meeting, has favourably recommended the proposal to the Senate.

Item is placed for consideration.

Item No. 54-3.6 To consider the proposals of new PG programs on M.Tech. (Materials Engineering), submitted by the Material Research Centre and M.Tech. (Materials Engineering), submitted by the Department of Metallurgical and Materials Engineering.

A proposal for new PG programs M.Tech. (Materials Engineering) was submitted by the Material Research Centre. The department of Metallurgy and Materials Engineering has also submitted a program that overlaps with the one submitted by MRC.

The SPGB in its 61st meeting, had recommended that a joint meeting of the HoDs and DPGC conveners of the Material Research Centre and the Department of Metallurgical & Materials Engineering should be convened by the Associate Dean (PG) for discussions regarding avoiding overlaps, as desired by the Senate. However, the meeting was non-conclusive.

The Department of Metallurgical and Materials Engineering has recommended that M.Tech (Materials Engineering) should be floated by their department only and has suggested that some theory/ laboratory courses can be allotted to the Material Research Centre based on the expertise of the faculty members of the centre.

The scheme and syllabi of both programs are placed at **Annexure-F (a) and (b) (Page-55 to 63)**.

Item is placed for directions.

Item No. 54-3.7 To consider the proposal of the revised scheme and syllabi of M. Tech. (Earthquake Engineering), submitted by the National Centre for Disaster Mitigation & Management.

The National Centre for Disaster Mitigation & Management has submitted a proposal to revise the scheme and syllabi of M. Tech. (Earthquake Engineering). The centre has offered the specialization along two tracks:

Track I: Earthquake Design of Structures

Track-II: Earthquake Safety of Dams

Track-II is specifically targeted to Dam Engineers, as the Centre has an MoU with the Ministry of Jal Shakti for Earthquake Safety of Dams in India. The Scheme of Track-II was sent to the Chairman, NDSA, and Joint Secretary, Ministry of Jal Shakti, for their comments. The ministry has underlined the need for the program and decided to support it. The proposal was revised to incorporate the changes suggested by the Ministry,

The revamped scheme and syllabi, with minor changes, were recommended by SPGB for approval of the Senate, in its 61st meeting.

The proposed Scheme is placed at **Annexure-G (Page-64 to 75)**.

Item is placed for consideration.

Item No. 54-3.8 To consider the recommendation of the committee to frame guidelines for the conversion of a center of the institute to department.

Vide Resolution No. Senate-53/2024/10, the Senate had constituted a committee of the following members to frame guidelines for the conversion of a centre of the Institute to department:

1. Prof. Ashok Pradhan - (External member of Senate) – Chairman
2. Prof. Vipul Rastogi – (External member of Senate) - Member
3. Prof. Shuchi Srivastav – (External member of Senate) - Member
4. Associate Dean (UG) - Convener

The recommendations of the committee are placed at **Annexure-H (Page-76 to 77)**.

Item is placed for consideration.

Item No. 54-3.9 To consider the composition of DREC in PG Rules and Regulations.

The Senate, in its 53rd meeting, vide agenda items no.53-3.8, suggested to go through the practices followed at other IITs and NITs and place the summary before the Senate for consideration. Accordingly, the Associate Dean (PG) explored the practices followed at other Institutes. The DREC composition of other IITs and NITs.

It has been observed that similar to MNITJ, the Supervisor is the Convener of DREC in most of the Institutes. However there is a Chairperson in addition to the Convener, which is missing in the prevailing composition at the Institute.

Item is placed for consideration and directions.

Item No. 54-3.10 To consider the revision in the semester progress evaluation of Ph.D. students in PG rules.

The Senate, in its 53rd meeting, vide agenda items no.53-3.9, suggested to go through the practices followed at other IITs and NITs and place the summary before the Senate for consideration. The Associate Dean (PG) explored the practices followed at other Institutes. The practice followed for the semester progress evaluation of Ph.D. students is either satisfactory (S) or Unsatisfactory (U) in all the IITs and NITs.

Item is placed for consideration and directions.

Item No. 54-3.11 To consider mercy requests submitted by students.

The following mercy requests were submitted by the students to their respective departments. The details of the students along with the recommendation/justification of the respective DUGC as well as the SUGB are given below:
Can you please provide me with access to this document?

S. No.	Name & ID	Justification of DUGC, if any	Recommendation of DUGC	Justification of SUGB	Recommendation of SUGB
1.	Rishu Sharma (2021UEC1054)	Due to significant health issues, he couldn't focus on his studies and, hence was not able to clear the required number of credits for the continuation of B. Tech. program. The convener DUGC interacted with the student and his parents, and the student showed a strong inclination towards continuing to study.	Recommended	SUGB looking to the medical & health issues of Rishu Sharma, recommended the mercy request to the Senate to allow him another chance with year back to clear the required number of credits for continuation of B.Tech. Program. He has to complete the minimum credit requirement required for the degree within the specified period. He will not allow any further semester withdrawal.	Recommended
2.	Naushad Ansari (2023UEE1072)	The DUGC of the Department of Electrical Engineering recommended that "admission may be given to the student as per the provision of multiple exit/entry of the new	Recommended	SUGB recommended the mercy request for readmission as the student had withdrawn admission due to influence and falls in trap of job promises as reported by his father.	Recommended

	Education policy.”		
3.	Pooja Sankpal (2021UCP1051)	Considering the severity of her psychological health, the DUGC of the Department of Computer Science and Engineering recommended giving her the opportunity to re-appear for the examinations.	Recommended SUGB did not recommend Pooja Sankpal's request (2021UCP1051) for re-examination as she has already appeared once in the re-examination of the same course.

Item is placed for consideration & approval.

Item No. 54-3.12: To consider the mercy request of Priyanka Meena (2017UCP1128) seeking permission for late registration in even semester 2023-24 without late fees.

Priyanka Meena (2017UCP1128) was admitted in the Academic Year 2017 in the Computer Science and Engineering Department. She regularly registered till VIII semester. She had taken 04-semester withdrawals in IV, IX, X, and XI semesters and then registered for XII and XIII semesters. Her last registration was for XIII semester in July 2023.

As per records, she has earned 102 credits out of 163 registered credits till her 13th semester 2023-24 with CGPA of 3.09 on a 10-point scale. A total 200 credits (minimum requirement) are required to complete B.Tech. Computer Science and Engineering degree.

She has submitted that due to her grandfather's critical health conditions, she was unable to complete registration for even semester 2023-24 and requested on 21-02-2024, seeking permission for late registration in even semester 2023-24 without late fees. As this is her last semester to complete her degree.

As per UG Regulations clause 11.4, "A Student will be permitted for semester withdrawal only twice in the entire duration of his/ her programme." But she has already taken 04-semester withdrawals during her studies at MNIT Jaipur, till date.

Also, as per the Office Order no. F.4 (P) 35 Senate/MNIT/Acad/2016/1639 dated 15-12-2016 Amendment in the UG Rules and Regulations (Manual July 2012), "The minimum and maximum permissible number of registered semesters for completing all degree requirements are defined in the table below;

<i>Academic Programme</i>	<i>Minimum number of registered semesters</i>	<i>Maximum number of registered semesters</i>
B.Tech.	8	14
B.Arch.	10	16

The maximum duration for a student to complete the Degree requirement is EIGHT Years (NINE Years for B.Arch.) from the date of first registration for his/ her first semester. A semester when a student has been granted Semester Withdrawal or granted semester leave will not be considered a registered semester.

The above case was placed in the 44th SUGB. The SUGB had not recommended the request as she has already been given relaxation in terms of the number of withdrawals and the total number of years to complete the credit requirements.

Item is placed for directions.

Item No. 54-3.13: To consider Vishal Kumar (2011PST5125) for award of M.Tech. (Structural Engineering) degree and Ravi Rathi (050362) for award of B.Tech. (Electronics and Communication Engineering) degree.

Vishal Kumar (2011PST5125) was admitted to the M.Tech. (Structural Engineering) as a full-time student in the academic year 2011-12. His status was converted to a part-time student in the IV Semester (even Semester 2012-13). He completed the requirements for the award of M.Tech. Degree in V Semester i.e. in two and half years (examination of V Semester held on 27th March 2014) with CGPA of 6.69. He was eligible for the award of degree in the 9th Convocation held on 19th January 2015, but due to omission, his name has not been placed before the Senate for the award of degree till date. The SPGB, in its 60th meeting, held on 11th December 2023, approved and recommended his name for the award of degree in M.Tech. (Structural Engineering).

Ravi Rathi (050362) was admitted to the B.Tech.(Electronics and Communication Engineering) in the academic year 2005-06. He completed the requirements for the award of B.Tech. degree in the examination of special term (2009-10) on 23rd July 2010 with a CGPA of 5.81. Accordingly, he was issued the grade sheets for the I to X Semester, summer term and special term. He was eligible for the award of B.Tech. degree in the 6th convocation held on 17th December 2011, but due to omission, his name has not been placed before the Senate for the award of degree till date. SUGB, in its 44th meeting held on 21st March 2024, approved and recommended his name for the award of degree in B.Tech. (Electronics and Communication Engineering).

Details of the above two cases have been checked from the scrolls and other records, and it is found that they have not been issued their respective degrees so far.

Item is placed for consideration.

Item No. 54-4.0 **Items for ratification**

Item No. 54-4.1 **To ratify the seat matrix for admission to various UG programs for the Academic Session 2024-25.**

The seat matrix of the UG programs for admission for the Academic Session 2024-25 was to be communicated to the JoSAA/CSAB. The seat matrix, as communicated for admission for the academic session 2024-25, is placed at **Annexure-I (Page-78 to 79)**.

Item is placed for ratification.

Item No. 54-4.2 **To ratify the seat matrix for admission to PG programs for the Academic Session 2024-25.**

The seat matrix of the PG program for admission for the Academic Session 2024-25 was to be communicated to the CCMT and CCMN, the coordinating Institute. The seat matrix, as communicated for admission for the academic session 2024-25, is placed at **Annexure- J (Page-80 to 83)**.

Item is placed for ratification.

Item No. 54-4.3 **To ratify the approval accorded to the names of the students, who completed the requirement for the award of degree before the 17th Convocation.**

The names of the PG/Ph.D. students who had completed the requirement for the award of degree before the 17th convocation were approved by the Chairperson, Senate for the award of degree in the 17th convocation. The list is placed at **Annexure-K (Page-84 to 86)**.

Item is placed for ratification.

Item No. 54-5.0 **Items for reporting**

Item No. 54-5.1 **To note the minutes of the 61st meeting of SPGB.**

Minutes of the 61st meeting of SPGB held on 22.03.2024 are placed for information to the Senate. (**Annexure L, Page 87 to 91**).

Item is placed for information.

Item No. 54-5.2 To note the minutes of the 44th meeting of SUGB.

Minutes of the 44th meeting of SUGB held on 21.03.2024 are placed for information to the Senate. (Annexure -M, Page 92 to 96).

Item is placed for information.

Item No. 54-5.3 To note the minutes of the 39th and 40th meetings of the Academic Affairs Committee held on 30.01.2024 and 04.03.2024, respectively.

The minutes of the 39th and 40th Academic Affairs Committee (AAC) meetings held on 30.01.2024 and 04.03.2024 respectively are placed for information to the Senate (Annexure- N, Page 97 to 101).

Item is placed for information.

Item No. 54-5.4 To note the minutes of the meetings of the Unfair Means Committee held on 30.01.2024 and 27.03.2024 respectively.

The minutes of the meetings of the Unfair Means Committee held on 30.01.2024 and 27.03.2024 are placed for information to the Senate (Annexure -O, Page 102 to 105).

Item is placed for information.

Item No. 54-6.0 Any other items with permission of chair.

Annexures



मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

Malaviya National Institute of Technology Jaipur

(An Institute of National Importance under Ministry of Education, Govt. of India)

MINUTES OF 53RD MEETING OF SENATE HELD ON 12TH JANUARY 2024

The 53rd meeting of the Senate was held on 12th January 2024 from 4:00 PM onwards in Niti Sabhagar, Prabha Bhawan of the Institute. The attendance list is enclosed as Annexure-A.

At the outset, the Chairman Senate, in his opening remarks, welcomed all the members attending the meeting. He specially welcomed all the new Senators. He appreciated few members who communicated their leave of absences in advance, and requested all others to do the same in future if they are not able to attend the meeting.

The agenda items were taken one by one, the resolutions of which are as follows:

Item No. 53.1.0	: To confirm the minutes of the 52 nd meeting of the Senate held on 04 th October, 2023. The Senate confirmed the minutes of the 52 nd meeting of the Senate.
Item No. 53.2.0	: To note the "Action Taken" on the decisions taken in the 52 nd meeting of the Senate. The Senate noted the action taken report on the decision/resolutions taken in its 52 nd meeting.
Item No. 53-3-0	: Items for consideration
Item No. 53-3.1	: To consider the recommendation of the committee constituted to review the Hindi/English names of the UG/PG program and other information to be printed on the degree certificate. Resolution No. Senate-53/2024/01: The senate in principle approved the format of the degree certificate and directed to prepare sample degree certificates of all the programs separately with existing fonts, colors, design, security features etc. and circulate to all senators for approval by circulation. Recommendations of the committee to write hindi translation for the word computer as "कम्प्यूटर" was approved.
Item No. 53-3.2	: To consider the recommendation of the committee constituted for comprehensively examining all aspects related to the implementation of the regulations received from the Council of Architecture. Resolution No. Senate-53/2024/02: Resolution No. Senate-53/2024/02: The Senate approved the recommendation of the committee except conducting special supplementary examination after odd semester.
Item No. 53-3.3	: To consider the additional list of students eligible for the award of degrees in UG and Ph.D. programs in the forthcoming Convocation. Resolution No. Senate-53/2024/03: Senate approved the list of the additional eligible students name in addition to the earlier list for the award of degree in UG and Ph.D. programs and recommended the same for consideration and approval of the Board of Governors. Further, the Senate authorized the Chairman to approve additional names,

Mehar

	if any, of eligible students who may complete the requirements for the award of degree before the 17 th Convocation if no Senate meeting takes place before the Convocation.												
Item No. 53-3.4	<p>To consider the Name of Mr. Vishal Kumar (ID No. 2011PST5125) for award of M.Tech. degree in Structural Engineering.</p> <p>Resolution No. Senate-53/2024/04: Senate after detailed deliberation deferred the matter of Mr. Vishal Kumar (ID No. 2011PST5125) for award of M.Tech. degree in Structural Engineering and directed to put the agenda along with all such cases together in the next senate meeting.</p>												
Item No. 53-3.5	<p>To consider the matter of conducting course in hybrid mode due to revision in UG scheme.</p> <p>Resolution No. Senate-53/2024/05: Senate after detailed deliberation approved the matter of conducting course in hybrid mode due to revision in UG scheme. If no other option is available in the new scheme for completion the credit requirement.</p> <p>The Senate did not approve the present case of the Mechanical Engineering Department and directed that the student should register the modified 03 credit course in even semester in the Department and earn one additional credit through NPTL. Senate further authorized AAC to take decision in similar cases in future on similar lines.</p>												
Item No. 53-3.6	<p>To consider the mercy request of the student Ms. Sakshi Mahajan (2020UEC1647) to rewrite the supplementary examination.</p> <p>Resolution No. Senate-53/2024/06: The Senate did not approved the mercy appeal of Ms. Sakshi Mahajan (2020UEC1647) to rewrite the supplementary examination.</p>												
Item No. 53-3.7	<p>To consider the termination of registration of UG students who failed to earn a minimum of 30 credits for promotion to II year even after opting for the Year Back option once in I year.</p> <p>Resolution No. Senate-53/2024/07: Senate approved the termination of enrollment of following students from the Institute roles:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Student Id</th> <th>Student Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>2021UCP1003</td> <td>AARAV MAKADIA</td> </tr> <tr> <td>2.</td> <td>2021UEC1054</td> <td>RISHU SHARMA</td> </tr> <tr> <td>3.</td> <td>2021UEC1575</td> <td>ROHIT SINGH TANWAR</td> </tr> </tbody> </table>	S. No.	Student Id	Student Name	1.	2021UCP1003	AARAV MAKADIA	2.	2021UEC1054	RISHU SHARMA	3.	2021UEC1575	ROHIT SINGH TANWAR
S. No.	Student Id	Student Name											
1.	2021UCP1003	AARAV MAKADIA											
2.	2021UEC1054	RISHU SHARMA											
3.	2021UEC1575	ROHIT SINGH TANWAR											
Item No. 53-3.8	<p>To discuss revision in composition of DREC in PG Rules.</p> <p>Resolution No. Senate-53/2024/08: Senate after detailed deliberation deferred the revision in composition of DREC in new PG rules and suggested to go through the practices followed at other IITs and NITs and place the summary before the Senate for consideration.</p> <p>The matter of inviting external expert out of the institute in DREC was discussed and it was decided that if it is found necessary, case specific approval shall be needed from Chairman, Senate on basis of case specific justification. It was also decided that participation of external DREC members can be online without any sitting charges/honorarium.</p>												
Item No. 53-3.9	To discuss revision in Semester progress evaluation of Ph.D. students in PG Rules.												

M. Shinde
2

	Resolution No. Senate-53/2024/09: Senate after detailed deliberation deferred the revision of Semester progress evaluation of Ph.D. students in new PG Rules and suggested to go through the practices of other IITs and NITs and place the summary before the Senate.
Item No. 53-4.0	: Item for ratification
Item No. 53-4.1	: To ratify the name of the students issued duplicate/revised Degree Certificates. Item was ratified.
Item No. 53-4.2	: To ratify the minimum qualification for Ph.D. admission entrance examination from Even Semester 2023-24 and onwards for the Department of Chemical Engineering and Centre for Energy and Environment. Item was ratified.
Item No. 53-5.0	: Item for reporting
Item No. 53-5.1	: To note the minutes of the 60th meeting of SPGB. Noted
Item No. 53-5.2	: To note the minutes of the 43rd meeting of SUGB. Noted
Item No. 53-5.3	: To note the minutes of the 37th and 38th meetings of the Academic Affairs Committee held on 01.11.2023 and 21.12.2023 respectively. Noted
Item No. 53-5.4	: To note the minutes of the meetings of the Unfair Means Committee held on 01.11.2023 and 21.12.2023 respectively. Noted
Item No. 53-6.0	: Any other items with permission of the Chair
Item No. 53-6.1	: To consider the proposals for the conversion of two Centers of the institute to Department. Resolution No. Senate-53/2024/10: The Senate after deliberation constituted a committee of the following members to frame guidelines for the conversion of any Center of the Institute to Department: <ol style="list-style-type: none"> 1. Prof. Ashok Pradhan (External member of Senate) – Chairman 2. Prof. Vipul Rastogi –(External member of Senate) Member 3. Prof. Suchi Srivastav –(External member of Senate) Member 4. Associate Dean (UG), Convener
Item No. 53-6.2	: To introduce a course of Human Values and Professional Ethics for all UG students. Resolution No. Senate-53/2024/10: The Senate after deliberation constituted a committee of the following members to suggest a course on Human Values and Professional Ethics for all UG students along with details about its delivery: <ol style="list-style-type: none"> 1. Dr. Preeti Bhatt, HoD HSS, Chairperson 2. Prof. Rajesh Kumar, Member 3. Prof. Jyoti Joshi, Member 4. Dr. Sushant Upadhyay, Member 5. Dr. Deepak Verma, Member
Item No. 53-6.3	: To consider the institution of the Institute internship Program. Resolution No. Senate-53/2024/11: The Senate after deliberation constituted a committee of the following members to give recommendations to start an internship

Neelam

	<p>program at the institute and suggested that the institute may start Institute internship in under graduate program with 50 Institute funded students :</p> <ol style="list-style-type: none">1. Prof. S.D. Bharti, Chairman2. Prof. Rajesh Kumar, member3. Prof. Amar Patnaik, member
--	--

The meeting ended with a vote of thanks to the Chair.

M. K. Mishra

Registrar & Secretary

Rattor

08.02.2024

List of Senate members who attended 53rd Senate meeting Offline/online:

S. No.	Name
1.	Prof. N. P. Padhy
2.	Prof. Shuchi Srivastava
3.	Prof. Ashok Kumar Pradhan
4.	Prof. A. P. S. Rathore
5.	Prof. Amar Patnaik
6.	Prof. Arun Gaur
7.	Prof. D. Boolchandani
8.	Prof. Dilip Sharma
9.	Prof. Girdhari Singh
10.	Prof. Ghanshyam Singh
11.	Prof. Gunwant Sharma
12.	Prof. Harpal Tiwari
13.	Prof. Harlal Singh Mali
14.	Prof. Jyoti Joshi
15.	Prof. Himanshu Chaudhary
16.	Prof. Jyotirmay Mathur
17.	Prof. K. K. Sharma
18.	Prof. Kailash Singh
19.	Prof. Lava Bhargava
20.	Prof. M. K. Shrimali
21.	Prof. M. L. Mittal
22.	Prof. M. M. Sharma
23.	Prof. Mahender Choudhary
24.	Prof. Mahesh Kumar Jat
25.	Prof. M. P. Poonia
26.	Prof. Manish Vashishtha
27.	Prof. Manju Singh
28.	Prof. Manoj Fozdar
29.	Prof. Madhu Agarwal
30.	Prof. Monica Sharma
31.	Prof. Nikhil Gupta
32.	Prof. R. P. Yadav
33.	Prof. Ragini Gupta
34.	Prof. Raj Kumar Vyas
35.	Prof. Rajendra Kumar Goyal
36.	Prof. Rajesh Kumar
37.	Prof. Rajive Tiwari
38.	Prof. Rakesh Jain
39.	Prof. Rohit Bhakar
40.	Prof. S. D. Bharti
41.	Prof. Sudhir Kumar
42.	Prof. Suja George
43.	Prof. Sumit Khandelwal
44.	Prof. Susanta Kumar Jana
45.	Prof. Urmila Brighu
46.	Prof. Y. P. Mathur
47.	Dr. Amartya Chowdhury
48.	Dr. Preeti Bhatt

49.	Dr. Sushant Upadhyaya
50.	Dr. Satish Pipralia
51.	Dr. Deepak Verma
52.	Dr. Vatsala Mathur
53.	Dr. Namita Mittal

The list of members who could not attend the 53rd Senate meeting:

S. No.	Name
1.	Prof. Vipul Rastogi
2.	Prof. A. B. Gupta
3.	Prof. A. K. Vyas
4.	Prof. Ajay Singh Jethoo
5.	Prof. B. L. Swami
6.	Prof. G. D. Agarwal
7.	Prof. G. S. Dangayach
8.	Prof. K. R. Niazi
9.	Prof. Kanupriya Sachdev
10.	Prof. Nirupam Rohtagi
11.	Prof. Nupur Tandon
12.	Prof. R. C. Gupta
13.	Prof. Rajeev Shringi
14.	Prof. Ravindra Nagar
15.	Prof. Rohit Goyal
16.	Prof. S. K. Tiwari
17.	Prof. S. P. Chaurasia
18.	Prof. Sanjay Mathur
19.	Prof. T. C. Gupta
20.	Prof. Tarush Chandra
21.	Prof. Upendra Pandel
22.	Prof. Vibhuti Singh Shekhawat
23.	Prof. Vijay Janyani
24.	Prof. Vijay Laxmi (Sabbatical Leave)
25.	Prof. Vineet Sahula
26.	Dr. Bhagwati Sharma

Mishra



Draft Minutes of 53rd Senate Meeting held on 12.01.2024

S D Bharti <sdbharti@mnit.ac.in>

Thu, Jan 18, 2024 at 3:59 PM

To: Dean Academic <dean.acad@mnit.ac.in>, MNIT Director <director@mnit.ac.in>, Aradhana Chopra <dr.acad@mnit.ac.in>

Dear Sir,

The following changes should be made in the Agenda Item No. 53-6.1

Existing Text

Item No. 53-6.1 : To consider the proposals for the conversion of two Centers of the institute to Department.

Changed Text:

Item No. 53-6.1 : To consider the **Renaming** of two Centers of the institute as below.

National Centre for Disaster Mitigation & Management to be Renamed as

Department of Earthquake Engineering

and

Centre for Energy and Environment to be renamed as:

Department of Energy and Environment

For your ready reference the Agenda Note circulated is also attached.

With Warm Regards

S. D. Bharti

Professor (Structural Engineering) Department of Civil Engineering &

Head, National Centre for Disaster Mitigation and Management (<https://mnit.ac.in/ncdmm/>)

Head, National Centre for Earthquake Safety of Dams (<https://ncesd.mnit.ac.in/>)

(An Initiative of the Ministry of Jal Shakti, Government of India, towards effective implementation of The Dam Safety Act, 2021)

Malaviya National Institute of Technology Jaipur,

JLN Marg, Jaipur-302017 (India)

[Quoted text hidden]

 **Senate_53 Meeting_Supplementary agenda_9 Jan 2023.pdf**
115K

Draft Minutes of 53rd Senate Meeting held on 12.01.2024

Head Humanities & Soc. Sc. <hod.hum@mnit.ac.in>

Tue, Jan 23, 2024 at 1:50 PM

To: "D. R. Academic" <dr.acad@mnit.ac.in>

Dear Ma'am,

This is with reference to **Item No. 53-3.8: To discuss revision in composition of DREC in PG Rules** of the draft Minutes of the 53rd Senate Meeting held on 12.01.2024.

The Agenda was stated as follows:

As per the rule no. 8.1-2, presently the DREC composition is as given below:

The present constitution of DREC is as follows:

- Supervisor, Convener
- Three Experts from within the department related to major area of specialisation (including co-supervisors)
- If required, one expert from outside the department or outside Institute

It is proposed to have a revised composition of DREC as given below:

The DREC shall comprise of at least five members, all having a PhD degree, including:

- Convener, DPGC (or his nominee other than DREC members) as the Chairperson of DREC (Ex-officio)
- Supervisor, as Convener, DREC
- Three Experts, preferably from within the department related to the major area of specialisation, including co-supervisor/ external supervisor, if any. In case there are less than three experts in the area in the department, experts from other departments of the Institute may be included.
- If required, one expert from outside the department or outside the Institute with approval of Chairperson, SPGB.

