

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान  
जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY  
JAIPUR



**Agenda**  
**Senate**

**50<sup>th</sup> Meeting**

**Date: 31<sup>st</sup> May, 2023**

**Time: 11:00 AM**

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

**मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर**  
**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**  
**AGENDA FOR THE 50<sup>TH</sup> MEETING OF THE SENATE TO BE HELD ON 31<sup>ST</sup>**  
**MAY 2023 (WEDNESDAY) AT 11.00 AM**

**CONTENTS**

Item No.	Agenda	Page From - To
50-1-0	To confirm the minutes of the 48 <sup>th</sup> & 49 <sup>th</sup> (Emergent) meetings of the Senate held on 10 <sup>th</sup> February 2023 and 30 <sup>th</sup> March 2023 respectively.	1
50-2-0	To note the “Action Taken” on the decisions taken in the 48 <sup>th</sup> and 49 <sup>th</sup> (Emergent) meetings of the Senate.	1-14
50-3-0	Items for consideration.	
50-3.1	To consider the Scheme and detailed syllabus of UG Program.	14
50-3.2	To consider the guidelines & modalities for starting M.Tech./M.Plan. + Ph.D. Dual Degree (MPDD) Program.	14-15
50-3.3	To consider new program elective courses to be offered to the students of M.Sc. (Mathematics) by the Department of Mathematics.	15
50-3.4	To consider new open elective courses to be offered to UG students by the Department of Management Studies.	15
50-3.5	To consider the case for change in name and gender in all the academic documents, issued by the Institute, of Ms. Riya Saini, an alumnus of the Institute.	16
50-3.6	To consider the case of Inactive UG Students who are not registered/absent from more or less than 2 semesters.	16-17
50-4.0	Items for ratification	
50-4.1	To ratify the list of additional students eligible for award of degree in Ph.D. programmes in the 16 <sup>th</sup> Annual Convocation in addition of earlier list approved.	17
50-4.2	To ratify the Seat matrix of UG programmes for the year 2023-24.	17
50-4.3	To ratify the Seat matrix of PG programmes for the year 2023-24.	17

50-5.0	Items for reporting		
50-5.1	To note the minutes of 39 <sup>th</sup> meeting of SUGB.		18
50-5.2	To note the minutes of 56 <sup>th</sup> meeting of SPGB.		18
50-5.3	To note the minutes of 33 <sup>rd</sup> meeting of Academic Affairs Committee meeting held on 17 <sup>th</sup> April, 2023.		18
50-5.4	To note the minutes of meeting of the unfair means committee held on 16 <sup>th</sup> March 2023.		18
50-6.0	Supplimentary agenda		
50-6.1	To consider the proposal to start a 2-Year E-MBA (Executive MBA) program by Department of Management Studies (DMS) in association with Continuing and Digital Education Centre (CDEC), MNIT Jaipur.		19
50-6.2	To consider the proposal to promote interdisciplinary and multi-disciplinary B.Tech. major projects.		19-20
50-6.3	To consider the institution of awards for graduating students on the basis of overall performance in curricular as well as extracurricular activities.		20
50-6.4	To consider creating a provision for making minor change on the degree certificate issued by the Institute.		20-21
50-6.5	To consider the case of Mr. Shantanu Bajpai for semester withdrawal on medical grounds.		21
50-6.6	To consider issuing a clarification for provision related to early submission of PhD Thesis (before three years) under PG rule: RR 9.5.2.		21-22
50-6.7	To consider Post-Doctoral fellowship (PDF) program at MNIT Jaipur.		22
50-7.0	Any other items with permission of chair.		

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Agenda for the 50<sup>th</sup> Meeting of the Senate  
(to be held on 31<sup>st</sup> May, 2023 at 11:00 AM in the Niti Sabhagar, Prabha Bhawan, MNIT, Jaipur)

**Item No. 50-1.0:** To confirm the minutes of the 48<sup>th</sup> & 49<sup>th</sup> (Emergent) meetings of the Senate held on 10<sup>th</sup> February 2023 and 30<sup>th</sup> March 2023 respectively.

The minutes of the 48<sup>th</sup> and 49<sup>th</sup> (Emergent) meetings of the Senate held on 10<sup>th</sup> February 2023 and 30<sup>th</sup> March 2023 respectively, approved by the Chairperson, Senate were circulated to the members only. No comments were received.

The minutes are placed before the Senate for confirmation at **Annexure-A (Pg. 01 to 12)**.

*Item is placed for confirmation.*

**Item No. 50-2.0:** To note the “Action Taken” on the decisions taken in the 48<sup>th</sup> and 49<sup>th</sup> (Emergent) meetings of the Senate.

**ACTION TAKEN REPORT (48<sup>th</sup> Senate Meeting)**

Item No.	Particulars	Decision	Action Taken
48-1-0	To confirm the minutes of the 47 <sup>th</sup> meeting of the Senate held on September 26, 2022.	The Senate confirmed the minutes of 47 <sup>th</sup> meeting of Senate as circulated.	Noted



48-2-0	To note the “Action Taken” on the decisions taken in the 47th meeting of the Senate.	The Senate noted the action taken report of 47 <sup>th</sup> meeting. Regarding Item No. 47-4.1 the Senate asked the committee constituted to propose the method to identify seniority among the Assistant Professors of the Institute and to submit their recommendation before the next Senate meeting. It was also decided that Prof. Vijay Laxmi as member of the committee may be replaced by Prof. Lava Bhargava.	Noted  Revised committee has been notified vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2380 dated 28-02-2023. The recommendation of the committee is still awaited.
48-3.0	Items for consideration		
48-3.1	To consider the additional list of the students eligible for award of degree in UG, PG and Ph.D. programmes in the forthcoming Convocation.	Resolution No. Senate-48/2023/01: The Senate approved the lists of eligible students for the award of. B.Tech./B.Arch./M.Tech./MBA and Ph.D. and recommended the same for consideration and approval of BoG. Further, the Senate authorized the Chairman, Senate to approve additional names, if any, of eligible students, who may complete the requirements for award of degree for the forthcoming 16 <sup>th</sup> Convocation, and if no Senate meeting took place before the 16 <sup>th</sup> Convocation.	Additional degrees were awarded in 16 <sup>th</sup> Convocation of the Institute held on 12 <sup>th</sup> April 2023. The Item is placed at 50-4.1 for ratification.
48-3.2	To consider relaxation in percentage of marks/CGPA for admission to Ph.D. programmes for person with disabilities.	Resolution No. Senate-48/2023/02: The Senate resolved that the relaxation in percentage of marks/CGPA for person with disabilities may also be applicable for admission to Ph.D. programmes.	Implemented and Ph.D. admission brochure for the session 2023-24 has been modified accordingly.
48-3.3	To consider the recommendation of committee constituted to analyze the requirement/possibility of introducing requirement of minimum CGPA and minimum number of students in a programme for award of Director’s Gold	Resolution No. Senate-48/2023/03: The Senate approved the recommendations of the committee as under:  For Director’s Gold Medals for academic toppers of UG programmes:	Minimum requirement for the award of Director’s and Board of Governor’s Gold Medal has been notified vide Office Order No. F4/S-V-1/22-23-Acad (48-

	Medals and Board of Governors Gold Medals from the 17 <sup>th</sup> Convocation onwards.	<p>Minimum CGPA: 9.0</p> <p>Minimum number of students admitted in the batch: 30</p> <p>For Board of Governor's Gold Meals for academic toppers of PG programmes:</p> <p>Minimum CGPA: 9.0</p> <p>Minimum number of students admitted in the batch: 10</p>	Senate)/ 2385 dated 28-02-2023 and shall be Implemented for the graduating students in the session 2022-23.
48-3.4	To consider academic research collaboration between MNITJ-IIT Madras and IIT Delhi.	<p>Resolution No. Senate-48/2023/04: The Senate resolved that a committee of following members may be constituted to evaluate all such MoUs received from various Institutions for academic research collaboration with MNIT Jaipur.</p> <ul style="list-style-type: none"> <li>(i) Dean, Academic- Convener</li> <li>(ii) Dean, International Affairs</li> <li>(iii) Dean, Research &amp; Consultancy</li> <li>(iv) Dean, Students Welfare</li> </ul> <p>It was further decided that the same committee will also evaluate proposals from Indian and Foreign Institutes for twin degree programs and other similar matters.</p> <p>The Senate authorized the Chairman Senate to approve such MoUs.</p>	Committee has been notified vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2381 dated 28-02-2023.
48-3.5	To consider the recommendation of the review committee constituted to review the UG programs.	Resolution No. Senate-48/2023/05: Senate discussed at length the UG seat matrix and the proposals for starting new UG programs and resolved that 40 seats of B.Tech. Metallurgical & Materials Engineering may be reduced and assigned to a new UG program: B.Tech. in Artificial Intelligence and Data Engineering.	Implemented. The seat matrix of UG programmes is placed at <b>Item No. 50-4.2</b> for ratification.

		Regarding starting other new UG programmes, the Senate approved the other proposed UG programmes in principle and decided to consider these proposals in subsequent academic years as per the availability of infrastructure.	
48-3.6	To consider the recommendation of the PG program review committee constituted to review the PG programs.	<p>Resolution No. Senate-48/2023/06: Senate discussed recommendations of the PG review committee and the proposed seat matrix. It was resolved that more deliberations will be required on the recommendation of the PG review committee, regarding the number of PG programmes offered by department and centres.</p> <p>It was decided that MRC and Metallurgy and Material Engineering Department should discuss together and come up with new program(s), new titles with minimum overlaps. It was decided that if they submit proposal for a new program(s), the same will be circulated among Senators and based upon the comments received, Chairman Senate is authorized to decide if the new program is to be included in seat matrix for 2023-24.</p> <p>It was also resolved that the proposed seat matrix may be shared with all the Senators for their feedback to Dean, Academics and the Senate authorized the Chairman Senate to approve the seat matrix to be communicated to CCMT coordinator.</p>	The seat matrix of PG programmes is placed at <b>Item No. 50-4.3.</b> for ratification
48-3.7	To consider the guidelines & modalities for starting Integrated Master + Ph.D. Dual Degree (MPDD) program.	Resolution No. Senate-48/2023/07: Senate appreciated the proposal and approved the guidelines in principle with modification in the minimum CGPA requirement for eligibility to the Integrated Masters + Ph.D. Dual Degree (MPDD) program from 6.5 to 8.00 up to the second semester of the M.Tech. Programme. The Senate constituted the following committee to review the guidelines for implementation of the	Committee has been notified vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2383 dated 28-02-2023 The recommendation of the committee is placed at Item No.50-3.1

		<p>scheme. Senate also decided to remove the word “Integrated” from the title of the scheme.</p> <p>(i) Dean, Academic- Convener  (ii) Prof. Tarush Chandra  (iii) Prof. D. Boolchandani</p>	
48-3.8	To consider the proposals for creation of (a) Centre for Rural Development, (b) Centre for Cyber Security.	<p>Resolution No. Senate-48/2023/08: The Senate approved both the proposals in principle as ‘Virtual Centres’, with no space and funds. Further a committee of following members was constituted to develop uniform policy/guidelines for working of various existing and upcoming Centres at the Institute:</p> <ol style="list-style-type: none"> <li>1. Prof. R. P. Yadav- Convener</li> <li>2. Prof. Kanupriya Sachdev</li> <li>3. Prof. Mahendra Chaudhary</li> <li>4. Dr. Ramesh Batula</li> </ol>	<p>Committee has been notified vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2384 dated 28-02-2023.</p> <p>The recommendations of the committee are still awaited.</p>
48-3.9	To consider the equivalence of courses of Old Scheme for UG programmes with courses of New Scheme for UG programmes.	<p>Resolution No. Senate-48/2023/09: The Senate approved the equivalence of courses with one minor modification that the course coordinator may also give self- study course with the approval of DUGC.</p> <p>It was also decided that the same approach may be applied in subsequent years as per the requirement.</p>	<p>Implemented vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2386 dated 28-02-2023</p>
48-3.10	To consider the proposal to start a 2-Year Online Executive MBA program by Department of Management Studies (DMS) in association with Continuing and Digital Education Centre (CDEC), MNIT Jaipur.	<p>Resolution No. Senate-48/2023/10: The Senate approved the programme in principle to start the program with maximum 40 students keeping a minimum of 2 weeks physical presence per semester of students on campus, towards interaction and examination. It was suggested that coordinator CDEC should come up with detailed plan for implementation of the program including</p>	<p>Noted.</p> <p>The detailed plan has been received and is placed at supplementary agenda <b>Item no.50-6.1</b></p>

		eligibility, admission process, recognition of degree, and self-sustainable strategy.													
48-3.11	To consider the Joint Supervision of Ph.D. student Mr. Sandeep Shukla (2020RME9599).	Resolution No. Senate-48/2023/11: The Senate resolved to approve joint supervision of Ph.D. student Mr. Sandeep Shukla as the request for addition of the name of Dr. Rohit Mishra was initiated before the date of comprehensive examination.	Implemented vide Office Order No. F4/P-I-1/21-22/Acad-Ph.D./ 2375 dated 28-02-2023.												
48-3.12	To consider the mercy appeal received from students through proper channel for relaxation in CGPA requirement for semester promotion.	Resolution No. Senate-48/2023/12: The Senate discussed all mercy appeals for relaxation in CGPA requirement for semester promotion and resolved the following: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name &amp; ID</th> <th>Decision</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mr. Abhishek Mehar (2022PBM5025) Full Time</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> <tr> <td>2.</td> <td>Mr. Vivekanand Prajapati (2022RME9079) Full Time</td> <td>Not approved</td> </tr> <tr> <td>3.</td> <td>Mr. Sachin Rolania (2022PPH5559)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an</td> </tr> </tbody> </table>	S. No.	Name & ID	Decision	1.	Mr. Abhishek Mehar (2022PBM5025) Full Time	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	2.	Mr. Vivekanand Prajapati (2022RME9079) Full Time	Not approved	3.	Mr. Sachin Rolania (2022PPH5559)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an	Implemented vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2388 dated 28-02-2023.
S. No.	Name & ID	Decision													
1.	Mr. Abhishek Mehar (2022PBM5025) Full Time	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.													
2.	Mr. Vivekanand Prajapati (2022RME9079) Full Time	Not approved													
3.	Mr. Sachin Rolania (2022PPH5559)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an													

				opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	
		4.	Ms. Megha Kumari (2022PEV5148)	The student is allowed for promotion to next semester.	
48-3.13	To consider mercy request of Mr. Gaurav Jain (2019UCE1044) regarding waiver of no backlog requirement for going on internship.	Resolution No. Senate-48/2023/13: The mercy request of Mr. Gaurav Jain was not approved.			Decision has been notified to the student through email.
48-3.14	To consider the mercy request for waiver of minimum attendance requirement of Mr. Viral Achhwan (ID2021UAR1259).	Resolution No. Senate-48/2023/14: The Senate resolved that Mr. Viral Achhwan may repeat all the courses of third semester.  Few senators suggested that such cases involving medical ground should be examined by involving a doctor or a medical board.			Decision has been notified to the student through email.
48-3.15	To consider the mercy request of Ph.D. student Mr. Sagar Mal Nitharwal (ID: 2019RCP9147) Department of Computer Science & Engineering	Resolution No. Senate-48/2023/15: The Senate did not approve the mercy request of Mr. Sagar Mal Nitharwal.			Decision has been notified to the student through email.
48-3.16	To consider the mercy request of Ph.D. student Mr. Umardaraj (2013RME9065) to resume his registration in Ph.D. Programme and give extension-time to complete his remaining Ph.D. work (Department of Mechanical Engineering).	Resolution No. Senate-48/2023/16: The Senate did not approve the mercy request of Mr. Umardaraj.			Decision has been notified to the student through email.

48-3,17	To consider the mercy request of M.Tech Students, Mr. Mukul Chaudhary (2021 PCV5354), Mr. Hemant Khatri (2021PCV5359) Mr. Chetram Meena (2022PCV5304), Department of Centre for Energy and Environment.	<p>Resolution No. Senate-48/2023/17: The Senate discussed all mercy appeals of the students and resolved the following:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name &amp; ID</th> <th>Decision</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mr. Mukul Chaudhary (2021PCV5354)</td> <td>Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24</td> </tr> <tr> <td>2.</td> <td>Mr. Hemant Khatri (2021PCV5359)</td> <td>Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24</td> </tr> <tr> <td>3.</td> <td>Mr. Chetram Meena (2022PCV5304)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> </tbody> </table>	S. No.	Name & ID	Decision	1.	Mr. Mukul Chaudhary (2021PCV5354)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24	2.	Mr. Hemant Khatri (2021PCV5359)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24	3.	Mr. Chetram Meena (2022PCV5304)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	<p>Implemented vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2389 and 2390 dated 28-02-2023.</p>
S. No.	Name & ID	Decision													
1.	Mr. Mukul Chaudhary (2021PCV5354)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24													
2.	Mr. Hemant Khatri (2021PCV5359)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24													
3.	Mr. Chetram Meena (2022PCV5304)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.													

48-3.18	To consider the mercy request of M.Tech Students Mr. Roop Singh Meena (2022PES 5280), and Mr. Anirban Chatterjee (2022PSM5255) of Department of Electrical Engineering.	<p>Resolution No. Senate-48/2023/18: The Senate discussed all mercy appeals of the students and resolved the following:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name &amp; ID</th> <th>Decision</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mr. Roop Singh Meena (2022PES 5280)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> <tr> <td>2.</td> <td>Mr. Anirban Chatterjee (2022PSM5255)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> </tbody> </table>	S. No.	Name & ID	Decision	1.	Mr. Roop Singh Meena (2022PES 5280)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	2.	Mr. Anirban Chatterjee (2022PSM5255)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	Implemented vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2387 dated 28-02-2023
S. No.	Name & ID	Decision										
1.	Mr. Roop Singh Meena (2022PES 5280)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.										
2.	Mr. Anirban Chatterjee (2022PSM5255)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.										
48-3.19	To consider the mercy request of M.Tech. student Mr. Vinod Kumar Meena (ID: 2020PCT5315) Department of Civil Engineering.	Resolution No. Senate-48/2023/19: The Senate approved the recommendation of SPGB and admitted the mercy appeal for award of degree with minimum CGPA 5.5 as per the present regulation for the award of PG degree.	Implemented vide Office Order No. F4/S-V-1/22-23-Acad (48-Senate)/ 2391 dated 28-02-2023									



48-4.0	Items for Ratification		
48-4.1	To ratify Ph.D. thesis evaluation of Hash Kumar Dixit (2014RME9552).	The item was ratified.	No action required
48-4.2	To ratify the minor changes in new scheme of B.Tech first semester.	The item was ratified.	No action required
48-5.0	Items for Reporting.		
48-5.1	To note the minutes of 37 <sup>th</sup> and 38 <sup>th</sup> meeting of SUGB.	<p>The minutes were noted, regarding item no. 38-2.2, Prof. Mahendra Choudhary, HoD, Civil Engineering Dept. raised concern about the decision of SUGB. The Senate deliberated the issue at length and decided that the HoD Civil Engg. may present the case to Chairman SUGB who will give his recommendation to Chairman Senate for consideration.</p> <p>Departments were requested to ensure that moderation is done on the date as notified in the academic calendar to avoid such situations in future. During the discussions it was suggested that a check needs to be introduced in existing ERP process for ensuring that the grade moderation is done by departments so that such cases do not arise in future.</p>	Implemented
48-5.2	To note the minutes of 54 <sup>th</sup> and 55 <sup>th</sup> meeting of SPGB.	Noted	No action required
48-5.3	To note the minutes of 30 <sup>th</sup> , 31 <sup>st</sup> and 32 <sup>nd</sup> meeting of Academic Affairs Committee meeting held on 11 <sup>th</sup> October, 2022, 23 <sup>rd</sup> November, 2022 and 30 <sup>th</sup> January 2023 respectively.	Noted	No action required
48-5.4	To note the minutes of meeting of the unfair means committee held on 23 <sup>rd</sup> November 2022.	Noted	No action required

48-5.5	To note the total number of students admitted in Undergraduate, Postgraduate and Ph.D. Programme during the Academic Session 2022-23.	Noted	No action required
48-5.6	To note the award of grades and credits for discipline and extra-curricular activities in new UG Scheme.	Noted	No action required
48-6.0	Any other items with permission of Chair.		
48-6.1	To consider the panel of experts for faculty selections.	Resolution No. Senate-48/2023/20: Senate approved the list of experts for faculty selections and also authorized Chairman, Senate to extend the list of experts with additional names as per additional requirement from time to time.	Noted
48-6.2	To review the Centralized Coordination of Examinations.	Resolution No. Senate-48/2023/21: The Senate resolved to circulate the slides presented by Dean Academic to all the Senators for comments. It was also decided that the present system of coordination of Mid Term and End Term examination through exam cell will continue till further decision.	No comments were received and the present system of coordination of Mid Term and End Term examination through exam cell is continuing.

**ACTION TAKEN REPORT [49<sup>th</sup> (Emergent) Senate Meeting]**

Item No.	Particulars	Decision	Action Taken
49-1-1	To review the names of UG and PG programmes to be printed on degrees certificates.	Resolution No. Senate-49 (Emergent)/2023/01: The Senate approved following names of degrees/specialization offered by MNIT Jaipur, both in English and Hindi:	Implemented in 16 <sup>th</sup> Convocation

**Name of UG programmes**

S. No.	Programme name in English	Programme name in Hindi
1.	Bachelor of Architecture	वास्तुकला स्नातक
2.	Civil Engineering	जनपद अभियांत्रिकी
3.	Chemical Engineering	रासायनिक अभियांत्रिकी
4.	Computer Science and Engineering	कंप्यूटर विज्ञान एवं अभियांत्रिकी
5.	Electrical Engineering	वैद्युत अभियांत्रिकी
6.	Electronics and Communication Engineering	वैद्युतवणिकी एवं संचार अभियांत्रिकी
7.	Mechanical Engineering	यांत्रिकी अभियांत्रिकी
8.	Metallurgical and Materials Engineering	धातुकी एवं पदार्थ अभियांत्रिकी

**Name of PG specializations**

S. No.	Specialization name in English	Specialization name in Hindi
1.	Renewable Energy	नवीकरणीय ऊर्जा
2.	Chemical Engineering	रासायनिक अभियांत्रिकी
3.	Environmental Engineering	पर्यावरणीय अभियांत्रिकी
4.	Water Resources Engineering	जल संसाधन अभियांत्रिकी
5.	Structural Engineering	संरचनात्मक अभियांत्रिकी
6.	Transportation Engineering	परिवहन अभियांत्रिकी
7.	Civil Engineering (Disaster Assessment and Mitigation)	जनपद अभियांत्रिकी (आपदा आकलन एवं शमन)
8.	Computer Engineering	कंप्यूटर अभियांत्रिकी

		9.	Computer Engineering and Information Security	कंप्यूटर अभियांत्रिकी एवं सूचना सुरक्षा
		10.	Power Systems	वैद्युत शक्ति प्रणाली
		11.	Power Electronics and Drives	पावर इलेक्ट्रॉनिक्स एवं ड्राइव्स
		12.	Power Systems Management	वैद्युत शक्ति प्रणाली प्रबंधन
		13.	VLSI Design	अतिवृहद् स्तर एकीकरण अभिकल्प
		14.	Wireless and Optical Communication	बेतार एवं प्रकाशीय संचार
		15.	Embedded Systems	सन्निहित प्रणाली
		16.	Electronics and Communication Engineering	वैद्युतवणिकी एवं संचार अभियांत्रिकी
		17.	Industrial Engineering	औद्योगिक अभियांत्रिकी
		18.	Thermal Engineering	थर्मल अभियांत्रिकी
		19.	Production Engineering	उत्पादन अभियांत्रिकी
		20.	Design Engineering	अभिकल्प अभियांत्रिकी
		21.	Metallurgical and Materials Engineering	धातुकी एवं पदार्थ अभियांत्रिकी
		22.	Steel Technology	इस्पात प्रौद्योगिकी
		23.	Material Science and Engineering	पदार्थ विज्ञान एवं अभियांत्रिकी
		24.	Earthquake Engineering	भूकम्प अभियांत्रिकी
		25.	Urban Planning	नगर नियोजन
		26.	Chemistry	रसायन शास्त्र
		27.	Mathematics	गणित
		28.	Physics	भौतिक शास्त्र
		29.	Master of Business Administration	व्यवसाय प्रशासन निष्णात

49-1-2	To consider the additional list of the students eligible for award of degree in UG, PG and Ph.D. programmes in the forthcoming 16 <sup>th</sup> Convocation to be held on 12 <sup>th</sup> April 2023.	Resolution No. Senate-49 (Emergent)/2023/02: The Senate approved the lists of eligible students for the award of. B.Tech./M.Tech./MBA and Ph.D and recommended the same for consideration and approval of BoG. Further, the Senate authorized the Chairman, Senate to approve additional names, if any, of eligible students, who may complete the requirements for award of degree for the forthcoming 16 <sup>th</sup> Convocation, if no Senate meeting takes place before the Convocation.	Additional degrees were awarded in 16 <sup>th</sup> Convocation of the Institute held on 12 <sup>th</sup> April 2023 the Item is placed at <b>50-4.1</b> for ratification.
--------	--	--	--

**Item No. 50-3.0: Items for consideration**

**Item No. 50-3.1 To consider the Scheme and detailed syllabus of UG Program.**

The new curriculum structure of UG program was approved in principle in 44<sup>th</sup> Senate. In 47<sup>th</sup> Senate meeting held on 26<sup>th</sup> September 2022 the curriculum structure of all UG programmes and detailed syllabus of 1<sup>st</sup> year B. Tech./B.Arch. was approved. In 38<sup>th</sup> & 39<sup>th</sup> SUGB meetings the status of implementation of new UG scheme and syllabus of 2<sup>nd</sup> year to final year B.Tech./B.Arch. programmes were discussed and the departments were requested to organize a curriculum development workshops and submit the complete scheme and syllabus. The new curriculum structure and detailed syllabus is placed at **Annexure-B (to be placed on table)**.