The draft minutes of the Item are as follows:

The matter of inviting external expert out of the institute in DREC was discussed and it was decided that if it is found necessary, case specific approval shall be needed from Chairman, Senate on basis of case specific justification. It was also decided that participation of external DREC members can be online without any sitting charges/honorarium.

In response to the above, I would like to point out that the Agenda was to discuss the addition of one more member - Convener, DPGC as the Chairperson of DREC (Ex-officio), as the remaining constitution of the DREC was the same as earlier. The discussion about External Members of the DREC was not the focus of the Agenda. However, the point regarding External Members of DREC was discussed in the Senate.

I have no objection to case specific approval for adding an External Member to the DREC of individual PhD students.

However, the point regarding the honorarium payable to External members was not clearly stated during the Senate meeting. It was not explicitly stated in the Senate that no honorarium would be paid to the External Members, while the draft Minutes say so. **Also financial matters are not in the purview of the Senate hence should not be included in the draft Minutes.**

External members are required in the DRECs of the HSS Department as PhDs are being supervised in individual disciplines and sufficient faculty members are not available for each discipline in the Department.

The following is the number of faculty members in each discipline:

English: 03

Economics: 03

Political Science: 01

Sociology: 01

Three Experts are required for the DREC to be complete and the Department does not have even enough internal faculty members to form the DREC of the PhD students. **The presence of an External member (offline or online) of the same discipline helps to enhance the quality of the research.**

Invited members are paid honorarium for sharing their expertise during both offline and online meetings at MNIT, hence I am not sure why honorarium should not be paid to the External Members of the DREC. As a fallout, it would not be possible for faculty members to invite External Members for the DREC, and the quality of research being carried out by the PhD students in the Department of HSS would suffer.

Kindly revise the draft Minutes regarding Item No. 53-3.8 considering the points mentioned above and oblige.

Thanks and regards
Preeti Bhatt

On Wed, Jan 17, 2024 at 4:43 PM D. R. Academic <dr.acad@mnit.ac.in> wrote:
[Quoted text hidden]

Dr Preeti Bhatt
Associate Professor and Head
Department of Humanities and Social Sciences
Malaviya National Institute of Technology Jaipur
J.L.N. Marg, Jaipur – 302017
INDIA
Tel. +91-9549657352; +91-9829310220; +91-141-2713407 (O)
Website: www.mnit.ac.in



मलवीय राष्ट्रीय प्रौद्योगिकी
संस्थान जयपुर
MALAVIYA NATIONAL INSTITUTE OF
TECHNOLOGY JAIPUR

MINORS

S.No.	Minor	Offering Department	Open for Branches
1	Minor in Industrial Safety	Chemical Engineering	All
2	Minor CSE	Computer Science and Engineering	All
3	Minor in Electronics and Communication Engineering	Electronics and Communication Engineering	All
4	Minor in Electric Vehicle	Electrical Engineering	All
5	Minor in System and Control		
6	Minor in Advanced Manufacturing Technologies	Mechanical Engineering	MME
7	Minor in Robotics and Automation		CSE, ECE and EE
8	Minor in Physics	Physics	All
9	Minor in Sustainable Energy	Centre for Energy and Environment	All
10	Minor in Management	Department of Management Studies	All

Scheme for B.Tech. Engineering with Minor in Industrial Safety
 Department of Chemical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Process Safety and Risk Management	V	Theory	3	3	0	0
2	Industrial Regulations and Occupational Health Management	V	Theory	3	3	0	0
3	Industrial Pollution Control	VI	Theory	3	3	0	0
4	Process Engineering & Plant Design	VI	Theory	3	3	0	0
5	Fire Engineering and Explosion Control	VII	Theory	3	3	0	0
6	Disaster Management	VIII	Theory	3	3	0	0
				Total Credits :	18		



MNIT JAIPUR

Scheme for B.Tech. Engineering with Minor CSE
 Department of Computer Science and Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Data Structures	V	Theory	3	3	0	0
2	Operating System	V	Theory	3	3	0	0
3	Computer Networks	VI	Theory	3	3	0	0
4	Database Information Systems	VI	Theory	3	3	0	0
5	Software Engineering	VII	Theory	3	3	0	0
6	Artificial Intelligence	VIII	Theory	3	3	0	0
				Total Credits :	18		



Scheme for B.Tech. Engineering with Minor in Electrical Vehicle
 Department of Electrical Engineering

SNo.	Course Name	Semester	Type	Credits	L	T	P
1	Basic Power Electronics	V	Theory	4	3	1	0
2	Electrical Machines	V	Theory	4	3	1	0
3	Electrical Machine Lab	VI	Lab	1	0	0	2
4	Electric Drives & Control	VI	Theory	4	3	1	0
5	Electric Drives Lab	VII	Lab	1	0	0	2
6	Electric Vehicle Technology	VIII	Theory	4	3	1	0
				Total Credits :	18		

Scheme for B.Tech. Engineering with Minor in System and Control
 Department of Electrical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Linear System Theory	V	Theory	3	3	0	0
2	Discrete time Control Systems	V	Theory	3	3	0	0
3	Nonlinear Control Systems	VI	Theory	3	3	0	0
4	Fundamentals of Robotics	VI	Theory	3	3	0	0
5	Optimal Control Systems	VII	Theory	2	2	0	0
6	System Engineering Lab	VII	Lab	1	0	0	2
7	Minor Specialization Project	VIII	Project	3	0	0	6
Total Credits :				18			

Scheme for B.Tech. Engineering with Minor in Electronics and Communication Engineering
 Department of Electronics and Communication Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Analog Communication	V	Theory	3	3	0	0
2	Digital Logic Design	V	Theory	3	3	0	0
3	Signals and Systems	VI	Theory	3	3	0	0
4	Electronics Devices and Circuits	VI	Theory	3	3	0	0
5	Linear Integrated Circuits *	VII	Theory	3	3	0	0
6	Wireless and 5G Communication *	VII	Theory	3	3	0	0
7	Digital Communication Systems *	VIII	Theory	3	3	0	0
8	Embedded Systems *	VIII	Theory	3	3	0	0
Total Credits :				18			

* The (*) indicates, two subjects can be taken in either VII/ VIII semester considering the provision for one semester industrial internship.



Scheme for B.Tech. Engineering with Minor in Advanced Manufacturing Technologies
 Department of Mechanical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Metal Additive Manufacturing	V	Theory	3	3	0	0
2	AM, PM&M, Mfg. Automation Lab	V	Lab	3	0	0	6
3	Precision Manufacturing and Measurement	VI	Theory	3	3	0	0
4	Manufacturing Automation	VI	Theory	3	3	0	0
5	Micro-Nano Fabrication	VII	Theory	3	2	1	0
6	Mini Project on AMTs	VIII	Project	3	0	0	6
				Total Credits :	18		



Scheme for B.Tech. Engineering with Minor in Robotics and Automation
 Department of Mechanical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Kinematics and Dynamics of Robotic Manipulators	V	Theory	3	2	1	0
2	Control of Robots and Automation Systems	V	Theory	3	3	0	0
3	Robot Vision and Sensing	VI	Theory	3	3	0	0
4	Programming, Control and Automation Lab	VI	Lab	3	0	0	6
5	Artificial Intelligence for Robotic Systems	VII	Theory	3	2	1	0
6	Mini Project on Robotics and Automation	VIII	Project	3	0	0	6
				Total Credits :	18		

Scheme for B.Tech. Engineering with Minor in Physics
Department of Physics

S.No.	Course Name	Semester	Type	Credits	L	T	P
1	Electromagnetic Theory	V	Theory	3	3	0	0
2	Quantum Mechanics	V	Theory	3	3	0	0
3	Condensed Matter Physics	VI	Theory	3	3	0	0
4	Advanced Physics Lab	VI	Lab	3	0	0	6
5	Program Elective I	VII	Theory	3	3	0	0
6	Program Elective II	VIII	Theory	3	3	0	0
				Total Credits :	18		

Scheme for B.Tech. Engineering with Minor in Sustainable Energy
 Department of Centre for Energy and Environment

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Mini Project	V	Project	3	0	0	6
2	Sustainable Energy Laboratory	V	Lab	3	0	0	6
3	Energy Economics and Policy	VI	Theory	3	3	0	0
4	Energy Storage Technologies	VI	Theory	3	3	0	0
5	Elective 1	VII	Theory	3	3	0	0
6	Elective 2	VIII	Theory	3	3	0	0
				Total Credits :	18		

Scheme for B.Tech. Engineering with Minor in Sustainable Energy
Department of Centre for Energy and Environment

List of elective courses offered by the Department of Centre for Energy and Environment

S No.	Course Name	Credits	L	T	P
1	Energy Management and audit	3	3	0	0
2	Solar Energy Engineering	3	3	0	0
3	Sustainable Buildings	3	3	0	0
4	Energy and Data Science	3	3	0	0
5	Hydrogen Energy	3	3	0	0
6	Circular Economy	3	3	0	0
7	Grid Integration of Renewable Energy	3	3	0	0



Scheme for B.Tech. Engineering with Minor in Management
 Department of Management Studies

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Business Environment	V	Theory	3	3	0	0
2	Human Resource Management and Organizational Behaviour	V	Theory	3	3	0	0
3	Fundamentals of Marketing Management	VI	Theory	3	3	0	0
4	Finance for Engineers	VI	Theory	3	3	0	0
5	Entrepreneurship and Innovation	VII	Theory	3	3	0	0
6	Project Management	VIII	Theory	3	3	0	0
				Total Credits :	18		

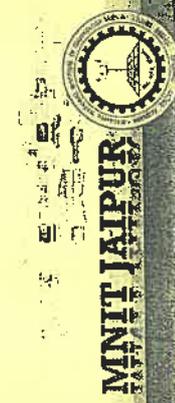
Honors

S.No.	Honors	Offering Department
1	B.Tech. Chemical Engineering with Honors	Department of Chemical Engineering
2	B.Tech. Civil Engineering with Honors	Department of Civil Engineering
3	B.Tech. Computer Science and Engineering with Honors	Department of Computer Science and Engineering
4	B.Tech. Electrical Engineering with Honors	Department of Electrical Engineering
5	B.Tech. Electronics and Communication Engineering with Honors in Machine Learning and Signal Processing	Department of Electronics and Communication Engineering
6	B.Tech. Electronics and Communication Engineering with Honors in VLSI Design	Department of Electronics and Communication Engineering
7	B.Tech. Electronics and Communication Engineering with Honors in Embedded & Intelligent Systems	Department of Electronics and Communication Engineering
8	B.Tech. Electronics and Communication Engineering with Honors in Advanced Communication Engineering	Department of Electronics and Communication Engineering
9	B.Tech. Mechanical Engineering with Honors in Advanced Manufacturing Technologies	Department of Mechanical Engineering
10	B.Tech. Mechanical Engineering with Honors in Supply Chain Analytics	Department of Mechanical Engineering
11	B.Tech. Mechanical Engineering with Honors in Robotics and Automation	Department of Mechanical Engineering
12	B.Tech. Mechanical Engineering with Honors in Advanced Thermal Systems	Department of Mechanical Engineering
13	B.Tech. Metallurgical and Materials Engineering with Honors	Department of Metallurgical and Materials Engineering



Scheme for B.Tech. Chemical Engineering with Honors
 Department of Chemical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Heterogeneous Catalysis	V	Theory	3	3	0	0
2	Soft Matter	V	Theory	3	3	0	0
3	Process Intensification	VI	Theory	3	3	0	0
4	Multiphase Reactors	VI	Theory	3	3	0	0
5	Molecular Modeling of Chemical Systems	VII	Theory	3	3	0	0
6	Process Industry 4.0	VIII	Theory	3	3	0	0
				Total Credits :	18		



Scheme for B.Tech. Civil Engineering with Honors
Department of Civil Engineering

S.No.	Course Name	Semester	Type	Credits	L	T	P
1	Honors Course 1	V	Theory	3	3	0	0
2	Honors Course 2	V	Theory	3	3	0	0
3	Honors Course 3	VI	Theory	3	3	0	0
4	Honors Course 4	VI	Theory	3	3	0	0
5	Honors Course 5	VII	Theory	3	3	0	0
6	Honors Course 6	VIII	Theory	3	3	0	0
				Total Credits :	18		



Scheme for B.Tech. Civil Engineering with Honors
Department of Civil Engineering

Professional Track

SNo.	Course Name	Credits	L	T	P
1	Advanced Foundation Design	3	3	0	0
2	Design of Hydraulic Structures	3	3	0	0
3	Ground Improvement Techniques	3	3	0	0
4	Air and Noise Pollution	3	3	0	0
5	Design of Masonry Structures	3	3	0	0
6	Solid Waste Management	3	3	0	0
7	Dynamics of Structures	3	3	0	0
8	Railway and Airport Engineering	3	3	0	0

* for students preparing for GATE, UPSC and other competitive exams



M. J. SOMAIYA
INSTITUTE OF TECHNOLOGY AND ENGINEERING
JALPUR

Scheme for B.Tech. Civil Engineering with Honors
Department of Civil Engineering

Industrial Track

S No.	Course Name	Credits			L	T	P
1	Urban Water Conveyance System Design	3	3	0	0	0	
2	Introduction of Spatial Data Collection and Analysis	3	3	0	0	0	
3	Construction Information Modelling and Automation	3	3	0	0	0	
4	Finite Element Method	3	3	0	0	0	
5	Structural Analysis - II	3	3	0	0	0	
6	Design of Steel Structural Systems	3	3	0	0	0	
7	Industrial Waste Treatment	3	3	0	0	0	
8	Concrete Technology	3	3	0	0	0	
9	Sustainable Building Project Delivery	3	3	0	0	0	

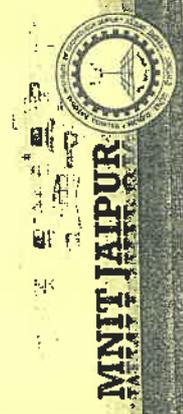
* for students appearing for core Civil Engineering jobs as career option



MNIT JAIPUR
MINISTRY OF EDUCATION
GOVERNMENT OF RAJASTHAN

Scheme for B.Tech. Computer Science and Engineering with Honors
 Department of Computer Science and Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Advanced Data Structures and Algorithms	V	Theory	3	3	0	0
2	Honors Elective - 1 *	V	Theory	3	3	0	0
3	Honors Elective - 2 *	VI	Theory	3	3	0	0
4	Honors Elective - 3 *	VI	Theory	3	3	0	0
5	Honors Elective - 4 *	VII	Theory	3	3	0	0
6	Honors Elective - 5 *	VIII	Theory	3	3	0	0
				Total Credits :	18		



Scheme for B.Tech. Computer Science and Engineering with Honors

Department of Computer Science and Engineering

Honors elective courses will be taken from PG Departmental Subject pool

S No.	Course Name	Credits			S No.	Course Name	Credits		
		L	T	P			L	T	P
1	Advances in Compiler Design	3	3	0	21	Pattern Recognition	3	3	0
2	Android Programming	3	3	0	22	Public Key Infrastructure and Trust Management	3	3	0
3	Big Data Analytics	3	3	0	23	Quantum Computing	3	3	0
4	Cloud Security	3	3	0	24	Quantum Cryptography	3	3	0
5	Cyber Security	3	3	0	25	Real Time Systems	3	3	0
6	Data Compression	3	3	0	26	Robotics and Control	3	3	0
7	Data Visualization	3	3	0	27	Security Analysis of Protocols	3	3	0
8	Digital Compression	3	3	0	28	Selected Topics in Cryptography	3	3	0
9	Digital Forensic	3	3	0	29	Social Media Mining	3	3	0
10	Distributed Systems	3	3	0	30	Software Project Management	3	3	0
11	E-commerce	3	3	0	31	System on Chip	3	3	0
12	Embedded System Security	3	3	0	32	Wireless Sensor Networks	3	3	0
13	Hardware Software Codesign	3	3	0					
14	Image Analysis	3	3	0					
15	Intrusion Detection	3	3	0					
16	Neural Network	3	3	0					
17	Network on Chip	3	3	0					
18	Network Performance Modeling	3	3	0					
19	Parallel Processing & Algorithms	3	3	0					
20	Parallelizing Compiler	3	3	0					



Scheme for B.Tech. Electrical Engineering with Honors
 Department of Electrical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Modelling & Simulation of Power Electronics Systems	V	Theory	3	3	0	0
2	Special Electrical Machines and Applications	V	Theory	3	3	0	0
3	Advanced Power System Protection	VI	Theory	3	3	0	0
4	Nonlinear Control Systems	VI	Theory	3	3	0	0
5	Power System Dynamics	VII	Theory	3	3	0	0
6	Switched Mode Power Conversion	VIII	Theory	3	3	0	0
				Total Credits :	18		

29



Scheme for B.Tech. Electronics and Communication Engineering with Honors in Machine Learning and Signal Processing
Department of Electronics and Communication Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Modelling, Optimization and Transforms	V	Theory	3	3	0	0
2	Multirate Signal Processing	V	Theory	3	3	0	0
3	Medical Engineering and Systems	VI	Theory	3	3	0	0
4	Computer Vision	VI	Theory	3	3	0	0
5	Reduced order modeling, Optimization and Machine Intelligence *	VII	Theory	3	3	0	0
6	VLSI Signal Processing Architecture *	VII	Theory	3	3	0	0
7	Mini Project on Machine Learning and Signal Processing *	VII	Project	3	0	0	6
8	Adaptive Signal Processing *	VIII	Theory	3	3	0	0
9	Advanced Digital Signal and Image Processing *	VIII	Theory	3	3	0	0
10	Pattern Recognition and Machine Learning *	VIII	Theory	3	3	0	0
11	Mini Project on Machine Learning and Signal Processing *	VIII	Project	3	0	0	6
				Total Credits :	18		

* The (*) indicates, two subjects can be taken in either VII/ VIII semester considering the provision for one semester industrial internship.



MNIT JAIPUR

Scheme for B.Tech. Electronics and Communication Engineering with Honors in VLSI Design
 Department of Electronics and Communication Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	CAD Algorithms for VLSI Physical Design	V	Theory	3	3	0	0
2	CAD Algorithms for Synthesis of VLSI Systems	V	Theory	3	3	0	0
3	Digital System Design & FPGA	VI	Theory	3	3	0	0
4	Formal Verification of Digital Hardware & Embedded Software	VI	Theory	3	3	0	0
5	Micro -& Nano-electro-mechanical Systems (MEMS & NEMS) *	VII	Theory	3	3	0	0
6	Mixed Signal IC Design *	VII	Theory	3	3	0	0
7	Nanotechnology & Emerging Applications *	VII	Theory	3	3	0	0
8	System Level Design & Modelling *	VIII	Theory	3	3	0	0
9	VLSI Signal Processing Architectures *	VIII	Theory	3	3	0	0
10	VLSI Technology *	VIII	Theory	3	3	0	0
11	Quantum Computing *	VIII	Theory	3	3	0	0
12	Mini Project on VLSI Design *	VIII	Project	3	0	0	6
Total Credits :				18			

* The (*) indicates, two subjects can be taken in either VII/ VIII semester considering the provision for one semester industrial internship.



**Scheme for B.Tech. Electronics and Communication Engineering with Honors in Embedded
& Intelligent Systems
Department of Electronics and Communication Engineering**

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Advanced Embedded Software design	V	Theory	3	3	0	0
2	Advanced Microcomputer Systems & Interfacing	V	Theory	3	3	0	0
3	CAD Algorithms for Synthesis of VLSI Systems	VI	Theory	3	3	0	0
4	Computer vision	VI	Theory	3	3	0	0
5	Formal Verification of Digital Hardware & Embedded Software *	VII	Theory	3	3	0	0
6	Pattern Analysis & Machine intelligence *	VII	Theory	3	3	0	0
7	Reduced order Modeling, Optimization & Machine intelligence *	VII	Theory	3	3	0	0
8	Embedded SoC Design *	VIII	Theory	3	3	0	0
9	Quantum Computing *	VIII	Theory	3	3	0	0
10	Internet of Things & IoT *	VIII	Theory	3	3	0	0
11	Mini Project on Embedded Systems *	VIII	Project	3	0	0	6
Total Credits :				18			

* The (*) indicates, two subjects can be taken in either VII/ VIII semester considering the provision for one semester industrial internship.



MNIT JAIPUR

**Scheme for B.Tech. Electronics and Communication Engineering with Honors in Advanced
Communication Engineering**
Department of Electronics and Communication Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Mathematical Modeling and Simulation for Communication Engineering Systems	V	Theory	3	3	0	0
2	Advanced Digital Communication Systems	V	Theory	3	3	0	0
3	Advanced Antenna Engineering	VI	Theory	3	3	0	0
4	Advanced Mobile and Wireless Networking	VI	Theory	3	3	0	0
5	Advanced Microwave Engineering *	VII	Theory	3	3	0	0
6	Advanced Optical Communication Systems *	VII	Theory	3	3	0	0
7	Advanced Error Control Codes *	VIII	Theory	3	3	0	0
8	Computational Electromagnetics *	VIII	Theory	3	3	0	0
9	Mini Project on Communication Engineering *	VIII	Project	3	0	0	6
Total Credits :				18			

* The (*) indicates, two subjects can be taken in either VII/ VIII semester considering the provision for one semester industrial internship.



MNIT JAIPUR

Scheme for B.Tech. Mechanical Engineering with Honors in Advanced Manufacturing Technologies

Department of Mechanical Engineering

SNo.	Course Name	Semester	Type	Credits	L	T	P
1	Metal Additive Manufacturing	V	Theory	3	3	0	0
2	AM, PM&M, Mfg. Automation Lab	V	Lab	3	0	0	6
3	Precision Manufacturing and Measurement	VI	Theory	3	3	0	0
4	Manufacturing Automation	VI	Theory	3	3	0	0
5	Micro-Nano Fabrication	VII	Theory	3	2	1	0
6	Mini Project on AMTs	VIII	Project	3	0	0	6
				Total Credits :	18		

Scheme for B.Tech. Mechanical Engineering with Honors in Supply Chain Analytics
 Department of Mechanical Engineering

S No.	Course Name	Semester	Type	Credits	L	T	P
1	Data Science for Supply Chain Management	V	Theory	3	2	1	0
2	Modelling Sustainability	V	Theory	3	2	1	0
3	Business Logistics	VI	Theory	3	2	1	0
4	Prescriptive Analytics	VI	Theory	3	2	1	0
5	Supply Chain 4.0	VII	Theory	3	2	1	0
6	Mini Project on Supply Chain Analytics	VIII	Project	3	0	0	6
				Total Credits :	18		



Scheme for B.Tech. Mechanical Engineering with Honors in Robotics and Automation
 Department of Mechanical Engineering

SNo.	Course Name	Semester	Type	Credits	L	T	P
1	Kinematics and Dynamics of Robotic Manipulators	V	Theory	3	2	1	0
2	Control of Robots and Automation Systems	V	Theory	3	3	0	0
3	Robot Vision and Sensing	VI	Theory	3	3	0	0
4	Programming, Control and Automation Lab	VI	Lab	3	0	0	6
5	Artificial Intelligence for Robotic Systems	VII	Theory	3	2	1	0
6	Mini Project on Robotics and Automation	VIII	Project	3	0	0	6
				Total Credits :	18		



Scheme for B.Tech. Mechanical Engineering with Honors in Advanced Thermal Systems
 Department of Mechanical Engineering

S. no.	Course Name	Semester	Type	Credits	L	T	P
1	Advanced Fluid Mechanics	V	Theory	3	3	0	0
2	Numerical Methods and Data Visualization	V	Theory	3	2	1	0
3	A. Design of Heat Exchanger B. Environment, Social and Governance	VI	Theory	3	2	1	0
4	High Performance Computing and AI in Thermal - Fluid Systems	VI	Theory	3	2	1	0
5	A. Computational Heat Transfer B. Experimental Methods in Thermal Sciences	VII	Theory	3	3	0	0
6	Thermal Simulation lab and Mini Project	VIII	Project	3	0	0	6
				Total Credits :	18		



Scheme for B.Tech. Metallurgical and Materials Engineering with Honors
 Department of Metallurgical and Materials Engineering

S.No.	Course Name	Semester	Type	Credits	L	T	P
1	Honors Course 1	V	Theory	3	3	0	0
2	Honors Course 2	V	Theory	3	3	0	0
3	Honors Course 3	VI	Theory	3	3	0	0
4	Honors Course 4	VI	Theory	3	3	0	0
5	Honors Course 5	VII	Theory	3	3	0	0
6	Honors Course 6	VIII	Theory	3	3	0	0
				Total Credits :	18		

Scheme for B.Tech. Metallurgical and Materials Engineering with Honors

Department of Metallurgical and Materials Engineering

List of Honors Elective Courses

S No.	Course Name	Credits	L	T	P
1	Light Metals and Alloys	3	3	0	0
2	Design and Development of Steels	3	3	0	0
3	Theory of Alloy Design	3	3	0	0
4	Physical Metallurgy of Alloy Steels	3	3	0	0
5	High Temperature Corrosion	3	3	0	0
6	Fracture and failure	3	3	0	0
7	Fatigue, Fracture and Creep	3	3	0	0
8	Defects and Diffusion in Crystalline Solids	3	3	0	0
9	Introduction to Computational Materials Science	3	3	0	0

Engineering Metals

S No.	Course Name	Credits	L	T	P
1	Metallurgy of Additive Manufacturing	3	3	0	0
2	Particulate Materials	3	3	0	0
3	Welding Metallurgy	3	3	0	0
4	Advanced Casting Technology	3	3	0	0
5	Additive Manufacturing Process	3	3	0	0
6	Non-Equilibrium Processing of Materials	3	3	0	0
7	Surface Engineering	3	3	0	0

Process Metallurgy



MNIT JAIPUR

Scheme for B.Tech. Metallurgical and Materials Engineering with Honors

Department of Metallurgical and Materials Engineering

S No.	Course Name	Credits	L	T	P
1	Composite Materials	3	3	0	0
2	Automotive and Aerospace Materials	3	3	0	0
3	Properties and Processing of Polymers	3	3	0	0
4	Tribological Engineering Materials	3	3	0	0
5	Advanced Solar Photovoltaic Materials and Technologies	3	3	0	0
6	Ceramics and Glasses	3	3	0	0
7	Biomaterials	3	3	0	0
8	Nuclear Materials	3	3	0	0
9	Design and Selection of Materials	3	3	0	0
10	Electronic and Magnetic Materials	3	3	0	0
11	Advanced Microscopic Techniques	3	3	0	0

Engineering Materials

S No.	Course Name	Credits	L	T	P
1	Alternative Routes of Iron making	3	3	0	0
2	Secondary Steel Making	3	3	0	0
3	Extraction of Mg, Sn, Ferro-Alloying Elements, Ni, Ti	3	3	0	0
4	Environmental and Waste Management in Metallurgical Industries	3	3	0	0

Extractive Metallurgy



Annexure-C

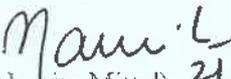
Recommendation of the committee Constituted to finalise the scheme and syllabus of Artificial Intelligence and Data Engineering (AIDE)

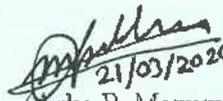
As per the directions of the SUGB, a committee was constituted to finalise the scheme and syllabus of Artificial Intelligence and Data Engineering (AIDE) vide office order F.4/S.VIII-1/23-24-Acad (SUGB)/3286, dated 01/01/2024. The committee conducted its meeting on March 20, 2024 to review the scheme of B.Tech. (AIDE) with reference to the scheme and structure approved by the Senate.

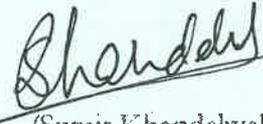
The committee observed that the title of a number of courses of the B.Tech. (AIDE) scheme was same as the courses approved for B.Tech. (Computer Science and Engineering). Looking into the institute guidelines, the committee observed that such duplication in course names/titles shall be avoided and hence observed that there is a need to revise the course titles accordingly.

The committee identified such duplicate titles and proposed suitable alternatives for the same. The syllabus of all the courses has been kept same as that recommended after the Curriculum Development Workshop (CDW).

The modified scheme of B.Tech. (Artificial Intelligence and Data Engineering) is recommended by the committee for approval of the SUGB.


(Namita Mittal) 2113
Head (CSE)


21/03/2024
(Arka P. Mazumdar)
Convener, DUGC (CSE)


(Sumit Khandelwal)
Associate Dean (UG)

Tentative UG(AI&DE) Scheme

First Semester					
S. No	Code	Subject	L-T-P	Credit	Type
1		Institute Core Subjects		19	IC
2	22AIT1xx	Discrete Structures	3-0-0	3	PC
3	22AIT1xx	Problem Solving with C	2-0-0	2	PC
4	22AIP1xx	Problem Solving with C Lab	0-0-2	1	PC
				25	

Second Semester					
S. No	Code	Subject	L-T-P	Credit	Type
		Institute Core Subjects		18	IC
	22AIT1xx	Data Structures and Algorithms	3-0-0	3	PC
	22AIT1xx	Mathematics for AI	3-0-0	3	PC
	22AIP1xx	Data Structures and Algorithms Lab	0-0-2	1	PC
				25	

Third Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	22AIT2xx	Digital Systems and Computer Architecture	3-1-0	4	PC
	22AIT2xx	Algorithm Design	3-0-0	3	PC
	22AIT2xx	Operating System Concepts	3-0-0	3	PC
	22AIT2xx	Foundations of Data Science	3-0-0	3	PC
	22AIT2xx	Automata Theory	3-1-0	4	PC
	22HST2xx	Social Sciences and Professional Ethics	3-1-0	4	BS
	22AIP2xx	Data Science Lab	0-0-2	1	PC
	22AIP2xx	Algorithm Design Lab	0-0-4	2	PC
	22AIP2xx	Operating System Concepts Lab	0-0-2	1	PC
			29	25	

Shardul
42

Fourth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	22AIT2xx	Artificial Neural Networks	3-0-0	3	PC
	22AIT2xx	Introduction to Artificial Intelligence	3-0-0	3	PC
	22AIT2xx	Introduction to Compiler Design	3-0-0	3	PC
	22AIT3xx	Data Communication and Networks	3-0-0	3	PC
	22AIT2xx	Database Management Systems	3-0-0	3	PC
	22MMTxx	Basics of Management	3-0-0	3	PLEAS
	22AIP3xx	DCN Lab	0-0-4	2	PC
	22AIP2xx	Introduction to Artificial Intelligence Lab	0-0-4	2	PC
	22AIP2xx	Database Management Systems Lab	0-0-2	1	PC
	22AIP2xx	Open-ended Minor Project	0-0-4	2	PC
			32	25	

Fifth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	22AIT3xx	Image Processing	3-0-0	3	PC
	22AIT2xx	Principles of Machine Learning	3-0-0	3	PC
	22AIT3xx	Big Data Analytics	3-0-0	3	PC
	22AIT2xx	Information Retrieval	3-0-0	3	PC
	22AIT3xx	Data Mining and Warehousing	3-0-0	3	PC
	22AIT3xx	Program Elective-1	3-0-0	3	PE
	22AIP3xx	Image Processing Lab	0-0-2	1	PC
	22AIP2xx	Principles of Machine Learning Lab	0-0-4	2	PC
	22AIP3xx	Data Analytics lab	0-0-2	1	PC
			26	22	

Sherdahi

43

Honors					
	22AITxxx	Bio-Medical Image Analysis		3	
	22AITxxx	Social Network Analysis		3	
				6	

Minor AIDE					
	22AIT1xx	<i>Data Structures and Algorithms</i>	3-0-0	3	PC
	22AIT2xx	Foundations of Data Science	3-0-0	3	PC
				6	

Sixth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	22AIT3xx	Deep Learning	3-0-0	3	PC
	22AIT3xx	Natural Language Processing	3-0-0	3	PC
	22AIT3xx	High Performance Computing	3-0-0	3	PC
	22AIT3xx	Information Security	3-0-0	3	PC
	22AIT3xx	Program Elective-2	3-0-0	3	PE
	22ECxxx	Wireless and 5G Communication	3-0-0	3	PLEAS
	22AIP3xx	Deep Learning Lab	0-0-4	2	PC
	22AIP3xx	Natural Language Processing Lab	0-0-2	1	PC
	22AIP3xx	High Performance Computing Lab	0-0-2	1	PC
			27	22	

Honors					
	22AITxxx	Honors Elective-1		3	
	22AITxxx	Honors Elective-2		3	
				6	

Minor AIDE					
	22AIT2xx	Database Management Systems	3-0-0	3	PC
	22AIT2xx	<i>Introduction to Artificial Intelligence</i>	3-0-0	3	PC
				6	

Shandeh

44

Seventh Semester					
S. No	Code	Subject	L-T-P	Credits	Type
1	22AIS401	Training Seminar	0-0-4	2	PC
2	22AID402	Minor Project	0-0-6	3	PC
3	22AITxxx	Program Elective-3	3-0-0	3	PE
4	22AITxxx	Program Elective-4	3-0-0	3	PE
5	22AITxxx	Program Elective-5	3-0-0	3	PE
6	22AITxxx	Program Elective-5 Lab	0-0-2	1	PE
7		Open Elective – 1	3-0-0	3	OE
			24	18	

Honors					
	22AITxxx	Honors Elective-3*		3	
				3	

Minor AIDE					
	22AIT3xx	Big Data Analytics	3-0-0	3	PC
				3	

Eighth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
1	22AID403	Major Project	0-0-16	8	PC
2	22AITxxx	Program Elective-6	3-0-0	3	PE
3	22AITxxx	Program Elective-7	3-0-0	3	PE
4	22AIPxxx	Program Elective-7 Lab	0-0-2	1	PE
5		Open Elective – 2	3-0-0	3	OE
			27	18	

Shandeh
45

Honors					
	22AITxxx	Honors Elective-4*		3	
				3	

Minor AIDE					
	22AIT3xx	Deep Learning	3-0-0	3	PC
				3	

* Honors Elective courses will be floated from Elective Pool

For Program Elective 5 & 7, only elective with Lab components to be selected

Shandell

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR****मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर****(An Institute of National Importance under Ministry of HRD, Govt. of India)****Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)****Department of Electrical Engineering**

The Program Elective Course on “Electric Vehicles” is proposed for Even Semester M.Tech programs for the academic year 2024-2025. The details of the course are enclosed.

Course Code: 21EET-XYZ**Course Name: Electric Vehicles****Credits: 3 L - 3 T - 0 P - 0****Course Type: Program Elective****Semester: Even****Prerequisites: Electrical Machines and Power Electronics****Course Contents****Introduction to EVs**

Introduction to EV, Motivation, History, Overview, Basic definitions, Some interesting vehicle concepts and problems/challenges of EVs, Future directions. Architecture of an EV (both conventional and in wheel mounted motors) and its operation starting from pedal to wheels, EV-Types, Market survey, Indian scenario, OEMs. Components of an EV: Battery, Motor, Motor controller, Gear box (in few cases), Differential, Axles, Wheels and how they interact with each other. Vehicle dynamics: Drive cycles and their impact on the vehicle operation, Basic Concepts and Terminology.

Powertrain (main focus: Motors and its controller)

Powertrain architectures and major components, power electronics, Three-phase DC-AC inverter and switching schemes, Desired features for an EV motor, Introduction to various motors available, $T-\omega$ characteristics. PMSM basics and modelling, Speed control of PMSM (vector / field-oriented control), PMSM drive: Four quadrant operation, regenerative braking, efficiency, Modeling of induction motor and its characteristics, Modeling of BLDC motor, Modeling of switched reluctance motor, Modeling of synchronous reluctance motor, Thermal modeling of motors, Efficiency calculation.

Powertrain (main focus: Converters and its design)

Design of high gain DC/DC converter (Forward/Fly back converters, Half-bridge converter, Full-bridge converter), Design of low voltage high current inverter drive – design of multilevel inverter drive, Efficiency calculation, Harmonic analysis, Thermal modeling of switches, Protection schemes for power converters.



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

(An Institute of National Importance under Ministry of HRD, Govt. of India)

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)

Powertrain (main focus: Battery basics, Types, BMS, Charger)

Introduction to battery energy storage and battery technologies, Lithium-ion (Li-ion) battery and its charging/discharging guidelines, Introduction to battery management system (BMS), Modeling techniques of Li-ion battery cells, Estimation of state of charge (SOC): Model based and data driven, Battery pack system and battery cell balancing, Introduction to battery chargers -- On-board and off-board chargers, standards, AC-DC power conversion and power factor correction, Isolated DC-DC power conversion and battery chargers, Wireless power transfer (WPT) technique for EV charging.

Indian Government Policies: NITI Aayog involvement, FAME scheme and its phases, Rate of deployment of EV off-board chargers, Cost effective policies. Case studies of popular EVs on the road.

Text/ Reference Books:

1. Electric and Hybrid Vehicles: Design Fundamentals by Iqbal Hussein, CRC Press.
2. Modern Electric, Hybrid Electric and Fuel Cell Vehicles: Fundamentals, Theory and Design, by Mehrdad Ehsani, Yimi Gao, Sebastian E. Gay, Ali Emadi, CRC Press.
3. Electric Vehicle Technology Explained, James Larminie, John Lowry, Wiley, 2003.
4. Electric Powertrain Energy Systems, Power Electronics and Drives for Hybrid, Electric and Fuel Cell Vehicles by John G. Hayes, G. Abbas Goodarzi, Wiley.
5. Permanent Magnet Synchronous and Brushless DC Motor Drives by R. Krishnan, CRC Press.
6. Electric and Hybrid Vehicles Technologies, Modeling and Control: A Mechatronic Approach by Amir Khajepour, Saber Fallah, Avesta Goodarzi, Wiley.
7. Fundamentals of Vehicle Dynamics by Thomas D. Gillespie.
8. Modern Electric Vehicle Technology by C. C. Chan, K. T. Chau, United Kingdom: Oxford University Press, 2001.

COURSE OBJECTIVES

- ✓ To understand the EV architecture, components and vehicle dynamics.
- ✓ To understand the EV motors and its controller.
- ✓ To understand the power electronic converters and its design techniques used for EV.
- ✓ To have a detailed understanding of battery types and its management system, battery charging technologies.
- ✓ To understand the Indian government policies for EV and case studies of EVs.



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

(An Institute of National Importance under Ministry of HRD, Govt. of India)

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)

COURSE OUTCOMES (COs)

After the completion of the subject, students should be able to perform the following tasks:

CO1- Understand the concepts of EV and its importance components.

CO2- Understand various motor operation and its controller for EV applications.

CO3- Comprehend and **analyze** the converters and its design for EV applications.

CO4- Understand and **describe** the battery technologies and its maintenance for EV applications.

CO5- Describe and **apply** the Indian government policies for EV.

PROGRAM OUTCOMES (POs)

PO1: An ability to independently carry out research/investigation and development work to solve practical problems.

PO2: An ability to write and present a substantial technical report/document.

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PO4: An ability to evaluate critically one's own action and work and make decisions by considering professional, social and ethical responsibilities.

PO5: An ability to recognize the need and engage in life-long learning through independent study, projects, research and to work in multidisciplinary teams.



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

(An Institute of National Importance under Ministry of HRD, Govt. of India)

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)

LECTURE WISE BREAKUP OF SYLLABUS COVERED DURING SEMESTER

NO. OF LECTURES	TOPICS	LEARNING OBJECTIVES	STUDY MATERIAL	COs MAPPED
MODULE I				
06 Lectures	Introduction to EVs	1) Architecture of an EV Diode Characteristics 2) Components of an EV 3) Vehicle dynamics	T1,T2,T3,T4,T7	CO1
MODULE II				
08 Lectures	Powertrain: Motors and its controller	1) Introduction to various motors and its characteristics 2) Modelling of PMSM and speed control 3) Modeling of induction motor and its characteristics 4) Modeling of BLDC motor 5) Modeling of switched reluctance motor 6) Modeling of synchronous reluctance motor 7) Thermal modeling of motors and efficiency calculation	T1,T2,T3,T4	CO2
MODULE III				
08 Lectures	Powertrain: Converters and its design	1) Design of high gain DC/DC converter 2) Design of low voltage high current inverter drive 3) design of multilevel inverter drive 4) Efficiency calculation and harmonic analysis 5) Thermal modeling of switches and protection schemes	T1,T2,T4,T6, T7,T8	CO3
MODULE IV				
08 Lectures	Powertrain: Battery basics,	1) Introduction to Li-ion battery and its charging/discharging guidelines	T4,T6,T7,T8	CO4



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

(An Institute of National Importance under Ministry of HRD, Govt. of India)

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)

	Types, BMS, Charger	2) Introduction to battery management system 3) Modeling and estimation techniques 4) Battery cell balancing 5) Introduction to on-board and off-board chargers 6) AC-DC power conversion and power factor correction 7) Wireless power transfer (WPT) technique		
MODULE V				
06 Lectures	Indian Government Policies	1) NITI Aayog Involvement 2) FAME Scheme 3) Rate of deployment of EV off-board chargers 4) Cost effective policies 5) Case studies of popular EVs on the road	T7,T8	CO5

EVALUATION SCHEME

S.NO.	COMPONENT	MARKS	WEIGHTAGE (%)	UNITS	DURATION
1.	(MTE) Mid Term Exam	30	30	Unit 1,2	1.5 Hours
3.	(ETE) End Term Exam	50	50	All Units	2.5 Hours
4.	(CWS) Class Work Sessionals	20 (a+b)	20	All Units	4 Hour
	(a) Tutorials/Assignments	15		All Units	4 Hour
	(b) Quiz's/class tests/Attendance	5		All Units	1 Hour
	Total Marks	100	100		

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR
DEPARTMENT OF PHYSICS

Programme: M.Sc. Physics

DETAILS OF THE COURSE

Course Code	Course Title	Credits	Lecture	Tutorial	Practical	Studio
21PHT505	Atomic & Molecular Physics	4	3	1	0	0

PREREQUISITE - None

COURSE OBJECTIVE(s)

This course aims to provide the students basic concepts and atomic physics and molecular spectroscopy. Students would come to know about the hydrogen and helium spectra, spin-orbit interaction, coupling schemes, spectra under electric and magnetic field. factors influencing spectral line width. The other topics contain valence band theory, Born-Oppenheimer approximation, rotational, vibrational and electronic spectra of diatomic molecules, Frank-Condon principle, Raman effect etc.

COURSE ASSESSMENT

The Course Assessment (culminating to the final grade), will be made up of the following three components;

S. No.	Component	Weightage
a)	Internal assessment (based upon assignments, quizzes and attendance)	20%
b)	Mid-term examination	30%
c)	End Semester Examination	50%

COURSE CONTENTS

Atomic Physics (one electron): Hydrogen atom spectrum, spin-orbit interaction and relativistic shift, fine structure, Lamb shift (only qualitative treatment), nuclear magnetic dipole interaction and hyper fine structure, electron spin and orbital magnetic dipole moment of electron, Larmor precession

(No. of lectures: 9)

Atomic Physics (many electron atoms): Helium spectrum, Vector atom model, Equivalent and non-equivalent electrons, Angular momentum coupling schemes: LS & JJ Coupling, Interaction with external fields: Stark effect, Zeeman and Paschen-Back effect, General factors influencing spectral line width and intensities

(No. of lectures: 12)

D. Singh

Molecular Physics: System with identical particles: exchange symmetry, Pauli exclusion principle, variation method, hydrogen molecular ion, valence band theory, hydrogen molecule.

(No. of lectures: 6)

Molecular Spectroscopy: Born-Oppenheimer approximation; rotational, vibrational and electronic spectra of diatomic molecules, Frank-Condon principle, Raman effect, advanced topics in atomic and molecular physics

(No. of lectures: 12)

Recommended Readings

Text books –

1. Atomic Physics: Christopher J. Foot (Oxford University Press)
2. Physics of atoms and molecules, B. H. Bransden and C. J. Joachain, Pearson
3. Fundamentals of Molecular Spectroscopy: C. N. Banwell and E. M. McCash (McGraw)
4. Atomic and Molecular Spectra: Lasers by Raj Kumar (KNRN)

Reference books –

1. Introduction to Atomic Spectra: H. E. White (McGraw Hill).
2. Molecular Spectroscopy: K. V. Raman, R. Gopalan and P.S. Raghavan (Thomson).
3. Spectra of Atoms and Molecules: Peter F. Bernath (Oxford University Press)

Lecture Plan

Lecture No.	Topics to be covered
1	Basic introduction of emission and absorption spectrum, Bohr atom
2	Hydrogen atom spectrum, Introduction of Schrodinger equation for hydrogen atom
3	Schrodinger equation for hydrogen atom
4	Spin-Orbit interaction
5	Relativistic shift, Hydrogen fine-structure
6	Lamb shift (only qualitative treatment)
7	Magnetic dipole interaction and hyper fine structure
8	Electron spin and Orbital magnetic dipole moment of electron
9	Larmor precession
10	Spectra of helium
11	Spectra of helium
12	Vector atom model, Equivalent and non-equivalent electrons
13	Central Field approximation (basic introduction), Introduction of angular momentum coupling schemes
14-15	LS & JJ Coupling
16	Normal Zeeman effect
17-18	Anomalous Zeeman effect
19	Paschen-Back effect
20	Stark effect
21	General factors influencing spectral line width and intensities
22	System with identical particles
23	Exchange symmetry, Pauli exclusion principle
24	Variation method
24	Hydrogen Molecular Ion
26-27	Hydrogen molecule (Heitler-London method)
28	Born-Oppenheimer approximation
29	Introduction to rotational, and electronic spectra of diatomic molecules
30	Rotational spectra
31	Rotational spectra
32	Vibrational spectra
33	Vibrational-Rotational spectra
34	Electronic spectra
35	Frank-Condon principle
36	Raman effect (classical)
37	Raman effect (quantum)
38-39	Advanced topics in atomic and molecular physics

Malaviya National Institute of Technology Jaipur
Department of Metallurgical and Materials Engineering

Minutes of Meeting of the Departmental Post Graduate Committee (DPGC).

Dt: 02/04/2024

A DPGC meeting was called on Tuesday, April 2nd, 2024 at 11:30AM in the department committee room to consider the following agenda:

In the meeting, following members were present:

Prof. Upender Pandel (HoD)	Prof. Rajendra K. Goyal	Dr. Rajeev Agarwal
Dr. Jyotirmaya Kar (DPGC Convener)	Dr. Sreekumar V.M.	Dr. R. C. Gupta
Dr. Krishna Kumar (DPGC Convener)	Dr. Rajesh K. Rai	Mr. Gadve R. Devanand
Dr. Swati Sharma	Dr. Brij Mohan Mundotiya	Ms. Priyanka Gupta

Agenda: To consider the suggestions discussed in the meeting called by ADPG on 01/04/2024 regarding the M.Tech Programme: Materials Engineering.

At the beginning, the convener has welcomed the members of the DPGC and placed the agenda circulated on 01/04/2024 for discussion. Important points deliberated are as follows:

All the members of DPGC committee have strongly opposed the suggestions of introducing a joint M.Tech programme: Materials Engineering with two different specialization by the Department of Metallurgical and Materials Engineering and the Materials Research Center. The committee recommended that the M. tech programme: Materials Engineering will only be floated by the Department of Metallurgical and Materials Engineering. This decision was made considering PG specialization offered by the Department of Metallurgical and Materials Engineering from several premiere institutions such as IIT Roorkee, IIT Bombay, IIT Indore, IIT Jodhpur, IIT Patna, IIT Bhubaneswar, NIT Surathkal, NIT Tiruchirappalli, NIT Warangal, VNIT Nagpur, and Jadavpur University, etc.

Hence, all the members have strongly recommended to keep the proposed M.Tech programme: Materials Engineering by the Department of Metallurgical and Materials Engineering. The scheme and syllabus of the proposed M.Tech programme was approved by the subject experts from academia and industries in a curriculum development workshop conducted on 08/03/2024. Besides, the department consists of sixteen faculty members having qualification in Metallurgical and Materials Engineering or Materials Engineering (B.Tech, M.Tech and Ph.D.) and expertise in all the domains of Materials Engineering as mentioned in the scheme and syllabus of the proposed M.Tech programme. The department also has all the important materials research facilities required for the proposed M.Tech programme.

The members have also suggested to allocate few theory/laboratory courses to the faculties of Materials Research Center based on their expertise.

The meeting ended with a vote of thanks.

Submitted for kind approval

Jyotirmaya Kar
Dr. Jyotirmaya Kar
DPGC Convener

Head, MME

Approved -
WS
02/04/2024

Dean Academics

Dr. include in separate agenda

Jy. Kar
02/04/24

- ADPG

238
4/4/24

323
03/04/2024

FTS/003654

Department of Metallurgical and Materials Engineering
Malaviya National Institute of Technology Jaipur
Structure of Proposed M.Tech. Program: Materials Engineering

The requirements of M.Tech. Programs as per the PG Regulations of MNIT Jaipur are:

- (1) Minimum credits required to be earned are **61-65 (Table 2.1)**.
- (2) Minimum credits required to be earned in four different types of courses (**Table 2.2**).
- (3) Semester-wise course structure (**Table 2.3**)

Table 2.1: Minimum credits to be earned during four semesters of M.Tech. Program

Semester	Courses	Total Credits
I	Taught Courses	18 – 22
II	Taught Courses	18 – 22
III	Dissertation, Seminar, Research Project	9 – 15
IV	Dissertation	9 – 15

Table 2.2: Minimum credits to be earned in four types of courses of M.Tech. Program

S.No.	Course Type	Min Credits to be earned
1	Taught Courses	18 – 22
2	Taught Courses	18 – 22
3	Dissertation, Seminar, Research Project	9 – 15
4	Dissertation	9 – 15

Table 2.3: Semester-wise course structure of proposed M.Tech. Programme (Materials Engineering)

First Semester

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Engineering Materials	PC	Theory	4	3	1	0
2		Characterization and Testing of Materials	PC	Theory	4	3	1	0
3		Physical Metallurgy	PC	Theory	4	3	1	0
4		Programme Elective - I	PE	Theory	3	3	0	0
5		Programme Elective - II	PE	Theory	3	3	0	0
6		Materials Processing Laboratory	PC	Laboratory	1	0	0	2
7		Characterization and Testing Laboratory	PC	Laboratory	1	0	0	2
Total Credits					20			

Second Semester

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Theory of Metal Extraction	PC	Theory	4	3	1	0
2		Materials Manufacturing - I	PC	Theory	4	3	1	0
3		Materials Manufacturing - II	PC	Theory	4	3	1	0
4		Programme Elective - I	PE	Theory	3	3	0	0
5		Programme Elective - II	PE	Theory	3	3	0	0
6		Programme Elective - II	PE	Theory	3	3	0	0
Total Credits					21			

PC: Programme Core, PE: Programme Elective

Third Semester

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Dissertation -- I	PC	-	08	0	0	20
2		Seminar	PC	-	2	0	0	4
Total Credits					10			

Fourth Semester

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Dissertation -- II	PC	-	10	0	0	24
Total Credits					10			

List of Programme Electives (PE) for <u>First Semester</u>								
S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Nano Materials	PE-11	Theory	3	3	0	0
2		Electronics and Magnetic Materials	PE-12	Theory	3	3	0	0
3		Strategic Materials	PE-13	Theory	3	3	0	0
4		Computational Materials Engineering	PE-21	Theory	3	3	0	0
5		Surface Engineering	PE-22	Theory	3	3	0	0
6		Additive Manufacturing	PE-23	Theory	3	3	0	0

List of Programme Electives (PE) for <u>Second Semester</u>								
S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1		Heat Treatment Practices	PE-11	Theory	3	3	0	0
2		Non-Destructive Testing and Evaluation	PE-12	Theory	3	3	0	0
3		Light Metals and Alloys	PE-13	Theory	3	3	0	0
4		Advanced Ceramics and Glasses	PE-14	Theory	3	3	0	0
5		Corrosion and its Prevention	PE-21	Theory	3	3	0	0
6		Fracture and Failure Analysis	PE-22	Theory	3	3	0	0
7		Biomaterials	PE-23	Theory	3	3	0	0
8		Advanced Composites	PE-24	Theory	3	3	0	0
9		Secondary Steel Making	PE-31	Theory	3	3	0	0
10		Sustainable Materials Management	PE-32	Theory	3	3	0	0
11		Processing and Properties of Polymers	PE-33	Theory	3	3	0	0
12		Emerging Materials	PE-34	Theory	3	3	0	0

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

MATERIALS RESEARCH CENTRE

Scheme for M. Tech in Materials Engineering

Semester I

S. No.	Course Title	Course Category	Type	Credits	L-T-P
1	Thermodynamics and Phase Transformations in Materials	Core	Theory	3	3-0-0
2	Material Characterization Techniques	Core	Theory	3	3-0-0
3	Mechanical Behaviour of Materials	Core	Theory	3	3-0-0
4	Materials Engineering Laboratory-I	Core	Lab	3	0-0-6
5	Program Elective-I	Elective	Theory	3	3-0-0
6	Program Elective-II	Elective	Theory	3	3-0-0

List of Elective Courses in Semester I

S. No.	Course Title	Course Category	Type	Credits	L-T-P
1	Steels and Their Heat Treatment	Elective	Theory	3	3-0-0
2	Carbon Materials and Their Applications	Elective	Theory	3	3-0-0
3	Introduction to Soft Materials	Elective	Theory	3	3-0-0

4	Composite Materials	Elective	Theory	3	3-0-0
5	Energy Materials and Their Applications	Elective	Theory	3	3-0-0
6	Introduction to Ceramic Materials and Properties	Elective	Theory	3	3-0-0

Semester II

S. No.	Course Title	Course Category	Type	Credits	L-T-P
1	Functional Properties of Materials	Core	Theory	3	3-0-0
2	Nanostructured Materials and Their Applications	Core	Theory	3	3-0-0
3	Materials Engineering Laboratory-II	Core	Lab	3	0-0-6
4	Program Elective-III	Elective	Theory	3	3-0-0
5	Program Elective-IV	Elective	Theory	3	3-0-0
6	Program Elective-V	Elective	Theory	3	3-0-0

List of Elective Courses in Semester II

S. No.	Course Title	Course Category	Type	Credits	L-T-P
1	High Temperature Materials	Elective	Theory	3	3-0-0
2	Computational Techniques in Materials Engineering	Elective	Theory	3	3-0-0
3	Polymer Technology	Elective	Theory	3	3-0-0
4	Corrosion and Degradation of Materials	Elective	Theory	3	3-0-0
5	Processing of Ceramics and Glasses	Elective	Theory	3	3-0-0
6	Advanced Characterization Techniques	Elective	Theory	3	3-0-0
7	Industrial Processing of Materials	Elective	Theory	3	3-0-0
8	Semiconductor Devices and Technology	Elective	Theory	3	3-0-0

Semester III

S.No.	Course Title	Course Category	Type	Credit	L	T	P
1	Seminar	Program Core	-	3	0	0	6
2	Dissertation - I	Program Core	-	9	0	0	18

Semester IV

S.No.	Course Title	Course Category	Type	Credit	L	T	P
-------	--------------	-----------------	------	--------	---	---	---

1	Dissertation - II	Program Core	-	12	0	0	24
---	-------------------	--------------	---	----	---	---	----



Fwd: Subject: Scheme for new Post Graduate Programme for Dam Engineers-regd.