*Item is placed for consideration and approval.*

**Item No. 50-3.2 To consider the guidelines & modalities for starting M.Tech./M.Plan. + Ph.D. Dual Degree (MPDD) Program.**

The guidelines & modalities for starting M.Tech./M.Plan. + Ph.D. Dual Degree (MPDD) program was placed in the 48<sup>th</sup> meeting of the Senate. The Senate accorded in principle approval to the guidelines and modalities. The Senate constituted the following committee to review the guidelines for the implementation of the scheme.

- (i) Dean, Academic- Convener
- (ii) Prof. Tarush Chandra
- (iii) Prof. D. Boolchandani

The recommendations of the committee are placed at **Annexure –C (Pg. 13 to 16)**.

*Item is placed for consideration and approval.*

**Item No. 50-3.3 To consider new program elective courses to be offered to the students of M.Sc. (Mathematics) by the Department of Mathematics.**

The proposal for new program elective courses to be offered to the students of M.Sc. (Mathematics) was considered in 56<sup>th</sup> SPGB meeting. The SPGB recommended the following two program electives for M.Sc. (Mathematics) vide Item No. 56-2.3:

- i. Computational Statistics for Data Science (3 credits; L-T-P)
- ii. Introduction to Bayesian statistics (3 credits; L-T-P)

The detailed syllabi are placed for consideration at **Annexure - D (Pg. 17 to 25)**.

*Item is placed for consideration and approval.*

**Item No. 50-3.4 To consider new open elective courses to be offered to UG students by the Department of Management Studies.**

The proposal of new open elective courses to be offered to UG students was placed in 39<sup>th</sup> SUGB meeting. The SUGB recommended the following 03 open electives to be offered to the UG students vide Item No. 39-2.3.

- (i) Team Building & Leadership (3 credits; 3-0-0)
- (ii) Introduction to Financial Markets (3 credits; 3-0-0)
- (iii) Labour Laws for Engineers (3 credits; 3-0-0)

The detailed syllabi are placed for consideration at **Annexure-E (Pg. 26 to 31)**.

*Item is placed for consideration.*

**Item No. 50-3.5 To consider the case for change in name and gender in all the academic documents, issued by the Institute, of Ms. Riya Saini, an alumnus of the Institute.**

Ms. Riya Saini ID No.2011UEC1383 graduated in the year 2015. She has undergone sex reassignment surgery and has got her gender changed to transgender (Male). She wished her identity to be changed from female to male transgender and her new identification as Rahul Saini. Ms. Riya Saini she has requested to change her name, title, and gender in all the grade sheets, Degree, and other academic records issued by the Institute. Ms. Riya Saini has already got similar changes done in her X, XII board Mark sheets, and Aadhar Card on the basis of the procedure given in “Transgender Persons (Protection of Rights) Act, 2019 and rules”. A name change certificate and transgender identity card has also been issued to her by the respective District Magistrate.

The Institute has taken legal opinion in this matter and as per the legal opinion revised certificate/documents may be issued with the name revised from Riya Saini to Rahul Saini and Gender revised from Male to Transgender.

The Transgender Persons (Protection of Rights) Rules, 2019, and the Legal opinion is placed at **Annexure –F Pg. 32 to 52**).

*Item is placed for consideration.*

**Item No. 50-3.6 To consider the case of Inactive UG Students who are not registered/absent from more or less than 2 semesters.**

There are 41 UG and 26 students respectively who have not registered for more or less than 02 Semesters. The Academic section has sent emails regarding their registration in every semester, but no response have been received.

As per the guidelines stipulated in UG Rules & Regulation Clause 14, (b) & (c) it is envisaged that,  
“The enrolment of the undergraduate program (B.Tech & B.Arch.) of a student may be terminated by the Senate if he/she is:

- (b) Student who is absent without authorized leave of absence for a major part of the semester and does not appear in the end-semester examination of the courses in which he/she is registered,
- (c) Student who fails to report and register by the last date of registration”

As per the above clause, the list was placed in 39<sup>th</sup> meeting of SUGB. The SUGB recommended for termination of their registration from institutes roles,

List is placed at **Annexure G (Pg. 53 to 56)**.

*Item is placed for consideration.*

#### **50-4.0 Items for Ratification**

**Item No. 50-4.1 To ratify the list of additional students eligible for award of degree in PhD programmes in the 16<sup>th</sup> Annual Convocation in addition of earlier list approved.**

The 16<sup>th</sup> Convocation of the Institute was held on 12<sup>th</sup> April 2023. The additional name of the students who had fulfilled the eligibility requirement for the award of Ph.D. degree was approved by the Chairman, Board of Governors before the 16<sup>th</sup> Convocation.

The list is placed at **Annexure-H (Pg. 57 to 58)**.

*Item is placed for ratification.*

**Item No. 50-4.2 To ratify the Seat matrix of UG programmes for the year 2023-24.**

The seat matrix of UG programme for the year 2023-24 for admission through CSAB was approved by the Chairman Senate.

The seat matrix is placed at **Annexure-I (Pg. 59 to 60)**.

*Item is placed for ratification.*

**Item No. 50-4.3 To ratify the Seat matrix of PG programmes for the year 2023-24.**

The seat matrix of PG programme for the year 2023-24 for admission through CCMT and CCMN was approved by the Chairman Senate.

The seat matrix is placed at **Annexure-J (Pg. 61 to 62)**.

*Item is placed for ratification.*



### **50-5.0 Items for reporting**

#### **Item No. 50-5.1 To note the minutes of 39<sup>th</sup> meeting of SUGB.**

The 39<sup>th</sup> meeting of SUGB was held on 28<sup>th</sup> March, 2023. The minutes of 39<sup>th</sup> SUGB are placed at **Annexure-K (Pg. 63 to 67)**.

*Item is placed for information.*

#### **Item No. 50-5.2 To note the minutes of 56<sup>th</sup> meeting of SPGB.**

The 56<sup>th</sup> meeting of Senate Postgraduate Board was held on 6<sup>th</sup> April 2023.

The minutes of the SPGB are placed at **Annexure- L (Pg. 68 to 73)**.

*Item is placed for information.*

#### **Item No. 50-5.3 To note the minutes of 33<sup>rd</sup> meeting of Academic Affairs Committee meeting held on 17<sup>th</sup> April, 2023.**

The 33<sup>rd</sup> meetings of Academic Affairs Committee (AAC) was held on 17<sup>th</sup> April, 2023.

The Minutes of the meetings are placed at **Annexure M (Pg. 74 to 75)**.

*Item is placed for information.*

#### **Item No. 50-5.4 To note the minutes of meeting of the unfair means committee held on 16<sup>th</sup> March 2023.**

The minutes of meeting of the unfair means committee held on 16<sup>th</sup> March 2023.

The minutes of the unfair means committee are placed at **Annexure – N (Pg. 76 to 77)**.

*Item is placed for information.*

## 50-6.0 Supplementary agenda

### **Item No. 50-6.1 To consider the proposal to start a 2-Year E-MBA (Executive MBA) program by Department of Management Studies (DMS) in association with Continuing and Digital Education Centre (CDEC), MNIT Jaipur.**

Department of Management Studies has proposed to offer E-MBA (Executive MBA) program for working professionals. In the 48th meeting of the Senate held on 10th February 2023, Senate approved the same 'in principle' to start the program with a maximum intake of 40 students. It was suggested that HoD, DMS and coordinator CDEC should come up with detailed plan for implementation of the program including eligibility, admission process, recognition of degree, and self-sustainable strategy.

A course curriculum workshop was conducted in DMS to identify the E-MBA program structure and scheme. Based on the course curriculum workshop, a detailed proposal was developed and discussed in DFB & DPGC of DMS.

The detailed proposal for the E-MBA program and the course outline of all the courses proposed in the scheme of the E-MBA program is placed at **Annexure – SA (Pg. 78 to 139)**.

### **Item No. 50-6.2 To consider the proposal to promote interdisciplinary and multi-disciplinary B.Tech. major projects.**

A committee was constituted to propose the guidelines to promote interdisciplinary and multi-disciplinary B.Tech. major projects with the following objectives:

- To encourage the students to take up inter/cross-disciplinary projects to facilitate learning about system analysis, design, testing and fabrication and product development.
- To enhance their employability
- To offer interdisciplinary/multidisciplinary B.Tech. Projects to students as highlighted in NEP 2020

The recommendation of the committee to promote interdisciplinary and multi-disciplinary B.Tech. major projects is placed at **Annexure- SB(Pg. 140 to 142)**.

*Item is placed for consideration.*

**Item No. 50-6.3 To consider the institution of awards for graduating students on the basis of overall performance in curricular as well as extracurricular activities.**

The Board of Governors vide Resolution No. BoG-50/2022/25: appreciated the initiative for instituting the President's Gold Medal for graduating students on the basis of overall performance in curricular as well as extracurricular activities, the Board suggested to work out guidelines for the same to be considered in the next BoG.

The decision of the Board was communicated to the following committee constituted in 47<sup>th</sup> Senate meeting for proposing the evaluation matrix and to develop objective criteria and procedure for identifying student for the award of President's Gold Medal:

- (i) Prof. G. D. Agarwal, Convener
- (ii) Prof. Kanupriya Sachdev, Member
- (iii) Dean-SW, Member

The above committee has proposed the Criteria for Selection of an all Rounder UG Student of MNIT Jaipur, the same is placed at **Annexure – SC (Pg. 143 to 144)**.

*Item is placed for consideration.*

**Item No. 50-6.4 To consider creating a provision for making minor change on the degree certificate issued by the Institute.**

In all UG/PG programmes the students are admitted from all over India and abroad. Their names are verified by the Institute from their X/XII Certificates where names are written only in English at the time of admission. As the degree certificate issued by the Institute are bilingual and their names/departments/program/specializations are written in Hindi as well as in English, sometimes the names/topic of the Ph.D. thesis in the English/Hindi version are written incorrectly due to various reasons such as students do not check his/her name/topic when displayed on the website, the ignorant response of students from non-Hindi speaking states, typographic error, difference in various Hindi fonts etc., therefore, their degree certificates are revised as and when required.

In the past, Chairman, Senate has been approving such minor changes.

However, it is proposed to formally create a provision for making the minor changes on the Degree Certificate issued by the Institute and authorize Chairman, Senate to approve the changes.

*Item is placed for consideration.*

**Item No. 50-6.5 To consider the case of Mr. Shantanu Bajpai for semester withdrawal on medical grounds.**

Mr. Shantanu Bajpai had taken 02 Semesters withdrawal i.e. in 06<sup>th</sup> and 07<sup>th</sup> Semester on medical grounds. Now he has submitted request for semester withdrawal in 8<sup>th</sup> semester as well. As per the UG Regulations Manual, clause 11.4 “A student will be permitted for semester withdrawal only twice in the entire duration of his programme.”

The DUGC of department of Mechanical Engineering has recommended for semester withdrawal to Mr. Shantanu Bajpai on medical grounds.

Recommendations of DUGC and medical officer Institute dispensary are placed at **Annexure- SD (Pg. 145 to 148)**.

*Item is placed for consideration.*

**Item No. 50-6.6 To consider issuing a clarification for provision related to early submission of PhD Thesis (before three years) under PG rule: RR 9.5.2.**

As per the PG rule no. RR9.5.2:

“The normal duration for submission of PhD thesis will be three years. However, if the work of the candidate has been satisfactory then the candidate can be allowed to submit his/her thesis after completion of two years from the date of initial registration on recommendation of DPGC and SPGB”.

While processing a request for permission at the level of SPGB, two interpretations of the above ruling came up:

1. Since the normal duration for submission of Ph.D. thesis is three years, as spelled out in the first line; for early submission, the research work needs to be of a higher level as compared to normal.

2. Since the second line is spelling out 'if the work has been satisfactory' as the requirement after two years, and the 'satisfactory' word is also used in regular progress evaluation, expectations for 'higher than normal' contribution should not be there.

*Item is placed for directions, which can be used as policy for such cases under process and in future.*

**Item No. 50-6.7 To consider Post-Doctoral fellowship (PDF) program at MNIT Jaipur.**

To bring a good academic and research culture at institute a proposal has been prepared to start Post-Doctoral fellowship (PDF) program at MNIT Jaipur.

The PDF positions can be, Project Funded, PDF bring their own funding from agencies, Institute funding, Self-financed, Industry funded etc.

The proposed guidelines from post-doctoral fellowship programme are placed at **Annexure-SE (Pg. 149 to 150)**.

*Item is placed for consideration.*

# ANNEXURES



**Malaviya National Institute of Technology Jaipur**  
(An Institute of National Importance under Ministry of Education, Govt. of India)  
JLN Marg, Jaipur-302017 (RAJASTHAN) INDIA

**MINUTES OF 48<sup>TH</sup> MEETING OF SENATE HELD ON 10<sup>TH</sup> FEBRUARY 2023**

The 48<sup>th</sup> meeting of Senate was held on 10<sup>th</sup> February, 2023 from 4:30 PM 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.

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

<b>Item No. 48.1.0</b>	<b>:</b>	<b>To confirm the minutes of the 47<sup>th</sup> meeting of the Senate held on September 26, 2022.</b>  The Senate confirmed the minutes of 47 <sup>th</sup> meeting of Senate as circulated.
<b>Item No. 48.2.0</b>	<b>:</b>	<b>To note the "Action Taken" on the decisions taken in the 47th meeting of the Senate.</b>  The Senate noted the action taken report of 47 <sup>th</sup> meeting. Regarding Item No. 47-4.1 the Senate asked the committee constituted to propose method of identify seniority among Assistant Professor at the Institute and to submit their recommendation before the next Senate meeting. It was also decided that the name of Prof. Vijay Laxmi as member may be replaced by Prof. Lava Bhargava.
<b>Item No. 48-3-0</b>	<b>:</b>	<b>Items for consideration</b>
<b>Item No. 48-3.1</b>	<b>:</b>	<b>To consider the additional list of the students eligible for award of degree in UG, PG and Ph.D. programmes in the forthcoming Convocation.</b>  <b>Resolution No. Senate-48/2023/01:</b> The Senate approved the lists of eligible students for the award of. B.Tech./B.Arch./M.Tech./MBA and Ph.D. and recommended the same for consideration and approval of BoG. Further, the Senate authorized the Chairman, Senate to approve additional names, if any, of eligible students, who may complete the requirements for award of degree for the forthcoming 16 <sup>th</sup> Convocation, if no Senate meeting takes place before the Convocation.
<b>Item No. 48-3.2</b>	<b>:</b>	<b>To consider relaxation in percentage of marks/CGPA for admission to Ph.D. programmes for person with disabilities.</b>  <b>Resolution No. Senate-48/2023/02:</b> The Senate resolved that the relaxation in percentage of marks/CGPA for person with disabilities may also be applicable for admission to Ph.D. programmes.
<b>Item No. 48-3.3</b>	<b>:</b>	<b>To consider the recommendation of committee constituted to analyze the requirement/possibility of introducing requirement of minimum CGPA and minimum number of students in a programme for award of Director's Gold Medals and Board of Governors Gold Medals from the 17<sup>th</sup> Convocation onwards.</b>  <b>Resolution No. Senate-48/2023/03:</b> The Senate approved the recommendations of the committee as under:  For Director's Gold Medals for academic toppers of UG programmes: Minimum CGPA: 9.0

*JL*

*Mahendra*



	<p>Minimum number of students admitted in the batch: 30  For Board of Governor's Gold Meals for academic toppers of PG programmes:  Minimum CGPA: 9.0  Minimum number of students admitted in the batch: 10</p>
Item No. 48-3.4	<p><b>To consider academic research collaboration between MNITJ-IIT Madras and IIT Delhi.</b></p> <p><b>Resolution No. Senate-48/2023/04:</b> The Senate resolved that a committee of following members may be constituted to evaluate all such MoUs received from various Institutions for academic research collaboration with MNIT Jaipur.</p> <ul style="list-style-type: none"> <li>(i) Dean, Academic- Convener</li> <li>(ii) Dean, International Affairs</li> <li>(iii) Dean, Research &amp; Consultancy</li> <li>(iv) Dean, Students Welfare</li> </ul> <p>It was further decided the same committee will also evaluate proposals from Indian and Foreign Institute for twin degree and other similar matters.</p> <p>The Senate authorized the Chairman Senate to approve such MoUs.</p>
Item No. 48-3.5	<p><b>To consider the recommendation of the review committee constituted to review the UG programs.</b></p> <p><b>Resolution No. Senate-48/2023/05:</b> Senate discussed the UG seat matrix and the proposals for starting new UG programs at length and resolved that 40 seats of B.Tech. Metallurgical &amp; Materials Engineering may be reduced and assigned to new UG program: B.Tech. in Artificial Intelligence and Data Engineering.</p> <p>Regarding starting other new UG programmes the Senate approved the other UG programmes in principle and decided to consider these proposals in subsequent academic years as per availability of infrastructure.</p>
Item No. 48-3.6	<p><b>To consider the recommendation of the PG program review committee constituted to review the PG programs.</b></p> <p><b>Resolution No. Senate-48/2023/06:</b> Senate discussed recommendations of the PG review committee and the proposed seat matrix. It was resolved that more deliberations are required on recommendations of the PG review committee, regarding number of PG programmes offered by department and centres.</p> <p>It was decided that MRC and Metallurgy and Material Engineering Department should discuss together and come up with new program(s), new titles and minimize overlaps. It was decided that if they submit proposal for a new program(s), the same will be circulated among Senators and based upon comments received, Chairman Senate was authorized to decide if the new program is to be included in seat matrix for 2023-24.</p> <p>It was also resolved that the proposed seat matrix may be shared with all the Senators for their feedback to Dean, Academics and the Senate authorized the Chairman Senate to approve the seat matrix to be communicated to CCMT coordinator.</p>
Item No. 48-3.7	<p><b>To consider the guidelines &amp; modalities for starting Integrated Master + Ph.D. Dual Degree (MPDD) program.</b></p>



	<p><b>Resolution No. Senate-48/2023/07:</b> Senate appreciated the proposal and approved the guidelines in principle with modification in minimum CGPA requirement for eligibility for Integrated Master + Ph.D. Dual Degree (MPDD) program from 6.5 to 8.00 upto second semester of the M.Tech. Programme. The Senate constituted the following committee to review the guidelines for implementation of the scheme. Senate also decided to remove the word "Integrated" from the title of the scheme.</p> <p>(i) Dean, Academic- Convener (ii) Prof. Tarush Chandra (iii) Prof. D. Boolchandani</p>
Item No. 48-3.8	<p><b>To consider the proposals for creation of (a) Centre for Rural Development, (b) Centre for Cyber Security.</b></p> <p><b>Resolution No. Senate-48/2023/08:</b> The Senate approved both the proposals in principle as 'Virtual Centres', with no space and funds. Further a committee of following members was constituted to develop uniform policy/guidelines for working of various existing and upcoming Centres at the Institute:</p> <p>1. Prof. R. P. Yadav- Convener 2. Prof. Kanupriya Sachdev 3. Prof. Mahendra Chaudhary 4. Dr. Ramesh Batula</p>
Item No. 48-3.9	<p><b>To consider the equivalence of courses of Old Scheme for UG programmes with courses of New Scheme for UG programmes.</b></p> <p><b>Resolution No. Senate-48/2023/09:</b> The Senate approved the equivalence of courses with one minor modification that the course coordinator may also give self- study course with the approval of DUGC.</p> <p>It was also decided that the same approach may be applied in subsequent years as per the requirement.</p>
Item No. 48-3.10	<p><b>To consider the proposal to start a 2-Year Online Executive MBA program by Department of Management Studies (DMS) in association with Continuing and Digital Education Centre (CDEC), MNIT Jaipur.</b></p> <p><b>Resolution No. Senate-48/2023/10:</b> The Senate approved the programme in principle to start the program with maximum 40 students keeping minimum 2 weeks physical presence per semester presence of students on campus towards interaction and examination. It was suggested that coordinator CDEC coordinator should come up with detailed plan for implementation of the program including eligibility, admission process, recognition of degree, and self-sustainable strategy.</p>
Item No. 48-3.11	<p><b>To consider the Joint Supervision of Ph.D. student Mr. Sandeep Shukla (2020RME9599).</b></p> <p><b>Resolution No. Senate-48/2023/11:</b> The Senate resolved to approve joint supervision of Ph.D. students Mr. Sandeep Shukla as the request for addition of the name of Dr. Rohit Mishra was initiated before the date of comprehensive examination.</p>
Item No. 48-3.12	<p><b>To consider the mercy appeal received from students through proper channel for relaxation in CGPA requirement for semester promotion.</b></p>

*JL*

*Mahendra*

**Resolution No. Senate-48/2023/12:** The Senate discussed all mercy appeals for relaxation in CGPA requirement for semester promotion and resolved the following:

S. No.	Name & ID	Decision
1.	Mr. Abhishek Mehar (2022PBM5025) Full Time	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.
2.	Mr. Vivekanand Prajapati (2022RME9079) Full Time	Not approved
3.	Mr. Sachin Rolania (2022PPH5559)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.
4.	Ms. Megha Kumari (2022PEV5148)	The student is allowed for promotion to next semester.

**Item No. 48-3.13 :** To consider mercy request of Mr. Gaurav Jain (2019UCE1044) regarding waiver of no backlog requirement for going on internship.

**Resolution No. Senate-48/2023/13:** The mercy request of Mr. Gaurav Jain was not approved.

**Item No. 48-3.14 :** To consider the mercy request for waiver of minimum attendance requirement of Mr. Viral Achhwan (ID2021UAR1259).

**Resolution No. Senate-48/2023/14:** The Senate resolved that Mr. Viral Achhwan may repeat all the courses of third semester.

Few senators suggested that such cases involving medical ground should be examined by involving a doctor or a medical board.

**Item No. 48-3.15 :** To consider the mercy request of Ph.D. student Mr. Sagar Mal Nitharwal (ID: 2019RCP9147) Department of Computer Science & Engineering

**Resolution No. Senate-48/2023/15:** The Senate did not approve the mercy request of Mr. Sagar Mal Nitharwal.

**Item No. 48-3.16 :** To consider the mercy request of Ph.D. student Mr. Umardaraj (2013RME9065) to resume his registration in Ph.D. Programme and give extension-time to complete his remaining Ph.D. work (Department of Mechanical Engineering).

**Resolution No. Senate-48/2023/16:** The Senate did not approve the mercy request of Mr. Umardaraj.

74

Mehar

4



Item No. 48-3.17	<p>To consider the mercy request of M.Tech Students, Mr. Mukul Chaudhary (2021PCV5354), Mr. Hemant Khatri (2021PCV5359) Mr. Chetram Meena (2022PCV5304), Department of Centre for Energy and Environment.</p> <p><b>Resolution No. Senate-48/2023/17:</b> The Senate discussed all mercy appeals of the students and resolved the following:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name &amp; ID</th> <th>Decision</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mr. Mukul Chaudhary (2021PCV5354)</td> <td>Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24</td> </tr> <tr> <td>2.</td> <td>Mr. Hemant Khatri (2021PCV5359)</td> <td>Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24</td> </tr> <tr> <td>3.</td> <td>Mr. Chetram Meena (2022PCV5304)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> </tbody> </table>	S. No.	Name & ID	Decision	1.	Mr. Mukul Chaudhary (2021PCV5354)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24	2.	Mr. Hemant Khatri (2021PCV5359)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24	3.	Mr. Chetram Meena (2022PCV5304)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.
S. No.	Name & ID	Decision											
1.	Mr. Mukul Chaudhary (2021PCV5354)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24											
2.	Mr. Hemant Khatri (2021PCV5359)	Permitted to repeat the Dissertation I course in the even semester and may register Dissertation II course in the Odd Semester 2023-24											
3.	Mr. Chetram Meena (2022PCV5304)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.											
Item No. 48-3.18	<p>To consider the mercy request of M.Tech Students Mr. Roop Singh Meena (2022PES 5280), and Mr. Anirban Chatterjee (2022PSM5255) of Department of Electrical Engineering.</p> <p><b>Resolution No. Senate-48/2023/18:</b> The Senate discussed all mercy appeals of the students and resolved the following:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name &amp; ID</th> <th>Decision</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mr. Roop Singh Meena (2022PES 5280)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> <tr> <td>2.</td> <td>Mr. Anirban Chatterjee (2022PSM5255)</td> <td>Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.</td> </tr> </tbody> </table>	S. No.	Name & ID	Decision	1.	Mr. Roop Singh Meena (2022PES 5280)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.	2.	Mr. Anirban Chatterjee (2022PSM5255)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.			
S. No.	Name & ID	Decision											
1.	Mr. Roop Singh Meena (2022PES 5280)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses. His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.											
2.	Mr. Anirban Chatterjee (2022PSM5255)	Semester Promotion not approved. In line with earlier decisions for similar cases, the student may be given an opportunity to re-register in first semester and repeat all the courses His eligibility for promotion to next semester will be evaluated on the basis of his performance after re-registration.											
Item No. 48-3.19	<p>To consider the mercy request of M.Tech. student Mr. Vinod Kumar Meena (ID: 2020PCT5315) Department of Civil Engineering.</p> <p><b>Resolution No. Senate-48/2023/19:</b> The Senate approved the recommendation of SPGB and admitted the mercy appeal for award of degree with minimum CGPA 5.5 as per the present regulation for the award of PG degree.</p>												
Item No. 48-4-0	Item for Ratification												
Item No. 48-4.1	<p>To ratify Ph.D. thesis evaluation of Hash Kumar Dixit (2014RME9552).</p> <p>The item was ratified.</p>												

*7/11*

*Thekender*

5

Item No. 48-4.2	:	<b>To ratify the minor changes in new scheme of B.Tech first semester.</b>  The item was ratified.
Item No. 48-5-0	:	<b>Item for Reporting</b>
Item No. 48-5.1	:	<b>To note the minutes of 37<sup>th</sup> and 38<sup>th</sup> meeting of SUGB.</b>  The minutes were noted, regarding item no. 38-2.2, Prof. Mahendra Choudhary, HoD, Civil Engineering Dept. raised concern about the decision of SUGB. The Senate deliberated the issue at length and decided that the HoD Civil Engg. may present the case to Chairman SUGB who will give his recommendation to Chairman Senate for consideration.  Departments were requested to ensure that moderation is done on the date as notified in the academic calendar to avoid such situations in future. During the discussions it was suggested that a check needs to be introduced in existing ERP process for ensuring that the grade moderation is done by departments so that such cases do not arise in future.
Item No. 48-5.2	:	<b>To note the minutes of 54<sup>th</sup> and 55<sup>th</sup> meeting of SPGB.</b>  Noted
Item No. 48-5.3	:	<b>To note the minutes of 30<sup>th</sup>, 31<sup>st</sup> and 32<sup>nd</sup> meeting of Academic Affairs Committee meeting held on 11<sup>th</sup> October, 2022, 23<sup>rd</sup> November, 2022 and 30<sup>th</sup> January 2023 respectively.</b>  Noted
Item No. 48-5.4	:	<b>To note the minutes of meeting of the unfair means committee held on 23<sup>rd</sup> November 2022.</b>  Noted
Item No. 48-5.5	:	<b>To note the total number of students admitted in Undergraduate, Postgraduate and Ph.D. Programme during the Academic Session 2022-23.</b>  Noted
Item No. 48-5.6	:	<b>To note the award of grades and credits for discipline and extra-curricular activities in new UG Scheme.</b>  Noted
Item No. 48-6.0	:	<b>Any other items with permission of chair.</b>
Item No. 48-6.1	:	<b>To consider the panel of experts for faculty selections.</b>  <b>Resolution No. Senate-48/2023/20:</b> Senate approved the list of experts for faculty selections and also authorized Chairman, Senate to extend the list of experts with additional names as per additional requirement from time to time.
Item No. 48-6.2	:	<b>To review the Centralized Coordination of Examinations.</b>  <b>Resolution No. Senate-48/2023/21:</b> The Senate resolved to circulate the slides presented by Dean Academic to all the Senators for comments. It was also decided that the present system of coordination of Mid Term and End Term examination through exam cell will continue till further decision.

The meeting ended with vote of thanks to the Chair.

*Mahendra*

6



List of Senate members who attended online/offline 48<sup>th</sup> Senate meeting:

S. No.	Name
1.	Prof. N. P. Padhy
2.	Prof. Ashok Kumar Pradhan
3.	Prof. Vipul Rastogi
4.	Prof. A.P.S. Rathore
5.	Prof. Ajay Singh Jethoo
6.	Prof. D. Boolechandani
7.	Prof. G. D. Agarwal
8.	Prof. Girdhari Singh
9.	Prof. Harpal Tiwari
10.	Prof. Himanshu Chaudhary
11.	Prof. Jyotirmay Mathur
12.	Prof. Jyoti Joshi
13.	Prof. K. K. Sharma
14.	Prof. Kailash Singh
15.	Prof. Kanupriya Sachdev
16.	Prof. Lava Bhargava
17.	Prof. M. K. Shrimali
18.	Prof. M. L. Mittal
19.	Prof. M. M. Sharma
20.	Prof. Mahender Choudhary
21.	Prof. Manju Singh
22.	Prof. Nupur Tandon
23.	Prof. R. P. Yadav
24.	Prof. Ragini Gupta
25.	Prof. Raj Kumar Vyas
26.	Prof. Rajeev Shringi
27.	Prof. Rajendra Kumar Goyal
28.	Prof. Rajive Tiwari
29.	Prof. Rakesh Jain
30.	Prof. Rajesh Kumar
31.	Prof. S. K. Tiwari
32.	Prof. S. D. Bharti
33.	Prof. S. P. Chaurasia
34.	Prof. Suja George
35.	Prof. Sushant Kumar Jana
36.	Prof. Tarush Chandra
37.	Prof. Upendra Pandel
38.	Prof. Urmila Brighu
39.	Prof. Vijay Janyani
40.	Prof. Vijay Laxmi
41.	Prof. Vineet Sahula
42.	Prof. Vibhuti Singh Shekhawat
43.	Prof. Y.P. Mathur
44.	Dr. Amartya Chowdhury
45.	Dr. Bhagwati Sharma
46.	Dr. Dinesh Gopalani
47.	Dr. Dipti Sharma
48.	Dr. Manish Vashishtha
49.	Dr. Satish Pipralia
50.	Dr. Vatsala Mathur

Jy

Nehru

7

51.	Dr. Sumit Khandelwal, AD (UG)
52.	Dr. Deepak Verma , (Special invite )
53.	Dr. Ramesh Batula,(Special invite )

The list of members who could not attend 48<sup>th</sup>Senate meeting:

S. No.	Name
1.	Prof. Shuchi Srivastava
2.	Prof. A. B. Gupta
3.	Prof. A. K. Vyas
4.	Prof. Alok Gupta
5.	Prof. Alok Ranjan
6.	Prof. B. L. Swami
7.	Prof. Dilip Sharma
8.	Prof. G. S. Dangayach
9.	Prof. Ghanshyam Singh
10.	Prof. Gunwant Sharma
11.	Prof. K. R. Niazi
12.	Prof. Manoj Fozdar
13.	Prof. Mahesh Kumar Jat
14.	Prof. M. P. Poonia
15.	Prof. Nirutpam Rohtagi
16.	Prof. Ravindra Nagar
17.	Prof. Rohit Goyal
18.	Prof. R. C. Gupta
19.	Prof. Sanjay Mathur
20.	Prof. Sudhir Kumar
21.	Prof. T. C. Gupta
22.	Dr. Satish Kumar

76

Mahesh

8

**मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर**  
**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY**  
**JAIPUR**

**MINUTES OF 49TH MEETING OF (EMERGENT) SENATE HELD ON**  
**30<sup>TH</sup> MARCH 2023**

The 49<sup>th</sup> (Emergent) meeting of Senate was held online on 30<sup>th</sup> March, 2023 at 12.00 Noon in the Board Room, Prabha Bhawan of the Institute. The attendance list is enclosed at Annexure-A.

At the outset, the Chairman Senate in his opening remarks, welcomed all the members attending the meeting online. The agenda items to consider the names of UG & PG programs and additional list of students for award of degree in 16<sup>th</sup> Convocation were taken up and the resolutions of which are as follows:

**Item No. 49-1.1** To review the names of UG and PG programmes to be printed on degrees certificates.

**Resolution No. Senate-49 (Emergent)/2023/01:** The Senate approved following names of degrees/specialization offered by MNIT Jaipur, both in English and Hindi:

**Name of UG programmes**

S. No.	Programme name in English	Programme name in Hindi
1.	Bachelor of Architecture	वास्तुकला स्नातक
2.	Civil Engineering	जनपद अभियांत्रिकी
3.	Chemical Engineering	रासायनिक अभियांत्रिकी
4.	Computer Science and Engineering	कंप्यूटर विज्ञान एवं अभियांत्रिकी
5.	Electrical Engineering	वैद्युत अभियांत्रिकी
6.	Electronics and Communication Engineering	वैद्युतवणिकी एवं संचार अभियांत्रिकी
7.	Mechanical Engineering	यांत्रिकी अभियांत्रिकी
8.	Metallurgical and Materials Engineering	धातुकी एवं पदार्थ अभियांत्रिकी

**Name of PG specializations**

S. No.	Specialization name in English	Specialization name in Hindi
1.	Renewable Energy	नवीकरणीय ऊर्जा
2.	Chemical Engineering	रासायनिक अभियांत्रिकी
3.	Environmental Engineering	पर्यावरणीय अभियांत्रिकी
4.	Water Resources Engineering	जल संसाधन अभियांत्रिकी
5.	Structural Engineering	संरचनात्मक अभियांत्रिकी
6.	Transportation Engineering	परिवहन अभियांत्रिकी

*Mehendra*  
31/3/2023

*Saltar*



7.	Civil Engineering (Disaster Assessment and Mitigation)	जनपद अभियांत्रिकी (आपदा आकलन एवं शमन)
8.	Computer Engineering	कंप्यूटर अभियांत्रिकी
9.	Computer Engineering and Information Security	कंप्यूटर अभियांत्रिकी एवं सूचना सुरक्षा
10.	Power Systems	वैद्युत शक्ति प्रणाली
11.	Power Electronics and Drives	पावर इलेक्ट्रॉनिक्स एवं ड्राइव्स
12.	Power Systems Management	वैद्युत शक्ति प्रणाली प्रबंधन
13.	VLSI Design	अतिवृहद् स्तर एकीकरण अभिकल्प
14.	Wireless and Optical Communication	बेतार एवं प्रकाशीय संचार
15.	Embedded Systems	संनिहित प्रणाली
16.	Electronics and Communication Engineering	वैद्युतवर्णिकी एवं संचार अभियांत्रिकी
17.	Industrial Engineering	औद्योगिक अभियांत्रिकी
18.	Thermal Engineering	थर्मल अभियांत्रिकी
19.	Production Engineering	उत्पादन अभियांत्रिकी
20.	Design Engineering	अभिकल्प अभियांत्रिकी
21.	Metallurgical and Materials Engineering	धातुकी एवं पदार्थ अभियांत्रिकी
22.	Steel Technology	इस्पात प्रौद्योगिकी
23.	Material Science and Engineering	पदार्थ विज्ञान एवं अभियांत्रिकी
24.	Earthquake Engineering	भूकम्प अभियांत्रिकी
25.	Urban Planning	नगर नियोजन
26.	Chemistry	रसायन शास्त्र
27.	Mathematics	गणित
28.	Physics	भौतिक शास्त्र
29.	Master of Business Administration	व्यवसाय प्रशासन निष्णात

**Item No. 49-1.2** To consider the additional list of the students eligible for award of degree in UG, PG and Ph.D. programmes in the forthcoming 16<sup>th</sup> Convocation to be held on 12<sup>th</sup> April 2023.

**Resolution No. Senate-49 (Emergent)/2023/02:** The Senate approved the lists of eligible students for the award of B.Tech./M.Tech./MBA and Ph.D and recommended the same for consideration and approval of BoG. Further, the Senate authorized the Chairman, Senate to approve additional names, if any, of eligible students, who may complete the requirements for award of degree for the forthcoming 16<sup>th</sup> Convocation, if no Senate meeting takes place before the Convocation.

The meeting ended with vote of thanks to the Chair.

*Mehendra*

Registrar  
Shakti

31.3.23



List of Senate members who attended online 49<sup>th</sup> (Emergent) Senate meeting:

S. No.	Name
1.	Prof. N. P. Padhy
2.	Prof. A. B Gupta
3.	Prof. Ajay Singh Jethoo
4.	Prof. D. Boolchandani
5.	Prof. Dilip Sharma
6.	Prof. G. D Agarwal
7.	Prof. Ghanshyam Singh
8.	Prof. Girdhari Singh
9.	Prof. Gunwant Sharma
10.	Prof. Harpal Tiwari
11.	Prof. Himanshu Chaudhary
12.	Prof. Jyotirmay Mathur
13.	Prof. K. K. Sharma
14.	Prof. Kailash Singh
15.	Prof. Kanupriya Sachdev
16.	Prof. Lava Bhargava
17.	Prof. M. M. Sharma
18.	Prof. Mahendra Choudhary
19.	Prof. Manju Singh
20.	Prof. Manoj Fozdar
21.	Prof. Nupur Tandan
22.	Prof. R. K. Goyal
23.	Prof. R. P. Yadav
24.	Prof. Ragini Gupta
25.	Prof. Raj Kumar Vyas
26.	Prof. Rajeev Shringi
27.	Prof. Rajesh Kumar
28.	Prof. Rajive Tiwari
29.	Prof. Rohit Goyal
30.	Prof. S. K. Jana
31.	Prof. S. P Chaurasia
32.	Prof. Suja George
33.	Prof. T. C Gupta
34.	Prof. Tarush Chandra
35.	Prof. Upendra Pandel
36.	Prof. Vatsala Mathur
37.	Prof. Vijay Janyani
38.	Prof. Vineet Sahula
39.	Dr. Amartya Chowdhury
40.	Dr. Bhagwati Sharma
41.	Dr. Deepak Verma

*Meekandi*  
21/3/23

42.	Dr. Dinesh Goplani
43.	Dr. Dipti Sharma
44.	Dr. Manish Vashishtha
45.	Dr. Sumit Khandelwal, AD (UG), Special Invitee
46.	Sh. Ashok Agarwal, Special Invitee

The list of members who could not attend 49<sup>th</sup> (Emergent) Senate meeting:

S. No.	Name
1.	Prof. Ashok Kumar Pradhan
2.	Prof. Vipul Rastogi
3.	Prof. Shuchi Srivastava
4.	Prof. A. K. Vyas
5.	Prof. A.P.S. Rathore
6.	Prof. Alok Gupta
7.	Prof. Alok Ranjan
8.	Prof. B. L. Swami
9.	Prof. G. S. Dangayach
10.	Prof. Jyoti Joshi
11.	Prof. K. R. Niazi
12.	Prof. M. K. Shrimali
13.	Prof. M. L. Mittal
14.	Prof. Mahesh Kumar Jat
15.	Prof. M. P. Poonia
16.	Prof. Nirutpam Rohtagi
17.	Prof. Rakesh Jain
18.	Prof. Ravindra Nagar
19.	Prof. S. D. Bharti
20.	Prof. S. K. Tiwari
21.	Prof. R. C. Gupta
22.	Prof. Sanjay Mathur
23.	Prof. Sudhir Kumar
24.	Prof. Urmila Brighu
25.	Prof. Vibhuti Singh Shekhawat
26.	Prof. Y. P. Mathur
27.	Dr. Satish Pipralia

*Melumbi*

Registrar  
Sharma

31.3.23

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR****M.Tech./M.Plan. + Ph.D. Dual Degree (MPDD) Program****I. Genesis:**

- a) The program has been designed for bright MTech/MPlan students having an inclination and aptitude for research. The program aims to attract the best of those students and attract them early towards research. Once these students complete their MTech coursework, they will start their research and earn both MTech/MPlan and PhD degrees - at the end of the program. The two distinct aspects of the MPDD are as below:
  - i. Provide an avenue to students to earn both degrees in a far lesser duration as compared to if these two programs were registered for sequentially.
  - ii. Attract bright students by awarding them a fellowship equivalent to that of doctoral students from the date of their joining the program.
- b) Once the candidate gets admission into the MPDD program, the requirements of the program will be as per the PhD program in vogue, except for the features indicated below.

**II. Eligibility:**

- a) The students who are admitted to MTech/MPlan Programme with a GATE scholarship at MNIT Jaipur are eligible to register for this program, provided they have an overall CGPA  $\geq$  8.0 up to second semester of the MTech/MPlan program. The program would be open for only full time MTech students admitted with GATE score. The candidate should not have any backlog in any of the registered courses for MTech/MPlan.
- b) They can convert themselves to the MTech/MPlan + Ph.D. Dual Degree (MPDD) Programme of the concerned academic unit where they have registered for MTech program.
- c) The student will be given an option to register for MPDD program any time after the declaration of the second-semester results, i.e. after second or third semester.
- d) Minimum CGPA for PhD candidacy is 7.5 and above; for the courses registered after admission to MPDD program.

**III. Admission process:**

- a) The willing candidate must apply to the institute for the MPDD program through regular PhD admission process every semester. Admission is not a right, but is subject to successful interview and availability of funded scholarship positions (from institute fellowship/UGC/CSIR, etc.)
- b) A separate category of PhD admissions may be approved by the Senate. A separate category of PhD admissions must be created in institute ERP.
- c) The candidate must appear for a personal interview in front of the Departmental Selection Committee (DSC), during the routine PhD admissions. No written test would be conducted for the candidates appearing for this program.
- d) The number of candidates admitted through MPDD program will be counted towards overall PhD scholars (slots) a faculty can supervise and overall seats available for scholarship.

#### **IV. Program Duration:**

- a) The total duration of the proposed MPDD program will be minimum 4 (1+3) and maximum of 7 (2+5) years from the date of MTech/MPlan admission at the institute.

#### **V. Program Assistantship:**

- a) The candidate becomes eligible for scholarship for regular PhD scholars. However, for the scholars admitted through MPDD program, MTech/MPlan Assistantship would continue till the successful clearing of their Comprehensive Exam.
- b) Once the candidate successfully clears the Comprehensive Exam, the difference of eligible assistantship amount since admission to MPDD program (3<sup>rd</sup> / 4<sup>th</sup> semester onwards) till the date of the Comprehensive Exam will be credited to the candidate in equal instalments. After that normal PhD Assistantship will be continued. The assistantship can be provided for a maximum period of 5 years from the date of registration in MPDD program, as per the current PhD assistantship norms.
- c) If a candidate converts to part time, his fellowship will cease as per institutional PhD guidelines.

#### **VI. Course requirements:**

- a) After clearing the first two semesters of MTech program, the remaining credit requirement for the dual degree program will be equal to the sum of pending credit requirements of the concerned MTech/MPlan program plus 9 credit of PhD program.

For example, if an MTech program has 22 credit to be attained in 3<sup>rd</sup> and 4<sup>th</sup> semester, the equivalent credit requirements for dual degree will be 22 credit plus 9 credit. The candidate has to appear for a minimum of total 22 credit in the 3<sup>rd</sup> and 4<sup>th</sup> semesters, as per the relevant

program, but can additionally register for more courses equivalent to 9 credit of PhD program. Likewise incase of MPlan, the credits to be attained in 3<sup>rd</sup> and 4<sup>th</sup> Semester will be 16 and 14 credits respectively and can additionally register for more courses equivalent to 09 credits of Ph.D Programme. The maximum credit to be registered in any semester is as per current guidelines. This credit can be attained as follows.

For M. Tech. + Ph.D. Dual Degree (MPDD) Programme	For M.Plan + Ph.D. Dual Degree (MPDD) Programme
<p><i>Third Semester (minimum 11 Credit maximum 17 Credit):</i></p> <p>Seminar: 3 Credit            Research Methodology I: 2 Credit            Four Courses: 12 Credit</p>	<p><i>Third Semester (minimum 18 Credit maximum 21 Credit):</i></p> <p>Courses of regular M.Plan Degree: 16 Credit            Research Methodology I: 2 Credit            One Courses extra: 3 Credit</p>
<p><i>Fourth Semester (minimum 11 Credit maximum 19 Credit)</i></p> <p>Research Methodology II: 2 Credit            Dissertation: 14 Credit            One Course: 3 Credit</p>	<p><i>Fourth Semester (minimum 16 Credit maximum 22 Credit)</i></p> <p>Dissertation: 14 Credit            Research Methodology II: 2 Credit            One/Two Course extra: 3/6 Credit</p>

*Any shortfall of credit can be covered in the 5th semester.*

- b) The candidate must register for sufficient credits in 3<sup>rd</sup> and 4<sup>th</sup> semesters, to fulfil the minimum credit requirement for the award of MTech/MPlan degree, in case the student quits the program with an MTech degree alone.
- c) Comprehensive Exam is to be conducted by the end of the 7<sup>th</sup> semester, as per current PhD regulations.
- d) The nomination of supervisor for the candidate registering for MPDD program will be done afresh, during the time of departmental interview. The supervisor may be different form the one appointed for the MTech/MPlan program.