1 message

Dean Academic <dean.acad@mnit.ac.in>
To: "D. R. Academic" <dr.acad@mnit.ac.in>

Fri, Apr 5, 2024 at 8:56 AM

Pl. include this letter in the senate agenda.

Prof. Jyotirmay Mathur
Dean (Academic)
Malaviya National Institute of Technology Jaipur
Jaipur-302017, India

----- Forwarded message -----

From: **S D Bharti** <sdbharti@mnit.ac.in>
Date: Thu, Apr 4, 2024 at 9:27 PM
Subject: Fwd: Subject: Scheme for new Post Graduate Programme for Dam Engineers-regd.
To: Dean Academic <dean.acad@mnit.ac.in>
Cc: MNIT Director <director@mnit.ac.in>, <dpgc.ncdmm@mnit.ac.in>, Manoj Kumar Director <cadwmcentral-mowr@nic.in>

Dear Sir,

In continuation to our proposal for the New PG program as discussed and approved in the last SPGB meeting. A meeting with the Secretary, MoJS was held on 3 April 2024 and the ministry has underlined the need of the program and decided to support the same. (for details kindly refer the attached letter)
The revised proposal after incorporating the changes suggested by MoJS and also by SPGB shall be submitted in a day or two.
It is requested that the same may be included as an agenda for the forthcoming Senate meeting.

With Warm Regards
S. D. Bharti

Professor (Structural Engineering) Department of Civil Engineering &
Head, National Centre for Disaster Mitigation and Management (<https://mnit.ac.in/ncdmm/>)
Head, National Centre for Earthquake Safety of Dams (<https://ncesd.mnit.ac.in/>)
(An Initiative of the Ministry of Jal Shakti, Government of India, towards effective implementation of The Dam Safety Act, 2021)
Malaviya National Institute of Technology Jaipur
(An Institution of National Importance under NITSER Act, Ministry of Education, Govt. of India)
JLN Marg, Jaipur-302017 (India)

----- Forwarded message -----

From: **Manoj Kumar** <cadwmcentral-mowr@nic.in>
Date: Thu, Apr 4, 2024 at 6:52 PM
Subject: Subject: Scheme for new Post Graduate Programme for Dam Engineers-regd.
To: director <director@mnit.ac.in>
Cc: Debashree Mukherjee <secy-mowr@nic.in>, Shri Anand Mohan <jsrd-dowr@gov.in>, Anil Jain <chmn-nds@gov.in>, Anil Jain <aniljain-cwc@nic.in>, sdbharti <sdbharti@mnit.ac.in>, Abhiram Kumar <uspenriv-mowr@nic.in>, Ankit Gupta <sopenriv-mowr@nic.in>

Sir,

Please find attached the letter regarding MNIT Jaipur' Proposal/Scheme for new PG program for Dam Engineers (Earthquake Engineering with Specialization in Earthquake Safety of Dams) at MNIT Jaipur for information and

needful.

Best Regards,

Manoj Kumar
Senior Joint Commissioner
Peninsular Rivers Wing
Department of Water Resources,
River Development & Ganga Rejuvenation
Ministry of Jal Shakti
Government of India
242 B, Krishi Bhawan
New Delhi-110 001.

Ph: 011-23388020 O Tel./Fax



2 attachments

 **MNIT Letter 04.04.2024.pdf**
459K

 **PG Program_Meeting with Sec_3 April 2024_Final_submitted.pdf**
222K

Room No.242-B, C-Wing
Krishi Bhawan, New Delhi
Dated:04-04-2024

To,

The Director
Malaviya National Institute of Technology
Jawaharlal Nehru Marg
Jaipur-302017, Rajasthan

Subject: Scheme for new Post Graduate Programme for Dam Engineers-regd.

Sir,

This is with reference to the MNIT Jaipur' Proposal/Scheme for new PG program for Dam Engineers (Earthquake Engineering with Specialization in Earthquake Safety of Dams) at MNIT Jaipur, which was forwarded to the Department of Water Resources, River Development& Ganga Rejuvenation, Ministry of Jal Shakti for comments/observation.

2. The proposal has been examined. Earthquake safety of dams is the need of the hour. Almost 54% of the land in India is vulnerable to earthquakes. North and North East India, both of which (majority area) classified under zone 4 or zone 5, are especially vulnerable for earthquakes.

3. Further, as part of "Comprehensive Dam Safety Evaluation" under the Dam Safety Act 2021, there is a mandatory provision for seismic evaluation of each and every specified dam, including the Site-Specific Seismic Design parameter studies. With the huge requirements coming after the implementation of the Dam Safety Act 2021, there is an imperative need & requirement of large-scale capacity building of dam safety officials and strengthening the institutional mechanism in this area.

4. A meeting was held under the Chairpersonship of Secretary, DoWR, RD&GR on 03.04.2024 at New Delhi, which was attended by the officials of MNIT, Chairman, NDSA and Joint Secretary (RD&PP), DoWR, wherein issues related to the selection and number of candidates for the proposed M. Tech Program was discussed.

5. On this background, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti supports the National Centre for Earthquake Safety of

Dams (NCESD), MNIT Jaipur Proposal for initiation of the M. Tech Program on Dam Safety (Earthquake Engineering with Specialization in Earthquake Safety of Dams).

Yours sincerely,



04/04/2024

(Manoj Kumar)

Senior Joint Commissioner

Copy for kind information to:

1. PPS to Secretary, DoWR, RD&GR, Ministry of Jal Shakti, New Delhi
2. Chairman, National Dam Safety Authority, New Delhi
3. Joint Secretary (RD&PP), DoWR, RD&GR, Ministry of Jal Shakti, New Delhi
4. Prof. S D Bharti, Head, National Centre for Earthquake Safety of Dams, MNIT Jaipur

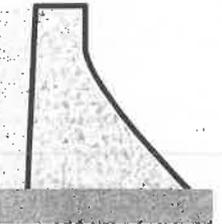


National Centre for Earthquake Safety of Dams

Malaviya National Institute of Technology Jaipur

Jawaharlal Nehru Marg, Jaipur 302017

www.ncesd.mnit.ac.in



NCESD MNITJ

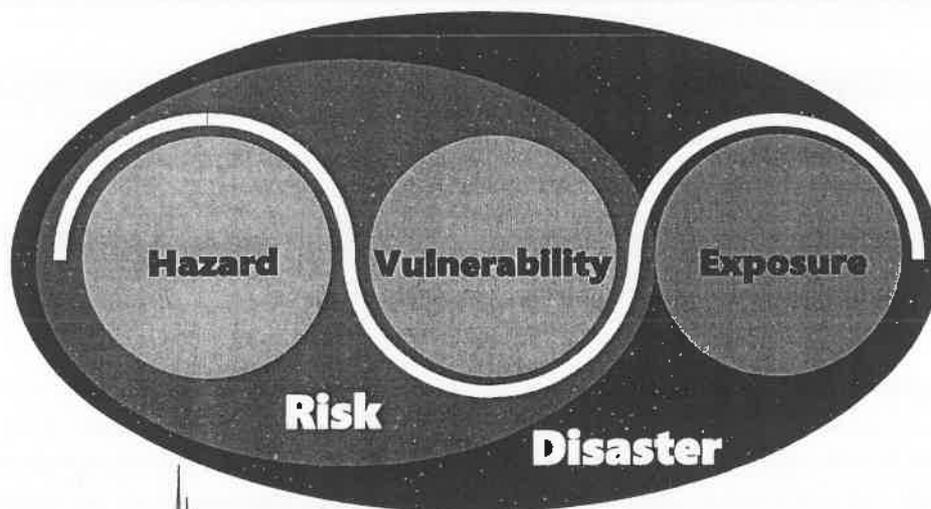
S. D. Bharti

Head, National Centre for Earthquake Safety of Dams

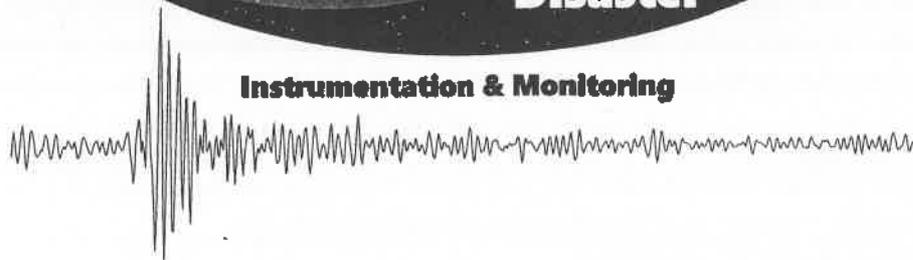
eMail : sdbharti@mnit.ac.in; ncesd@mnit.ac.in

3 April 2024

M.Tech. in Earthquake Engineering with Specialization in Earthquake Safety of Dams Offered at MNIT Jaipur



Instrumentation & Monitoring



**M.Tech. in Earthquake Engineering
with Specialization in Earthquake Safety of Dams
MNIT Jaipur**

A. Course Structure

Semester I

Compulsory Courses

1. Earthquake Hazard Assessment
2. Earthquake Analysis and Testing of Structures
3. Earthquake Analysis of Soil-Foundation Systems
4. Earthquake Analysis of Concrete Dams

Semester II

Elective Courses (Any 4)

5. Earthquake Analysis of Earthen Dams and Embankments (*Recommended by NDSA*)
6. Earthquake Geotechnics of Dam Foundations (*Recommended by NDSA*)
7. Earthquake Risk Evaluation and Retrofit of Dams
8. Earthquake Instrumentation and Testing of Dams
9. Displacement-based Design of Structures

Semester III

10. Seminar
11. Dissertation (*In the domain of Earthquake Safety of Dams*)

Semester IV

12. Dissertation (*In the domain of Earthquake Safety of Dams*)

B. Uniqueness of the Program

Earthquake safety assessment of concrete and earthen dams and appurtenant structures is not taught at the graduate level in mandatory engineering curriculum, even though the *Dam Safety Act, 2021* has stringent regulatory requirements on earthquake safety. Also, earthquake shaking imposes the most severe loading on a dam.

This program aims to *bridge the gap* in the structural engineering knowledge of the participants related to *earthquake safety of dams*. The focus of the program is mainly on:

- (1) Earthquake behaviour of *dam-foundation-reservoir* system,
- (2) Structural design of new dams,
- (3) Earthquake risk assessment of existing dams,
- (3) Earthquake testing and retrofit of existing dams,
- (4) Earthquake instrumentation of existing dams,
- (5) International state-of-the-art-practice in the domain of earthquake safety of dams.

Thus, the program covers *all practical aspects related to Earthquake Safety of Dams, i.e.,* earthquake hazard assessment, vulnerability, risk evaluation, testing, instrumentation and monitoring.

The participants trained in the subjects taught are expected to fulfill the requirement of dam engineers dealing with *comprehensive risk evaluation of dams* as mandated under the *Dam Safety Act, 2021*.

C. Eligibility & Batch Size

Ten (10) engineers will be admitted, who are sponsored by the public and private dam owning organizations, including *Water Resources Departments* of the states, UTs and industry. The prospective participants should have received a bachelor's degree in civil engineering.

Also, twenty (20) engineers will be admitted directly, who have received a bachelor's degree in civil engineering and qualified the GATE examination.

D. Admission Procedure for Sponsored Candidates

For interviewing the engineers sponsored by the public and private dam owning organizations, an *Admission Committee* will be constituted by MNIT Jaipur, comprising *five* members, with the following composition:

- (1) Head, NCESD, MNIT Jaipur
- (2) Convener, DPGC, NCDMM, MNIT Jaipur
- (3) One Professor to be nominated by the Director, MNIT Jaipur
- (4) Two members to be nominated by the Ministry of Jal Shakti, Government of India

For the engineers to be admitted directly, the admission shall be as per the prevailing *Post-Graduate Admissions Policy of MNIT Jaipur*.

...

M.Tech in Civil Engineering with Major in Dam Engineering Offered at IISc Bangalore

Core Courses (Common to all students)

- Basic Geomechanics
- Transportation Systems Modelling
- Fluid Mechanics
- Solid Mechanics
- Finite Element Method
- Mathematics for Engineers

Major in Dam Engineering

Core Courses

- Disaster Management for Dams
- Dam Safety Surveillance, Instrumentation and Monitoring
- Rock Mechanics
- Integrated Investigation of Dams
- Dissertation Project

Elective Courses (Any Two)

- ✓ Assessing and Managing Risks Associated with Dams
- ✓ Sediment Management in Reservoirs
- ✓ Hydrologic Safety Evaluation of Dams
- ✓ Dams and Spillways
- ✓ Earth Retaining Structures and Earthen Dams
- ✓ Ground Improvement and Geosynthetics
- ✓ Earthquake Geotechnical Engineering
- ✓ Engineering Seismology
- ✓ Computational Geotechnics
- ✓ Flood Resilient Transport System
- ✓ Basic Concepts of Planning & Design of Hydro-Mechanical Components in Dams

::

M.Tech in Dam Safety and Rehabilitation Offered at IIT Roorkee

Semester I

Core Courses

- Assessing and Managing Risks Associated with Dams
- Basics of Disaster Management and its Implementation Concepts
- Hydrologic Safety Evaluation of Dams

Elective Courses

- Elective I
- Elective II

Semester II

Core Courses

- Sediment Management in Reservoirs
- Dam Safety Surveillance, Instrumentation and Monitoring
- Seminar

Elective Courses

- Elective Course III
- Elective Course IV
- Elective Course V

Semester III

- Dissertation Stage-I

Semester IV

- Dissertation Stage-II

List of Elective Courses

- ✓ Seepage through Dams
- ✓ Assessment and Management of Environmental Issues in Reservoirs
- ✓ Earthquake Geotechnical Engineering
- ✓ Study tour/ Case studies
- ✓ Geo-Mechanics
- ✓ Geospatial Technology for Monitoring of Dams
- ✓ Hydraulic and structural design of dams, spillways, and energy dissipators
- ✓ Ground Improvement and Geo-synthetics
- ✓ Contract and Financial Management
- ✓ Sustainable Tourism around Dams
- ✓ Earth Retaining Structures and Dams (Concrete, RCC, CFRD, Arch, Earth, Rockfill dams & Barrages)
- ✓ Seismic Safety of Embankment Dams
- ✓ Concepts of Planning & Design of Hydro-Mechanical Components in Dams
- ✓ Engineering Seismology and Hazard Assessment for dams

2. Structure of M.Tech. Programs

The requirements of *M.Tech. Programs* as per the *PG Regulations* of MINIT Jaipur are:

- (1) Minimum credits required to be earned are 54-60 (Table 2.1).
- (2) Four different types of courses should be credited (Table 2.2).

Table 2.1: Minimum credits to be earned during *four semesters* of M.Tech. Program

Semester	Courses	Total Credits
I	Taught Courses	15 - 18
II	Taught Courses	15 - 18
III	Dissertation, Seminar, Research Project	9 - 15
IV	Dissertation	12 - 16

Table 2.2: Minimum credits to be earned in *four types* of courses of M.Tech. Program

S.No.	Course Type	Min. Credits to be earned
1	Program Core	18 - 21
2	Program Elective	15 - 21
3	Open Elective	0 - 6
4	Research Project, Dissertation	16 - 24

Table 2.3: *Core and Elective* courses of proposed M.Tech. (Earthquake Engineering) Program with *two tracks* of specialization

S.No.	Course Title	Credits
Program Core Courses		
Track 1	Earthquake Hazard Assessment	4
	Earthquake Analysis and Testing of Structures	5
	Earthquake Analysis of Soil-Foundation Systems	5
	Earthquake Resistant Design of Concrete Structures	4
	Total Credits	18
Track 2	Earthquake Hazard Assessment	4
	Earthquake Analysis and Testing of Structures	5
	Earthquake Analysis of Soil-Foundation Systems	5
	Earthquake Analysis of Concrete Dams	4
	Total Credits	18
Program Elective Courses		
Track 1 Any 4	Earthquake Safety Assessment and Retrofit of Buildings	4
	Earthquake Resistant Design of Steel Structures	4
	Earthquake Behaviour of Buildings	4
	Earthquake Behaviour of Bridges	4
	Earthquake Resistant Design of Precast Buildings	4
	Earthquake Nonlinear Analysis of Buildings	4
	Displacement-based Design of Structures	4
	Earthquake Protection of Nonstructural Elements	4
	Total Credits	16
Track 2 Any 4	Earthquake Analysis of Earthen Dams and Embankments	4
	Earthquake Risk Evaluation and Retrofit of Dams	4
	Earthquake Instrumentation and Testing of Dams	4
	Displacement-based Design of Structures	4
	Earthquake Geotechnics of Dam Foundations	4

Note: Fraction of the any of the courses can be handled either through Experts from Industry or Academia or through MOOCS as per the PG Regulation after due approval from the DPGC

The Semester-wise course structure of proposed M.Tech. (Earthquake Engineering) with specialization in the two tracks, namely *Earthquake Design of Structures* (Track 1) and *Earthquake Safety of Dams* (Track 2) are presented in Tables 2.4 and 2.5.

Table 2.4: Semester-wise course structure of proposed M.Tech. (Earthquake Engineering) with specialization in Earthquake Design of Structures (Track 1)

Course	Type	L-T-P	Credits
Semester 1			
Earthquake Hazard Assessment	PC	3-1-0	4
Earthquake Analysis and Testing of Structures	PC	3-0-4	5
Earthquake Analysis of Soil-Foundation Systems	PC	3-0-4	5
Earthquake Resistant Design of Concrete Structures	PC	3-1-0	4
Total Semester Credits			18
Semester 2			
Elective 1	PE		4
Elective 2	PE		4
Elective 3	PE		4
Elective 4	PE		4
Earthquake Safety Assessment and Retrofit of Buildings	PE	3-0-2	4
Earthquake Resistant Design of Steel Structures	PE	3-0-2	4
Earthquake Behaviour of Buildings	PE	3-0-2	4
Earthquake Behaviour of Bridges	PE	3-0-2	4
Earthquake Behaviour of Precast Buildings	PE	3-0-2	4
Earthquake Nonlinear Analysis of Buildings	PE	3-0-2	4
Displacement-based Design of Structures	PE	3-0-2	4
Earthquake Protection of Nonstructural Elements	PE	3-1-0	4
Total Semester Credits			16
Total Coursework Credits			34
Semester 3			
Seminar	PC	0-0-8	4
Dissertation	PC	0-0-16	8
Total Semester Credits			12
Semester 4			
Dissertation	PC	0-0-24	12
Total Semester Credits			12
Total Credits in Semesters 3 and 4			24
Total Program Credits (All 4 Semesters)			58

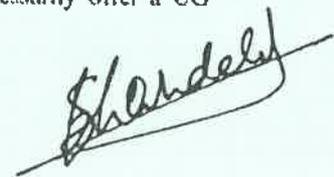
Table 2.5: Semester-wise course structure of proposed M.Tech. (Earthquake Engineering) with specialization in Earthquake Safety of Dams (Track 2)

Code	Course	Type	L-T-P	Credits
Semester 1				
	Earthquake Hazard Assessment	PC	3-1-0	4
	Earthquake Analysis and Testing of Structures	PC	3-0-4	5
	Earthquake Analysis of Soil-Foundation Systems	PC	3-0-4	5
	Earthquake Analysis of Concrete Dams	PC	3-0-2	4
Total Semester Credits				18
Semester 2				
	Elective 1	PE		4
	Elective 2	PE		4
	Elective 3	PE		4
	Elective 4	PE		4
	Earthquake Analysis of Earthen Dams and Embankments	PE	3-0-2	4
	Earthquake Risk Evaluation and Retrofit of Dams	PE	3-0-2	4
	Earthquake Instrumentation and Testing of Dams	PE	2-0-4	4
	Displacement-based Design of Structures	PE	3-0-2	4
	Earthquake Geotechnics of Dam Foundations	PE	3-0-2	4
Total Semester Credits				16
Total Coursework Credits				34
Semester 3				
	Seminar	PC	0-0-8	4
	Dissertation	PC	0-0-16	8
Total Semester Credits				12
Semester 4				
	Dissertation	PC	0-0-24	12
Total Semester Credits				12
Total Credits in Semesters 3 and 4				24
Total Program Credits (All 4 Semesters)				58

Recommendation of the Committee Constituted to frame Guidelines for Conversion of Centre to Department

A committee was constituted (vide office order no. F.No. F4/S-V-1/23-24-Acad (53-Senate)/3461 dated 19/02/2024 in accordance with the resolution number Senate-53/2024/10) to frame guidelines for the conversion of any Centre of the Institute to Department. The committee had an online meeting on 28th March 2024 from 3:30 PM onwards. The committee discussed/made following observations/points related to the conversion of a centre to department.

1. The first Statutes for all national institutes of technology, published in the Gazette of India: Extraordinary dated 23rd April 2009 defines that a 'Centre' in relation to an institute means an academic unit of the institute engaged in academic activities (like teaching, research etc.) generally of an interdisciplinary nature, while 'Department' in relation to an institute means an academic unit of the institute engaged in academic activities (like teaching, research etc.) generally relating to a particular discipline or area (point 2.1-(d) and 2.1-(e).
2. No other distinction has been made in the Statutes between Centre and Department, except in the definition given at point no. 1.
3. A centre can be started/established when some faculty members, working in different areas/disciplines, collaborate to carry out interdisciplinary work/research. The starting/establishment of a new centre can be by appointment of joint faculty only or by appointment of both joint and regular faculty. This is stated in the Statute.
4. It is understood that a centre can be started for interdisciplinary work and it may be discontinued if sufficient growth is not achieved in a period of time. On the contrary, a department is usually permanent which means that a centre can be converted to department only when it has achieved certain stability.
5. A centre generally starts an academic program (equivalent to a masters program and also a doctoral program) at the time of inception or after a few years.
6. All departments, especially engineering departments, shall strive to run a UG program. However, the Dept. of Humanities and Social Sciences, Dept. of Chemistry, Dept. of Mathematics, Dept. of Physics are few exceptions that not necessarily offer a UG



program in IITs/NITs (many of these have been established since the inception of the institutes). Also, these departments offer one or more courses to all the UG students of the institute.

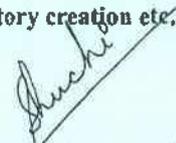
7. Conversion of a centre to department is usually done when the interdisciplinary/focus area of centre becomes so prominent that the focus area becomes a discipline in itself.
8. Many centres of different IITs/NITs have been converted to departments after few years of their establishment. The conversion might have been done even after about 25 years in few cases. However, no clear guidelines for conversion of centre to department is available from any of the IITs/NITs.

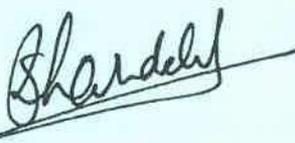
Deliberating the above, the committee recommends following guidelines for conversion of a centre of the institute to department, in addition to the statutory guidelines of the institute.