#### **VII. Award of degree and Exit options:**

- a) After successful completion of the Viva Voçe relating to his/her PhD works, the student concerned will be awarded the MPDD together. The MTech/MPlan degree will be retroactive from the date of the completion of his/her fulfilment of minimum credit requirement for relevant MTech/MPlan program/Comprehensive Examination.

- b) If the candidate intends to leave the program any time after four semesters or is unsuccessful in the Comprehensive Exam, then the candidate will be entitled to only an MTech/MPlan degree.
- c) The scholar would not be allowed to appear for MTech/MPlan placements or internships upto his/her Comprehensive Examination, once admitted into the MPDD program.

-----End-----



## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department/Centre : Department of Mathematics

Course Code : MAT

Course Name : Computational Statistics for Data Science

Credits : 3 L - 3 T - 0 P - 0

Course Type : Program elective

Prerequisites : Any computer language, basics of probability and Statistics

Course Contents

Introduction: Data collection, correlational and experimental methods, analyzing data, frequency distributions, the centre of a distribution: mean, median and mode, fitting statistical models to the data. Visualizing the problems with tools like R/MATLAB/Python. [6 Lectures]

Building statistical models, Populations and samples, data types, Simple statistical models, standard errors and confidence intervals, Test statistics, One and two tailed tests, type I and type II errors. Visualizing the problems with tools like R/MATLAB/Python. [8 Lectures]

Probability concepts, Sampling Concepts, Generating Random Variables, Exploratory Data Analysis. Review of distributions. ANOVA and MANOVA. Visualizing the problems with tools like R/MATLAB/Python. [8 Lectures]

Assumptions of parametric data, the assumption of normality, Shapiro-Wilk test, testing for homogeneity of variance, dealing with outliers, dealing with non-normality and unequal variances. Visualizing the problems with tools like R/MATLAB/Python. [8 Lectures]

Correlation significance of correlation coefficient, data entry for correlation analysis, bivariate correlation. Covariance, multi collinearity, Regression, method of least squares, simple regression using any programming language, basics of multiple regression, example regression model using any programming language. Visualizing the problems with tools like R/MATLAB/Python. [8 Lectures]

Recommended ReadingsText book:-

1. Andy Field, Jeremy Miles and Zoe field, Discovering statistics using R, SAGE publications, 2012.
2. Maria L. Rizzo, Statistical Computing with R, Second Edition, Taylor and Francis, CRC Press 2019.

Reference book:-

1. James D. Miller, Statistics for Data Science, Packt Publishing Limited, 2017.
2. Gareth James, Daniela Witten, Trevor Hastie and Robert Tibshirani, An Introduction to Statistical Learning: with Applications in R, Springer, 2017

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department/Centre : Department of Mathematics

Course Code : MAT

Course Name : Operations Research

Credits : 3 L - 3 T - 0 P - 0

Course Type : Program elective

Prerequisites : Undergraduate Mathematics

Course Contents

An overview of optimization problems, some examples of optimum design problem. Concepts and terms related to optimization problem, necessary and sufficient conditions for a multivariable function. Effects of scaling or adding a constant to an objective function and understanding constrained and unconstrained optimization problems. Concept of Lagrange multipliers and its application to unconstrained optimization problem. [12 lectures]

Linear programming: Introduction, general structure of linear programming (LP) models, methods of solving: graphical method, simplex method. Duality in LP, Assignment problem, Transportation Problem: Mathematical statement of transportation problem, methods of finding basic feasible solution (BFS), test of optimality, MODI'S method for optimal solution, variation in transportation problem. [12 lectures]

Convex sets, convex and concave functions, properties of convex function, definiteness of a matrix and test for concavity of function. Problem statement of convex optimization, quadratic optimization, quadratically constrained quadratic optimization, local and global optima. [8 lectures]

Quadratic programming: Wolfe's and Beale's method. Network Analysis: Project planning and control with PERT-CPM. [6 lectures]

Recommended Readings

Text book:-

1. Srinivas Rao, Operations Research-Principles and applications, (PHI Publications, 2021)
2. Hamdy A. Taha, Operations Research - An Introduction, (Macmillan Publishing Company Inc., 2006).

Reference book:-

3. B. E. Gillett, Introduction to Operations Research, (Tata McGraw Hill Publishing Company Ltd., 2006) 31
3. F. S. Hillier and G. J. Lieberman, Operations Research, (Wiley, 2006)
4. Jasbir S. Arora, Introduction to optimum design, Elsevier, 2006.
5. S.S. Rao, Engineering Optimization: Theory and Practice, New Age International Pvt. Ltd., New Delhi, 2000.
6. A Ravindran, K.M.Ragsdell, and G.V. Reklaitis, Engineering optimization: Methods and Applications, Wiley India Edition, 2006.
7. K. Deb, Optimization for Engineering Design-Algorithms and Examples, Prentice-Hall of India Pvt. Ltd., New Delhi, 1995.



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department/Centre	:	<u>Department of Mathematics</u>
Course Code	:	<u>MAT</u>
Course Name	:	<u>Introduction to Bayesian statistics</u>
Credits	:	<u>3 L - 3 T - 0 P - 0</u>
Course Type	:	Program elective
Prerequisites	:	Any computer language, basics of probability and Statistics

Course Contents

Introduction to the compute environment for the Specialization. Graphical and numerical summaries of univariate and multivariate data. [6 lectures]

Review of Probability and random variables. Higher moments. Quantile-quantile plots, Estimation using Method of Moments and Maximum Likelihood Estimation. Hands-on: Fitting statistical models and developing new tests. [8 Lectures]

Basics of Bayes' Rule, Decisions and Loss Functions, Priors introduction, Priors as conjugates, Informative vs non-informative priors, Jeffrey's Prior, Prior distributions and posterior ramifications. [8 Lectures]

A Hands-On Introduction to Common Distributions: Negative Binomial Distribution, Lognormal Distribution, Student's t-distribution, Estimation using a Beta Distribution, Gaussian Mixture Model, Non-parametric Methods: Kernel Density Estimation [8 Lectures]

Sampling Algorithms Introduction to Sampling, The Inverse Transform Algorithm, Rejection Sampling, Importance Sampling, Differences between the Bayesian and the Frequentist, Features of Bayesian and Frequentist Inference [8 Lectures]

Recommended Readings

Text book:-

1. Gelman, et al., "Bayesian Data Analysis", (1995).
2. Sheldon M. Ross, "Simulation" (Academic Press, Fourth Edition), 2006, Chaps. 1-5. (2002).

Reference book:-

1. Casella and Berger, "Statistical Inference" (2002).
2. Randall Pruim, "Foundations and Applications of statistics: An introduction using R" (American Mathematical society), 2011.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department:** Department of Management Studies

**Course Code:** BMT

**Course Name:** Team Building & Leadership

**Credits:** 3 (L - 3 T - 0 P - 0)

**Course Type:** Elective

**Prerequisites:** None

**Course Objectives:**

After studying this course, students will be able to:

- Understand the nature of the team & group formation process, its challenges & the critical components required for a high performance team.
- Focus on these critical components to build effective teams with synergy.
- Explain the benefits of developing and maintaining effective team working.
- Understand different ways of exercising leadership, their own strengths and weaknesses, and how they can best work with others in a leadership context.
- Evaluate fundamental leadership practices relevant to modern organizations & will be able to meet their personal leadership challenges.
- Assess potential leadership philosophy, traits, skills, behaviours, and develop a leadership portfolio.

**Course Contents:**

Introduction to the Concept of Groups and Teams; Stages of Group Development, Group Roles, Group Norms and Group Cohesion; Effective Team Characteristics and Team Building; Why Teams Fail? High Performing Team.

Introduction to the concept of leadership; Difference between Leadership and Management; Role, Responsibility and Competencies; Traits and Challenges of Leaders; Theories of leadership; Leadership Effectiveness; leadership practices relevant to modern organizations; Leadership Ethics.

**Recommended Readings:**

- Northouse, Peter G. (2021) Leadership: Theory and Practice, 9<sup>th</sup> Edition, Sage Pubns.
- Haldar, Uday Kumar (2010) Leadership and Team Building, Oxford University Press.
- Belbin, R Meredith (2010) Management Teams: Why they succeed or fail, 3<sup>rd</sup> edition, Taylor and Francis.
- Yukl, Gary and Uppal, Nishant (2017) Leadership in Organizations, 8<sup>th</sup> Edition, Pearson
- Kouzes, James M. and Posner, Barry Z. (2018) The Student Leadership Challenge: Five Practices of Exemplary Leaders, 3<sup>rd</sup> edition, Jossey-Bass.

In addition to the above recommended books, a number of articles, exercises and cases will be part of class discussion and the links for the same will be shared before discussion of the topics.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR  
DEPARTMENT OF MANAGEMENT STUDIES**

**BACKGROUND NOTE AND JUSTIFICATION**  
**Course Title: Team Building & Leadership (Open Elective)**

To achieve the objectives of an organization, the renewal of encouraging work culture is critical. Managers working at different levels in organizations have to harmonize and channel the efforts of all subordinates and followers in positive and effective ways. This signifies the need to work in a team. Team building is essential in the current business climate as organizations are looking to design team-based structures further to improve their productivity, profitability and service quality. Furthermore, team building has many benefits for businesses in terms of improving productivity, increasing employee motivation, encouraging collaboration and building trust and respect among employees. Team building also naturally allows the development of leadership since it enables decision-making. Leaders are responsible for not only showing the way to their subordinates to work as a team/group towards the attainment of goals, but they are also supposed to lead the group/team through inspiration, persuasion and personal connections. Good leadership is vital to organizational success.

In this course, students will understand the concept and types of teams, team development, team building and effectiveness, qualities of an effective leader, importance of leadership, theories and styles of leadership. Through this course and team-building activities, participants can develop novel, supportive and desired behaviours that may be very supportive at their personal and professional levels and may assist them in becoming good leaders. The course will consist of class sessions, group discussions, case studies and problem-solving exercises, individual assignments and other training methods to give all participants the best learning and personal development opportunities.

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department : Department of Management Studies  
Course Code : \_\_\_\_\_  
Course Name : Introduction to Financial Markets  
Credits : 3 L- 3 T- 0 P- 0  
Course Type : Open Elective  
Prerequisites : None

### Course Objective

This introductory course in the area of finance aims to expose students to different segments of financial markets. The course allows the student to gather the key concepts on financial markets, its products, pricing, risks and the market participants. This gives a practical support to be able to understand the financial information as well as to be able to work on financial markets. This course also focuses on the role of financial institutions and its impact on efficient resource allocation. In the process it also introduces most common of the instruments and financial claims which constitute different market segments.

### Course Contents

- Overview Financial system: Introduction, functions of financial system and its components.
- Financial institutions: Definition, types, role in economic development, Commercial banks: emergence of private sector bank after liberalization, financial innovation in commercial banks.
- Financial markets: Structure, institution and operating mechanism and its role in Economic Development, Types of Money, Process of Capital Formation.
- Types of financial Markets-Capital market: Primary and secondary (introduction), money market: introduction, types of money market instruments-money at call, treasury bill, certificates of deposits; commercial papers.
- Capital Market- New Issue Market & Stock Exchanges, Foreign Capital Issuance.
- Financial instruments - Equity, Preference Shares, Debentures, Bonds, Warrants, Options, Convertible securities, Fixed deposits, Derivatives, Debt Securitization, Commercial Paper, Euro Issue etc.
- Financial Regulation: Reserve bank of India, its role and functions, SEBI-introductions and guidelines, Types of exchanges – National, Regional & Local

### Recommended Readings

1. Foundations of financial markets and institutions, Fabozzi, Modigliani, Jones and Ferri. Pearson Publication
2. Frederic S. Mishkin, The Economics of Money, Banking and Financial Market, Addison Wesley.
3. Financial Management: Theory & Practice, Chandra, P. Tata McGraw Hill Publishing Company Limited.
4. Mishkin and Eakins, Financial Markets and Institutions, Pearson Publication



### BACKGROUND NOTE AND JUSTIFICATION

**Course Title: Introduction to Financial Markets (Open Elective)**

Financial Markets are the backbone of any economy and play a very significant role in determining the business environment. The Financial markets and banking services have been growing in an integrated manner across the globe and within India that requires professionals and experts to manage different types of financial transactions to co-integrate the increased corporate financial needs through innovative financial instruments. The financial markets arena is a field which is constantly evolving; in which updated and specialized knowledge is essential. Companies today seek candidates who not only have excellent knowledge of their field and specialist skills, but who can cope with dynamism and lead the company successfully through changes. The innovations in the financial markets, as well as the globalization process and technological changes require highly trained professionals, able to face the challenges in the financial areas of corporate business. They seek individuals who can represent the company in a positive light when dealing with clients and transmitting in them, confidence of the company's ability to manage the funds.

This course will appraise the participants to various functions, and operations of the financial markets and institutions. It explains the role of financial system on economic development. Various conceptual issues related to risk and return, the role of regulatory bodies, mechanism of commercial banking, capital and money market instruments, operations of insurance companies and mutual funds are discussed elaborately. It also describes the importance of small savings, provident funds, pension funds and credit rating agencies. In this course, the participants will be trained to nuances of the financial markets and will help in creating skills such as conceptual understanding, Quantitative Analysis and analytical skills.

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department : Department of Management Studies

Course Code : \_\_\_\_\_

Course Name : Labour Laws for Engineers

Credits : 3      L - 3      T - 0      P - 0

Course Type : Open Elective

Prerequisites : None

**Course Objectives:**

The main objective of the course is to develop awareness and give students a background in various aspects of the labour laws that could affect and enhance their careers as engineers. The engineers should be familiar with some laws in order to avoid problems during their careers. In addition to the laws related to the workplace, there is a need to understand the various laws regulating hiring and the workplace. There are laws at National and state level covering everything from hiring process, payment of salaries, social security measures, health, safety and welfare concerns to workers' compensation.

**Course Contents**

The **Factories Act, 1948** – Provisions related to health, safety & Welfare of workers.  
The **Industrial Disputes Act, 1947** - Provisions related to grievance redressal machinery, layoff, retrenchment, strikes and lockouts, Rights of workmen for compensation in case of layoff.  
The **Employees Provident Fund and Miscellaneous Provisions Act, 1952**– Concept of PF, contributions, and Provisions related to various schemes of the act.  
The **Maternity Benefit Act, 1961**– Provisions related to Payment of Maternity Benefits.  
The **Payment of Bonus Act, 1965** – Provisions related to eligibility for bonus, Computation of working days, calculation & payment of bonus.  
The **Payment of Gratuity Act, 1972** – Provisions related to continuous service, formula for calculating gratuity, payment & non-payment of gratuity.  
The **Employees Compensation Act, 1923** – Concept of compensation & dependant, Employers' liability, provisions related to amount of compensation.

**Recommended Readings**

1. Sinha, P.R.N., Sinha, InduBala, Priyadarshini, ShekharSeema (2017) Industrial Relations, Trade Unions and Labour Legislations, Pearson Education India
2. Monappa, Arun, Nambudiri, Ranjeet, Selvaraj, Patturaja (2017) Industrial Relations and Labour Laws, 2nd Edition, McGraw Hill Education
3. Ghosh, Piyali and Nandan, Shefali (2017) Industrial Relations and Labour Laws, Latest edition, McGraw Hill Education
4. Srivastava, S.C.(2019) Industrial Relations and Labour Laws, 7th Revised Edition, S Chand
5. Taxmann's Labour Laws (2022) Edition

**BACKGROUND NOTE AND RATIONALE**

**Course Title: Labour Laws for Engineers (Open Elective)**

Labour laws consists of various Acts related to Factories, Industrial Dispute, Provident fund, Gratuity, Maternity Benefits, Social Security etc. These laws are necessary for every profession whether it is Management, Engineering or any other stream. Engineering and law may not have much in common, but labour laws affect every profession in some way or other. There is a need to understand the various laws at National and State level covering everything from hiring, payment of wages, provisions related to industrial dispute, provident fund, other social security measures, health, safety and welfare concerns to workers' compensation.

The course will benefit the students in various ways such as:

1. The students will understand the interaction pattern among labour, management and the State.
2. This course will help the students to understand and develop the awareness about their rights, various laws preventing discrimination at the workplace, laws governing medical leave and protecting workers' interest.
3. This will the students in understanding the legal aspects of HR and legal system which have a pervasive impact on business activities. Due to this, the students shall get insight in handling all those issues prevailing in industries.
4. They may be able to identify multiple cases on various labour issues existing in the industry and thereby learning implication of labour laws.

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**Department:** Department of Management Studies

**Course Code:** BMT

**Course Name:** Team Building & Leadership

**Credits:** 3 (L - 3 T - 0 P - 0)

**Course Type:** Elective

**Prerequisites:** None

### Course Objectives:

After studying this course, students will be able to:

- Understand the nature of the team & group formation process, its challenges & the critical components required for a high performance team.
- Focus on these critical components to build effective teams with synergy.
- Explain the benefits of developing and maintaining effective team working.
- Understand different ways of exercising leadership, their own strengths and weaknesses, and how they can best work with others in a leadership context.
- Evaluate fundamental leadership practices relevant to modern organizations & will be able to meet their personal leadership challenges.
- Assess potential leadership philosophy, traits, skills, behaviours, and develop a leadership portfolio.

### Course Contents:

Introduction to the Concept of Groups and Teams; Stages of Group Development, Group Roles, Group Norms and Group Cohesion; Effective Team Characteristics and Team Building; Why Teams Fail? High Performing Team.

Introduction to the concept of leadership; Difference between Leadership and Management; Role, Responsibility and Competencies; Traits and Challenges of Leaders; Theories of leadership; Leadership Effectiveness; leadership practices relevant to modern organizations; Leadership Ethics.

### Recommended Readings:

- Northouse, Peter G. (2021) Leadership: Theory and Practice, 9<sup>th</sup> Edition, Sage Pubns.
- Haldar, Uday Kumar (2010) Leadership and Team Building, Oxford University Press.
- Belbin, R Meredith (2010) Management Teams: Why they succeed or fail, 3<sup>rd</sup> edition, Taylor and Francis.
- Yukl, Gary and Uppal, Nishant (2017) Leadership in Organizations, 8<sup>th</sup> Edition, Pearson
- Kouzes, James M. and Posner, Barry Z. (2018) The Student Leadership Challenge: Five Practices of Exemplary Leaders, 3<sup>rd</sup> edition, Jossey-Bass.

In addition to the above recommended books, a number of articles, exercises and cases will be part of class discussion and the links for the same will be shared before discussion of the topics.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR  
DEPARTMENT OF MANAGEMENT STUDIES**

**BACKGROUND NOTE AND JUSTIFICATION**  
**Course Title: Team Building & Leadership (Open Elective)**

To achieve the objectives of an organization, the renewal of encouraging work culture is critical. Managers working at different levels in organizations have to harmonize and channel the efforts of all subordinates and followers in positive and effective ways. This signifies the need to work in a team. Team building is essential in the current business climate as organizations are looking to design team-based structures further to improve their productivity, profitability and service quality. Furthermore, team building has many benefits for businesses in terms of improving productivity, increasing employee motivation, encouraging collaboration and building trust and respect among employees. Team building also naturally allows the development of leadership since it enables decision-making. Leaders are responsible for not only showing the way to their subordinates to work as a team/group towards the attainment of goals, but they are also supposed to lead the group/team through inspiration, persuasion and personal connections. Good leadership is vital to organizational success.

In this course, students will understand the concept and types of teams, team development, team building and effectiveness, qualities of an effective leader, importance of leadership, theories and styles of leadership. Through this course and team-building activities, participants can develop novel, supportive and desired behaviours that may be very supportive at their personal and professional levels and may assist them in becoming good leaders. The course will consist of class sessions, group discussions, case studies and problem-solving exercises, individual assignments and other training methods to give all participants the best learning and personal development opportunities.

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department : Department of Management Studies  
Course Code : \_\_\_\_\_  
Course Name : Introduction to Financial Markets  
Credits : 3 L - 3 T - 0 P - 0  
Course Type : Open Elective  
Prerequisites : None

### Course Objective

This introductory course in the area of finance aims to expose students to different segments of financial markets. The course allows the student to gather the key concepts on financial markets, its products, pricing, risks and the market participants. This gives a practical support to be able to understand the financial information as well as to be able to work on financial markets. This course also focuses on the role of financial institutions and its impact on efficient resource allocation. In the process it also introduces most common of the instruments and financial claims which constitute different market segments.

### Course Contents

- Overview Financial system: Introduction, functions of financial system and its components.
- Financial institutions: Definition, types, role in economic development, Commercial banks: emergence of private sector bank after liberalization, financial innovation in commercial banks.
- Financial markets: Structure, institution and operating mechanism and its role in Economic Development, Types of Money, Process of Capital Formation.
- Types of financial Markets-Capital market: Primary and secondary (introduction). money market: introduction, types of money market instruments-money at call, treasury bill, certificates of deposits, commercial papers.
- Capital Market- New Issue Market & Stock Exchanges, Foreign Capital Issuance.
- Financial instruments - Equity, Preference Shares, Debentures, Bonds, Warrants, Options, Convertible securities, Fixed deposits, Derivatives, Debt Securitization, Commercial Paper, Euro Issue etc.
- Financial Regulation: Reserve bank of India, its role and functions, SEBI-introductions and guidelines, Types of exchanges - National, Regional & Local

### Recommended Readings

1. Foundations of financial markets and institutions, Fabozzi, Modigliani, Jones and Ferri, Pearson Publication
2. Frederic S. Mishkin, The Economics of Money, Banking and Financial Market, Addison Wesley.
3. Financial Management: Theory & Practice, Chandra, P. Tata McGraw Hill Publishing Company Limited.
4. Mishkin and Eakins, Financial Markets and Institutions, Pearson Publication

### BACKGROUND NOTE AND JUSTIFICATION

**Course Title: Introduction to Financial Markets (Open Elective)**

Financial Markets are the backbone of any economy and play a very significant role in determining the business environment. The Financial markets and banking services have been growing in an integrated manner across the globe and within India that requires professionals and experts to manage different types of financial transactions to co-integrate the increased corporate financial needs through innovative financial instruments. The financial markets arena is a field which is constantly evolving; in which updated and specialized knowledge is essential. Companies today seek candidates who not only have excellent knowledge of their field and specialist skills, but who can cope with dynamism and lead the company successfully through changes. The innovations in the financial markets, as well as the globalization process and technological changes require highly trained professionals, able to face the challenges in the financial areas of corporate business. They seek individuals who can represent the company in a positive light when dealing with clients and transmitting in them, confidence of the company's ability to manage the funds.

This course will appraise the participants to various functions, and operations of the financial markets and institutions. It explains the role of financial system on economic development. Various conceptual issues related to risk and return, the role of regulatory bodies, mechanism of commercial banking, capital and money market instruments, operations of insurance companies and mutual funds are discussed elaborately. It also describes the importance of small savings, provident funds, pension funds and credit rating agencies. In this course, the participants will be trained to nuances of the financial markets and will help in creating skills such as conceptual understanding, Quantitative Analysis and analytical skills.

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Department : Department of Management Studies

Course Code : \_\_\_\_\_

Course Name : Labour Laws for Engineers

Credits : 3 L- 3 T- 0 P- 0

Course Type : Open Elective

Prerequisites : None

### Course Objectives:

The main objective of the course is to develop awareness and give students a background in various aspects of the labour laws that could affect and enhance their careers as engineers. The engineers should be familiar with some laws in order to avoid problems during their careers. In addition to the laws related to the workplace, there is a need to understand the various laws regulating hiring and the workplace. There are laws at National and state level covering everything from hiring process, payment of salaries, social security measures, health, safety and welfare concerns to workers' compensation.