- A. **Stability:** A centre can be converted to a department when it has gained complete stability. It is recommended that if a centre has been in existence for a period of more than a decade or so, the stability criteria can be considered to be fulfilled.
- B. **Operation:** A centre may have joint faculty and regular faculty. It is important that the newly converted department should be able to function even after the joint faculty moves back to their parent departments. Further, there must be sufficient faculty strength of the centre to carry out the activities of the department following the conversion. It is recommended that a centre may be converted to a department if it has more than 15 faculty members out of which at least 50% should be exclusively for the centre.
- C. **Sustainability:** The centre must be offering a masters level academic programme. It is recommended that a centre may be converted to a department, if it has been successfully running a masters level academic programme by admitting a minimum of 10 or more candidates for the last 5 years in a row. Further, the centre must have shown significant research accomplishments in terms of PhD graduated, current PhD strength, laboratory creation etc.


(Ashok Kumar Pradhan)


(Vipul Rastogi)


(Shuchi Srivastava)


(Sumit Khandelwal)

Undergraduate Programmes

The intake/allocation of 888 seats for students from Rajasthan & other than Rajasthan states for the session 2024-25 are as follows:

Program Name	State / All India Seats	Seat Pool	OPEN	OPEN-PwD	EWS	EWS-PwD	SC	SC-PwD	ST	ST-PwD	OBC-NCL	OBC-NCL-PwD	Total
Architecture	Rajasthan	Gender-Neutral	11	1	3	0	5	0	2	0	8	0	30
		Female-only (including supernumerary)	3	0	0	0	1	0	1	0	0	2	1
Chemical Engineering	Rajasthan	Gender-Neutral	19	1	4	1	6	0	4	0	11	1	47
		Female-only (including supernumerary)	4	0	1	0	2	0	1	0	0	3	0
Civil Engineering	Rajasthan	Gender-Neutral	16	2	5	0	6	1	3	0	12	0	45
		Female-only (including supernumerary)	5	0	1	0	2	0	1	0	0	3	0
Computer Science and Engineering	Rajasthan	Gender-Neutral	17	1	4	1	7	0	3	0	13	1	47
		Female-only (including supernumerary)	5	0	1	0	2	0	1	0	0	2	0
Electrical Engineering	Rajasthan	Gender-Neutral	18	0	5	0	7	1	3	0	12	1	47
		Female-only (including supernumerary)	4	1	1	0	1	0	1	0	0	3	0
Electronics & Communication Engineering	Rajasthan	Gender-Neutral	18	0	5	0	8	0	2	1	12	1	47
		Female-only (including supernumerary)	5	1	1	0	1	0	1	0	0	3	0
Mechanical Engineering	Rajasthan	Gender-Neutral	18	1	4	0	6	1	4	0	12	1	47
		Female-only (including supernumerary)	5	0	1	0	2	0	1	0	0	3	0
Metallurgical & Materials Engineering	Rajasthan	Gender-Neutral	12	1	3	0	4	0	1	1	7	0	29
		Female-only (including supernumerary)	3	0	1	0	0	1	1	0	0	2	0
Artificial Intelligence and Data Engineering	Rajasthan	Gender-Neutral	7	0	1	0	2	0	1	0	5	0	16
		Female-only (including supernumerary)	0	0	1	0	1	0	1	0	0	1	0
Total (A)			170	9	42	2	63	4	32	2	114	6	444

Bajirao
Assistant Registrar (Academic)

Ratna
Dy. Registrar (Academic)

Shandilya
Associate Dean (UG)

Program Name	State / All India Seats	Seat Pool	OPEN	OPEN-PwD	EWS	EWS-PwD	SC	SC-PwD	ST	ST-PwD	OBC-NCL	OBC-NCL-PwD	Total
Architecture	Other than Rajasthan	Gender-Neutral	12	1	3	0	5	0	2	0	7	1	31
		Female-only (including supernumerary)	3	0	1	0	1	0	1	0	2	0	8
Chemical Engineering	Other than Rajasthan	Gender-Neutral	18	1	5	0	6	0	4	0	11	1	46
		Female-only (including supernumerary)	4	0	1	0	2	0	1	0	3	0	11
Civil Engineering	Other than Rajasthan	Gender-Neutral	17	1	4	1	6	1	4	0	12	0	46
		Female-only (including supernumerary)	5	0	1	0	2	0	1	0	3	0	12
Computer Science and Engineering	Other than Rajasthan	Gender-Neutral	17	1	5	0	7	1	3	0	12	1	47
		Female-only (including supernumerary)	5	1	1	0	1	0	1	0	3	0	12
Electrical Engineering	Other than Rajasthan	Gender-Neutral	18	1	4	0	7	0	3	1	12	1	47
		Female-only (including supernumerary)	5	0	1	0	2	0	1	0	3	0	12
Electronics & Communication Engineering	Other than Rajasthan	Gender-Neutral	18	0	4	1	8	0	3	0	12	1	47
		Female-only (including supernumerary)	4	1	1	0	1	0	1	0	3	0	11
Mechanical Engineering	Other than Rajasthan	Gender-Neutral	18	1	4	1	6	1	2	0	12	0	45
		Female-only (including supernumerary)	5	0	1	0	1	0	1	0	4	0	12
Metallurgical & Materials Engineering	Other than Rajasthan	Gender-Neutral	12	1	2	0	4	0	2	0	8	0	29
		Female-only (including supernumerary)	2	0	1	0	1	0	1	0	2	1	8
Artificial Intelligence and Data Engineering	Other than Rajasthan	Gender-Neutral	7	0	2	0	2	0	1	0	4	0	16
		Female-only (including supernumerary)	1	0	1	0	1	0	0	0	1	0	4
Total (A)			171	9	42	3	63	3	32	1	114	6	444

Rajiv An.
Assistant Registrar (Academic)

Rattan

Dy. Registrar (Academic)

Shandilya

Associate Dean (UG)



दैनन्दिनी
संख्या
MNIT
Diary
NO.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / File No.....

कार्यालय टिप्पणी

Note Sheet

Academic Section

01 The Intake capacity for the various PG programme (M.Tech/ M.Plan) offered for the year 2024-25, under regular (through CCMT), sponsored and part time categories and M.Sc. programme (through CCMN) are as follows

02 A. PG Programmes offered for - 2024-25 (CCMT Intake).

S.No.	Department	Programme	CCMT Intake	Sponsored	PT
1	Department of Architecture & Planning -(AP)	Urban Planning-(UP)	26	5	6
2	Department of Civil Engineering-(CE)	Environmental Engineering-(EV)	16	5	6
3	Department of Civil Engineering-(CE)	Structural Engineering-(SU)	16	5	6
4	Department of Civil Engineering-(CE)	Transportation Engineering-(TE)	16	5	6
5	Department of Civil Engineering-(CE)	Water Resources Engineering-(WR)	16	5	6
6	Department of Computer Science & Engineering-(CT)	Computer Science & Information Security-(CQ)	26	0	0
7	Department of Computer Science & Engineering-(CT)	Computer Science & Engineering-(XG)	26	5	6
8	Centre for Energy & Environment-(CY)	Renewable Energy-(RE)	16	5	6
9	Department of Electronics & Communication Engineering-(EC)	Embedded Systems-(EB)	27	0	0
10	Department of Electronics & Communication Engineering-(EC)	Electronics & Communication Engineering-(EF)	21	5	6
11	Department of Electronics & Communication Engineering-(EC)	VLSI Design-(VN)	26	5	6
12	Department of Electronics & Communication Engineering-(EC)	Wireless & Optical Communication-(WO)	15	0	0
13	Department of Electrical Engineering-(EE)	Power Electronics & Drives-(PD)	26	0	0
14	Department of Electrical Engineering-(EE)	Power Systems Management-(PN)	16	5	6
15	Department of Electrical Engineering-(EE)	Power Systems-(PO)	21	5	6
16	Department of Mechanical Engineering-(ME)	Design Engineering-(DG)	21	0	0
17	Department of Mechanical Engineering-(ME)	Industrial Engineering-(IG)	16	5	6
18	Department of Mechanical Engineering-(ME)	Production Engineering-(PU)	16	0	0
19	Department of Mechanical Engineering-(ME)	Thermal Engineering-(TI)	20	0	0
Total Seats			383	60	72

03 B. PG programmes not offered in the year 2024-25 under decision of 46th senate meeting (Item no.46.3.3).

S.No.	Department	CCMT Intake	Sponsored	PT
1	Civil Engineering (Disaster Assessment and Mitigation) (CE)	No Admission in 2024-25		
2	Chemical Engineering	No Admission in 2024-25		
3	Materials Science and Engineering (MRC)	No Admission in 2024-25		
4	Metallurgical and Materials Engineering (MME)	No Admission in 2024-25		
5	Steel Technology (MMF)	No Admission in 2024-25		
6	Earthquake Engineering (NCDMM)	No Admission in 2024-25		



दैनन्दिनी
सख्या
MNIT
Diary
NO.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पृष्ठ संख्या
Page No.

पंजिका संख्या / File No.....

कार्यालय टिप्पणी

Note Sheet

Academic Section

04

C. M.Sc. Programmes offered for year 2024-25 (CCMN Intake).

S.No.	Department	Programme	Total
1	Department of Chemistry	Chemistry	41
2	Department of Mathematics	Mathematics	41
3	Department of Physics	Physics	41
Total Seats			123

05

The seat matrix bifurcated category-wise for both CCMT and CCMN intake is attached as Annexures A & B. The category-wise bifurcation is as per the guidelines of the Government of India.

06

The seat matrix is submitted for kind perusal and approval.

Birbal Singh
(Assistant Registrar)

Dr. Suman Rathore
(Deputy Registrar)

Associate Dean (PG)

The last date for submission to CCMT conducted is 28th March.
∴ submitted for approval.

21/3/24

Dear Agedewas

Submitted for kind approval.
The same will be reported in the next meeting of Senate if approved.

- Director and Chairman, Senate

24/3/24

3592

27/3/24

2781

27/03/24

1915
27/03/24

Dean, Academics

Approved
27/03/24
fina pl. to be reported to Senate.

27/03/24

MNIT Jaipur Seat Matrix for Centralized Counselling for M.Tech./M. Plan Admission (CCMT Counselling 2024-25)

Department	Programme	Group	OPEN	OPEN-PWD	EWS	EWS-PWD	SC	SC-PWD	ST	ST-PWD	OBC	OBC-PWD	Total	Quota
Department of Architecture & Planning (AP)	Urban Planning (UP)	Group 1	7	1	2	0	3	0	2	0	4	0	19	AI
		Group 2	3	0	0	0	1	0	0	0	3	0	7	AI
Department of Architecture & Planning (AP)	Environmental Engineering (EV)	Group 1	6	1	2	0	2	0	1	0	4	0	16	AI
		Group 1	6	0	2	1	2	0	1	0	4	0	16	AI
Department of Civil Engineering (CE)	Transportation Engineering (TE)	Group 1	6	0	2	0	2	1	1	0	4	0	16	AI
		Group 1	6	0	1	0	2	0	2	0	4	1	16	AI
Department of Civil Engineering (CE)	Water Resources Engineering (WR)	Group 1	6	0	2	0	4	1	2	0	7	0	26	AI
		Group 1	10	0	2	0	4	0	2	0	7	1	26	AI
Department of Computer Science & Engineering (CT)	Computer Science & Information Security (CS)	Group 1	6	1	2	0	2	0	1	0	4	0	16	AI
		Group 1	7	1	2	0	3	0	2	0	4	0	19	AI
Department of Electronics & Communication Engineering (EC)	Embedded Systems (EB)	Group 2	3	0	0	0	1	1	0	0	3	0	8	AI
		Group 1	8	0	2	0	3	0	2	1	5	0	21	AI
Department of Electronics & Communication Engineering (EC)	Electronics & Communication Engineering (EF)	Group 1	8	1	2	0	3	0	1	0	5	0	20	AI
		Group 2	2	0	1	0	1	0	0	0	2	0	5	AI
Department of Electronics & Communication Engineering (EC)	VLSI Design (VN)	Group 1	6	0	2	0	2	0	1	0	4	0	15	AI
		Group 1	10	1	2	0	4	0	2	0	7	0	26	AI
Department of Electronics & Communication Engineering (EC)	Wireless & Optical Communication (WO)	Group 1	6	0	2	0	2	0	1	0	4	0	16	AI
		Group 1	6	0	2	0	2	0	1	0	4	1	16	AI
Department of Electrical Engineering (EE)	Power Electronics & Drives (PD)	Group 1	8	0	2	0	3	0	2	1	5	0	21	AI
		Group 1	8	0	2	0	3	0	1	0	6	1	21	AI
Department of Mechanical Engineering (ME)	Design Engineering (DG)	Group 1	4	1	1	0	1	0	1	0	3	0	11	AI
		Group 2	2	0	1	0	1	0	0	0	1	0	5	AI
Department of Mechanical Engineering (ME)	Industrial Engineering (IG)	Group 1	4	1	1	0	1	0	1	0	3	0	11	AI
		Group 2	2	0	1	0	1	0	0	0	1	0	5	AI
Department of Mechanical Engineering (ME)	Production Engineering (PU)	Group 1	2	0	1	0	1	0	0	0	1	0	5	AI
		Group 2	2	0	1	0	1	0	0	0	1	0	5	AI
Department of Mechanical Engineering (ME)	Thermal Engineering (TI)	Group 1	9	0	1	0	3	0	2	0	5	0	20	AI
		Total Seats	147	8	37	1	54	3	28	2	99	4	383	

*Note:- The Pwd seats are supernumery

Banshi
Assistant Registrar (Academic)

Rattor
Dy. Registrar (Academic)

MNIT Jaipur Seat Matrix for Centralized Counselling for M.Sc. Admission (CCMN Counselling 2024-25)

Department	Programme	Group	OPEN	OPEN-PWD	EWS	EWS-PWD	SC	SC-PWD	ST	ST-PWD	OBC	OBC-PWD	Total	Quota
Department of Chemistry	Chemistry	Group 1	16	0	4	0	6	1	3	0	10	1	41	AI
		Group 1	16	1	3	1	6	0	3	0	11	0	41	AI
Department of Mathematics	Mathematics	Group 1	16	1	4	0	6	0	3	0	10	1	41	AI
		Group 1	16	2	11	1	18	1	9	0	31	2	123	
		Total Seats	48	2	11	1	18	1	9	0	31	2	123	

*Note:- The PwD seats are supernumerary


Assistant Registrar (Academic)


Dy. Registrar (Academic)

पंजिका संख्या / File No.....

कार्यालय टिप्पणी
Note Sheet

Sub: Approval of additional names of students eligible for award of degree (PG and Ph.D.) in 17th Convocation scheduled to be held on 16th March 2024.

The total number of eligible students for the award of degree was approved in respective Senate

Programme	Approved in 52 nd Senate Meeting	Approved in 53 rd Senate Meeting	Total Degree Approved
UG	826	12	838
PG	526	-	526
Ph.D.	35	36	71

The following students are eligible for the award of PG /Ph.D. degree who have completed the requirements for the award of degree after the 53rd Senate meeting held on 12th January 2024:-

Postgraduate Programme

S. No.	ID No.	Name	Specialization	Total Credits registered	Total Credit earned	CGPA
1.	2020PCT5708	Nitesh Kumar	Transportation Engineering	70	70	7.29
2.	2021PCV5354	Mukul Chaudhary	Renewable Energy	60	60	6.90
3.	2021PCH5078	Rohan Meena	Chemical Engineering	60	60	5.70
4.	2021PCW5485	Kamlesh Yadav	Water Resources Engineering	60	60	7.55
5.	2021PCW5495	Himanshu Singh	Water Resources Engineering	60	60	7.07
6.	2021PES5300	Priyanshu Gupta	Power Systems	60	60	7.92
7.	2021PES5311	Abhinav Meena	Power Systems	60	60	7.62
8.	2021PPD5273	Shubham Verma	Power Electronics and Drives	60	60	7.67

Doctor of Philosophy

S. No.	ID No.	Name	Department	Date of Viva-voce
1.	2019REN9033	Vikash Kumar Saini	Centre For Energy and Environment	08-01-2024
2.	2018RMR9078	Mohd Saquib	Material Research Center	04-01-2024



मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पृष्ठ संख्या
Page No

पंजिका संख्या / File No.....

कार्यालय टिप्पणी

Note Sheet

नन्दिनी
संख्या
MNIT
Diary
NO.

		Khan		
3.	2019RCY9006	Richa Sharma	Chemistry	12-01-2024
4.	2017RCP9054	Saurabh Ranjan Srivastava	Computer Science and Engineering	10-01-2024
5.	2018RCE9507	Ankan Jana	Civil Engineering	16-01-2024
6.	2019RAR9011	Akanksha Sangwan	Architecture and Planning	19-01-2024
7.	2019RCY9116	Jyoti Yadav	Chemistry	16-01-2024
8.	2018REE9152	Srinivas Yelisetti	Electrical Engineering	13-01-2024
9.	2018REC9042	Ankita Porwal	Electronics and Communication Engineering	17-01-2024
10.	2015REC9501	Abhinav Bhatnagar	Electronics and Communication Engineering	23-01-2024
11.	2016RME9527	Shrinivas	Mechanical Engineering	29-01-2024
12.	2019RMA9072	Sonali Sharma	Mathematics	23-01-2024
13.	2015RHS9502	Ginisha Dewani	Humanities and Social Science	08-12-2023
14.	2019REE9069	Manikant Kumar	Electrical Engineering	17-02-2024
15.	2018RCY9012	Jaidev Kaushik	Chemistry	16-02-2024
16.	2018RCH9037	Meenakshi Yadav	Chemical Engineering	26-02-2024
17.	2020RMA9086	Shyamsunder	Mathematics	23-02-2024
18.	2019RMR9129	Upasana Bhardwaj	Material Research Center	20-02-2024
19.	2016RCY9546	Himanshu Khandaka	Chemistry	20-02-2024
20.	2018RCH9038	Ritu Chaudhary	Chemical Engineering	04-03-2024
21.	2018RCE9136	Nikhil Garg	Civil Engineering	07-03-2024
22.	2018REN9019	Apoorva Upadhyay	Centre For Energy and Environment	06-03-2024
23.	2019RME9048	Shamsher Singh	Mechanical Engineering	06-03-2024
24.	2018RMT9105	Mukesh Kumar	Metallurgical and Materials Engineering	05-03-2024
25.	2017REE9082	Pooja Sharma	Electrical Engineering	07-03-2024
26.	2020RPY9062	Hem Kanwar Rathore	Physics	08-03-2024
27.	2018REN9045	Gyanesh Gupta	Centre For Energy and Environment	11-03-2024
28.	2019RCH9093	Sameer Imdad	Chemical Engineering	12-03-2024
29.	2018RCP9099	Megha Sharma	Computer Science and Engineering	11-03-2024
30.	2018RCP9087	Shikha Mundra	Computer Science and Engineering	11-03-2024

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पृष्ठ संख्यां
Page No.

पंजिका संख्या / File No.....

कार्यालय टिप्पणी
Note Sheet

31.	2016REC9063	Sanjay Sharma	Electronics and Communication Engineering	21-02-2024
32.	2018REE9066	Prahlad Mundotiyan	Electrical Engineering	11-03-2024

The above list is placed for the kind approval of Chairman SPGB, Chairman Senate, and Board of Governors; if approved, the same will be ratified in the forthcoming meetings of SPGB, Senate, and Board of Governors, respectively.

Submitted for kind perusal and approval.

(Yuvraj Singh Rathore)
Dealing Assistant (PG)

(Deepak Atolia)
Dealing Assistant (Ph.D.)

Ravi Kumar Sharma
Sr. Superintendent

Birbal Singh
Assistant Registrar (Academic)

Dr. Suman Rathore
Dy. Registrar (Academic)

All the above names are checked and duly verified
Submitted for kind approval.

Associate Dean (PG)

Recommended for approval

12/3/24

Dean, Academic

Recommended for approval
under the authorization given by Senate

12/3/24

Chairman, SPGB

Recommended for approval

12/3/24

13/3/2024

Chairwoman, Senate

14/03/24

To be ratified
accordingly.

Chairman, SPGB

12/03/24



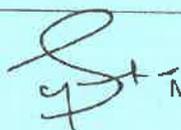
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

MINUTES OF THE 61st MEETING OF THE SPGB HELD ON 22nd March, 2024

The 61st meeting of the SPGB was held on 22nd March, 2024 at 04:00 PM in the NKN-I, Prabha Bhawan.

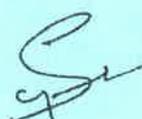
The following agenda items were discussed, and the recommendations are as follows:

Item No. 61-1.0	To confirm the minutes of the 60th meeting of the SPGB held on December 11th, 2023. The minutes of the 60 th meeting of the SPGB were confirmed.
Item No. 61-1.1	To note the "Action Taken" on the decisions taken in the 60th meeting of the SPGB The SPGB noted the action taken report of the 60 th meeting.
Item No. 61-2.0	Items for Consideration.
Item No. 61-3.1	To consider the proposal of the Department of Electrical Engineering to float a new programme elective "Electric Vehicles" in PG programs. SPGB, after detailed deliberation, approved the proposal of the Department of Electrical Engineering to float a new course, program elective "Electric Vehicles" in all the three PG programs being offered by the department.
Item No. 61-3.2 and 61-3.3	To consider the proposal for a New PG program M.Tech. in Materials Engineering submitted by the Material Research Centre. and To consider the proposal for a new PG program M.Tech. Materials Engineering submitted by the Department of Metallurgical and Materials Engineering. Item no. 61-3.2 and 61-3.3 were combined. SPGB recommended that a joint meeting of the HoD's and DPGC conveners of the Material Research Centre and the department of Metallurgical & Materials Engineering should be convened by the Associate Dean (PG) for discussions and preparation of the proposal(s) for the new PG program in compliance to the 48 th Senate resolution. SPGB further authorized the Chairman, SPGB to review the modified proposals received from the Department of Material Research Centre and Department of Metallurgical and Materials Engineering and decide if found appropriate to forward it to the Senate for consideration or to reject if not found appropriate.
Item No. 61-3.4	To consider the proposal for the revised PG Program M. Tech. in "Earthquake Engg." Submitted by the National Centre for Disaster Mitigation & Management. Some observations were made by members on the structure of the revised program, such as the requirement of separating theory and lab courses.



MNIT Jaipur | Minutes – 61st SPGB | 22nd March 2024 | 1

	<p>DPGC convener of the National Centre for Disaster Mitigation & Management was requested to submit the modified proposal after checking it with Institute guidelines and submit the modified version for consideration of the Senate after approval of the SPGB Chairman on behalf of SPGB.</p> <p>HoD of NCDMM submitted that through the Ministry of Jal Shakti, they are likely to receive some sponsored candidates, and therefore, the revised scheme should be approved and implemented from the Academic Year 2024-25 itself, waiving-off the two-year gap as resolved by the Senate earlier.</p> <p>SPGB recommended that if a commitment letter for sponsored candidates is received from the ministry, the proposal for running the program from the forthcoming year itself may also be considered by the Senate.</p>
Item No. 61-3.5	<p>To consider the mercy request of Mr. Sameer (2020PCT5276) to complete M. Tech. Part-time Degree.</p> <p>SPGB noticed that the justification for granting mercy was missing in the recommendation of the DPGC. DPGC convener was requested to explain the justification during the meeting so that the matter could be sent to Senate with recommendations of SPGB, but he submitted that he needs time for reviewing the matter and the matter may be taken up in the next SPGB meeting.</p> <p>Therefore, the SPGB decided to refer the matter back to the department seeking justification of the recommendation.</p>
Item No. 61-3.6	<p>To consider the list of PG students for termination of enrolment who scored a CGPA less than 5.5 in the academic year 2023-24.</p> <p>SPGB approved the list of PG students for termination of enrolment who scored a CGPA less than 5.5 in the academic year 2023-24.</p>
Item No. 61-3.7	<p>To consider the cases of Ph.D. students for termination from the Institute roles who have not done semester registration.</p> <p>On the basis of recommendation of DPGC Conveners received, SPGB approved the cases of Ph.D. students for termination from the Institute roles. It was reported that recommendations have not been received from few departments (regarding S.No.4 to 9). Respective DPGC Conveners of these departments consented during the meeting that the process of termination may be continued and the academic section should moved forward with the termination process.</p>
Item No. 61-3.8	<p>To consider the case of PG students who have not deposited their Semester fee.</p> <p>Academic section submitted that the students have been sent reminders. They were also contacted telephonically, but, none of the students has responded positively.</p> <p>SPGB approved the termination of PG students who have not deposited their Semester fee</p>
Item No. 61-3.9	<p>To consider the revised syllabus and change in the course name of M.Sc. in Physics program submitted by the Department of Physics.</p> <p>SPGB approved the revised syllabus and change in the course name of the M.Sc. in Physics program submitted by the Department of Physics</p>
Item No. 61-3.10	<p>To consider the proposal to convert the Open Elective slot of IV Semester M.Sc. Mathematics to Program Elective slot.</p> <p>SPGB approved the proposal to convert the Open Elective slot of IV Semester M.Sc. Mathematics to Program Elective slot.</p>

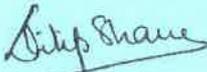
 MNIT Jaipur | Minutes – 61st SPGB | 22nd March 2024 | 2

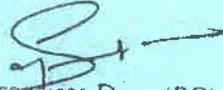
Item No	Reporting Items.
61-4.0	
Item No 61-4.1	To report the list of Ph.D. students whose supervisors (Internal/External) are added? Noted.
Item No 61-4.2	To report the list of Ph.D. students converted from Full-time to Part-time. Noted.
Item No 61-4.3	To report the list of the Ph.D. students permitted for Semester Withdrawal. Noted.
Item No 61-4.4	To report the list of Ph.D. students permitted for research work in other institutes. Noted.
Item No 61-4.5	To report the list of the Ph.D. students of change of supervisor. Noted.
Item No 61-4.6	To report the list of the Faculty members permitted to supervise Ph.D. students of other institutes. Noted.
Item No 61-4.7	To report the list of the Ph.D. Students permitted for semester extension from January 2024 to June 2024. Noted.
Item No 61-4.8	To report the list of the PG students permitted for internship work in the other Institutes Noted.
Item No 61-4.9	To report the list of the PG students converted from Full-time to Part-time. Noted.
Item No 61-4.10	To report the list of the PG students permitted for Semester Withdrawal. Noted.
Item No 61-5.0	Items for Ratification
Item No 61-5.1	To ratify the name of the student member for SPGB. The name of Ms. Manisha Prajapat, ID No. 2021REC9501, as a student member of SPGB, was ratified.
Item No. 61-6.0	Any other item with the permission of the Chair
Item No. 61-6.1	To consider the proposal of the Department of Mathematics for approval of a new Program elective "Optimization Techniques" for M.Sc. (Mathematics). SPGB, after deliberation, observed that as other courses with similar names and overlapping syllabus are already running in some departments, the Convener DPGC was requested to review and revise the course for fresh consideration of SPGB.