### Course Contents

**The Factories Act, 1948** – Provisions related to health, safety & Welfare of workers.  
**The Industrial Disputes Act, 1947** - Provisions related to grievance redressal machinery, layoff, retrenchment, strikes and lockouts, Rights of workmen for compensation in case of layoff.  
**The Employees Provident Fund and Miscellaneous Provisions Act, 1952**– Concept of PF, contributions, and Provisions related to various schemes of the act.  
**The Maternity Benefit Act, 1961**– Provisions related to Payment of Maternity Benefits.  
**The Payment of Bonus Act, 1965** – Provisions related to eligibility for bonus, Computation of working days, calculation & payment of bonus.  
**The Payment of Gratuity Act, 1972** – Provisions related to continuous service, formula for calculating gratuity, payment & non-payment of gratuity.  
**The Employees Compensation Act, 1923** – Concept of compensation & dependant, Employers' liability, provisions related to amount of compensation.

### Recommended Readings

1. Sinha, P.R.N., Sinha, InduBaia, Priyadarshini, ShekharSeema (2017) Industrial Relations, Trade Unions and Labour Legislations, Pearson Education India
2. Monappa, Arun, Nambudiri, Ranjeet, Selvaraj, Patturaja (2017) Industrial Relations and Labour Laws, 2nd Edition, McGraw Hill Education
3. Ghosh, Piyali and Nandan, Shefali (2017) Industrial Relations and Labour Laws, Latest edition, McGraw Hill Education
4. Srivastava, S.C.(2019) Industrial Relations and Labour Laws, 7th Revised Edition, S Chand
5. Taxmann's Labour Laws (2022) Edition



**BACKGROUND NOTE AND RATIONALE**

**Course Title: Labour Laws for Engineers (Open Elective)**

Labour laws consists of various Acts related to Factories, Industrial Dispute, Provident fund, Gratuity, Maternity Benefits, Social Security etc. These laws are necessary for every profession whether it is Management, Engineering or any other stream. Engineering and law may not have much in common, but labour laws affect every profession in some way or other. There is a need to understand the various laws at National and State level covering everything from hiring, payment of wages, provisions related to industrial dispute, provident fund, other social security measures, health, safety and welfare concerns to workers' compensation.

The course will benefit the students in various ways such as:

1. The students will understand the interaction pattern among labour, management and the State.
2. This course will help the students to understand and develop the awareness about their rights, various laws preventing discrimination at the workplace, laws governing medical leave and protecting workers' interest.
3. This will the students in understanding the legal aspects of HR and legal system which have a pervasive impact on business activities. Due to this, the students shall get insight in handling all those issues prevailing in industries.
4. They may be able to identify multiple cases on various labour issues existing in the industry and thereby learning implication of labour laws.

**The Transgender Persons (Protection of Rights) Rules, 2020**





Government of India  
Ministry of Social Justice and Empowerment  
Notification

New Delhi, dated

G.S.R No \_\_\_ In exercise of the powers conferred by sub-section (1) and (2) of Section 22 Transgender Persons (Protection of Rights) Act, 2019, the Central Government hereby notifies the following rules, namely:

**1. Short title and commencement:** - (1) These rules may be called the Transgender Persons (Protection of Rights) Rules, 2020.

(2) They shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

**2. Definition:** - In these rules, unless the context otherwise requires, -

- (a) 'Act' means the Transgender Persons (Protection of Rights) Act, 2019;
- (b) 'affidavit' means affidavit in **form – 2** to be submitted by an applicant seeking certificate of identity;
- (c) 'application' means application-cum-enumeration form as in **form – 1** of these rules.
- (d) 'certificate of identity' means a certificate issued by the District Magistrate under sections 5 and 6 or 7 of the Act as in **form – 3** or **form – 4** of these rules;
- (e) 'identity card' a photo identity card in **form – 5** issued to a transgender person under section 6 or **form - 6** issued to a transgender person on change of gender under section 7 on the basis of 'certificate of identity' issued by the District Magistrate or identity card to a transgender person issued by a State authority prior to the commencement of these rules;
- (f) 'procedure' means procedure laid in **annexure – 1** to be adopted by District Magistrate for issue of certificate of identity under section 6 or 7.
- (g) 'section' means section of the Act

**3. Application for issue of identity of certificate under section 6 or 7:**

- (1) Any transgender person desirous of obtaining a certificate of identity shall make an application, in **form – 1** of this rule.
- (2) The application shall be submitted to the District Magistrate in person or by post till online facilities are developed by the State Government concerned, and thereafter application may also be made online.

**4. Procedure for issue of certificate of identity (section 6):**

- (1) The District Magistrate shall, based on the application, the affidavit attached therewith and the report of psychologist, without any medical examination, issue the certificate of identity.

(2) The said certificate of identity shall be issued within 30 days of receipt of duly filled in application along with the affidavit and the report of psychologist.

**5. Issue of certificate of identity for transgender person under section 6:**

(1) The District Magistrate shall issue to the applicant following the procedure under rule 4, a certificate of identity in **form – 3** of these rules, indicating the gender of such person as transgender.

(2) The certificate of identity issued under this sub-rule shall be the basis to record or change the gender as well as name, if so necessitated, of transgender person in all such official documents illustrated in **annexure – 1** to these rules, in accordance with the gender specified in the said identity card.

(3) For the purpose of determination of the District Magistrate concerned, the applicant must be a resident of the area under the jurisdiction of the District Magistrate for a period of one completed year, to protect the interests and facilitate inclusive development of transgender persons.

(4) Any official document wherein gender of transgender is revised based on the said certificate of identity shall bear the same serial or reference number as in the original official document of such transgender person who seeks change in the gender and the name in the official documents.

**6. Procedure for issue of certificate of identity for change of gender (Section 7):**

(1) If a transgender person undergoes surgery to change gender either as a male or female, such person may apply in the **form – 1** of these rules, along with a certificate issued to that effect by the Medical Superintendent or Chief Medical Officer of the medical institution in which that person has undergone surgery, to the District Magistrate for revised certificate.

(2) The District Magistrate shall, on receipt of an application for change in gender under section 7 of the Act, along with the certificate issued by the Medical Superintendent or Chief Medical Officer, and surrender of the transgender identity card issued under rule 5 or a transgender identity card issued by a State authority before the commencement of these rules, and on being satisfied with the correctness of such medical certificate, issue a certificate indicating change in gender in **form – 4**.

(4) The certificate of identity issued under sub-rule \_\_\_ shall be the basis to record the revised gender of the person in all such official documents illustrated in **Annexure – 1** to these rules, in accordance with the gender specified in the revised identity card.

(5) For the purpose of determination of the District Magistrate concerned, the applicant must be a resident of the area under the jurisdiction of the District Magistrate for a period of one completed year, to protect the interests and facilitate inclusive development of transgender persons.

(6) District Magistrate may verify with the Medical Superintendent or Chief Medical Officer to confirm the correctness or otherwise of the medical certificate.

(7) The District Magistrate shall thereafter issue the revised certificate of identity within 30 days from the receipt of application along with the certificate of the Medical Superintendent or Chief Medical Officer.

(8) In case the Medical Superintendent or Chief Medical Officer does not confirm the correctness of the certificate or does not recommend issue of revised identity card, District Magistrate shall inform the applicant of the application for issue of certificate of identity has been rejected due to non-confirmation of correctness of the medical certificate submitted by the applicant or/and non-recommendation by Medical Superintendent or Chief Medical Officer.

(9) The applicant shall have a right to appeal, within 30 days from the date of intimation of rejection of the application, to the District Magistrate who shall refer the matter to a medical board for a final decision.

(10) Any official document wherein gender of transgender is revised based on the said certificate of identity shall bear the same serial or reference number as in the original official document of such transgender person who seeks change in the gender and the name in the official documents.

**7. Welfare measures, education, social security and health of transgender persons by appropriate Government:**

(1) The appropriate Government shall notify the general category transgender persons 'other backward classes' so as to enable them to avail the benefits of vertical reservation provided for the other backward classes.

Provided nothing in this sub-rule shall deny the benefits to transgender persons belonging to the scheduled caste and scheduled tribe under the vertical reservation or to the persons with disability, ex-servicemen and sportspersons under the horizontal reservation.

(2) Ministry or Department concerned under the appropriate Government shall review all existing educational, social security and health schemes and welfare measures to include transgender persons so as to protect their rights and interests and facilitate their access to such schemes and welfare measures framed by that Government.

(3) The appropriate Government shall formulate educational, social security and health schemes and welfare schemes and programmes in a manner so as to be transgender sensitive, non-stigmatising and non-discriminatory to transgender persons.

(4) The appropriate Government shall review Acts, rules, regulations, codes, bye-laws, and such statutes for the rescue, protection and rehabilitation of transgender persons to address their needs and promote.

(5) The appropriate Government shall create institutional and infrastructure facilities such as separate wards in the hospital wash rooms within two years from the date of commencement of these rules to protect the rights of such persons to participate in cultural and recreational activities.

(6) The appropriate Government shall carry out awareness campaigns to enlighten and facilitate transgender persons to avail benefits of welfare schemes as well as to other stakeholders in developing appropriate change in behavior towards transgender persons.

[F No \_\_\_\_\_]

(Joint Secretary to the Government of India)

Form - 1

Page 3 of 12



Application – cum – enumeration form for issue of transgender certificate of identity under Section 6\* / 7\* of the Transgender Persons (Protection of Rights) Act, 2019 under Rule \_\_\_\_ Transgender Persons (Protection of Rights) Rules, 2020

\* Strike out whichever is not applicable

State Emblem State Government of (name of the State) Department of (name of the issuing department)
---

Application – cum – enumeration form for issue of transgender certificate of identity under Section 6\* / 7\* of the Transgender Persons (Protection of Rights) Act, 2019 under Rule \_\_\_\_ Transgender Persons (Protection of Rights) Rules, 2020

\* Strike out whichever is not applicable

**Note:**

1. Furnishing false information would result in cancellation of the identity card as stipulated under Rule \_\_ of \_\_\_\_ Rules, apart from making you liable for penal action under the relevant Act(s) or/ and Code(s).
2. Information provided by you in this application will be treated as confidential and shall not to be shared with any person or organisation save the Central and / or State security agencies

<b>1</b>	<b>Name</b>	
(i)	Birth name (in capital letters)	
(ii)	Transgender name (in capital letters)	
<b>2</b>	<b>Mother's name</b>	
<b>3</b>	<b>Father's name</b>	
<b>4</b>	<b>Guardian's name</b>	
<b>5</b>	<b>Gender</b>	Transgender
<b>6</b>	<b>Date of birth or Age as on the date of application</b>	dd/mm/yyyy __ years
<b>7</b>	<b>Educational qualification</b>	
<b>8</b>	<b>Name of the School or College or University with complete address</b>	
<b>9</b>	<b>Present address</b>	
<b>10</b>	<b>Permanent address</b>	
<b>11</b>	<b>Mother tongue</b>	
<b>12</b>	<b>Place of birth</b>	
<b>13</b>	<b>Domicile (for the last 12 months)</b>	



	surgery in the context of transgender transition?	
(ii)	Please give details of 18(i)	
(iii)	Any other medical status you would like to share	
(iv)	Is the certificate of identity issued earlier under section 6 of the Act, or under any other Act or rule of any Government, enclosed?	YES Can DM ask for this?
19	Any other information you would like to give	
20	Have you attached affidavit prescribed in Form – 2 of the Transgender Persons (Protection of Rights) Act, 2019 under Rule ____ Transgender Persons (Protection of Rights) Rules, 2020	Yes
21	Your signature or your left hand thumb impression	

Enclosed: \_\_\_ documents as mentioned in the application

Station:	
Date:	Signature or left hand thumb impression of the applicant



Format of affidavit to be submitted by a person applying for certificate of identity for transgender persons under Section 6\* / 7\* of the Transgender Persons (Protection of Rights) Act, 2019 under Rule \_\_\_\_ Transgender Persons (Protection of Rights) Rules, 2020

\* Strike out whichever is not applicable

(Affidavit should be on Non-judicial stamp paper of Rs.10/-)

Competent Notary Civil, District (Name of the District), (Name of the State)

I, (Name), son/daughter/ward/spouse of (name of the parent/guardian/husband), aged (in completed years), residing at (address), (Tehsil), (District), (State) (Pin code) do hereby solemnly affirm and declare as under:

1. I am a resident of the above address.
  2. I perceive myself as a transgender male/female\*.
  3. I declare myself as a transgender.
  4. I am executing this affidavit to be submitted to the District Magistrate for issue of certificate of identity as transgender person under Section 6\* / 7\* of the Transgender Persons (Protection of Rights) Act, 2019 under Rule \_\_\_\_ Transgender Persons (Protection of Rights) Rules, 2020.
  5. I am aware that in case of false declaration to obtain certificate of identity I shall be liable to be punished under the relevant penal code of the appropriate Government mentioned under the Transgender Persons (Protection of Rights) Act, 2019.
- \* strike out whichever is not applicable.

Deponent  
(Signature of the Applicant)

### Verification

I, (Name), hereby state that whatever is stated here in above serial Nos. 1 to 4 are true to the best of my knowledge and that I fully understand the meaning and impact of the statement at No 5.

Deponent  
(Signature of the Applicant)

Tehsil  
Date

Identified by me  
Advocate

Before Me  
Notary Public

Signature of witness

Form – 3

Form of certificate of identity to be issued by District Magistrate under Rule 5 Transgender Persons (Protection of Rights) Rules, 2020 read with section 6 of the Transgender Persons (Protection of Rights) Act, 2019

Photograph  
of the  
certificate  
holder  
District  
Magistrate to  
attest the  
photograph

1. On the basis of the application submitted to the undersigned along with an affidavit (and medical certificate)\*, it is to certified that Shri / Smt / Km (name) son / daughter / ward of Shri/ Smt/ Mx (name of the parent or Guardian) of (complete residential address of the applicant) is a transgender person.
2. His / her birth name is \_\_\_\_\_.
3. This certificate is issued in terms of the provisions contained under Rule 5 Transgender Persons (Protection of Rights) Rules, 2020 read with section 6 of the Transgender Persons (Protection of Rights) Act, 2019.
4. It is also certified that Shri / Smt / Km \_\_\_\_\_ is ordinarily a resident at the address given above.

Date

Signature of the District  
Magistrate:

Place

Seal

Form of certificate of identity for change of gender to be issued by District Magistrate under Rule 6 of the Transgender Persons (Protection of Rights) Rules, 2020 read with section 7 of the Transgender Persons (Protection of Rights) Act, 2019

Photograph  
of the  
certificate  
holder  
District  
Magistrate to  
attest the  
photograph

5. On the basis of the application submitted to the undersigned along with a medical certificate from the Medical Superintendent or Chief Medical Officer (name of the Hospital and complete address), it is to certified that Shri / Smt / Km (name) son / daughter / ward of Shri/ Smt/ Mx (name of the parent or Guardian) of (complete residential address of the applicant) has undergone surgery to change gender.
6. His/ Her birth name is \_\_\_\_\_.
7. This certificate is issued in terms of the provisions contained under Rule 6 of the Transgender Persons (Protection of Rights) Rules, 2020 read with section 7 of the Transgender Persons (Protection of Rights) Act, 2019.
8. It is also certified that Shri / Smt / Km is ordinarily a resident at the address given above.

Date

Signature of the District  
Magistrate:  
Seal

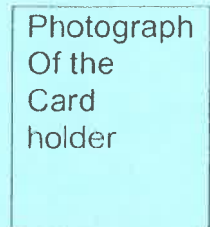
Place

**Form of Identity Card  
Front side of identity card**

State Emblem  
State Government of (name of the State).  
Department of (name of the issuing department)

**Transgender Identity Card**

Identity card number



Name

Mother's name

Father's / Guardian's name

Gender

Transgender

Date of birth or

dd/mm/yyyy

Age as on the date of application for  
issue of identity card

\_\_ years

**Back side of the identity card**

Present address

Permanent address

Card issue date

Signature of the issuing authority

Designation

Seal of the issuing authority

**Issued under Section 6\*/ 7\* of the Transgender Persons (Protection of Rights)  
Act, 2019 and under Rule \_\_ of Transgender Persons (Protection of Rights)  
Rules, 2020**

\* Strike out whichever is not applicable

**Form of Identity Card**  
**Front side of identity card**

State Emblem  
State Government of (name of the State)  
Department of (name of the issuing department)

**Identity Card**

Identity card number

Photograph  
of the  
Card  
holder

Name  
Mother's name  
Father's / Guardian's name  
Gender  
Date of birth or  
Age as on the date of application for  
issue of identity card

Male / Female  
dd/mm/yyyy  
\_\_ years

**Back side of the identity card**

Present address

Permanent address

Card issue date  
Signature of the issuing authority  
Designation  
Seal of the issuing authority



Illustrative list of official documents referred to in

S No	Name of the official document
1	Birth certificate
2	Caste/ Tribe certificate
3	Class (Secondary school) certificate or Class 12 (Senior Secondary School) certificate or SSLC
4	Election Photo Identity Card
5	Aadhaar Card
6	Permanent Account Number (PAN)
7	Driving Licence
8	BPL ration card
9	Post Office bank/ Bank Pass book with photo
10	Pass port
11	Kisan Pass book
12	Marriage certificate
13	Electricity / water/ gas connection paper







# मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO. ....

Legal Cell

कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख्या

Page No.

1

दैनन्दिनी  
संख्या  
MNIT  
Diary No.

1/N

Mr. Rahul Saini has submitted an application dated 02.01.2023 to issue revised college documents (Annexure-V) with change of name, title and gender as per applicability. The annexed documents are Degree of B.Tech., Marksheets of different semesters, alumni card, character certificate, Migration certificate etc. issued by MNIT Jaipur from time to time.

2/N

Mr. Rahul Saini has stated that his old name was Riya Saini female transgender and after undergoing sex reassignment surgery and has identified herself as female to male transgender. He has annexed copies of name change certificate and transgender Identity card issued by District Magistrate, notarized affidavit for change in name and gender, surgery certificate issued by a Doctor of Sir Ganga Ram Hospital Delhi and opinion and fitness certificate issued by a Psychiatrist.

3/N

I have perused the copies of relevant documents and the relevant provisions of law. Govt. of India has enacted the Transgender persons (Protection of Rights) Act 2019 and the Transgender Person (Protection of Rights) Rule 2020 made there under. Section 6 of the said Act 2019 provides that the District Magistrate shall issue, a certificate of identity as transgender and the gender of transgender person shall be recorded in all official documents in accordance with certificate issued under sec 6(1) and it shall confer rights and be a proof of recognition of his identity as a transgender person. Section 7 of said Act of 2019 provides that after the issue of a certificate under section 6(1), if a transgender person undergone surgery to change gender either as a male or female, such person may make an application alongwith a certificate issued to that effect by the Medical Superintendent or Chief Medical officer of Medical Institution in which that person has undergone surgery to the District Magistrate for revised certificate in such form and manner as may be prescribed. The District Magistrate shall



दैनन्दिनी  
संख्या  
MNIT  
Diary No.

# मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO.

Legal Cell

कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख्या

Page No.

2

issue a certificate on being satisfied with certificate by such Medical Authority.

4/N

Rule 5(i) of Rules of 2020 provides about issue of certificate of identity for transgender person by District Magistrate under section 6 in Form-3 of said rules after following the procedure under rule-4 and sub rule (2) of Rule 5 clearly provides that the certificate of identity issued under this sub-rule shall be the basis of record or change of gender as well as name, if so necessitated of transgender person in all such official documents illustrated in Annexure-1 to said rules, in accordance with the gender specified in the said identity card. Rule 6 of Rules 2020 provides the procedure for issue of certificate of identity for change of gender under section 7 and it provides that if a transgender person undergoes surgery to change gender either as a male or female such person may apply in Form-1 of said rules alongwith certificate issued by medical authority and the District Magistrate shall issue certificate in Form-4 and the said certificate of identity shall be the basis to record revised gender of the person in all such official documents illustrated in Annexure-1 to said rules. Annexure-1 contains illustrative list of official documents as referred in aforesaid provisions of rule-5 and rule 6 like Birth Certificate, Caste/Tribe Certificate, Secondary School Certificate or Senior Secondary School Certificate or SSLC, Election Photo ID Card, Aadhaar Card, PAN Card, Driving License, Pass Port, Marriage Certificate, Electricity/Water connection paper, Post office/Bank Pass Book with photo ID etc. The said list is illustrative in nature and not conclusive.

5/N

A bare perusal of copies of document annexed by applicant clearly reveals that the applicant has been issued with certificate of identity dated 11.08.2021 by District Magistrate Jaipur in Form-3 under Rule 5 Rules of 2020 and Section 6 Act 2019 in the name 'Rahul Saini' earlier known as 'Riya Saini' and Transgender Identity Card dated 11.08.2021. It has has



दैनन्दिनी  
संख्या  
MNIT  
Diary No.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO. .... Legal Cell

कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख  
Page No



clearly been mentioned in certificate of identity dated 11.08.2021 that the said certificate entitles the holder to change name and gender in all official documents of the holder. It is further clear from perusal of said documents that Board of Secondary Education Rajasthan has also issued revised certificates with Marksheets of Secondary and Senior Secondary Examination in the changed name of Rahul Saini and the Govt. of India has issued Aadhaar Card in the changed name of Rahul Saini.

6/N

In view of the aforesaid facts and circumstances and provisions of law, Rahul Saini is also entitled to get change of his name in the certificates issued by MNIT Jaipur since the list of documents contained in Annexure-1 of Transgender Rules of 2020 are illustrative in nature and not conclusive and certificates/mark sheets issued by Higher Education Institute are part of it which were issued on the basis of name shown in 10<sup>th</sup>/12<sup>th</sup> certificate issued by School Education Board.

7/N

Thus, in my considered opinion revised certificates/documents may be issued showing name as 'Rahul Saini' and so far as gender is concerned, the gender may be mentioned as 'Transgender' where ever the same is required to be mentioned in terms of the Transgender ID Card no. RJ/Jai/2021/6236/1/RJ/Jai/2021/6236-RJ/Jai/2020/4470 issued on 11.08.2021 by District Collector & Distt. Magistrate, Jaipur, State Govt. of Rajasthan Office of District Magistrate.

8/N

Submitted for kind perusal and consideration please.

  
(N.S. Chauhan)  
Legal Consultant

9/N

DR. (Estt & Legal)

The request may be considered, received from the applicant, as mentioned at para 7/N above.

19/12/2023

10/N

Nodal Officer (Legal)

47

As the name of Rahul Saini has been





# मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

दैनन्दिनी  
संख्या  
MNIT  
Diary No.

पंजिका संख्या / FILE NO. ....

कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख्या  
Page No.

4

already incorporated in Badhar Card, Marksheet of Secondary and Senior Secondary of Board of Secondary Education Rajasthan, the name may be revised in relevant academic records of MNIT in his case and revised certificates/marksheets/ Degree and character character may be issued.

Dear Academics

P Singh  
22/02/2023

Submitted for approval for issuance of required documents with name and gender change as recommended under para 7/N of legal opinion.

Director and Chairman Senate

Jyoti  
25/3/23

Place before Senate.

Dean Academics

(N) name  
03/03/23

for info

~~SR~~

Jyoti  
06/3/23

S. Pathan  
16/3/23

Sh. Raviji

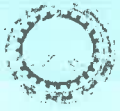
Gmr.

Sh. Mritunjay

367  
23/2/2023

2368  
22/2/23  
2220  
27/2/23  
Malaviya National Institute of Technology Jaipur

2608  
3/3/23



दैनन्दिनी  
संख्या  
MNIT  
Diary No.

1/N

2/N

3/N

# मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO. Legal Cell

कार्यालय टिप्पणी

## Note Sheet

पृष्ठ संख्या  
Page No.

1

Mr. Rahul Saini has submitted an application dated 02.01.2023 to issue revised college documents (Annexure-V) with change of name, title and gender as per applicability. The annexed documents are Degree of B.Tech., Marksheets of different semesters, alumni card, character certificate, Migration certificate etc. issued by MNIT Jaipur from time to time.

Mr. Rahul Saini has stated that his old name was Riya Saini female transgender and after undergoing sex reassignment surgery and has identified herself as female to male transgender. He has annexed copies of name change certificate and transgender Identity card issued by District Magistrate, notarized affidavit for change in name and gender, surgery certificate issued by a Doctor of Sir Ganga Ram Hospital Delhi and opinion and fitness certificate issued by a Psychiatrist.

I have perused the copies of relevant documents and the relevant provisions of law. Govt. of India has enacted the Transgender persons (Protection of Rights) Act 2019 and the Transgender Person (Protection of Rights) Rule 2020 made there under. Section 6 of the said Act 2019 provides that the District Magistrate shall issue, a certificate of identity as transgender and the gender of transgender person shall be recorded in all official documents in accordance with certificate issued under sec 6(1) and it shall confer rights and be a proof of recognition of his identity as a transgender person. Section 7 of said Act of 2019 provides that after the issue of a certificate under section 6(1), if a transgender person undergone surgery to change gender either as a male or female, such person may make an application alongwith a certificate issued to that effect by the Medical Superintendent or Chief Medical officer of Medical Institution in which that person has undergone surgery to the District Magistrate for revised certificate in such form and manner as may be prescribed. The District Magistrate shall

Legal





दैनन्दिनी  
संख्या  
MNIT  
Diary No.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO. Legal cell

कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख्या  
Page No.

2

issue a certificate on being satisfied with certificate by such Medical Authority.

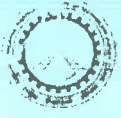
u/n

Rule 5(i) of Rules of 2020 provides about issue of certificate of identity for transgender person by District Magistrate under section 6 in Form-3 of said rules after following the procedure under rule-4 and sub rule (2) of Rule 5 clearly provides that the certificate of identity issued under this sub-rule shall be the basis of record or change of gender as well as name, if so necessitated of transgender person in all such official documents illustrated in Annexure-1 to said rules, in accordance with the gender specified in the said identity card. Rule 6 of Rules 2020 provides the procedure for issue of certificate of identity for change of gender under section 7 and it provides that if a transgender person undergoes surgery to change gender either as a male or female such person may apply in Form-1 of said rules alongwith certificate issued by medical authority and the District Magistrate shall issue certificate in Form-4 and the said certificate of identity shall be the basis to record revised gender of the person in all such official documents illustrated in Annexure-1 to said rules. Annexure-1 contains illustrative list of official documents as referred in aforesaid provisions of rule-5 and rule 6 like Birth Certificate, Caste/Tribe Certificate, Secondary School Certificate or Senior Secondary School Certificate or SSLC, Election Photo ID Card, Aadhaar Card, PAN Card, Driving License, Pass Port, Marriage Certificate, Electricity/Water connection paper, Post office/Bank Pass Book with photo ID etc. The said list is illustrative in nature and not conclusive.

s/n

A bare perusal of copies of document annexed by applicant clearly reveals that the applicant has been issued with certificate of identity dated 11.08.2021 by District Magistrate Jaipur in Form-3 under Rule 5 Rules of 2020 and Section 6 Act 2019 in the name 'Rahul Saini' earlier known as 'Riya Saini' and Transgender Identity Card dated 11.08.2021. It has has

11/11



दैनन्दिनी  
संख्या  
MNIT  
Diary No.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO.

Legal Cell  
कार्यालय टिप्पणी

Note Sheet

पृष्ठ संख्या  
Page No.

(3)

clearly been mentioned in certificate of identity dated 11.08.2021 that the said certificate entitles the holder to change name and gender in all official documents of the holder. It is further clear from perusal of said documents that Board of Secondary Education Rajasthan has also issued revised certificates with Marksheet of Secondary and Senior Secondary Examination in the changed name of Rahul Saini and the Govt. of India has issued Aadhaar Card in the changed name of Rahul Saini.

6/N

In view of the aforesaid facts and circumstances and provisions of law, Rahul Saini is also entitled to get change of his name in the certificates issued by MNIT Jaipur since the list of documents contained in Annexure-I of Transgender Rules of 2020 are illustrative in nature and not conclusive and certificates/mark sheets issued by Higher Education Institute are part of it which were issued on the basis of name shown in 10<sup>th</sup>/12<sup>th</sup> certificate issued by School Education Board.

7/N

Thus, in my considered opinion revised certificates/documents may be issued showing name as 'Rahul Saini' and so far as gender is concerned, the gender may be mentioned as 'Transgender' where ever the same is required to be mentioned in terms of the Transgender ID Card no. RJ/Jai/2021/6236/1/RJ/Jai/2021/6236-RJ/Jai/2020/4470 issued on 11.08.2021 by District Collector & Distt. Magistrate, Jaipur, State Govt. of Rajasthan Office of District Magistrate.

8/N

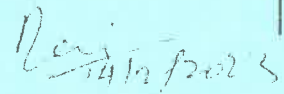
Submitted for kind perusal and consideration please.

  
(N.S. Chaulhan)  
Legal Consultant

9/N

D.R. (Estt & Legal)

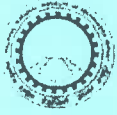
The request may be considered, received from the applicant, as mentioned at para 7th above.

  
14/12/2023

10/N

Notal Officer (Legal)

As the name of Rahul Saini was taken



दैनन्दिनी  
संख्या  
MNIT  
Diary No.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजीक संख्या / FILE NO. ....

कार्यालय टिप्पणी  
Note Sheet

पृष्ठ संख्या  
Page No.  
(4)

already incorporated in Achar Card, Marksheet of Secondary and Senior Secondary of Board of Secondary Education Rajasthan, the names may be revised in relevant academic records of MNIT in his case and revised certificates/marksheets/ degree and character character may be issued.

367  
23/2/23

Dean Academics

POngj  
22/02/2023

Submitted for approval for issuance of relevant documents with name change as recommended under para 7/14 of Achar Card.

2368  
23/2/23  
2228  
23/2/23

Director and Chairman, Senate

POngj  
23/2/23

Place before Director

2608  
23/2/23

Dean Academics

(N) Varad  
03/02/23

Dr

POngj  
23/2/23

Sh. Rattan  
16/3/23

Sh. Ravi ji

Om

Sh. Mritunjay



## List of Inactive UG Students having absence for more than 02 semesters and are on the stage of Termination

S No.	Department	Student Id	Student Name	Status	No. of GAP pending semesters	Minimum Credits Required	Registered Credits	Eamed Credits	CGPA	Reached the maximum limit of duration to complete Degree
1	ARCHITECTURE AND PLANNING	2015UAR1154	AKASH BANSAL	Inactive	6	229	229	226	6.72	Not registered from July 2020 i.e. from 11th Semester onwards
2	ARCHITECTURE AND PLANNING	2015UAR1327	PRATYUSH SONI	Inactive	6	229	229	213	6.5	Not registered from July 2020 i.e. from 11th Semester onwards
3	ARCHITECTURE AND PLANNING	2018UAR1093	AMAR SINGH MEENA	Inactive	8	229	22	0	0	Not registered from July 2019 i.e. from 03rd Semester onwards
4	ARCHITECTURE AND PLANNING	2018UAR1666	TANVI VURADI	Inactive	9	229	22	0	0	Not registered from Jan 2019 i.e. from 02nd Semester onwards
5	ARCHITECTURE AND PLANNING	2018UAR1690	JOY DAS	Inactive	9	229	22	18	3.91	Not registered from Jan 2019 i.e. from 02nd Semester onwards
6	CHEMICAL ENGINEERING	2018UCH1606	PRANAV PRAVIN SAWANT	Inactive	9	194	24	0	0	Not registered from Jan 2019 i.e. from 02nd Semester onwards
7	CHEMICAL ENGINEERING	2020UCH1244	ANSH SAXENA	Inactive	4	194	48	40	6.54	Not registered from July 2021 i.e. from 03rd Semester onwards
8	CIVIL ENGINEERING	2017UCE1105	ANIL MEENA	Inactive	5	190	97	50	2.26	Not registered from Jan 2021 i.e. from 08th Semester onwards
9	CIVIL ENGINEERING	2017UCE1143	ASHOK MEENA	Inactive	9	190	72	35	2.33	Not registered from Jan 2019 i.e. from 04th Semester onwards
10	CIVIL ENGINEERING	2017UCE1422	RAKUMAR SIWAMI	Inactive	7	190	121	118	6.43	Not registered from Jan 2020 i.e. from 06th Semester onwards
11	CIVIL ENGINEERING	2018UCE1118	PUNEET ARORA	Inactive	9	190	22	1	0.36	Not registered from Jan 2019 i.e. from 02nd Semester onwards
12	CIVIL ENGINEERING	2018UCE1679	RAJESH KUMAR	Inactive	9	190	24	0	0	Not registered from Jan 2019 i.e. from 02nd Semester onwards
13	CIVIL ENGINEERING	2019UCE1606	ADITYA SARAOGI	Inactive	3	190	72	44	3.74	Not registered from Jan 2022 i.e. from 06th Semester onwards
14	CIVIL ENGINEERING	2019UCE1609	SUDARSHAN YADAV	Inactive	7	190	24	0	0	Not registered from Jan 2020 i.e. from 02nd Semester onwards
15	CIVIL ENGINEERING	2020UCE1457	SUMIT KUMAR SINGH	Inactive	5	190	24	0	0	Not registered from Jan 2021 i.e. from 02nd Semester onwards
16	CIVIL ENGINEERING	2020UCE1467	DEVANSHU POONIA	Inactive	3	190	68	44	5.23	Not registered from Jan 2022 i.e. from 04th Semester onwards
17	COMPUTER SCIENCE AND ENGINEERING	2012UCP1066	KANAK PARMAR	Inactive	9	200	200	193	4.77	Not registered from Jan 2019 i.e. from 14th Semester
18	COMPUTER SCIENCE AND ENGINEERING	2019UCP1371	AAKASH GOYAL	Inactive	7	200	22	0	0	Not registered from Jan 2020 i.e. from 02nd Semester onwards
19	COMPUTER SCIENCE AND ENGINEERING	2019UCP1708	SAMYAK JAIN	Inactive	4	200	102	67	3.99	Not registered from July 2021 i.e. from 05th Semester onwards
20	COMPUTER SCIENCE AND ENGINEERING	2020UCP1753	SAMAR SINGH RANDHAWA	Inactive	5	200	24	19	6.92	Not registered from Jan 2021 i.e. from 02nd Semester onwards
21	COMPUTER SCIENCE AND ENGINEERING	2020UCP1781	AADITI AJAY KAPRE	Inactive	5	200	24	0	0	Not registered from Jan 2021 i.e. from 02nd Semester onwards
22	ELECTRICAL ENGINEERING	2013UEE1461	AJAYA TUDU	Inactive	4	201	201	181	5.21	Not registered from July 2021 i.e. from 17th Semester onwards
23	ELECTRICAL ENGINEERING	2019UEE1344	RAKESH CHANGAL	Inactive	4	200	99	67	3.87	Not registered from July 2021 i.e. from 05th Semester onwards
24	ELECTRICAL ENGINEERING	2020UEE1900	PALAGUDI SAI PRA THYUSHA	Inactive	4	200	48	40	6.57	Not registered from July 2021 i.e. from 3rd Semester onwards
25	ELECTRONICS AND COMMUNICATION ENGINEERING	2013UECC051	SHILPA ANNI SAJI	Inactive	6	201	200	191	5.09	Not registered from Jan 2020 i.e. from 14th Semester onwards
26	ELECTRONICS AND COMMUNICATION ENGINEERING	2015UECC1311	JAIPAL SINGH	Inactive	8	201	203	136	3.78	Not registered from July 2019 i.e. from 9th Semester

**List of Inactive UG Students having absence for more than 02 semesters and are on the stage of Termination**

S No.	Department	Student id	Student Name	Status	CGPA	Minimum Credits Required	Registered Credits	Earned Credits	CGPA
27	ELECTRONICS AND COMMUNICATION ENGINEERING	2015UFC1002	A A NIPUN LOCHANA PERERA	Inactive	4.15	201	194	166	4.15
28	ELECTRONICS AND COMMUNICATION ENGINEERING	2018UFC1458	Harsh Surya Bhushan	Inactive	0	201	24	0	0
29	MECHANICAL ENGINEERING	2016UME1715	SIDHLAL MURMU	Inactive	2.33	197	182	97	2.33
30	MECHANICAL ENGINEERING	2017UME1592	ASHOK KUMAR	Inactive	4.87	198	198	193	4.87
31	MECHANICAL ENGINEERING	2019UME1196	RAHUL KUMAR MEENA	Inactive	3.14	197	100	67	3.14
32	MECHANICAL ENGINEERING	2019UME1649	JABIN THOMAS JOHN	Inactive	1.04	197	24	4	1.04
33	MECHANICAL ENGINEERING	2020UME1081	ANKIT	Inactive	3.9	197	73	40	3.9
34	MECHANICAL ENGINEERING	2021UME1093	CHITRANJAN SINGH BHATI	Inactive	0	197	22	0	0
35	METALLURGICAL AND MATERIALS ENGINEERING	2016UMT1548	DEVENDRA	Inactive	1.83	199	48	20	1.83
36	METALLURGICAL AND MATERIALS ENGINEERING	2017UMT1615	KSHITIJ YADAV	Inactive	5.01	199	198	198	5.01
37	METALLURGICAL AND MATERIALS ENGINEERING	2018UMT1310	BANOTH SAMPATH	Inactive	1.26	199	48	14	1.26
38	METALLURGICAL AND MATERIALS ENGINEERING	2018UMT1669	SANDEEP KUMAR	Inactive	0	199	24	0	0
39	METALLURGICAL AND MATERIALS ENGINEERING	2019UMT1753	AMIT KUMAR PANDEY	Inactive	3.91	199	48	27	3.91
40	METALLURGICAL AND MATERIALS ENGINEERING	2020UMT1609	KORRA URDOB	Inactive	0	199	22	0	0
41	METALLURGICAL AND MATERIALS ENGINEERING	2020UMT1923	NILAKSH NAYAN	Inactive	2.17	199	24	13	2.17



**List of Inactive UG Students having absence for 2 or < 2 semesters**

S No.	Department	Student id	Student Name	Status	No. of GAP pending semesters	Minimum Credits Required	Registered Credits	Earned Credits	CGPA
1	ARCHITECTURE AND PLANNING	2019UAR1154	AMAN KUMAR TEKRIWAL	Withdrawal	2	229	153	121	4.57
2	ARCHITECTURE AND PLANNING	2020UAR1120	JONATHAN WILLIAM N	Inactive	2	229	72	25	2.06
3	ARCHITECTURE AND PLANNING	2022UAR1848	KULDEEP BERWAL	Inactive	1	229	22	0	0
4	CHEMICAL ENGINEERING	2020UCH1517	NAWAL MEENA	Inactive	2	194	100	67	3.71
5	CHEMICAL ENGINEERING	2020UCH1916	SAGARIKA SHYAM GOHAIN	Inactive	2	194	100	45	2.91
6	CHEMICAL ENGINEERING	2021UCH1642	VISHAL CHOUHAN	Inactive	2	194	48	9	0.61
7	CHEMICAL ENGINEERING	2022UCH1909	RAHUL	Inactive	1	194	25	16	3.16
8	CIVIL ENGINEERING	2017UCE1049	KARNIDAN	Inactive	1	190	191	179	4.6
9	CIVIL ENGINEERING	2018UCE1129	RAMAVATH KUMAR	Inactive	1	190	179	128	3.96
10	COMPUTER SCIENCE AND ENGINEERING	2016UCP1570	BARINDER SINGH	Inactive	1	200	102	50	2.79
11	COMPUTER SCIENCE AND ENGINEERING	2018UCP1446	CHINTAN ASHVINKUMAR KHOONT	Inactive	2	200	177	153	4.5
12	ELECTRICAL ENGINEERING	2017UEE1026	SAURABH SINGH CHAUHAN	Inactive	2	201	201	169	4.07
13	ELECTRICAL ENGINEERING	2020UEE1627	SHOBHIT KUMAR MEENA	Inactive	1	200	123	83	3.62
14	ELECTRONICS AND COMMUNICATION ENGINEERING	2018UEC1056	YATENDRA KUMAWAT	Inactive	1	201	201	198	6.09
15	ELECTRONICS AND COMMUNICATION ENGINEERING	2020UEC1576	AMIT BORAVAT	Inactive	1	201	126	99	5.46
16	ELECTRONICS AND COMMUNICATION ENGINEERING	2020UEC1789	ADITYA RAJ	Inactive	1	201	101	87	5.54
17	ELECTRONICS AND COMMUNICATION ENGINEERING	2022UEC1650	ANANYA KASHYAP	Inactive	1	201	24	23	5.83
18	MECHANICAL ENGINEERING	2016UME1290	MAHENDRA KUMAR GARG	Inactive	2	197	194	155	3.55
19	MECHANICAL ENGINEERING	2020UME1083	GIRRAJ KUDALIYA	Inactive	2	197	100	70	4.29
20	MECHANICAL ENGINEERING	2022UME1743	ANANYA SINGH	Inactive	1	197	25	25	9.44
21	METALLURGICAL AND MATERIALS ENGINEERING	2020UMT1365	TARUN JANGID	Inactive	2	199	102	70	4.87
22	METALLURGICAL AND MATERIALS ENGINEERING	2020UMT1911	EEDIGA N HARIKA	Inactive	2	199	102	42	3.14
23	METALLURGICAL AND MATERIALS ENGINEERING	2021UMT1828	NARESH KUMAR	Inactive	1	199	70	50	3.36

55

S No.	Department	Student id	Student Name	Status	No. of GAP pending semesters	Minimum Credits Required	Registered Credits	Earned Credits	CGPA
24	METALLURGICAL AND MATERIALS ENGINEERING	2022UMT1607	ANKIT SINGHANIA	Inactive	1	199	25	5	0.84
25	METALLURGICAL AND MATERIALS ENGINEERING	2022UMT1638	SAGAR YADAV	Inactive	1	199	25	0	0
26	METALLURGICAL AND MATERIALS ENGINEERING	2022UMT1697	MOHD ANAS	Inactive	1	199	25	0	0



दैनिकी  
संख्या  
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

**Annexure-H**

Sub: Approval of additional names of students eligible for award of degrees (UG, PG and Ph.D.) in 16<sup>th</sup> Convocaion scheduled to be held on 12<sup>th</sup> April 2023 (Wednesday).

The number of students of B.Tech./B.Arch./ M.Tech./M.Plan./M.Sc./MBA and Ph.D programs who have completed the requirments for the award of degree are as under:

Branch	Approved in 47 <sup>th</sup> Senate and 50 <sup>th</sup> BoG	Approved in 48 <sup>th</sup> Senate meeting	Approved in 49 <sup>th</sup> (Emergent) Senate meeting	Total Degree approved
Bachelor of Architecture	53	1	0	54
Bachelor of Technology	664	5	4	673
Master of Technology	403	6	3	412
Master of Planning	24	0	0	24
Master of Science	92	0	2	94
Master of Business Administration	49	1	2	52
Doctor of Philosophy	94	25	19	138
<b>TOTAL</b>	<b>1379</b>	<b>38</b>	<b>30</b>	<b>1447</b>

In addition above UG, PG and PhD degree recipients approved in 47<sup>th</sup>, 48<sup>th</sup> and 49<sup>th</sup> (Emergent) Senate meetings held on 26<sup>th</sup> September 2022, 10<sup>th</sup> February 2023 and 30<sup>th</sup> March 2023, following 05 students of Ph.D programme have completed the requirments for the award of PhD degree after 49<sup>th</sup> (Emergent) Senate meeting.

S.No.	ID No.	Name	Dept.	Date of Viva-Voce
1	2019REC9550	Girdhar Gopal	Electronics and Communication Engineering	3/28/2023
2	2017RME9086	Pal Manojkumar Ramechandra	Mechanical Engineering	3/31/2023
3	2019RBM9053	Aastha Dhoopar	Management Studies	4/5/2023
4	2018RMA9104	Tarun Kumar Chauhan	Mathematics	4/5/2023
5	2016RCI9030	Jerripotu Gopala Rao	Civil Engineering	4/5/2023

The above list is placed for kind approval of charman senate.

Submitted for kind approval.



दैनिकी  
संख्या  
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

*P. S. S.*  
Assisnat Registrar (Academic) 10/4/23

Deputy Registrar (Academic) *P. S. S.*  
10/4/23

Dean Academic *10/4/23*

*10/4/23* *10/4/23*

*10/4/23* *10/4/23*

Undergraduate Programmes

The intake/allocation of 888 seats for students from Rajasthan & other than Rajasthan states for the session 2023-24 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
<b>Total (A)</b>			<b>170</b>	<b>9</b>	<b>42</b>	<b>2</b>	<b>63</b>	<b>4</b>	<b>32</b>	<b>2</b>	<b>114</b>	<b>6</b>	<b>444</b>

*Bansidhar*  
Assistant Registrar (Academic)


*Rastor*  
Dy. Registrar (Academic)

*Shahjahan*  
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
<b>Total (A)</b>			<b>171</b>	<b>9</b>	<b>42</b>	<b>3</b>	<b>63</b>	<b>3</b>	<b>32</b>	<b>1</b>	<b>114</b>	<b>6</b>	<b>444</b>

  
Assistant Registrar (Academic)

  
Dy. Registrar (Academic)

  
Associate Dean (UG)

MINIT Jaipur Seat Matrix for Centralized Counselling for M.Tech./M-Plan Admission (CMMT Counselling 2023-24)

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
Department of Architecture & Planning - (AP)	Urban Planning-(UP)	Group 2	3	0	0	0	1	0	0	0	3	0	7	AI
Department of Civil Engineering-(CE)	Civil Engineering (Disaster Assessment and Mitigation)-(D4)	Group 1	6	0	1	0	3	0	1	0	4	0	15	AI
Department of Civil Engineering-(CE)	Environmental Engineering-(EV)	Group 1	6	1	2	0	2	0	1	0	4	0	16	AI
Department of Civil Engineering-(CE)	Structural Engineering-(SU)	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
Department of Civil Engineering-(CE)	Water Resources Engineering-(WR)	Group 1	6	0	1	0	2	0	2	0	4	1	16	AI
Department of Chemical Engineering-(CH)	Chemical Engineering-(CE)	Group 1	4	0	1	0	1	0	1	0	3	0	10	AI
Department of Chemical Engineering-(CH)	Chemical Engineering-(CE)	Group 2	2	0	1	0	1	0	0	0	1	1	6	AI
Department of Computer Science & Engineering-(CT)	Computer Science & Information Security-(CS)	Group 1	10	0	2	0	4	1	2	0	7	0	26	AI
Department of Computer Science & Engineering-(CT)	Computer Science & Engineering-(XG)	Group 1	10	0	2	0	4	0	2	0	7	1	26	AI
Department of Environment-(CY)	Renewable Energy-(RE)	Group 1	6	1	2	0	2	0	1	0	4	0	16	AI
Department of Disaster Mitigation and Management-(DM)	Earthquake Engineering-(EE)	Group 1	6	0	2	1	2	0	1	0	4	0	16	AI
Department of Electronics & Communication Engineering-(EC)	Embedded Systems-(EB)	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
Department of Electronics & Communication Engineering-(EC)	Electronics & Communication Engineering-(EF)	Group 1	8	0	2	0	3	0	2	1	5	0	21	AI
Department of Electronics & Communication Engineering-(EC)	VLSI Design-(VN)	Group 1	8	1	2	0	3	0	1	0	5	0	20	AI
Department of Electronics & Communication Engineering-(EC)	VLSI Design-(VN)	Group 2	2	0	1	0	1	0	0	0	2	0	6	AI
Department of Electronics & Communication Engineering-(EC)	Wireless & Optical Communication-(WO)	Group 1	6	0	2	0	2	0	1	0	4	0	15	AI
Department of Electrical Engineering-(EE)	Power Electronics & Drives-(PD)	Group 1	10	1	2	0	4	0	2	0	7	0	26	AI
Department of Electrical Engineering-(EE)	Power Systems Management-(PN)	Group 1	6	0	2	0	2	0	1	0	4	1	16	AI
Department of Electrical Engineering-(EE)	Power Systems-(PO)	Group 1	8	0	2	0	3	0	2	1	5	0	21	AI
Department of Mechanical Engineering-(ME)	Design Engineering-(DG)	Group 1	8	0	2	0	3	0	1	0	6	1	21	AI
Department of Mechanical Engineering-(ME)	Industrial Engineering-(IG)	Group 1	4	1	1	0	1	0	1	0	3		11	AI
Department of Mechanical Engineering-(ME)	Industrial Engineering-(IG)	Group 2	2	0	1	0	1	0	0	0	1	0	5	AI
Department of Mechanical Engineering-(ME)	Production Engineering-(PI)	Group 1	4	1	1	0	1	0	1	0	3	0	11	AI
Department of Mechanical Engineering-(ME)	Production Engineering-(PI)	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			165	8	42	2	61	3	31	2	111	5	430	

Note:- The Pwd seats are supernumery

*Bansari Kaur*  
Assistant Registrar(Academic)

*S. R. Sharma*  
Dy. Registrar(Academic)

*S. R. Sharma*  
19/11/24



MNIT Jaipur Seat Matrix for Centralized Counselling for M.Sc. Admission (CCMN Counselling 2023-24)

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
Department of Mathematics	Mathematics	Group 1	16	1	3	1	6	0	3	0	11	0	41	AI
Department of Physics	Physics	Group 1	16	1	4	0	6	0	3	0	10	1	41	AI
Total Seats			48	2	11	1	18	1	9	0	31	2	123	

Note:- The PwD seats are supernumerary

*Bunai Kishore*  
Assistant Registrar(Academic)

*Shobhar*  
Dy. Registrar(Academic)

*ADPH*

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

MINUTES OF THE 39<sup>th</sup> MEETING OF THE SUGB HELD ON  
March 28, 2023

The 39<sup>th</sup> Meeting of SUGB was held on March 28, 2023 at 3:30 PM in the Old Senate Hall, Prabha Bhawan.