Item No. 61-6.2	To consider the seat matrix of the PG programs for the Academic Session 2024-25.
Item No. 61-6.3	<p>SPGB approved the seat matrix of the PG programs for the Academic Session 2024-25.</p> <p>To consider the request submitted by some students to change the name of the PG degree awarded before 2016 from Applied Physics to Physics.</p> <p>SPGB deliberated on the matter and concluded that the names of the degrees which are awarded already cannot be changed.</p>

The meeting ended with a vote of thanks to the Chair.


Chairman SPGB


Associate Dean (PG)

The meeting was attended by the following members:

S. No.	Name	Department
1.	Prof. Dilip Sharma	Chairman, SPGB
2.	Prof. Jyotirmay Mathur	Dean, Academics
3.	Prof. Suja George	Associate Dean (PG)
4.	Dr. Sumit Khandelwal	Associate Dean (UG)
5.	Prof. Tarush Chandra	Convener DPGC, Department of Architecture and Planning
6.	Dr. Vivekanand	Convener DPGC, Centre for Energy & Environment
7.	Dr. Virendra Kumar Saharan	Convener DPGC, Department of Chemical Engineering
8.	Dr. Sumit Kumar Sonkar	Convener DPGC, Department of Chemistry
9.	Dr. Vinay Agarwal	Convener DPGC, Department of Civil Engineering
10.	Dr. Pilli Emmanuel Shubhakar	Convener DPGC, Department of Computer Science & Engineering
11.	Dr. Neeli Satyanarayana	Convener DPGC, Department of Electrical Engineering
12.	Prof. Vibhuti Singh Shekhawat	Convener DPGC, Department of Humanities and Social Science
13.	Dr. Divesh Kumar	Convener DPGC, Department of Management Studies
14.	Dr. Nisha Verma	Convener DPGC, Material Research Center
15.	Dr. Ritu Agarwal	Convener DPGC, Department of Mathematics
16.	Prof. Harlal Singh Mali	Representing Convener DPGC, Department of Mechanical Engineering
17.	Dr. Jyotirmaya Kar	Convener DPGC, Metallurgical and Materials Engineering
18.	Prof. S.D. Bharti	Representing Convener DPGC, National Centre for Disaster Mitigation & Management
19.	Dr. Nishant Roy	National Centre for Disaster Mitigation & Management
20.	Dr. Rahul Singhal	Convener DPGC, Department of Physics
21.	Dr. Bhagwati Sharma	Head, MRC
22.	Ms. Silpa Priyadarsini Das (2022PWC5409)	Student Nominee

The following members could not attend the meeting:

S. No.	Name	Department
1.	Prof. Rajeev Shringi	Chairman, SUGB
2.	Prof. Rakesh Jain	Ex-Chairman, SPGB
3.	Prof. R.K. Vyas	Nominee Chairman Senate
4.	Dr. Ritu Sharma	Convener DPGC, Department of Electronics & Communication Engineering

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**MINUTES OF 44th MEETING OF SUGB HELD ON
March 21, 2024**

44th Meeting of SUGB was held on March 21, 2024 at 04:30 PM in the NKN1, Prabha Bhawan.

The following agenda items were discussed, and the recommendations are as follows:

Item No. 44-1.0	<p>To confirm the minutes of 43rd meeting of SUGB held on 05th December 2023.</p> <p>The SUGB confirmed the minutes of 43rd meeting of SUGB held on 05th December 2023.</p>										
Item No. 44-2.0	<p>To Note the "Action Taken" on the decisions taken in the 43rd meeting of the SUGB.</p> <p>Action taken was noted.</p> <p>For Item No.43-3.6, Associate Dean (UG) submitted that the teaching scheme for B.Tech. (AIDE) has been finalized now. SUGB authorized Chairman SUGB to approve the scheme for the consideration of the Senate if all the documents are found in order and send it to Senate for consideration.</p>										
Item No. 44-3.0	<p><i>Items for Consideration.</i></p>										
Item No. 44-3.1	<p>To consider the mercy request of Rishu Sharma (2021UEC1054) for continuing B.Tech.</p>										
	<table border="1"> <thead> <tr> <th data-bbox="368 1189 438 1272">S. No.</th> <th data-bbox="438 1189 667 1272">Student Name/ ID/status and Dept.</th> <th data-bbox="667 1189 874 1272">Recommendation of DUGC</th> <th data-bbox="874 1189 1401 1272">The decision of 44th SUGB</th> </tr> </thead> <tbody> <tr> <td data-bbox="368 1272 438 1657">1.</td> <td data-bbox="438 1272 667 1657">Rishu Sharma (2021UEC1054) ECE</td> <td data-bbox="667 1272 874 1657">The DUGC of ECE recommended the mercy plea of Rishu Sharma.</td> <td data-bbox="874 1272 1401 1657"> <p>SUGB, looking into the medical & health issues of Rishu Sharma, recommended the mercy request to the Senate to allow him another chance with year back to clear the required number of credits for continuation of B.Tech. program.</p> <p>The SUGB noted that Rishu Sharma has to complete the credit requirements required for the award of B.Tech. degree within the maximum duration specified. Further, the SUGB decided that he will not be allowed any semester withdrawal.</p> </td> </tr> </tbody> </table>	S. No.	Student Name/ ID/status and Dept.	Recommendation of DUGC	The decision of 44 th SUGB	1.	Rishu Sharma (2021UEC1054) ECE	The DUGC of ECE recommended the mercy plea of Rishu Sharma.	<p>SUGB, looking into the medical & health issues of Rishu Sharma, recommended the mercy request to the Senate to allow him another chance with year back to clear the required number of credits for continuation of B.Tech. program.</p> <p>The SUGB noted that Rishu Sharma has to complete the credit requirements required for the award of B.Tech. degree within the maximum duration specified. Further, the SUGB decided that he will not be allowed any semester withdrawal.</p>		
S. No.	Student Name/ ID/status and Dept.	Recommendation of DUGC	The decision of 44 th SUGB								
1.	Rishu Sharma (2021UEC1054) ECE	The DUGC of ECE recommended the mercy plea of Rishu Sharma.	<p>SUGB, looking into the medical & health issues of Rishu Sharma, recommended the mercy request to the Senate to allow him another chance with year back to clear the required number of credits for continuation of B.Tech. program.</p> <p>The SUGB noted that Rishu Sharma has to complete the credit requirements required for the award of B.Tech. degree within the maximum duration specified. Further, the SUGB decided that he will not be allowed any semester withdrawal.</p>								



Item No. 44-3.2	To consider the mercy request of Naushad Ansari (2023UEE1072) for re-admission to MNIT.		
S. No.	Student Name/ ID/status and Dept.	Recommendation of DUGC	The decision of 44 th SUGB
1.	Naushad Ansari (2023UEE1072) Electrical Engineering	The DUGC of the Department of Electrical Engineering recommended that "admission may be given to the student as per the provision of multiple exit/entry of the new Education policy."	SUGB recommended the mercy request for re-admission as the student had withdrawn admission due to influence and falls in trap of false job promises as reported by his father.
Item No. 44-3.3	To consider the request of Ravi Rathi (050362) to provide his B.Tech degree. SUGB recommended the request of Ravi Rathi (050362) to the Senate to provide his B.Tech. degree. SUGB also directed D.R. (Academic) and A.R.(Academic) to match the TR and Scroll of all batches admitted from 2002 to 2019 and submit the report to Dean. Academic by 10 th April 2024 for further submission to Senate.		
Item No. 44-3.4	To consider the request of Priyanka Meena (2017UCP1128) seeking permission for late registration in even semester 2023-24 without late fees. SUGB did not recommend the request of Priyanka Meena (2017UCP1128) seeking permission for late registration in even semester 2023-24 without late fees, as the student has already been given relaxation in terms of number of withdrawals and total no. of years to complete the credit requirements.		
Item No. 44-3.5	To consider the mercy request of Pooja Sankpal (2021UCP1051) seeking permission for re-examination.		
S. No.	Student Name /ID and Department	Recommendation of DUGC	The decision of 44 th SUGB
1.	Pooja Sankpal (2021UCP1051) Computer Engineering	Considering the severity of her psychological health, the DUGC of the Department of Computer Science and Engineering recommended giving her the opportunity to re-appear for the examination	SUGB did not recommend conduct of re-exam as the request from student was received after a long time after the prescribed time limit for the purpose. SUGB further recommended that she may be permitted to appear in all the papers in the forthcoming supplementary exam, as a special case du to medical reasons.
Item No. 44-3.6	To consider the Scheme/Syllabus of new UG program of B.Tech. (Mathematics and Computing), submitted by the Department of Mathematics.		

Shardell

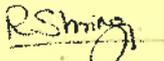
	<p>SUGB made the following observation on the proposal:</p> <ol style="list-style-type: none"> 1. There are many courses which appear to be from the Computer Engineering Department. The department should clarify if these are to be taught by the Department of Mathematics or some other department. In case any course needs to be taught by the other departments, consent of the DFB of the other departments is to be taken in advance. 2. DFB should provide detailed related to the space/lab, lab equipment and additional faculty with teaching load calculations. 3. Number of seats on which admission is to be offered, shall be specified. <p>The SUGB authorized Chairman SUGB to forward the case to the Senate for further consideration.</p>
Item No. 44-3.7	<p>To consider the Scheme/Syllabus of new UG program of (Engineering Physics), submitted by the Department of Physics.</p> <p>SUGB made the following observation on the proposal:</p> <ol style="list-style-type: none"> 1. In case any course needs to be taught by the other departments, consent of the DFB of the other departments is to be taken in advance. 2. DFB should provide detailed related to the space/lab, lab equipment and additional faculty with teaching load calculations. 3. Number of seats on which admission is to be offered, shall be specified. <p>The SUGB authorized Chairman SUGB to forward the case to the Senate for further consideration.</p>
Item No. 44-3.8	<p>To consider the recommendations of the Curriculum Development Workshop (CDW) organised by Department of Physics to float a single course on physics for B.Tech. 1st year student.</p> <p>The department was suggested to take inputs from the departments clarifying if they would like to replace the existing physics course with the proposed new course.</p>
Item No. 44-3.9	<p>To consider the proposal of a new minor program in "physics" for B.Tech. students.</p> <p>SUGB recommended the proposal to Senate for approval.</p>
Item No. 44-3.10	<p>To consider the proposal submitted by the Chemical Engineering Department for waiving off summer Internship fees for students from other institutes.</p> <p>SUGB decided to forward the matter to the committee constituted vide no.F4/S-V-1/23-24-Acad (53-Senate)/3463 dated 19.02.2024 in this regard.</p>



Item No. 44-3.11	<p>To consider the proposal submitted by the Chemical Engineering Department for the installation of biometric attendance system in the classrooms for the B. Tech. students.</p> <p>SUGB recommended the matter to Dean of Digital Infrastructure & Services, requesting for an urgent action in this regard.</p>
Item No. 44-3.12	<p>To consider the proposal of a course "Energy, Environment and Sustainability" for B.Tech. 1st year students submitted by the Centre for Energy and Environment.</p> <p>SUGB advised that the Centre shall seek inputs from the departments offering UG program. to replace the existing course on Environmental Science with the new course proposed by the Centre. The department was suggested to take inputs from the departments clarifying if they would like to replace the existing Environment Science course with the proposed new course.</p>
Item No. 44-3.13	<p>To consider the proposal of a new minor specialization in "Sustainable Energy" for B.Tech. students submitted by the Centre for Energy and Environment.</p> <p>SUGB recommended the matter to the Senate.</p>
Item No. 44-3.14	<p>To consider the proposal of two new minor specializations in "Electrical Vehicle" and "System and Control" for B.Tech. students of other departments, submitted by the Department of Electrical Engineering.</p> <p>SUGB suggested to review the title of both the specializations and authorized Chairman SUGB to recommend the matter to the Senate, for approval.</p>
Item No. 44-3.15	<p>To consider the seat matrix of the UG programs for the Academic Session 2024-25.</p> <p>SUGB approved the Seat matrix of UG programs for admission in the Academic year 2024-25.</p>

The meeting ended with a vote of thanks to the Chair.


Associate Dean (UG)


Chairman SUGB

The meeting was attended by the following members:

Sl. No.	Name of Faculty	Designation
1.	Prof. Rajeev Shringi	Chairman SUGB
2.	Prof. Jyotirmay Mathur	Dean, Academic
3.	Prof. Suja George	Associate Dean PG
4.	Dr. Sumit Khandelwal	Associate Dean UG
5.	Dr. Nivedita Kaul	Nominee, Chairman Senate
6.	Prof. B.L.Swami	Convener DUGC, Department of Civil Engg.
7.	Dr. Parul Mathuria	Convener DUGC, Department of Centre for Energy and Environment
8.	Dr. U.K. Arun Kumar	Convener DUGC, Department of Chemical Engineering
9.	Dr. Arka Prokash Mazumdar	Convener DUGC, Department of Computer Science and Engineering
10.	Dr. Anil Swarnkar	Convener DUGC, Department of Electrical Engineering
11.	Dr. Kuldeep Singh	Convener DUGC, Department of Electronics and Communication Engineering
12.	Dr. Nidhi Sharma	Convener DUGC, Department of Humanities and Social Science
13.	Dr. Aakanksha Kataria	Convener DUGC, Department of Management studies
14.	Dr. Santosh Chaudhary	Convener DUGC, Department of Mathematics
15.	Dr. Harlal Singh Mali	Convener DUGC, Department of Mechanical Engineering
16.	Dr. R.K.Singh	Representing Convener DUGC, Department of Metallurgical and Materials Engineering
17.	Dr. Srinivasa Rao Nelamarri	Convener DUGC, Department of Physics
18.	Prof. Kanupriya Sachdev	HoD, Physics - special invitee
19.	Prof. Vatsala Mathur	HoD, Mathematics - special invitee
20.	Mr. Manvendra Singh (2021UCH1649)	Student Nominee

Following members couldn't attend the meeting:

S.No.	Name	Department
1.	Prof. Dilip Sharma	Chairman SPGB
2.	Prof. Ravindra Nagar	Previous Chairman, SUGB
3.	Prof. Rina Surana	Convener DUGC, Department of Architecture and Planning
4.	Dr. Pradeep Kumar	Convener DUGC, Department of Chemistry
5.	Dr. Kamakshi Pandey	Representing Convener DUGC, Department of Materials Research Centre
6.	Mr. Himanshu Kushwaha (2022UCP1186)	Student Nominee

(Handwritten Signature)

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Minutes of 39th Meeting of Academic Affairs Committee (AAC)

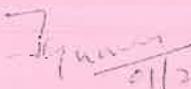
The 39th Academic Affairs Committee (AAC) meeting was held on 30 January 2024, at 04:30 PM in the Committee Room near the Dean's office, Prabha Bhawan. The following members attended the meeting:

1. Prof. Jyotirmay Mathur (Dean, Academics)
2. Prof. Dilip Sharma (Chairman, SPGB)
3. Prof. Rajeev Shringi (Chairman, SUGB)
4. Prof. Sumit Khandelwal (Associate Dean UG)- attended online
5. Prof. Suja George (Associate Dean PG)- attended online

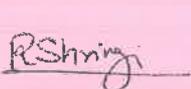
Item No.	Particular
39-1.0	<p>To confirm the minutes of the 38th meeting of the AAC held on 21st December 2023.</p> <p>The AAC confirmed the minutes of the 38th meeting of the AAC held on 21st December 2023.</p>
39-2.0	<p>To note the "Action Taken" on the decisions made in the 38th meeting of the AAC.</p> <p>The AAC noted the action taken report on the decision taken in its 38th meeting.</p>
39-3.0	<p>Items for Consideration.</p>
39-3.1	<p>To consider the cases of the students who have not deposited their semester fees and/or have not completed course registration.</p> <p>AAC deliberated the matter at length and decided the following:</p> <ol style="list-style-type: none"> 1. The students who have not deposited their semester fee but sent mail up to 05th January 2024 (Last date of fee deposition without a late fine) regarding their inability to pay the fees due to various reasons for depositing fees may be allowed to register without a late fine. 2. The students who have not deposited their semester fee but sent mail up to 09th January 2024 (Last date of fee deposition with Rs.1000/- late fine) regarding their inability to pay the fees due to various reasons for depositing fees may be allowed to register with Rs.1000/- late fine. 3. The students who have not deposited their semester fee but sent mail up to 15th January 2024 (Last date of fee deposition with Rs.10,000/- late fine) regarding their inability to pay the fees due to various reasons for depositing fees may be allowed to register with Rs.10,000/- late fine. 4. The students who have not deposited their semester fee and have not contacted the Academic Section up to 15th January 2024 (Last date of fee deposition with Rs.10,000/- late fine) regarding their inability to pay the fees due to various reasons for depositing fees may be asked to take semester withdrawal if they intend to continue their studies at the institute. 5. The students who have deposited their semester fees but have not completed their course

	<p>registration to date may be permitted to register for courses with a Rs.10,000/- late fine.</p> <p>6. The students who have deposited their semester fees and completed their course registration but could not add/drop courses up to 15th January 2024 may be permitted to add/drop courses with Rs.1,000/- late fine.</p>
39-3.2	<p>To consider the registration of students suspended for a semester/year.</p> <p>AAC approved the proposal regarding the registration of students suspended for a semester/year. AAC decided that the students' suspension period may be considered a forced withdrawal, and fees similar to the cases of semester withdrawal may be charged. A semester withdrawal grade sheet may be issued for such candidates.</p>
39-4.0	<p>Items for Ratification</p>
39-4.1	<p>To ratify an interchange of M.Sc. II and III Semester laboratory.</p> <p>The item was ratified.</p>
39-5.0	<p>Any other item with the permission of the chair.</p>
39-5.1	<p>To consider the application of Atharva Dhuri (2020UEC1614) forwarded by Convener, DUGC, Department of Electronics and Communication Engineering for the registration of Major Project A-ECD 498 in VIII Semester.</p> <p>The AAC discussed the request of Atharva Dhuri (2020UEC1614) and decided that the student would work for 02 months on the course Major Project-A after the completion of the End Term Examination of the current semester in the department. The Department will conduct an examination for this course after 02 months. This will be treated as a supplementary examination for the course.</p>

The meeting was concluded with thanks to the chair.


 (Prof. Jyotirmay Mathur)
 Dean Academic


 (Prof. Dilip Sharma)
 Chairman SPGB


 (Prof. Rajeev Shringi)
 Chairman SUGB

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Minutes of 40th Meeting of Academic Affairs Committee (AAC)

The 40th Academic Affairs Committee (AAC) meeting was held on 04th March 2024 at 5 PM and 27th March 2024 at 11:30 PM in the Committee Room near the Dean's office, Prabha Bhawan. The following members attended the meeting:

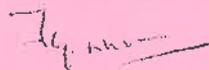
1. Prof. Jyotirmay Mathur (Dean, Academics)
2. Prof. Rajeev Shringi (Chairman, SUGB)
3. Prof. Dilip Sharma (Chairman, SPGB)
4. Prof. Suja George (Associate Dean PG)
5. Prof. Sumit Khandelwal (Associate Dean UG)

Item No.	Particular												
40-1.0	<p>To confirm the minutes of the 39th meeting of the AAC held on 21st December 2023.</p> <p>The AAC confirmed the minutes of the 39th meeting of the AAC held on 21st December 2023.</p>												
40-2.0	<p>To note the "Action Taken" on the decisions made in the 39th meeting of the AAC.</p> <p>The AAC noted the action taken report on the decision taken in its 39th meeting.</p> <p>For item no.39-3.1 AAC also decided that-</p> <ol style="list-style-type: none">1. The Cut-off date for the deposition of the fee was decided as 11.03.2024.2. After the cut-off date (i.e.11.03.2024), the current semester of the student will be treated as Semester Withdrawal (If the student appeared for the mid-term examination, his examination will also be canceled).												
40-3.0	Items for Consideration.												
40-3.1	<p>To consider the request of the students for the remission of late fee.</p> <p>Following was the resolution of the AAC regarding the remission of late fee:</p> <table border="1"><thead><tr><th>S. No.</th><th>Name and ID</th><th>Date of fee deposition</th><th>Challan Date</th><th>Fine (in Rs.)</th><th>Decision</th></tr></thead><tbody><tr><td>1.</td><td>Mr. Sumendra Meena (ID:2022PCD5105)</td><td>15.01.2024</td><td>10.01.2024</td><td>10,000/-</td><td>The remission of late fees is not permitted.</td></tr></tbody></table>	S. No.	Name and ID	Date of fee deposition	Challan Date	Fine (in Rs.)	Decision	1.	Mr. Sumendra Meena (ID:2022PCD5105)	15.01.2024	10.01.2024	10,000/-	The remission of late fees is not permitted.
S. No.	Name and ID	Date of fee deposition	Challan Date	Fine (in Rs.)	Decision								
1.	Mr. Sumendra Meena (ID:2022PCD5105)	15.01.2024	10.01.2024	10,000/-	The remission of late fees is not permitted.								

	2.	Mr. Vikram Kumar Yadav (2022PES5270)	04.01.2024	01.01.2024	1,000/-	The remission of the late fee is Permitted since the last date was extended up to 05.01.2024
40-3.2	<p>To review the process of tuition fee concession offered to students as per directions of MoE.</p> <p>AAC, after deliberation, decided following-</p> <p>A. AAC allowed additional students (who had not submitted the claim form earlier) to submit the fee remission claim form for the next semester/year.</p> <p>B. AAC recommended a new process for claiming fee remission/concession admissible under the MHRD letter F.No.33-4/2014-T.S. III dated 24th June 2016; detailed below:</p> <ol style="list-style-type: none"> i. Every year, Oct 15 will be the critical date for submission of claims with supporting documents. All students claiming fee concession will have to submit requests every year with supporting documents of immediately preceding financial year. ii. The Academic Section will process the claims by Dec.15, and update the fee challan for the forthcoming even semester, and initiate remission (if any) for the odd semester. iii. Any student failing to submit documents by Oct 15 will not be entitled for fee concession for the ongoing academic year. He/she can, however, apply for the same in the next academic year. iv. Fee concession claim, once found admissible (will be applicable for the even semester of the ongoing Academic year as well as it), will provisionally continue to be applicable in the following odd semester of the next Academic Year. However, if there is any change in the status (as per the documents submitted/not submitted) on the following Oct 15, recovery of the concession given will be made in the even semester of the ongoing Academic Year. 					
40-5.0	Any other item with the permission of the chair.					
40-5.1	<p>To consider the request of late registration of Ms. Arunima Sharma (2019RCP9558).</p> <p>AAC, after deliberation, allowed the semester withdrawal of Ms. Arunima Sharma (2019RCP9558), and to pay the semester withdrawal fees as applicable to the cases of the semester withdrawal.</p>					
40-5.2	To consider the issue of the students for name change on MNIT ERP.					

	AAC, after deliberation, decided that no change would be made by the Institute in the name of the student. The name with which any student takes admission will be continued as it is, without any change.
40-5.3	<p>To consider the issue of the Ph.D. student's absence from Invigilation duties during the Mid-Term Examination of Even semester 2023-24 (all Years UG & PG) held from 26.02.2024 to 01.03.2024.</p> <p>The Academic Affairs Committee discussed the matter on a case basis and decided to deduct the scholarship according to the number of days absent from invigilation duty 26.02.2024 to 01.03.2024 from the months of March 2024 for those students who have either not given any reason for absence or given a reason that is not admissible. The academic Section will inform the concerned Ph.D. Scholar through email regarding the amount deducted from their scholarship. The list of such Ph.D. students is placed in Annexure-A</p>

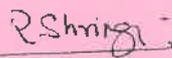
The meeting was concluded with thanks to the chair.



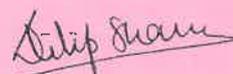
(Jyotirmay Mathur)
Dean Academic



(Sumit Khandelwal)
Associate Dean UG



(Rajeev Shringi)
Chairman SUGB



(Dilip Sharma)
Chairman SPGB



(Suja George)
Associate Dean PG & Ph. D

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY**Office of Dean Academic****Minutes of Unfair Means Committee Meeting held on 30th January 2024**

The meeting of the Unfair Means Committee was held on 30th January 2024, at 04:00 PM in meeting room No.1, near the Dean's office, Prabha Bhawan. The meeting was attended by the following members:

1.	Prof. Jyotirmay Mathur	Dean, Academic
2.	Prof. Dilip Sharma	Chairman SPGB
3.	Prof. Rajeev Shringi	Chairman, SUGB
4.	Prof. Suja George	Associate Dean PG (online)
5.	Prof. Sumit Khandelwal	Associate Dean UG (online)
6.	Dr. Namita Mittal	HoD, Computer Science and Engineering
7.	Dr. Himanshu Arora	Assistant Professor, Department of Civil Engineering
8.	Dr. Satish Pipralia	HoD, Architecture and Planning
9.	Dr. Gireendra Kumar	Assistant Professor, Department of Architecture and Planning
10.	Dr. Jyotirmay Kar	Assistant Professor Department of Metallurgical & Materials Engineering (online)

The following agenda items were discussed:

Item No. 1.0 To confirm the minutes of the Unfair Means Committee meeting dated 21.12.2023

The minutes of the Unfair Means Committee meeting dated 21.12.2023 were confirmed.

Item No. 2.0 To note the "Action Taken" on the decisions made in the Unfair Means Committee meeting dated 21.12.2023.

The Unfair Means Committee noted the action taken report on the decisions taken on 21.12.2023.

Item No. 3.0 *Items for Consideration.*

Item No. 3.1 To discuss the unfair means cases reported in the End-term Examinations of odd semester 2023-24.

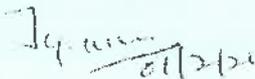
The unfair means cases reported in the End-term examinations held from 20th November 2023 to 12th December 2023, and forwarded by the concerned course coordinator/invigilator/flying squads to the Unfair Means Committee were discussed. All the students who indulged in unfair means were called before the committee to present their cases before the committee. Mr. Saurabh Sindhi (2019UAR1768) and Ms. Shravya Bhamidipati (2022UCPI891) were present in person. The committee

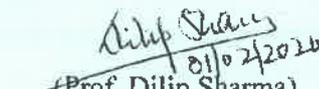
discussed the cases individually, and the following decisions were taken:

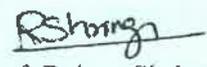
S. No.	Name of the student	Course details	Examination	Decision
1.	Saurabh Sindh (2019UAR1768)	ART-501 (Building Services-III)	IX th Semester End-Term Examinations 2023-24	The End-term of the ART-501 (Building Services-III) examination stands cancelled, and the student will be awarded an 'FP' grade in this subject.
2.	Shravya Bhamidipati (2022UCPI891)	22CST201 (Data Communication)	III rd Semester End-Term Examinations 2023-24	The End-term of the 22CST201 (Data Communication) examination stands cancelled, and the student will be awarded an 'FP' grade in this subject.

It was decided that the students' information regarding indulging in unfair means should be communicated to their parents. It was also decided that any such repeat offense by these students shall attract severe penalties, which may range up to expulsion (limited period/permanent) of the students from the Institute. Further, the decision of the committee will be communicated to all the students of the Institute.

The meeting was concluded with thanks to the chair.


(Prof. Jyotirmay Mathur)
Dean Academic


(Prof. Dilip Sharma)
Chairman, SPGB


(Prof. Rajeev Shringi)
Chairman, SUGB

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY
Office of Dean Academic

Minutes of Unfair Means Committee Meeting held on 27th March 2024

The meeting of the Unfair Means Committee was held on 27th March 2024, at 11:00 AM in meeting room No.1, near the Dean's office, Prabha Bhawan. The meeting was attended by the following members:

1.	Prof. Jyotirmay Mathur	Dean, Academic
2.	Prof. Dilip Sharma	Chairman SPGB
3.	Prof. Suja George	Associate Dean, PG
4.	Prof. Sumit Khandelwal	Associate Dean, UG
5.	Dr. Santosh Chaudhary	Invigilator
6.	Dr. Sushant Upadhyaya	Associate Professor and Head, Department of Chemical

The following agenda items were discussed:

Item No. 1.0 To confirm the minutes of the Unfair Means Committee meeting dated 30.01.2024.

The minutes of the Unfair Means Committee meeting dated 30.01.2024 were confirmed.

Item No. 2.0 To note the "Action Taken" on the decisions made in the Unfair Means Committee meeting dated 30.01.2024.

The Unfair Means Committee noted the action taken report on the decisions taken on 30.01.2024.

Item No. 3.0 *Items for Consideration.*

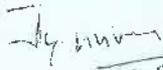
Item No. 3.1 To discuss the unfair means cases reported in the Mid-term Examinations 2023-24.

The unfair means cases reported in the Mid-term examinations held from 26th February 2024 to 03rd March 2024, and forwarded by the concerned course coordinator/invigilator/flying squads to the Unfair Means Committee were discussed. All the students who indulged in unfair means were called before the committee to present their cases before the committee. Mr. Rishav Raj Verma (2023UCH1329) was present in person. The committee discussed the case and the following resolutions/recommendations were taken:

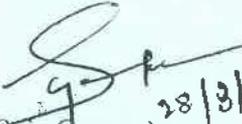
S. No.	Name of the student	Course details	Examination	Decision
1.	Rishav Raj Verma (2023UCH1329)	22EET107 (Basic Electrical Engineering)	II Semester Mid-Term Examinations 2023-24	The Mid-term of the 22EET107 (Basic Electrical Engineering) examination stands cancelled, and the student will be awarded an 'FP' grade in this subject.

It was decided that the information regarding indulging in unfair means by the student should be communicated to their parents. It was also decided that any such repeat offense by the student will attract severe penalties, which may range up to expulsion (limited period/permanent) of the student from the Institute. Further, the decision of the committee will be communicated to all the students of the Institute.

The meeting was concluded with thanks to the chair.


28/3/24

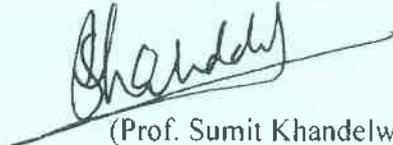
(Jyotirmay Mathur)
Dean Academic


28/3/24

(Prof. Suja George)
Associate Dean (PG)



(Prof. Dilip Sharma)
Chairman, SPGB



(Prof. Sumit Khandelwal)
Associate Dean (UG)

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

SUPPLEMENTARY AGENDA FOR 54TH MEETING OF SENATE

(To be held on 24th April 2024 at 4:00 PM in the Niti Sabhagar, Prabha Bhawan, MNIT,
Jaipur)

Item No. 54 -6.1	<p>To consider the Scheme/Syllabus of the new UG program B.Tech. Engineering Physics, proposed by the Department of Physics.</p> <p>The Department of Physics has proposed a Bachelor of Technology program in Engineering Physics. Senate, in principle, approved the program in the 48th Senate meeting under item no.48-3.5. The Scheme and Syllabus were discussed in the 44th SUGB meeting held on 21.03.2024. The SUGB required clarification on some points. The DFB of the Physics Department discussed the matter in detail and submitted the following points:</p> <ol style="list-style-type: none">1. All proposed courses (DC and TE) of B.Tech. Engineering Physics will be taught by the faculty of the Physics Department.2. 04 additional faculty and 04 additional labs will be required for the smooth conduct of the program.3. Initially, the program may start with 30 seats. <p>The Scheme, Syllabus, and details of additional space and faculty requirements are placed at Annexure-SA 1.</p> <p><i>Item is placed for consideration.</i></p>
Item No. 54 -6.2	<p>To consider the proposals for the change of name of the National Centre for Disaster Mitigation and Management.</p> <p>Proposal has been received from the National Center for Disaster Mitigation and Management to change the name of Centre from the National Centre for Disaster Mitigation and Management to the Department of Earthquake Engineering.</p> <p>The detailed justification, including Background, Activities, and Salient reasons for the proposed change is attached as Annexure SA-2</p> <p><i>Item is placed for directions.</i></p>
Item No. 54 -6.3	<p>To consider a course on Human Values and Professional Ethics for all UG students</p> <p>The Senate vide Resolution No. Senate-53/2024/10 constituted a committee of the following members to suggest a course on Human Values and Professional Ethics for all UG students, along with details about its delivery;</p> <ol style="list-style-type: none">1. Dr. Preeti Bhatt, HoD HSS, Chairperson2. Prof. Rajesh Kumar, Member3. Prof. Jyoti Joshi, Member4. Dr. Sushant Upadhyay, Member5. Dr. Deepak Verma, Member

	<p>The above committee has prepared the detailed Course Objectives/Learning Outcomes/Assessment and Course contents with the session plan.</p> <p>The details are attached as Annexure SA-3</p> <p><i>Item is placed for directions.</i></p>
Item No. 54 -6.4	<p>To consider the updated Rules and Regulations Manual for UG programs</p> <p>The Rules and Regulation Manual for UG Programs (UG Manual) was approved by the Senate in 2012. A number of provisions of this manual have been amended by the Senate. The academic module of ERP was implemented after the UG Manual came into existence and hence few provisions need to be updated. Few sections of the UG Manual have now become obsolete, and hence they shall be removed.</p> <p>A committee comprising of following members was constituted to revise the UG Manual and for preparation of rules and procedures for the new UG scheme.</p> <p>Prof. Himanshu Chaudhary Chairman Dr. Sumit Khandelwal Convener Dr. Rina Surana Member Dr. Anil Swarnkar Member Dr. Dipaloy Datta Member Dr. Rajnish Dhiman Member</p> <p>The draft of the updated manual was circulated to all the faculty members of the institute for their comments. The final manual, after incorporation of the comments, is placed on the table.</p> <p><i>Item is placed for consideration & approval.</i></p>

Malaviya National Institute of Technology Jaipur
Department of Physics

NOTE SHEETDate: - 15/04/2024

A DFB meeting was held on 15th April, 2024 regarding the 44th SUGB meeting held on 21st March, 2024 & minutes circulated on 5th April, 2024 (item no. 44-3.7).

Minutes of DFB are attached for kind perusal & necessary action.

Sachdev
15/04/24
Dr. K. Sachdev
Head, Physics

Dean Academics Affairs

Pl. examine.

- ~~ADUG~~

Jy. inw
15/4/24

With reference to the minutes of the meeting of SUGB at item no. 44-3.7, the department of Physics has submitted the response of all the three observations.

Submitted for perusal/directions.

Shordely
16/4/24

→ Dean Academic

Pl. prepare Table Agenda for Senate.

Jy. inw
17/4/24

202
15/04/2024





No. F(1) DFB/PHY/MNITJ/2024/003

Date: 15/04/2024

Minutes of the DFB meeting held on 15.04.2024 (Monday) at 12:00 PM in the Department of Physics

A DFB meeting was held on 15 April 2024 at 12:00 PM in the HOD office, Department of Physics. The following faculty members were physically present in the meeting-

1. Dr. Akhilesh Nautiyal
2. Dr. Anees Ahmed
3. Dr. Anirban Dutta
4. Dr. Debasish Sarkar
5. Dr. K. Venkataratnam Kamma
6. Dr. Kamakshi Pandey
7. Dr. Kamendra Awasthi
8. Prof. Kanupriya Sachdev
9. Dr. Kavita Lalwani
10. Dr. Manoj Kumar
11. Dr. Rahul Singhal
12. Dr. Rajnish Dhiman
13. Dr. Srinivasa Rao Nelamarri
14. Dr. Subhayan Mandal

At the outset, HOD welcomed all the faculty members to the DFB Meeting. The matters discussed and decisions taken are as follows:

AGENDA 1:

Newly Proposed B.Tech Engineering Physics Program:

Regarding the 44th SUGB meeting held on 21 March 2024 and the minutes circulated on 5 April 2024, the following points of item no. 44-3.7 are discussed:

1. In case any course needs to be taught by the other departments, consent of the DFB of the other departments is to be taken in advance.
2. DFB should provide details related to space/lab, lab equipment, and additional faculty with teaching load calculations.
3. Number of seats on which admission is to be offered shall be specified.

The DFB discussed the matter in detail, and unanimously agreed on the following points:

1. All the proposed courses (DC & PE) of the newly proposed B.Tech Engineering Physics will be taught by the faculty members of the Physics department only.
2. It was discussed and everybody felt that at least four additional faculty members and four additional teaching labs are required to smoothly run the proposed new program. The details



of the required teaching lab space and additional faculty members are attached. The existing teaching load, and proposed teaching load are also given in the same attachment.

3. DFB and the experts of the CDW committee unanimously agreed that the program can be started initially with 30 seats.

The meeting ended with thanks to all.

Dr. Akhilesh Nautiyal

Dr. Anees Ahmed

Dr. Anirban Dutta

Dr. Debasish Sarkar

Dr. K. Venkataratnam Kamma

Dr. Kamakshi Pandey

Dr. Kamendra Awasthi

Prof. Kanupriya Sachdev

Dr. Kavita Lalwani

Dr. Manoj Kumar

Dr. Rahul Singhal

Dr. Rajnish Dhiman

Dr. Srinivasa Rao Nelamarri

Dr. Subhayan Mandal

S.No.	Session	Teaching work load in the Department of Physics				Lab space requirement (number and area)		Additional faculty required
		Existing work load	Per faculty	New Work load created	Total work load			
1.	Even semester (2023-2024)	197	14.1	0	197	-	-	-
2.*	Odd semester (2024-2025)-Sem-I	176	12.6	8	184	-	-	-
3.	Even semester (2024-2025) - Sem-II	197	14.1	4	201	-	-	01
4.	Odd semester (2025-2026) - Sem-III	176	12.6	32	208	02	25'*60'	01
5.	Even semester (2025-2026) - Sem-IV	197	14.1	28	225	01	25'*60'	02
6.	Odd semester (2026-2027) - Sem-V	176	12.6	24	200	01	25'*60'	-
7.	Even semester (2026-2027) - Sem-VI	197	14.1	23	220	-	-	-
8.	Odd semester (2027-2028) - Sem-VII	176	12.6	18	194	-	-	-
9.	Even semester (2027-2028) - Sem-VIII	197	14.1	24	221	-	-	-

*Kindly note that the workload and space requirement has been determined assuming the start of the program B.Tech Engineering Physics from odd semester 2024-2025.

[Handwritten signature]

Kamakhya
Bois

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]
[Handwritten signature]

Malaviya National Institute of Technology Jaipur

Department of Physics

Course Structure and Syllabi for B.Tech.
(Engineering Physics)



Curriculum Development Workshop
March 1-2, 2024

N. Srinivasa Rao

[Handwritten Signature]

Proposed Course Structure of B. Tech. (Engineering Physics)

Semester I

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	22MAT101	Mathematics I	IC	3-1-0	4
2.	22EET101	Basics Electrical and Electronics Engineering	IC	3-0-0	3
3.	22HST102	English Communication skills	IC	2-0-0	2
4.	22PHT102	Modern Physics	IC	2-1-0	3
5.	22ECP101	Electronics Engineering Lab	IC	0-0-2	1
6.	22EEP102	Electrical Engineering Lab	IC	0-0-2	1
7.	22HSP104	Communication Skills lab	IC	0-0-2	1
8.	22PHP104	Modern Physics Lab	IC	0-0-2	1
9.	24PHT101	Waves & Optics	PC	3-1-0	4
10.	24PHT102	Mechanics & Relativity	PC	3-1-0	4
Total					24

Semester II

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	22MAT102	Mathematics II	IC	3-1-0	4
2.	22CST101	Programming with Python	IC	2-0-0	2
3.	22CET101	Engineering Drawing & Sketching	IC	1-0-2	2
4.	22CET102	Environmental Science	IC	2-0-0	2
5.	22CYT101	Engineering Chemistry	IC	2-1-0	3
6.	22HST101	Basic Economics	IC	2-0-0	2
7.	22MET101	Introduction to Mechanical Systems	IC	2-0-0	2
8.	22CSP102	Programming with Python Lab	IC	0-0-2	1
9.	22CYP102	Engineering Chemistry Lab	IC	0-0-2	1
10.	22MEP102	Product Realization through Manufacturing	IC	0-0-2	1
11.	24PHT201	Introduction to Thermodynamics	PC	3-1-0	4
Total					24

Alamp

Rajin

Semester III

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	24PHT301	Mathematical Methods in Physics - I	PC	3-1-0	4
2.	24PHT302	Computational Physics	PC	2-1-2	4
3.	24PHT303	Electromagnetic Theory	PC	3-1-0	4
4.	24PHT304	Quantum Mechanics	PC	3-1-0	4
5.	24PHT305	Analog Electronics	PC	3-1-0	4
6.	24PHT306	Astronomy & Astrophysics	PC	3-1-0	4
7.	24PHP307	Analog Electronics Lab	PC	0-0-4	2
8.	24PHP308	Electricity & Magnetism Lab	PC	0-0-4	2
Total					28

Semester IV

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	24PHT401	Mathematical Methods in Physics - II	PC	3-1-0	4
2.	24PHT402	Condensed Matter Physics	PC	3-1-0	4
3.	24PHT403	Atomic & Molecular Physics	PC	3-1-0	4
4.	24PHT404	Digital Electronics	PC	3-1-0	4
5.	24PHT405	Statistical Mechanics	PC	3-1-0	4
6.	BMT499	Basic Management	MM	3-0-0	3
7.	24PHP406	Digital electronics lab	PC	0-0-4	2
8.	24PHP407	Solid State Physics Lab	PC	0-0-4	2
Total					27

None

Rajin

Semester V

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	24PHT501	Nuclear and Particle Physics	PC	3-1-0	4
2.	24PHT502	Semiconductor Physics and Devices	PC	3-1-0	4
3.	24PHT503	Quantum Electronics	PC	3-1-0	4
4.	24PHT504	Thin Film Science and Technology	PC	3-1-0	4
5.	24PHP505	Laser and Optoelectronics lab	PC	0-0-4	2
6.	24PHP506	Nuclear and Spectroscopy Lab	PC	0-0-4	2
Total					20

Semester VI

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.	24PHT601	Instrumentation Physics	PC	3-1-0	4
2.	24PHT602	Data Analysis & Interpretation	PC	3-1-0	4
3.		Program Elective 01	PE	2-1-2	4
4.		Program Elective 02	PE	3-0-0	3
5.		PL EAS	EAS	3-0-0	3
6.	24PHP603	Advanced Physics Lab	PC	0-0-8	4
Total					22

Name

Signature

Semester VII

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.		Program Elective 03	PE	3-0-0	3
2.		Program elective 04	PE	3-0-0	3
3.		Program Elective 05	PE	3-0-0	3
4.		Advance Elective 01	AE	3-0-0	3
5.		Open Elective 01	OE	3-0-0	3
6.		Minor Project	DC	0-0-6	3
Total					18

Semester VIII

S. No.	Course Code	Title of the course	Subject Area	L-T-P	Credits
1.		Advance Elective 02	AE	3-0-0	3
2.		Advance Elective 03	AE	3-0-0	3
3.		Open Elective 02	OE	3-0-0	3
4.		Major Project	DC	0-0-18	9
Total					18

Nancy

Rajiv

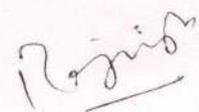
Program elective courses for B. Tech. (Engineering Physics)

S. No.	Course Type	Course Code	Title of the course	L-T-P	Credits
1.	PE	24PHTXXX	Surface Physics and Engineering	3-0-0	3
2.	PE	24PHTXXX	Materials Science and Engineering	3-0-0	3
3.	PE	24PHTXXX	LabVIEW for Beginners	2-0-2	3
4.	PE	24PHTXXX	Particle Detector and its Technology	3-0-0	3
5.	PE	24PHTXXX	Problem Solving in Physics with Python	2-0-2	3
6.	PE	24PHTXXX	Sensors: Materials, Fabrication & Applications	3-0-0	3
7.	PE	24PHTXXX	Introduction to Bio-inspired and bio-mimetic materials	3-0-0	3
8.	PE	24PHTXXX	Soft Materials	3-0-0	3

Advance elective courses for B. Tech. (Engineering Physics)

S. No.	Course Type	Course Code	Title of the course	L-T-P	Credits
1.	AE	24PHTXXX	Solar Energy and Physics of solar cells	3-0-0	3
2.	AE	24PHTXXX	Nanoscience and nanofabrication	3-0-0	3
3.	AE	24PHTXXX	Fundamentals of Energy Materials and Devices	3-0-0	3
4.	AE	24PHTXXX	Introduction to 3D Printing Technology	3-0-0	3

Name 



Fwd: Agenda for inclusion in the 54th Meeting of the Senate

1 message

jyotirmay mathur <jmathur.mech@mnit.ac.in>
To: "D. R. Academic" <dr.acad@mnit.ac.in>

Thu, Apr 18, 2024 at 3:29 PM

Pl. prepare a supplementary agenda.

Dr.-Ing. Jyotirmay Mathur
BIS Chair Professor,
Mechanical Engineering Department,
Centre for Energy and Environment,
and
Dean of Academic Affairs,
Malaviya National Institute of Technology
J.L.N. Marg, Jaipur (India) -302 017
Phone:
+91-94142-50329 (mobile)

Alternate mail ID: jyotirmay.mathur@gmail.com

----- Forwarded message -----

From: **S D Bharti** <sdbharti@mnit.ac.in>
Date: Thu, Apr 18, 2024 at 2:16 PM
Subject: Agenda for inclusion in the 54th Meeting of the Senate
To: Dean Academic <dean.acad@mnit.ac.in>
Cc: MNIT Director <director@mnit.ac.in>, M.K Shrimali <mkshrimali@mnit.ac.in>, Jyotirmay Mathur <jmathur.mech@mnit.ac.in>

Dear Prof. Mathur,
Kindly include the below agenda in the 54th meeting of the Senate

Agenda Item for consideration at the 54th Meeting of the Senate of MNIT Jaipur: Renaming the National Centre for Disaster Mitigation and Management as Department of Earthquake Engineering

The matter has been discussed with the Chairman, Senate and the inclusion of this as agenda has been cleared by him.
My apologies for late submission of the agenda.

**With Warm Regards
S. D. Bharti**

Professor (Structural Engineering) Department of Civil Engineering &
Head, National Centre for Disaster Mitigation and Management (<https://mnit.ac.in/ncdmm/>)
Head, National Centre for Earthquake Safety of Dams (<https://ncesd.mnit.ac.in/>)
(An Initiative of the Ministry of Jal Shakti, Government of India, towards effective implementation of **The Dam Safety Act, 2021**)
Malaviya National Institute of Technology Jaipur
(An Institution of National Importance under NITSER Act, Ministry of Education, Govt. of India)

JLN Marg, Jaipur-302017 (India)

 **Senate_54 Meeting_agenda for consideration_18 April 2024.pdf**
114K

Agenda Item

for consideration at the 54th Meeting of the Senate of MNIT Jaipur:

Renaming the *National Centre for Disaster Mitigation and Management* as **Department of Earthquake Engineering**

1. Relevant Provisions of the First Statutes of the NITs

The following are the relevant provisions of the Statutes of MNIT Jaipur:

(1) *Statute No. 2 (1): Definitions*

(d) "Centre" in relation to an Institute means an academic unit of the Institute engaged in academic activities (like teaching, research, etc.) generally of an inter-disciplinary nature.

(e) "Centre" in relation to an Institute means an academic unit of the Institute engaged in academic activities (like teaching, research, etc.).

(2) *Statute No. 8: Powers of the Senate*

(xii) make recommendations to the Board with regard to the *creation or restructuring* of Departments or Programmes or Centres and the abolition of existing Departments or centres thereof.

1. Background

The *National Centre for Disaster Mitigation and Management* was created in the 27th Meeting of the Board of Governors of MNIT Jaipur (held on 7th October 2013, Item No. 27-4.2). The Centre has been running *M.Tech. (Earthquake Engineering)* since 2015 and produced 10 Doctoral Thesis in the domain of Earthquake Engineering. Currently, there are 7 registered doctoral students. And, the Centre has *two* Faculty Members appointed directly under the Centre and *two* Faculty Members are attached to the Centre from the *Department of Civil Engineering*, with background in *Earthquake Engineering*.

2. Activities

The Centre has following activities within its ambit:

(1) *National Earthquake Testing Facility (NETF)* is a state-of-the-art facility engaged with industry partners, for *Qualification, Certification and Development* of new and emerging technologies for evaluating earthquake performance of buildings and bridges through *full-scale testing*, particularly the *mass housing* in India. Currently:

(a) *M/s B. G. Shirke Constructions Private Limited, Pune*, has made a significant pledge to the Institute towards establishing the long-term R&D initiatives in the domain of earthquake safety of building including full-scale testing. A few other companies are approaching to engage with the NETF for full-scale testing.

(b) The *Ministry of Steel, Government of India*, jointly with the *Ministry of Urban Affairs, Government of India*, has funded a project for *Technology Development for Promotion of Steel in Construction for Mass Housing* under Pradhan Mantri Housing Yojana. Five major steel manufacturers, namely, Tata Steel, SAIL, JSW, JSPL and AM&NS are co-funders of this Project (*Financial Outlay: Rs. 4.5 Crores*).

(2) *National Centre for Earthquake Safety of Dams (NCESD)* is a flagship project of the *Ministry of Jal Shakti, Government of India*, for effective implementation of *The Dam Safety Act, 2021*. (*Financial Outlay: Rs. 30.0 Crores*).

(3) *Development of earthquake safety standards* is a major effort underway of the Centre in collaboration with the *Earthquake Engineering Sectional Committee CED39* of the *Bureau of Indian Standards, Government of India, New Delhi*. The standards published and under

preparation are:

- (a) Earthquake Resistant Design & Detailing of *Base-Isolated Buildings*,
- (b) *Earthquake Testing of Structures*, and
- (c) *Earthquake Hazard, Earthquake Resistant Design & Detailing*, and *Earthquake Safety Assessment & Retrofit of Dams and Embankments*.

3. Salient Reasons for Renaming

The reasons for this fall in three broad categories.

- (1) The focus of the activities of the NCDMM largely has been in the domain of *earthquake safety* of the built environment, in all three aspects, namely *teaching, research and national development*. So, suitably naming the *Academic Unit* as *Department of Earthquake Engineering* is more appropriate, relevant and justifiable. By renaming, the Centre will be able to attract more:
 - (a) Competent applicants for Faculty Positions, and
 - (b) Academically bright *Masters and Doctoral* students and *Post-Doctoral Fellows*.
- (2) The Centre has been actively engaged with industry in a significant manner for *technology, qualification, certification and development for earthquake safety*. Hence, it is even more appropriate that the name should highlight the focus of the activities.
- (3) The Centre is in active and continuous engagement with Government and Private Sectors in the domain of *earthquake safety and resilient infrastructure*.

The activities of the Centre center solely in the domain of *Earthquake Engineering*. So far, the Centre has been successful in getting significant financial support from Government and Private Sectors.

Further, the Centre is planning to re-launch the *M.Tech. (Earthquake Engineering) Program* with two *tracks of Specialisations*, namely:

- (a) *Earthquake Dam Safety*, specifically targeted to dam engineers, which has become extremely relevant in the aftermath of the *Dam Safety Act, 2021*, and is the expectation of the *Ministry of Jal Shakti, Government of India*, as articulated in the road map of the *National Centre for Earthquake Safety of Dams* established at MNIT Jaipur, and
- (b) *Earthquake Resistant Design of Structures*, which is extremely relevant in the context of over 60% of India's landmass and its population under the exposure to moderate to severe earthquake hazard.

The new name will reflect the focus of the activities of the Centre clearly, which will bring greater recognition and credibility in the eyes of the prospective students and faculty members.