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

Item No. 39-1.0	<p><i>To confirm the minutes of the 38th meeting of the SUGB held on January 17, 2023.</i></p> <p>The SUGB confirmed the minutes of 38th meeting of the SUGB held on January 17, 2023. It was pointed out that few students who had backlog in few courses of old scheme had registered for the courses of new scheme. It was also pointed out that the equivalence of courses of old &amp; new scheme was approved very recently. Hence, such registrations in which the students had registered for back papers during the odd semester 2022-23 shall be dropped on ERP. Few cases were reported in which the students had appeared in all the examination of odd semester 2022-23. The SUGB decided that no grade shall be awarded for registration of courses before the equivalence was approved by the Senate. Such students may register the back papers either during Even semester 2022-23 or during the supplementary exam.</p>																				
Item No. 39-2.0	<p><i>Items for Consideration.</i></p>																				
Item No. 39-2.1	<p><b>To consider the list of the students eligible for award of degree in UG programmes in the 16th Annual Convocation in addition of earlier list approved by SUGB</b></p> <p>Following 03 students have completed the requirements for award of UG degree recently.</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Student ID</th> <th>Name</th> <th>Total Earned Credit</th> <th>CGPA</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>2018UCE1213</td> <td>Ashish Kumar</td> <td>191</td> <td>5.53</td> </tr> <tr> <td>2.</td> <td>2018UCP1507</td> <td>Sujeet Kumar Sharma</td> <td>203</td> <td>6.38</td> </tr> <tr> <td>3.</td> <td>2018UME1178</td> <td>Himanshu Yadav</td> <td>197</td> <td>6.37</td> </tr> </tbody> </table> <p>The SUGB deliberated upon the matter and it was decided to approve the list of above 03 students in addition to total number of 723 eligible students approved earlier for award of degree in UG programmes during the 16<sup>th</sup> Annual Convocation-2022. The SUGB authorised the Chairman, SUGB to recommend cases of students who complete requirements for award of UG degree, if no SUGB meeting takes place after this meeting and before the convocation.</p>	S. No.	Student ID	Name	Total Earned Credit	CGPA	1.	2018UCE1213	Ashish Kumar	191	5.53	2.	2018UCP1507	Sujeet Kumar Sharma	203	6.38	3.	2018UME1178	Himanshu Yadav	197	6.37
S. No.	Student ID	Name	Total Earned Credit	CGPA																	
1.	2018UCE1213	Ashish Kumar	191	5.53																	
2.	2018UCP1507	Sujeet Kumar Sharma	203	6.38																	
3.	2018UME1178	Himanshu Yadav	197	6.37																	

*R. Shingji*

*Shandely*

<p><i>Item No. 39-2.2</i></p>	<p>To consider the case of UG students who were allotted MNIT Jaipur through JoSAA/CSAB 2022 and have not reported and/or have not deposited the balance fee and documents.</p> <p>The SUGB deliberated upon the case of 13 UG students and recommended for termination of the candidates from the institute roles who have not reported and/or have not deposited the balance fee and documents.</p>
<p><i>Item No. 39-2.3</i></p>	<p>To consider the proposal received from Department of DMS regarding approval for floating new Open Elective Courses for UG Students.</p> <p>After detailed deliberation the SUGB recommended the below mentioned 03 courses at S.No.1, 2 &amp; 4, as received from the Department of Management Studies for approval of the Senate. SUGB directed the Convener DUGC, Department of Management Studies and Department of Mechanical Engineering to discuss the courses for any overlaps between the syllabus of the proposed courses at S. No. 3 and 5 and courses that have already been approved. The resolution of the discussion shall be communicated to the Academic Section. The SUGB authorised Chairman SUGB to recommend these courses, for approval of the Senate.</p> <ol style="list-style-type: none"> <li>1. Team Building &amp; Leadership (3 credits; 3-0-0)</li> <li>2. Introduction to Financial Markets (3 credits; 3-0-0)</li> <li>3. Lean Six Sigma 4.0 (3 credits; 3-0-0)</li> <li>4. Labour Laws for Engineers (3 credits; 3-0-0)</li> <li>5. Mindful Living: Happiness, Well-being, and a Good Life (3 credits; 1-2-0)</li> </ol>
<p><i>Item No. 39-2.4</i></p>	<p>To consider to offer a compulsory course on standardization, for UG students, through the standardization Chair Professor at MNIT, Jaipur.</p> <p>After detailed deliberation the SUGB decided that the departments may decide to offer/float the course in IV/V Semester of their UG program and shall include the same in the new UG Scheme, being prepared.</p>
<p><i>Item No. 39-2.5</i></p>	<p>To review the progress regarding development of new UG scheme and Curriculum Development Workshop.</p> <p>After detailed discussion all members of SUGB agreed that there has already been a delay in conducting Curriculum Development Workshop. It was decided that one month may be allowed for the finalization of new scheme. Accordingly, the date for conducting Curriculum Development Workshop has been revised to 20.04.2023 and the date of submission of complete scheme with syllabus to the Academic Section for further processing and final approval of the Senate has been revised to 30.04.2023.</p>
<p><i>Item No. 39-2.6</i></p>	<p>To consider the possibility of creating two sections in each UG program which have more than hundred students.</p> <p>It was proposed that due to probable shifting of IIIT Kota to Kota and fitting of</p>

*R Sharma*

*Shardul*




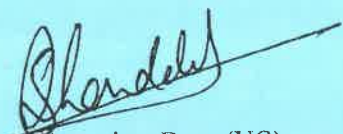
	furniture in few more class rooms of VLTC, more space is likely to be available for holding lectures. SUGB requested DUGC conveners to deliberate the proposal of creating two sections in each UG program which have more than hundred students, in the Departments.
<b>Item No. 39-2.7</b>	<p><b>To consider the cases of the students who have not deposited their semester fee and/or have not completed course registration.</b></p> <p>After detailed discussion SUGB decided following:</p> <ol style="list-style-type: none"> <li>1. For the IISemester students who have deposited their semester fee but not completed their course registration – Allowed for course registration without late registration fees within a week, from finalization of minutes of meeting.</li> <li>2. For the II Semester students who have not deposited fee – Fee to be paid along with late registration fee, except those cases which are under process.</li> <li>3. For the IV, VI, VIII (B.Tech./B.Arch.) and X (B.Arch.) semester students who have not completed their registration – SUGB recommended for termination of the students except those whose cases are under process. A warning email to be sent by the department before proceeding further to the concerned students and will display the list of such students on the notice board. Late registration fees to be charged from the student to be allowed to complete his pending registration.</li> </ol>
<b>Item No. 39-2.8</b>	<p><b>To consider the matter regarding Inactive UG Students who were not registered/absent for more than 2 semesters.</b></p> <p>SUGB recommended to the Senate for termination of the students who have been absent for more than 2 semesters from the Institute.</p>
<b>Item No. 39-2.9</b>	<p><b>To consider the matter regarding Inactive UG Students who were not registered/absent for 2 or less than 2 semesters.</b></p> <p>SUGB recommended to the Senate for termination of the student from the Institute who have not registered for odd semester 2022-23 and after that.</p>
<b>Item No. 39-3.0</b>	<b>Reporting Items</b>
<b>Item No. 39-3.1</b>	<p>To report the list of UG students permitted for internship during Academic Year 2022-2023 (Even Semester).</p> <p><i>Noted.</i></p>
<b>Item No. 39-4.0</b>	<b>Any other item with permission of chair.</b>
<b>Item No. 39-4.1</b>	<b>To consider Mr. Bhattu Saiteja (2018UME1560) eligible for award of degree in UG programmes in the 16th Annual Convocation in addition to earlier list approved by SUGB.</b>

*RShringi*

*Shandeh*

	In addition to total number of 723 eligible students approved earlier for award of degree in UG programmes during the 16 <sup>th</sup> Annual Convocation-2022, SUGB approved the name of Mr. Bhattu Saiteja (2018UME1560) student of Mechanical Engineering who completed the requirements for award of degree recently.
Item No. 39-4.2	<p><b>To consider the proposal received from the Department of Electronics and Communication Engineering regarding B.Tech. First year syllabus/scheme.</b></p> <p>SUGB requested to DUGC Convener, Electronics and Communication Engineering Department to review the contents of the course first with Electrical Engineering Department and sort out the matter. If matter is not sorted out as a combined course, then it may be placed before SUGB, as a fresh agenda.</p>
Item No. 39-4.3	<p><b>To consider the proposal received from the Department of Electronics and Communication Engineering to introduce Network Theory subject in 1<sup>st</sup> Semester.</b></p> <p>SUGB requested to DUGC convener, Electronics and Communication Engineering Department to review/discuss the proposal in the Curriculum Development Workshop and submit the scheme accordingly.</p>
Item No. 39-4.4	<p><b>To consider the proposal received from the Department of Electronics and Communication Engineering to introduce the tutorials for analytical subjects.</b></p> <p>SUGB requested to DUGC convener, Electronics and Communication Engineering Department to review/discuss the proposal in the Curriculum Development Workshop and submit the scheme accordingly.</p>

  
Chairman, SUGB

  
Associate Dean (UG)

The meeting was attended by following members:

S.No.	Name	Department
1.	Prof. Rajeev Shringi	Chairman, SUGB
2.	Prof. Jyotirmay Mathur	Dean, Academics
3.	Dr. Sumit Khandelwal	Associate Dean (UG)
4.	Dr. Anil Swarnkar	Convener DUGC, Department of Electrical Engineering
5.	Dr. Dipaloy Datta	Convener DUGC, Department of Chemical Engineering
6.	Dr. Sreekumar Vadakke Madam	Convener DUGC, Department of Metallurgical and Materials Engineering
7.	Dr. Srinivasa Rao Nelamarri	Convener DUGC, Department of Physics
8.	Dr. Nidhi Sharma	Convener DUGC, Department of Humanities and Social Science
9.	Dr. Reeta Singh	Representative, Convener DUGC, Department of Management Studies
10.	Dr. Harlal Singh Mali	Convener DUGC, Department of Mechanical Engineering
11.	Dr. Santosh Choudhary	Convener DUGC, Department of Mathematics
12.	Dr. Satyasai Jagannath Nanda	Convener DUGC, Department of Electronics & Communication Engineering
13.	Dr. Himanshu Arora	Representative, Convener DUGC, Department of Civil Engineering
14.	Dr. Anup Malik	First Year Class Coordinator-Special Invitee
15.	Ms. Sukriti Bohra (2019UEC1002)	Student Nominee

Following members couldn't attend the meeting:

S.No.	Name	Department
1.	Prof. Ravindra Nagar	Previous Chairman, SUGB
2.	Prof. Suja George	Associate Dean (PG)
3.	Dr. Nivedita Kaul	Nominee, Chairman Senate
4.	Dr. Ramesh Babu Battula	Convener DUGC, Department of Computer Science & Engineering
5.	Dr. Rina Surana	Convener DUGC, Department of Architecture and Planning
6.	Dr. Parul Mathuria	Convener DUGC, Centre for Energy & Environment
7.	Dr. Abbas Raja Naziruddin	Convener DUGC, Department of Chemistry
8.	Dr. Kamakshi Pandey	Convener DUGC, Material Research Centre
9.	Mr. Aryan Sharma (2020UAR1005)	Student Nominee

*Shardul*

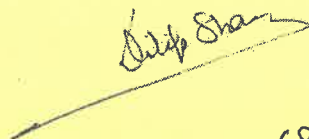


**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR****MINUTES OF THE 56<sup>th</sup> MEETING OF THE SPGB HELD ON  
April 06, 2023**

The 56<sup>th</sup> Meeting of SPGB was held on April 06, 2023, at 4:30 PM in the Old Senate Hall, Prabha Bhawan.

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

<b>Item No. 56-1.0</b>	<b><i>To confirm the minutes of 55<sup>th</sup> meeting of the SPGB held on February 02, 2023.</i></b>  The minutes of the 55 <sup>th</sup> meeting of the SPGB held on February 02, 2023 were circulated for comments. Since no comments were received, they were put up to confirm in the SPGB.  The SPGB noted and confirmed the minutes.
<b>Item No. 56-2.0</b>	<b><i>Items for Consideration.</i></b>
<b>56-2.1</b>	<b><i>To consider the proposal for revision of minimum qualification for admission to Ph.D. programme in Department of Centre for Energy and Environment.</i></b>  SPGB referred the proposal to the committee constituted for reviewing the PG and PhD Regulations manual for their comments.
<b>56-2.2</b>	<b><i>To consider the proposal for addition of an external joint supervisor of Ph.D. student Mr. Paras Garg 2021RME9075 after the comprehensive examination.</i></b>  SPGB, after detailed deliberation, referred the matter back to the Department seeking the 'explicitly defined need' of an additional external Co-supervisor as the third supervisor' as required, under the PG RR 9.1-(2), for the Ph.D. Supervision of Mr. Paras Garg (2021RME9075) after the comprehensive examination and state of art seminar
<b>56-2.3</b>	<b><i>To consider the proposal of the Department of Mathematics for approval of three new Program electives for M.Sc. (Mathematics).</i></b>  SPGB approved the following two program electives for M.Sc. (Mathematics): i. Computational Statistics for Data Science (3 credits) ii. Introduction to Bayesian statistics (3 credits)  The SPGB referred the proposed Program elective "Operations Research (3 credits)" back to the Mathematics department to redesign the course and contents, as there is already a Core course run by the Mechanical Department and a Program elective run by the Department of Chemical Engineering, with the same name. No two courses can be offered with the same title and similar content.



56-2.4	<p><b><i>To consider the proposal of New M. Tech. Program by Materials Research Centre.</i></b></p> <p>It was decided that the proposal may be sent to the Department for circulation to all other Departments/Centres/ faculty for their comments. It may be submitted again before the SPGB after incorporating the comments received from the departments, if any.</p>
56-2.5	<p><b><i>To consider the list of PG students for termination of enrolment who scored a CGPA less than 5.5 in the academic year 2021-22 and 2022-23.</i></b></p> <p>As per clause 8 of PG Regulations, SPGB approved the termination of enrolment of the students who scored a CGPA less than 5.5 in the academic year 2021-22 and 2022-23.</p>
56-2.6	<p><b><i>To consider the list of PG students absent without authorized leave for termination from the Program.</i></b></p> <p>As per clause 5.6 of PG Regulations, SPGB approved the termination of enrolment of PG students from the Program who had been absent without authorized leave.</p>
56-2.7	<p><b><i>To consider the case of PG students who were allotted MNIT Jaipur through CCMT/CCMN 2022 and have not reported and/or have not deposited the balance fee.</i></b></p> <p>SPGB approved the termination of students who had not reported or deposited the fees enrolled through CCMT/CCMN.</p>
56-2.8	<p><b><i>To consider late registration of part-time Ph.D. student of Department of Civil Engineering.</i></b></p> <p>SPGB decided to permit Mr. Vijay Anand (2021RCE9025) of the Civil Engineering Department to continue his registration with the withdrawal of the current semester. He may be permitted to deposit the fee within one week after the generation of fee chalan and intimation to the student.</p>
56-2.9	<p><b><i>To consider the Fees to be charged from the PG students who were given an opportunity to re-register in first semester and repeat all the courses.</i></b></p> <p>After detailed deliberation, SPGB decided that the Institute fee (similar to the case of semester withdrawal) should be charged to these students PG students who are given an opportunity to re-register in the first semester and repeat all the courses. The students may be permitted to deposit the Institute Fee within a week after the generation of fee chalan and intimation to the student.</p>
56-2.10	<p><b><i>To consider one Ph.D. Institute scholarship per semester.</i></b></p> <p>SPGB suggested no change in the current practice of permitting one PhD Institute scholarship candidate per academic year.</p>
56-2.11	<p><b><i>To consider the list of Ph.D. students proposed for termination from Ph.D. program.</i></b></p> <p>As per Clause No. 8-3(i), 8.3-(2), (5) and 4-(1) &amp; 5.6 of PG Rules &amp; Regulations, the SPGB approved the termination of the listed Ph.D. students.</p>

*Sub Secm*

*SPM*




56-2.12	<i>To consider the request of Mr. Kamlesh Yadav (2021PCW5485) M.Tech. III Semester to convert his M.Tech Program from Full Time to Part Time.</i>
	SPGB conditionally approved the request of Mr. Kamlesh Yadav (2021PCW5485). As a part-time candidate, he must deposit the required documents, including NOC within the specified time. His minimum duration to complete the Program will be 5 Semesters, as applicable to part-time students.
56-2.13	<i>To consider the request of Mr. Abhishek Chaturvedi (2020PTE5340) for late registration.</i>
	SPGB did not approve the request of Mr. Abhishek Chaturvedi (2020PTE5340) for late registration as he has already surpassed the maximum duration for the program and therefore approved his termination.
<b>Item No.</b> 56-3.0	<b>Reporting Items</b>
56-3.1	To note the list of Ph.D. students permitted for an extension of one Semester from January 2023 to June 2023.  Noted.
56-3.2	To note the list of Ph.D. students whose status converted from Full Time to Part Time/Off Campus.  Noted.
56-3.3	To note the list of Ph.D. students whose supervisors (Internal/External) are added/changed before the comprehensive examination.  Noted.
56-3.4	To note the list of Ph.D. students whose Semester withdrawal was permitted.  Noted.
56-3.5	To note the list of Ph.D. students permitted for research work outside the Institute etc.  Noted.
56-3.6	To note the list of Ph.D. students permitted for extension of the comprehensive examination.  Noted.

*[Signature]*

*[Signature]*

56-3.7	To note the list of PG students permitted for Internships in other Institute.  Noted.
56-4.0	<i>Any other item with permission of chair.</i>
56-4.1	<i>To clarify the weightage of MTE and ETE for M.Tech. dissertation part 2 (4<sup>th</sup> semester).</i>  SPBG decided to constitute a committee of the following members to give their recommendation to decide the mode of Mid-term evaluation of Dissertation part II and its weightage: 1. Dr. Yogesh Kumar Meena 2. Dr. Virendra Kumar Saharan
56-4.2	<i>To consider the proposal received from the Department of Humanities and Social Sciences to start a Post-Doctoral Research/ Fellowship in the area of Tech Policy and Public Administration (Full Time Fellows/Full Time Working Professional on Study leave/ Part Time Working professional).</i>  SPGB appreciated the proposal received from the Department of Humanities and Social Sciences to start a Post-Doctoral Research/ Fellowship. It was suggested that such provision should be extended to all the academic departments/units of the Institute. It was mentioned that though some post-doctoral fellows have earlier been permitted at the Institute, but no written provision is available. Hence, the matter was referred to the committee constituted to review and revise PG and Ph.D. rules for their recommendations.
56-4.3	<i>To consider the eligibility criteria for admission to Full-time scholar.</i>  SPGB referred the proposal to the committee constituted for reviewing the PG and PhD Regulations manual for their comments.
56-4.4	<i>To consider the matter received from Department of Electronics and Communication Engineering regarding Ph.D. Criteria.</i>  SPGB referred the proposal to the committee constituted for reviewing the PG and PhD Regulations manual for their comments.
56-4.5	<i>To consider the matter received from Department of Computer Science and Engineering to revise the Ph.D. admission process.</i>  SPGB referred the proposal to the committee constituted for reviewing the PG and PhD Regulations manual for their comments.