Human Values and Professional Ethics

Title of the course: Human Values and Professional Ethics

Course Credits: 3

Course Objectives:

- To introduce fundamental human values and their significance in engineering practice.
- To explore the concept of professional ethics and its application in real-world engineering scenarios.
- To understand the role of traditional knowledge systems in ethical decision-making.
- To navigate emerging ethical challenges posed by new technologies.
- To develop critical thinking and problem-solving skills in ethical dilemmas.

Learning Outcomes:

At the end of this course, the students should be able to:

- articulate the importance of human values in engineering.
- identify and analyze ethical issues in engineering decisions.
- apply ethical frameworks to real-world engineering cases.
- appreciate the contributions of traditional knowledge systems to ethical engineering practices.
- critically evaluate the ethical implications of emerging technologies.

Assessment:

- Class participation and presentations: 30%
- Mid-term exam: 30%
- Final exam: 40%

Course Contents:

- Unit 1:** Introduction to human values and professional ethics; Traditional knowledge systems with a focus on India; Spirituality and Human consciousness; Social welfare, and Social responsibility
- Unit 2:** Ethical dilemmas in engineering; Ethics and integrity in scientific conduct and publications; Ethical use of new age technology
- Unit 3:** Environmental ethics and sustainable engineering practices: Environmental ethics and engineering responsibility; Tools and frameworks for sustainable engineering design; Engineer's role in advocating for sustainability
- Unit 4:** Emotional Intelligence and interpersonal interactions; Ethical considerations and group dynamics; Diversity, equity, and inclusion in engineering. Hallmarks of engineering professionalism; Balancing competing interests and upholding ethical practices; Whistleblowing and reporting misconduct.

Recommended Readings

- A.C. Bhaktivedanta Swami., The Science of Self-realization. The Bhaktivedanta Book Trust International, Inc., P.O. Box 1437, Alachua, FL 32616, USA; Bhaktivedant Book Trust, Hare Krishna Land, Juhu, Mumbai.
- Andrew Light & Holmes Rolston III. (2002). Environmental Ethics, Wiley Blackwell.
- Clancy, R. F., & Zhu, Q. (2021). Global Engineering Ethics: What? Why? How? And When? *ASEE Annual Conference and Exposition*.
available at <https://peer.asee.org/3722>
- D. K. Chaturvedi. (2023). Professional Ethics Values and Consciousness, Ane Books Pvt. Ltd.
- Dale Jamieson. (2008). Ethics and the Environment, Cambridge.
- Davis, M. (1991). Thinking like an engineer: The place of a code of ethics in the practice of a profession, *Philosophy & Public Affairs*, 20(2), 150-167.

- available at <https://www.jstor.org/stable/2265293>
- Edmund G Seebauer and Robert L Berry. (2001). "Fundamental of Ethics for Scientists and Engineers", Oxford University Press.
 - Elegbe, J. A. (2015). Emotional intelligence: Missing priority in engineering programs. *Journal of Business Studies Quarterly*, 7(2), 196-207. available at:
<https://www.proquest.com/docview/1755024715?pq-origsite=gscholar&fromopenview=true&sourcetype=Scholarly%20Journals>
 - Fernández Aller, C., & Miñano Rubio, R. (2015). Social & ethical issues in engineering. (Case Study) available at: https://upcommons.upc.edu/bitstream/handle/2117/89178/CS_21.pdf
 - Goleman, D. (2020). *Emotional intelligence: Why it can matter more than IQ* (25th Anniversary Ed.). Bloomsbury
 - Govindarajan M, Natarajan S, Senthil Kumar V. S. (2004). *Engineering Ethics*, Prentice Hall of India, New Delhi.
 - Harris, C. E. (2008). The good engineer: Giving virtue its due in engineering ethics. *Science and Engineering Ethics*, 14, 153-164. available at:
https://scholar.google.com/scholar?output=instlink&q=info:pjPxiVrHTEJ:scholar.google.com/&hl=en&as_sdt=0,5&scilfp=15712639047527848662&oi=lle
 - Harris, Charles E. (2018). *Engineering ethics: Concepts and cases*. Cengage
 - Hughes, Clarethia (2016). *Diversity intelligence: Integrating diversity intelligence alongside intellectual, emotional and cultural intelligence for leadership and career development*. Palgrave Macmillan
 - Louis P. Pojman. (2017). "The moral life: An introductory reader in ethics and literature". New York, Oxford University Press.
 - Marebane, S., Hans, R., & Kgaphola, P. (2023, September). Mapping of Studies on Ethical Responsibilities of Software Engineers. In *2023 IEEE AFRICON* (pp. 1-6). IEEE.
available at: <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=10293734>
 - Mike W. Martin and Roland Schinzinger. (2003). *Ethics in Engineering*, Tata McGraw Hill, New Delhi.
 - Pojman & Pojman. (2008). *Environmental Ethics*, 5th Edition, Thomson-Wadsworth.
 - Prem, E. (2023). From ethical AI frameworks to tools: a review of approaches. *AI and Ethics*, 3(3), 699-716.
available at: <https://link.springer.com/content/pdf/10.1007/s43681-023-00258-9.pdf>
 - R R Gaur, R Sangal, G P Bagaria. (2010). *A foundation course in human values and Professional Ethics*.
 - R.S. Naagarazan. (2006). *A Textbook on Professional Ethics and Human Values*", New Age International Publishers.
 - Robert Elliot (1995). *Environmental Ethics*, Oxford UP.
 - Sanderson, C., Douglas, D., Lu, Q., Schleiger, E., Whittle, J., Lacey, J., ... & Hansen, D. (2023). AI ethics principles in practice: Perspectives of designers and developers. *IEEE Transactions on Technology and Society*.
available at: <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=10071542>
 - Schinzinger, R. (2000). *Introduction to engineering ethics*.
available at: <https://philarchive.org/archive/SCHITE-2>
 - Singh, D. (2006). *Emotional intelligence at work: A professional guide*. Sage.
 - Whitbeck, C. (2011). *Ethics in engineering practice and research*. Cambridge University Press.
 - Zhu, Q., & Jesiek, B. K. (2017, June). Engineering ethics in global context: Four fundamental approaches. In *2017 ASEE Annual Conference & Exposition*.
available at <https://peer.asee.org/engineering-ethics-in-global-context-four-fundamental-approaches>
 - Zhu, Q., & Jesiek, B. K. (2020). Practicing engineering ethics in global context: A comparative study of expert and novice approaches to cross-cultural ethical situations. *Science and Engineering Ethics*, 26(4), 2097-2120.
available at: <https://link.springer.com/content/pdf/10.1007/s11948-019-00154-8.pdf>

Human Values and Professional Ethics

Session Plan

WEEK 1: INTRODUCTION TO HUMAN VALUES AND PROFESSIONAL ETHICS	
Session 1-1	<p>The Importance of Human Values in Engineering</p> <ul style="list-style-type: none"> Introduction to the course and its objectives. Definition of human values and their significance in engineering practice. Examples of how human values (honesty, integrity, etc.) influence engineering decisions. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> Why should engineers consider human values in their work? Can you think of any examples where human values have clashed with engineering goals?
Session 1-2	<p>Exploring Fundamental Human Values</p> <ul style="list-style-type: none"> Introduction to various core human values (e.g., honesty, responsibility, fairness, etc.). Students brainstorm and categorize human values relevant to engineering. Case Study: A simplified case study where engineers face a decision that conflicts with a core value (e.g., building a dam that displaces communities). <p>Discussion Prompts:</p> <ul style="list-style-type: none"> What are the different human values involved in this case study? How can engineers balance different values when making decisions?
Session 1-3	<p>Introduction to Professional Ethics</p> <ul style="list-style-type: none"> Definition of professional ethics and its importance in engineering careers. Professional engineering societies and their codes of ethics (brief overview). <p>Group Activity: Students research and present on specific codes of ethics from different engineering disciplines (e.g., IEEE Code of Ethics).</p>
WEEK 2: TRADITIONAL KNOWLEDGE SYSTEMS WITH A FOCUS ON INDIA	
Session 2-1	<p>Introduction to Traditional Knowledge Systems (TKS)</p> <ul style="list-style-type: none"> Definition and characteristics of traditional knowledge systems. Importance of TKS in various aspects of life (e.g., agriculture, architecture, medicine). Video Presentation: Showcase a short documentary highlighting a specific traditional knowledge system (e.g., Indian water management systems). <p>Discussion Prompts:</p> <ul style="list-style-type: none"> What are some examples of traditional knowledge systems from around the world? How can traditional knowledge be relevant in our modern world?
Session 2-2	<p>Exploring India's Rich Heritage of Knowledge Systems</p> <ul style="list-style-type: none"> Guest Lecture by an expert on Indian Knowledge Systems (e.g., scholar of Ayurveda, Vedic science). The lecture will explore different domains of traditional knowledge in India (e.g., Ayurveda, Yoga, Vaastu Shastra). <p>Interactive Discussion: Students ask questions and clarify doubts with the guest speaker.</p>
Session 2-3	<p>Traditional Knowledge and Ethical Engineering Practices</p> <ul style="list-style-type: none"> Discussion on how traditional knowledge systems can promote ethical engineering practices (e.g., focus on sustainability, harmony with nature). Case Discussion: A real-world example where engineers can learn from traditional knowledge to make an ethical decision (e.g., designing a dam project considering traditional water management practices). <p>Discussion Prompts:</p> <ul style="list-style-type: none"> How can traditional knowledge systems be integrated with modern engineering approaches to create more ethical solutions? What are some challenges in incorporating traditional knowledge in contemporary engineering projects?

Annexure 1

WEEK 3		SPIRITUALITY, SOCIAL WELFARE, AND SOCIAL RESPONSIBILITY
Session 3-1	<p>Spirituality and its Connection to Engineering Ethics</p> <ul style="list-style-type: none"> Introduction to the concept of spirituality and its potential role in ethical decision-making. Exploring different spiritual traditions (brief overview) and their emphasis on ethical principles. <p>Class Debate:</p> <ul style="list-style-type: none"> Topic: "Spiritual values are not necessary for ethical engineering practices." Students are divided into pro and con teams, researching arguments to support their stance. 	
Session 3-2	<p>Social Welfare and the Engineer's Role</p> <ul style="list-style-type: none"> Guest Lecture by a social worker or engineer working on social welfare projects (e.g., clean water access, sustainable development). The lecture will highlight the challenges and opportunities for engineers to contribute to social good. <p>Interactive Discussion:</p> <ul style="list-style-type: none"> What are some of the biggest social challenges that engineers can help address? How can engineers ensure their work benefits society as a whole. 	
Session 3-3	<p>Social Responsibility and Ethical Engineering Decisions</p> <ul style="list-style-type: none"> Case Discussion: A complex case study where engineers face a decision with ethical implications for social welfare (e.g., choosing a cheaper but polluting construction material). Students analyze the case through the lens of human values, social responsibility, and ethical codes. 	
WEEK 4		ETHICAL DILEMMAS IN ENGINEERING
Session 4-1	<p>Identifying Ethical Dilemmas in Engineering Projects</p> <ul style="list-style-type: none"> Introduction to the concept of ethical dilemmas in engineering. Common types of ethical dilemmas engineers face (e.g., safety vs. cost, environmental impact vs. project completion). Interactive Lecture: Students brainstorm and discuss various scenarios where ethical dilemmas can arise in different engineering fields. Case Analysis: A simplified case study where engineers must choose between meeting deadlines and adhering to safety regulations. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> Why can it be difficult to make ethical decisions in engineering projects? 	
Session 4-2	<p>Applying Ethical Frameworks to Decision-Making</p> <ul style="list-style-type: none"> Introduction to different ethical frameworks for making ethical decisions (e.g., Utilitarianism, Deontology). Role-Playing: Students take on different roles (engineer, manager, community leader) in a scenario with an ethical dilemma. Acting out the scenario allows students to experience the different perspectives involved. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> How can different ethical frameworks be applied to the role-playing scenario? What are the strengths and limitations of each framework? 	
Session 4-3	<p>Resolving Ethical Dilemmas and Building Moral Courage</p> <ul style="list-style-type: none"> Case Analysis: A complex case study with an ethical dilemma that has real-world consequences. Students analyze the case, considering factors like stakeholder impacts and potential solutions from various ethical frameworks. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> What are some strategies for resolving ethical dilemmas in the workplace? What is the role of moral courage in ethical decision-making? How can engineers advocate for ethical solutions even when facing pressure? 	

Annexure 1

WEEK 5		ETHICS & INTEGRITY IN SCIENTIFIC CONDUCT & PUBLICATIONS
Session 5-1	<p>Introduction to Research Ethics</p> <ul style="list-style-type: none"> The fundamental principles of research ethics (honesty, objectivity, responsibility, fairness). The importance of research ethics for public trust in science and engineering. Video Analysis: A short video highlighting a historical case of scientific misconduct <p>Discussion Prompts:</p> <ul style="list-style-type: none"> Why is it crucial to uphold ethical principles in scientific research? How can the video case study illustrate the consequences of unethical research practices? 	
Session 5-2	<p>Responsible Conduct in Scientific Publications</p> <ul style="list-style-type: none"> Guest Lecture by a researcher with expertise in scientific publishing. Focus on responsible authorship practices, including clear contribution definitions and avoiding plagiarism. The guest speaker will discuss common issues in scientific publications and best practices for maintaining integrity. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> What are the different types of authorship in scientific research publications? How can researchers avoid plagiarism in their work? What are some strategies for maintaining data integrity throughout the research process? 	
Session 5-3	<p>Maintaining Integrity in Research</p> <ul style="list-style-type: none"> Case Analysis: A case study dealing with an ethical dilemma in scientific research publications (e.g., fabricated data, authorship disputes). Students analyze the case, identifying the ethical breaches and potential consequences. <p>Discussion with Resources</p> <p>Students will explore resources available to help researchers uphold ethical practices. This could include workshops on responsible conduct of research, online resources provided by universities or scientific societies, and hotlines for reporting ethical concerns.</p>	
WEEK 6		STUDENT PRESENTATIONS & MID-TERM REVIEW
Session 6-1	<p>Student presentations and activities</p> <ul style="list-style-type: none"> Reserved for student presentations (group/ individual) and activities assigned by the course coordinator in the preceding weeks related to topics already covered. 	
Session 6-2 (2 sessions)	<p>Discussion Prompts:</p> <ul style="list-style-type: none"> To be generated on the basis of topics of the presentation 	
Session 6-3	<p>Mid-Term Review</p> <ul style="list-style-type: none"> The course coordinator will organize and open, interactive session focussing on review of the course contents covered till date and clarify issues, counsel/guide students accordingly. 	
WEEK 7		MID-TERM EXAMINATIONS
WEEK 8		ETHICAL USE OF NEW AGE TECHNOLOGY (FOCUS ON AI)
Session 8-1	<p>Ethical Decision-Making with Technology in Engineering</p> <ul style="list-style-type: none"> Introduction to the ethical considerations surrounding the use of technology in engineering projects. Case Studies: Analyze real-world engineering scenarios where technology use presented ethical dilemmas (e.g., autonomous vehicles and safety concerns, data privacy in smart infrastructure projects). <p>Discussion Prompts:</p> <ul style="list-style-type: none"> How can engineers ensure their use of technology aligns with ethical principles? What are some of the potential consequences of unethical technology use in 	

Annexure 1

	engineering?
Session 8-2	<p>AI in Engineering: The Power and the Peril</p> <ul style="list-style-type: none"> ▪ Guest Lecture by an AI researcher or engineer working on applications in the engineering field. ▪ The lecture will explore the potential benefits of AI in various engineering disciplines (e.g., design optimization, robotics, predictive maintenance). ▪ The guest speaker will also discuss the ethical considerations surrounding AI use in engineering (e.g., bias in algorithms, explainability of AI decisions). <p>Group Activity:</p> <ul style="list-style-type: none"> ▪ Students will research and present on specific ethical concerns related to the use of AI in a chosen engineering subfield.
Session 8-3	<p>Professional Conduct and Responsible Use of Technology and AI</p> <ul style="list-style-type: none"> ▪ Role-Playing: Students take on different roles (engineer, manager, client) in a scenario where an ethical dilemma arises due to the use of technology/AI in an engineering project. ▪ The scenario could involve issues like data privacy concerns, intellectual property rights, or potential safety risks associated with AI-powered systems. ▪ Following the role-playing, students discuss how engineers can uphold professional conduct in such situations. <p>Interactive Discussion:</p> <ul style="list-style-type: none"> ▪ What are some strategies for engineers to advocate for ethical use of technology and AI in the workplace? ▪ How can engineers stay informed about emerging ethical considerations in their field? ▪ How do professional engineering codes of ethics guide ethical conduct when using technology and AI?
WEEK 9	ENVIRONMENTAL ETHICS & SUSTAINABLE ENGINEERING PRACTICES
Session 9-1	<p>Environmental Ethics and Engineering Responsibility</p> <ul style="list-style-type: none"> ▪ Introduction to environmental ethics and its core principles (sustainability, intergenerational equity, precautionary principle). ▪ Exploring the environmental impact of engineering projects throughout their life cycle (construction, operation, decommissioning). <p>Discussion Prompts:</p> <ul style="list-style-type: none"> ▪ Why is it important for engineers to consider environmental ethics in their work? ▪ How can engineering decisions have positive or negative consequences for the environment?
Session 9-2	<p>Tools and Frameworks for Sustainable Engineering Design</p> <ul style="list-style-type: none"> ▪ Guest Lecture by a sustainability engineer working on integrating environmental considerations into engineering projects. ▪ The lecture will introduce frameworks and tools for sustainable engineering design (e.g., life cycle assessment, Life Cycle Costing). ▪ The guest speaker may also discuss a case study analyzing two engineering design options for a product or infrastructure project, considering their environmental impact throughout the life cycle. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> ▪ What are some of the tools and frameworks engineers can use to promote sustainability? ▪ How can the case study illustrate the trade-offs involved in achieving sustainable design?
Session 9-3	<p>The Engineer's Role in Advocating for Sustainability</p> <ul style="list-style-type: none"> ▪ Debate: Resolved: "Engineers have a greater responsibility than other professionals to promote environmental sustainability." ▪ Students are divided into pro and con teams, researching arguments on the role of engineers in environmental protection.
WEEK 10	NAVIGATING ETHICAL INTERACTIONS IN ENGINEERING TEAMS

Annexure 1

Session 10-1	<p>Emotional Intelligence and Interpersonal Interactions</p> <ul style="list-style-type: none"> ▪ Understanding Emotional Intelligence and its role in professional interactions ▪ Developing Emotional Intelligence skills such as self-awareness, empathy, and social skills ▪ Interactive Activities: Students participate in self-assessment activities to identify their strengths and areas for improvement in emotional intelligence. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> ▪ How can emotional intelligence help engineers navigate ethical dilemmas within teams? ▪ How can self-awareness and self-regulation contribute to ethical leadership?
Session 10-2	<p>Ethical Considerations and Group Dynamics</p> <ul style="list-style-type: none"> ▪ Exploring different communication styles and their impact on teamwork. ▪ Understanding the dynamics of group and team behavior and related ethical considerations <p>Role-Playing: Students participate in scenarios where they practice effective communication in situations like:</p> <ul style="list-style-type: none"> ▪ Raising ethical concerns with a superior. ▪ Addressing bias or discrimination within a team. ▪ Mediating disagreements between team members.
Session 10-3	<p>Diversity, Equity, and Inclusion in Engineering</p> <ul style="list-style-type: none"> ▪ Guest Lecture by an expert on Diversity, Equity, and Inclusion (DE&I) in the workplace. ▪ The lecture will explore the benefits of a diverse and inclusive engineering workforce. ▪ The guest speaker will discuss strategies for promoting respectful and ethical interactions within teams that value different backgrounds and perspectives. <p>Interactive Discussion:</p> <ul style="list-style-type: none"> ▪ Students discuss how the concepts of DE&I can be integrated into their ongoing course project to ensure a more ethical and equitable solution.
WEEK 11 PROFESSIONALISM & ETHICAL CONDUCT	
Session 11-1	<p>The Hallmarks of Engineering Professionalism</p> <ul style="list-style-type: none"> ▪ Defining professional conduct and its significance in engineering careers. ▪ Exploring core principles of professionalism: accountability, competence, integrity, objectivity, and trustworthiness. ▪ Case Studies: Analyze real-world scenarios where engineers demonstrate or compromise professional conduct in interactions with clients, colleagues, and the public. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> ▪ What are some of the expected behaviors of a professional engineer? ▪ How can the case studies illustrate the consequences of unprofessional conduct?
Session 11-2	<p>Balancing Competing Interests and Upholding Ethical Practices</p> <ul style="list-style-type: none"> ▪ Scenarios where engineers may face conflicts between client needs, employer demands, public safety, and ethical principles. <p>Role-Playing: Students participate in scenarios where they have to navigate competing interests while upholding ethical standards. Examples could include:</p> <ul style="list-style-type: none"> ▪ Pressure from a client to use lower-quality materials. ▪ A supervisor insisting on cutting corners to meet deadlines. ▪ The discovery of a potential safety hazard in a project. <p>Discussion Prompts:</p> <ul style="list-style-type: none"> ▪ What are some strategies for engineers to balance competing interests ethically? ▪ How can engineers maintain their integrity when facing pressure to compromise ethical standards?
Session 11-3	<p>Whistleblowing and Reporting Misconduct</p> <ul style="list-style-type: none"> ▪ Guest Lecture by a vigilance office/ lawyer specializing in engineering ethics or workplace regulations. ▪ The lecture will explore the concept of whistleblowing and legal protections for

Annexure 1

	<p>engineers who report unethical or illegal conduct.</p> <ul style="list-style-type: none"> The guest speaker will discuss ethical considerations and proper procedures for reporting misconduct within an organization or to external authorities.
WEEK 12-13	STUDENT PRESENTATIONS & END-TERM REVIEW
Session 12-1 to 13-1 (4 sessions)	Student presentations and activities <ul style="list-style-type: none"> Reserved for student presentations (group/ individual) and activities assigned by the course coordinator in the preceding weeks related to topics already covered. Discussion Prompts: <ul style="list-style-type: none"> To be generated on the basis of topics of the presentation
Session 13-2 & 13-3 (2 sessions)	End-Term Review The course coordinator will organize and open, interactive session focussing on review of the course contents covered till date and clarify issues, counsel/guide students accordingly.
WEEK 14	END-TERM EXAMINATIONS

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Table Agenda of adjourned 54th Senate meeting to be held on 01st May 2024

Item No. 54-7.1 To report the change of grades on MNIT ERP (odd semester 2023-24).

A large number of cases of Grade Change after the declaration of results for the odd semester of AY 2023-24 were identified by the departments/academic section for various reasons such as typographical error, posting error, ignorance of rules related to appearance in ETE being mandatory, etc.

In most of the cases, students having a 'pass' grade are now to be awarded 'FA or FP' grades as they either did not appear in ETE or did not come to classes at all and/or had a shortage of attendance.

As per the rules for change of grades after declaration, Director is empowered to approve the change after seven days of display of grades. However, while approving the cases of odd semester of AY 2023-24, as the Chairman Senate, desired that since the number of cases is large, it should be brought to the notice of the Senate.

Item is placed for information and directions.

Item No. 54-7.2 To consider the institution of the Institute Internship Program.

Vide Resolution No. Senate-53/2024/11, the Senate constituted a committee of the following members to give recommendations to start Institute internship program:

1. Prof. S.D. Bharti – Chairman
2. Prof. Rajesh Kumar - Member
3. Prof. Amar Patnaik - Member

The recommended guidelines for the Summer Internship submitted by the committee are placed at **Annexure-TA-1 (Page-1-2)**.

Item is placed for consideration.

Summer Internship Guidelines

1. About the Program

The Summer Internship Program (SIP) is an exceptional opportunity extended by MNIT Jaipur to promising undergraduate and graduate students. To work in various academic departments/centres under the mentorship of faculty members on various areas of engineering application in both theoretical and experimental domain.

2. Program Highlights:

- **Skill Development:** Develop essential research skills, critical thinking abilities, and problem-solving techniques under expert guidance.
- **Innovative Research:** Engage in groundbreaking research projects aligned with MNIT faculty expertise and project requirements.
- **Mentorship:** Benefit from one-on-one mentorship provided by MNIT faculty members.
- **Networking Opportunities:** Connect with fellow interns, faculty members, and industry professionals, expanding professional network and fostering collaborative opportunities.
- **Professional Growth:** Gain valuable insights into the world of academia, refining research methodologies and preparing for future academic pursuits.

3. Boarding and Lodging

- The selected candidates will be able to use the hostel accommodation for which they will have to pay Hostel Rent and messing facility in the Hostel fee as applicable. This will be subject to availability.

4. Eligibility

- Undergraduate and Graduate students from engineering institutions in India.

5. Duration

- A minimum of 4 weeks during the summer break of MNIT Jaipur. The minimum duration can be extended based on the inputs of the concerned mentor.

6. Selection Criteria

The selection will be based on the applicant's qualifications and experience and other academic and professional details provided in the candidates *Curriculum Vitae*.

(a) Candidates supported by the Institute.

The selection will be done at each Department/Centre by Head of the Department.

(b) Candidates seeking under a Research Project.

- The selection will be finalized by Project Principal Investigator based on the candidate's ability to work on the project.

7. How to Apply

- An eMail to the Head of the Department/Centre/Principal Investigator be sent with detailed CV, with the subject line "**Application for Summer Internship 2024**".

8. Financial Support

(a) Support from Institute Funds (Category-I)

- The candidates selected at the Institute level for each Academic Unit (Department/Centre) shall be provided hands on expenses as decided by the Competent Authority.

(b) Support from Ongoing Research Projects (Category-II)

- Faculty members acting as Principal Investigator/Co-Principal Investigator shall be able to pay hand on expenses to the selected candidates from their project budget as applicable.

(c) Self-support/Industry Support (Category-III)

- Some candidates shall be able to attend the program without any financial support/self-support/industry support.

9. General Instructions

- Candidates are advised to visit the Department/Centre website and Faculty profiles to identify the prospective mentors.
- The selected candidate shall receive a certificate of completion by the mentor.
- During the period of internship, the General Rules of Conduct and Discipline as applicable to MNIT students shall be applicable.

∴