56-4.6	<p><i>To consider the early submission of Ph.D. Thesis (before 3 years) by Full Time Ph.D. student Mr. Ayush Meena ID: 2020RCE9521 registered in the Department of Civil Engineering.</i></p> <p>SPGB, after detailed deliberation, referred it back to the DPGC of the Department of Civil Engineering in order to explain explicitly how this matter is not a normal case, and to justify the exception requested, since the rules PG RR 9.5.2 mentions that 'The normal duration for submission of Ph.D. thesis will be three years'.</p>
56-4.7	<p><i>To consider the matter received from the Department of Metallurgical and Material Engineering regarding M.Tech. (Part-Time) student Mr. Vishal Bhaskar (ID No. 2020PMT5275) to allow registration in VI Semester.</i></p> <p>SPBG decided on the termination of enrolment of M.Tech. (Part-Time) student Mr. Vishal Bhaskar (ID No. 2020PMT5275) from the Institute roles.</p>
56-4.8	<p><i>To consider the recommendation of the DPGC of the Dept. of Electrical Engineering regarding 05 Ph.D. students registered under the supervision of Dr. Arun Kumar Verma, Assistant Professor who has joined IIT Jammu.</i></p> <p>SPGB did not approve to allow Dr. Arun Kumar Verma to remain the sole Supervisor of Ph.D. student Mr. Manikant Kumar (ID: 2019REE9069), whose synopsis is proposed to be submitted by May 2023. However, the matter is referred to the Senate for approval. SPGB recommended for the change of Supervisor for all five candidates as per the rules.</p> <p>It recommended that for all five students, the exemption may be given from rule P.G. RR 9.1 (9) which states that "In case there has been a change/addition in the Supervisor (s), the Ph.D. thesis will not be submitted earlier than one year from the date of such change" ,because the students may not be penalized if their performance is satisfactory and the Supervisor leaves the Institute for his own reasons.</p>
56-4.9	<p><i>To consider the list of 05 students eligible for award of degree in Ph.D programmes in the 16th Annual Convocation in addition of earlier list approved.</i></p> <p>SPGB approved the list of 05 students eligible for the award of degree in Ph.D. programmes.</p>
56-5.0	<p><i>Items for Ratification</i></p>
56-5.1	<p><i>To ratify the additional list of the students eligible for award of degree in UG, PG and Ph.D. programmes in the forthcoming 16th Convocation to be held on 12th April 2023.</i></p> <p>The SPGB noted &amp; ratified the same.</p>

  
Chairman, SPGB

  
Associate Dean (PG)



The meeting was attended by 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.	Dr. Vivekanand	Convener DPGC, Centre for Energy & Environment
6.	Dr. Virendra Kumar Saharan	Convener DPGC, Department of Chemical Engineering
7.	Dr. Vinay Agrawal	Convener DPGC, Department of Civil Engineering
8.	Dr. Yogesh Kumar Meena	Convener DPGC, Department of Computer Science & Engineering
9.	Dr. Praveen Kumar Agrawal	Convener DPGC, Department of Electrical Engineering
10.	Dr. Tarun Varma	Convener DPGC, Department of Electronics & Communication Engineering
11.	Dr. Preeti Bhatt	Convener DPGC, Department of Humanities and Social Science
12.	Dr. Divesh Kumar	Convener DPGC, Department of Management Studies
13.	Dr. Varun Jindal	Convener DPGC, Department of Mathematics
14.	Dr. Vibhuti Singh Shekhawat	Special Invitee

Following members could not attend the meeting:

S. No.	Name	Department
1.	Prof. Rajeev Shringi	Chairman, SUGB
2.	Prof. M.K. Shrimali	National Centre for Disaster Mitigation & Management
3.	Prof. Rakesh Jain	Ex-Chairman, SPGB
4.	Prof. Tarush Chandra	Convener DPGC, Department of Architecture and Planning
5.	Dr. Sumanta Kumar Meher	Convener DPGC, Department of Chemistry
6.	Dr. Nisha Verma	Convener DPGC, Material Research Center
7.	Dr. Dinesh Kumar	Convener DPGC, Department of Mechanical Engineering
8.	Dr. Vijay Navaratna Nadakuduru	Convener DPGC, Metallurgical and Materials Engineering
9.	Dr. Rahul Singhal	Convener DPGC, Department of Physics



## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

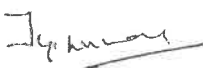
Minutes of 33<sup>rd</sup> Meeting of Academic Affairs Committee (AAC)

The 33<sup>rd</sup> meeting of Academic Affairs Committee (AAC) was held on 17 April, 2023 at 04:30 PM near the office of Dean Academic for discussing the various issues. The following members attended the meeting:


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

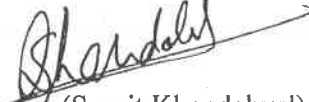
Items No.	Particular
33-1.1	<p><b>To consider the matter of Ms. Manisha Kumari 2019UEC1021 regarding waiver/dropping the open elective of 7<sup>th</sup> Semester.</b></p> <p>AAC discussed the matter and decided to allow to drop the open elective CST203-Data Structures and Algorithms (Credits 4) registered by Ms. Manisha Kumari 2019UEC1021 of 7<sup>th</sup> Semester. The AAC also advises the program advisors take full care to avoid such matters during the approval of course registration.</p>
33-1.2	<p><b>To consider the issue of the Ph.D. student's absence from Invigilation duties during the End-Term Examination of Odd Semester 2022-23 (I year UG) and Mid Term Examination of Even Semester 2022-23 (II, III, IV, V Year UG &amp; I, II Year PG), which took place from 20.02.2023 to 05.03.2023.</b></p> <p>AAC discussed the matter case by case and decided to deduct one day scholarship from the month of April 2023 for those students who have either not given any reason for absence or the given reason is not admissible to AAC. Academic Section will inform to the concerned Ph.D. Scholar through Email regarding deduction of one day scholarship amount.</p>
33-1.3	<p><b>To consider the matter of Mr. Shantanu Bajpai (2019UME1826) regarding Semester Withdrawal on Medical Ground.</b></p> <p>Mr. Shantanu Bajpai has taken 02 Semesters withdrawal i.e. in 06<sup>th</sup> and 07<sup>th</sup> Semester. Now he wants semester withdrawal in 8<sup>th</sup> semester also.</p> <p>As per the UG Regulations Manual, clause 11.4 "A student will be permitted for semester withdrawal only twice in the entire duration of his programme."</p> <p>Looking to the above clause AAC decided to refer the matter to the Senate for consideration.</p>

33-1.4	<p><b>To consider the matter for not charging late registration fee from the students whose family income is below 1 lac and having discrepancies in their documents.</b></p> <p>AAC discussed the matter and decided to waive-off the late registration fee from the students whose family income is below 1 lac and having discrepancies in their documents.</p>
33-1.5	<p><b>To consider the matter to entertain new applications for fee remission.</b></p> <p>AAC discussed the matter and decided not to entertain new applications, due to end of the financial-year and expiry of the last date for submitting the claim form.</p>
33-1.6	<p><b>To consider the Academic Calendar for Odd Semester 2023-24.</b></p> <p>AAC discussed the Academic Calendar for Odd Semester 2023-24 and finalized after some minor corrections.</p>
33-1.7	<p><b>To consider the revision in Academic Calendar 2022-23.</b></p> <p>AAC discussed the revision in Academic Calendar 2022-23 and finalized after some minor corrections.</p>
33-2.0	<p><b>Any other item with permission of chair.</b></p>

  
 (Jyotirmay Mathur)  
 Dean Academic

  
 (Suja George)  
 ADPG

  
 Prof. Rajeev Shringi  
 (Chairman, SUGB)

  
 (Sumit Khandelwal)  
 ADUG

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY  
Office of Dean Academic****Minutes of Unfair Means Committee Meeting held on March 16, 2023**

A meeting of the Unfair Means Committee was held on March 16, 2023 at 04:30 PM in the NKN-1, Prabha Bhawan, MNIT Jaipur. The meeting was attended by the following members:

1.	Prof. Jyotirmay Mathur	Dean, Academic
2.	Prof. Rajeev Shringi	Chairman SUGB
3.	Dr. Satish Kumar	Associate Dean (PG & Ph.D.),
4.	Dr. Sumit Khandelwal	Associate Dean (UG), Senate Nominee
5.	Dr. Sreekumar Vadakke Madam	DUGC Convenor, Department of Metallurgical and Materials Engineering

Following unfair means cases were reported and forwarded by the concerned course coordinator/invigilator/flying squads during the End-Term Examinations 2022-23 to the Unfair Means Committee. The Committee discussed cases individually in the meeting and resolution/recommendations of the committee are as under:

S.No.	Name of the student	Course details	Examination
1.	Arushi Gupta (2021UAR1166)	CET293 Surveying	3 <sup>rd</sup> Semester End-Term- Examination
2.	Pulkit Sharma (2021UMT1759)	MTT203 Introduction to Physical Metallurgy	3 <sup>rd</sup> Semester End-Term- Examination
3.	Rohan Saini (2021UMT1839)	MTT203 Introduction to Physical Metallurgy	3 <sup>rd</sup> Semester End-Term- Examination

All the students were called before the committee to give their clarification/comments about the unfair means used by them. The committee found that all the students were carrying their mobile phones and when they were caught by the concerned course coordinator/invigilator/flying squads the exam matter was opened in their mobile phones.

**Recommendation:** The committee decided that the End Term Examination of respective course of all the above three students' stands cancelled and will be awarded 'FP' grade. This decision is in line with the decisions taken earlier for similar cases.

It was decided that the information regarding indulging in unfair means by the students will be communicated to their parents. It was also decided that any such repeat offense by these students will attract severe penalty which may range up to expulsion (limited period/permanent)

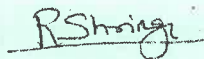


of the students from the Institute. Further, the decision of the committee will be communicated to all the students of the Institute.

The meeting was concluded with thanks to the chair.



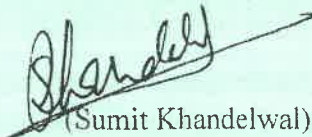
(Jyotirmay Mathur)  
Dean Academic



Prof. Rajeev Shringi  
(Chairman, SUGB)



Satish Kumar  
Associate Dean (PG & PhD.)



(Sumit Khandelwal)  
ADUG





## **Details of Proposed New Executive MBA (E-MBA) Program**

### **DEPARTMENT OF MANAGEMENT STUDIES, MNIT JAIPUR**

The Department of Management Studies was established in 1996 as a Centre of Management Studies and Industrial Collaboration under the self-finance scheme. It was upgraded to the status of a full-fledged academic department in 2004. Since its inception, DMS has played a seminal role in the growth of the corporate sector and management education in India. Its alumni occupy high places in the echelons of the corporate world. The Department has a rich pool of faculty with years of interdisciplinary research, teaching, and administrative experience. The faculty members at the DMS are equally competent in delivering 'quality training & learning experience' and in 'research & consultancy'.

### **DMS VISION**

To create a centre for imparting managerial education of international standards and conduct world-class research at the cutting edge of technology to meet the current and future challenges of technological development.

### **DMS MISSION**

- To create techno-managerial manpower for meeting the current and future demands of industry;
- To recognize education and research in close interaction with industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the Institute with sensitivity to social development and eye for opportunities for growth in the international perspective.

### **ABOUT THE EXECUTIVE MBA (E-MBA) PROGRAM**

There is an increasing need for quality management education among working professionals in the context of dynamic business scenarios and increasing reliance upon technology and data in the management of businesses. These working executives, though equipped with rich business insights and knowledge of the business process they are working on, can benefit immensely by developing a more comprehensive understanding of the overall business, management, industry, and economy. This can equip them much better in handling organizational challenges and furthering their respective careers. The E- MBA program can help them to:

- Enhance their management skills
- Develop skill sets to sail through the uncertainties and challenges of a global business environment

- Upgrade their managerial and analytical skills
- Fast-track their career
- Overall development of their professional and personal lives

### **Program Objectives**

DMS, MNIT Jaipur proposes to launch an E-MBA program to respond to the needs of working professionals who may lack a formal management education. E-MBA Program aims to develop managerial professionals who can meet emerging and unforeseen challenges of modern-day business. The specific objectives of the proposed E-MBA program are:

- Developing comprehensive understanding of business processes and organizations
- Understanding the impact of business processes within and beyond organizations
- Learning and imbibing the business dynamics for a continuously evolving and challenging global business scenario.
- Developing leadership skills for senior managerial positions
- To create digital dexterity for using emerging technologies

### **Program duration**

The proposed E-MBA program's minimum duration is four semesters, spread over two years. The maximum duration of the program is proposed as three years.

### **E-MBA PROGRAM SCHEME**

An exhaustive course curriculum workshop was organized to finalize the detailed course scheme for the E-MBA program. A committee of DMS faculty conducted a detailed study of various executive MBA or similar programs offered by the leading IITs, IIMs and other prominent B-Schools in the country to understand and compile a repository of the course structures. On the basis of this study a framework for the course structure was developed and presented for the consideration in the Curriculum Development Workshop for the program.

The Curriculum Development Workshop included, apart from the DMS faculty, experts from academia and industry who had detailed discussions on the course scheme, nature (core and elective) and distribution of courses and their content. The following details are the result of the curriculum development workshop:

- The proposed EMBA will normally be of four semesters spread over two academic years.
- The maximum duration to complete the program is six semesters/ three years.
- The specific dates of the course registration and other significant events will be as per the Academic Calendar issued by the Institute.
- E-MBA will have 80 credits spread over 2 years (04 semesters).

The detailed program scheme is as under (detailed course outline is attached as Appendix A):

#### **E-MBA First year:**

First year of E-MBA will comprise of 02 semesters and will have core courses from various functional areas of management.

The course scheme for the first year is directed at developing foundations for a general understanding of all functional areas of business, organization, structures, industry, economy at large, and cutting across the silos of specific functional areas.

The semester wise course scheme for the Year 1 is as follows:

**Semester 1:** In semester 1, all students will register in 6 program core courses.

Sr.	Course	Credits
1	Management Fundamentals for Global Business	03
2	Marketing Management:	03
3	Financial Management and Accounting	03
4	Human Capital Management	03
5	Data Analytics and Decision-Making	03
6	Project Management	03
<b>Total Credit of Semester 1</b>		<b>18</b>

**Semester 2:** Semester 2 will have 6 program core courses. In addition to the program core courses, the students will be required to appear for a Comprehensive Viva-voce examination.

The oral Comprehensive viva-voce examination will assess the overall understanding of the students at the end of Year 1 of their program. This comprehensive examination will be conducted by a panel of at least 3 faculty members with at least one member from outside the department/institute (preferably an industry expert).

Sr.	Course	Credits
1	Managerial Economics in Global Context	03
2	Leadership and Organizational Behavior	03
3	Operations Management	03
4	Entrepreneurship and Innovation	03
5	Negotiation and Conflict Resolution	03
6	Business IT Strategy and Transformation	03
7	Comprehensive Viva-Voce Examination	04
<b>Total Credit of Semester 2</b>		<b>22</b>

**E-MBA Second year:**

During the second year (Semesters 3 and 4) of the E-MBA program, the students will be required to opt for program electives in addition to few program core courses. The students will be required to opt for three program electives in the third semester and two in the fourth semester. The Department will offer a semester-wise bouquet of program elective courses from which the students will make their choices.

The objective of the courses in the Year 2 of the program will be on developing advanced skills related to specific aspects/functional areas of business and management.



The semester wise course scheme for the Year 2 is as follows:

**Semester 3:** In semester 3, students will be required to opt for 03 courses from a bouquet of program electives offered by the department. The student will also be required to register in one 01 program core course.

In addition, the student will be required to register for a Course of Independent Study, wherein the student will be required to undertake a business/industry problem and work independently to study it. The Department will assign a supervisor to each student as mentor for the course.

Sr.	Course	Credits
1	Business Strategy and Competitive Advantage	03
2	Elective 3.1	03
3	Elective 3.2	03
4	Elective 3.3	03
5	Course of Independent study	06
<b>Total Credit of Semester 3</b>		<b>18</b>

**Semester 4:** In semester 4, students will be required to opt for 02 courses from a bouquet of program electives offered by the department. Also, student will also be required to register in one 01 program core course.

In addition to above, the student will also be required to register for a Research Project, wherein the student will be required to undertake a research-based project to solve a business problem. The Department will assign a supervisor to each student as mentor for the course.

In addition to the courses and the project work, an oral Comprehensive viva-voce examination will also be conducted to assess the overall understanding of the students at the end their E-MBA program. This comprehensive examination will be conducted by a panel of at least 3 faculty members with at least one member from outside the department/institute (preferably an industry expert).

Sr.	Course	Credits
1	Corporate Governance and Ethics	03
2	Elective 4.1	03
3	Elective 4.2	03
4	Research Project	09
5	Comprehensive Viva-Voce	04
<b>Total Credit of Semester 3</b>		<b>22</b>

The overall summary of the scheme for E-MBA program is as under:

Semester	Program Core (Nos./Credits)	Program Electives (Nos./Credits)	Project/Research work (Credits)	Comprehensive Viva-Voce (Credits)	Total credits
1	6 / 18 credits	0	0	0	18
2	6/ 18 credits	0	0	4 credits	22



3	1/ 3 credits	3/ 9 credits	6 credits	0	18
4	1/ 3 credits	2/ 6 credits	9 credits	4 credits	22
<b>Total Program credits</b>					<b>80</b>

### Project/ Industry-study Linked Courses

In addition to the program core and elective courses in Year 2, the students will also have to register for one core course per semester which is dedicated to industry-linked study or research project.

In Semester 3 shall be Course of independent Study focusing on research related to industry specific problem. In semester 4 students will undertake a research project, either from the company they represent or select from a pool of projects proposed by the department. For these courses students will be assigned mentors individually to guide their studies/research.

### Specializations

The department will initially offer program electives from 04 specialization area for the students registered in the E-MBA program. These areas are Finance, Human Resource, Marketing, and Operations. The students can opt for the program elective courses from any area or combination of areas of their choice. The courses offered will be subject to a minimum number of students registering for that course as decided by the Department Faculty Board/Institute rules.

The area-wise bouquet of courses is listed as under:

<b>MARKETING</b>	<b>Credits</b>
Consumer Behaviour	03
Marketing of Services	03
Managing Marketing Communications	03
Managing Brands	03
Managing Customer Relationships	03
Marketing Analytics	03
Marketing for B2B Organizations	03
Managing Product Portfolios	03
Digital Marketing	03

<b>FINANCE</b>	<b>Credits</b>
Project and Infrastructure Finance	03
Financial Econometrics	03
Investment / Wealth Management	03
Behavioural Finance	03
Fixed Income Securities	03
Fintech	03
Entrepreneurial Finance	03
Supply Chain Finance	03
Corporate Restructuring	03

<b>HUMAN RESOURCES</b>	<b>Credits</b>
Organizational Change & Development	03
HR Analytics	03
Team Dynamics	03
Managing Creativity and Innovation	03
Competency Mapping & Assessment	03
Contemporary Talent Management	03
Employee Engagement	03
Diversity, Equity & Inclusion	03
Learning And Development	03

<b>OPERATIONS</b>	<b>Credits</b>
Advanced Operations Management	03
Supply Chain Management	03
Supply Chain Analytics	03
Lean Six Sigma	03
Operations Strategy for Competitive Advantage	03
Service Operations Management	03
Production Planning and Control	03
Sustainable Operations	03

## **PROGRAM PEDAGOGY**

The E-MBA program will be conducted in hybrid/blended mode with weekend classes every week. The lectures for the courses will be delivered in a combination of offline and online mode instructor driven sessions. (Simultaneous online streaming of the course will be done as per the convenience of students who could not join class in offline mode on a particular day)

The hybrid/blended learning mode of the program offers greater flexibility to working executives looking to enhance their skill sets. Often, working professionals have less time to devote to attending regular daily classes to attain higher education. The blended online/offline model will provide greater flexibility to the working professionals while not compromising on the benefits of face-to-face interactions with the faculty and fellow participants.

Normally, the students will be expected to devote 3 hours/week for a 3-credit course. This will include two hours of instructor-driven sessions and one hour of self-study per week for each 3-credit course. The self-study will include working on readings, assignments, case-studies, projects and other similar activities as designed by the respective course instructors.

### **Program Instructors/ Resource persons**

The courses in the E-MBA program will be taught by a mix of in-house regular and adjunct faculty members of the DMS and external experts from the subject domain. The external experts from the various departments of MNIT Jaipur, prominent academicians serving (or have served) in institutes of national and international repute, and industry experts will be invited for delivery of course contents. Such external experts may be assigned a full course, or may teach partial courses in collaboration with other faculty members (preferably not more than two). Visiting experts may also be invited to discuss specific topics as per the requirements of the courses.

For each course a teaching assistant will be assigned to coordinate with the course instructor(s). Such teaching assistants will be appointed from the PhD research scholars registered in DMS and availing a scholarship (either Institute or external).

### ***Honorarium to Instructors/ Teaching Assistants***

- **To Instructors:** As per institute norms for invited/expert lectures for a maximum of 30 hours per course.
- **To Teaching Assistants:** As PhD scholar availing any scholarship are expected to devote at least 8 hours per week for the Institute/Department work, no additional honorarium is to be paid for such teaching assistants.

## **ADMISSION TO THE E-MBA PROGRAM**

Admission to the MBA program will be conducted once a year as per the academic calendar of the Institute. The detailed selection process for an academic session will be specified along with the release of the Admission Notification for the program.

### Minimum eligibility for admission to the E-MBA program

The applicant seeking admission to the E-MBA program must have:

- Must have completed a bachelor's degree with at least 6.5 CGPA on a 10-point scale (or 60% only in case where percentages are awarded) or equivalent from a recognized university with a relaxation for SC/ST implying a minimum of 6.0 on a 10-point scale (or 55% only in case where percentages are awarded).

Additionally, the candidate must satisfy at least one of the following conditions:

- either be working in an organization or should be having a startup (registered for minimum two years),
- should have at least two years of full-time work experience.

### Selection Criteria

The selection for admission to the program will be based on merit list prepared on the basis of weighted criteria computed on the basis of following:

S. No.	Criterion	Maximum Point
<b>1. Academic Qualification</b>		10
Post graduation	a) PG Degree (Minimum 02 Year duration) : 05	
	b) PG Diploma (Minimum 01-year duration) : 03	
Graduation	a) $\geq$ CGPA 9.50 or 90.00% : 05	
	b) CGPA 7.50 - 9.49 or 70.00% - 89.99% : 04	
	c) CGPA 6.50 - 7.49 or 60.00% - 69.99% : 03	
	d) CGPA 6.00 – 6.49 or 55% - 59.99% : 02	
<b>2. Work experience</b>		20
a) 24-36 Months : 05		
b) 37-60 Months : 10		
c) More than 60 months : 20		
<b>Points based on nature of experience:</b>		
a) Operational level : (Point obtained) * 0.60		
b) Supervisory Level : (Point obtained) * 0.80		
c) Managerial level : (Point obtained) * 1.00		
<b>3. Statement of Purpose</b>		10
a) Clarity and coherence in aspirations : 3		
b) Relevance and alignment with E-MBA program : 3		
c) Originality and creativity : 2		
d) Language proficiency : 2		
<b>4. Performance in Entrance Test</b>		30
Score obtained in entrance test (100% is equal to 30 points)		
<b>5. Personal Interview</b>		30
Professional aptitude : 10		
Career Goal Clarity : 10		
Overall personality/ interpersonal skills : 10		
<b>Total points</b>		<b>100</b>



## ASSESSMENT AND EVALUATION

### Continuous Assessment

The performance of the participants in the E-MBA program will be evaluated on a continuous-assessment based system. Following is the distribution for various assessment/evaluation components.

1. **Mid Term Exam (MTE):** For assessing the performance of student in mid-semester and accordingly taking the corrective action to improve the performance of the students.
2. **End Term Exam (ETE):** For assessing the overall performance of the student in the course at the end of semester.
3. **Class work (CWS):** For the continuous assessment of the students in a course during the semester. Instructor will use cases, individual assignments, group assignments, course projects, live projects and others to continuously evaluate the progress of the student.

For theory courses, the relative weightage of the three components would be:

Theory Course	
Evaluation Component	Approved
CWS	20-30%
MTE	20-40%
ETE	30-50%

For non-theory courses, viz., Course of Independent study, Research Project and Comprehensive Viva-voce examinations, the performance of the students will be evaluated as Satisfactory/Unsatisfactory.

### Grading (Relative/ Absolute)

A student will be awarded a letter grade in each course she/ he is registered for, indicating his/ her overall performance in that course. These grades and corresponding grade points (on a 10-point scale) is given below. The following are the general guidelines for the award of grades:

- a. All evaluations of different components of a course announced in the course plan shall be done in marks for each student.
- b. The marks of various components shall be added to get total marks secured on a 100-point scale for theory courses.
- c. For any course, the statistical method shall be used for the award of grades with or without marginal adjustment for the natural cut-off. For courses where number of registered students is not more than 30, absolute method for award of grades will be adopted.
- d. The instructor will ensure coverage of all the contents of a course taught during the semester. The end semester examination question paper shall cover all the sections of the syllabus.



Statistical method for grading		
Lower Range of Marks	Grade Awarded (if $x_i$ falls in range)	Upper Range of Marks
Mean + 1.5 $\sigma$ $\leq$	AA	
Mean + 1.0 $\sigma$ $\leq$	AB	< Mean + 1.5 $\sigma$
Mean + 0.5 $\sigma$ $\leq$	BB	< Mean + 1.0 $\sigma$
Mean $\leq$	BC	< Mean + 0.5 $\sigma$
Mean - 0.5 $\sigma$ $\leq$	CC	< Mean
Mean - 1.0 $\sigma$ $\leq$	CD	< Mean - 0.5 $\sigma$
Mean - 1.5 $\sigma$ $\leq$	D	< Mean - 1.0 $\sigma$
F		< Mean - 1.5 $\sigma$

Here  $\sigma$  = Standard deviation, where  $x_i$  = marks of  $i^{\text{th}}$  student,  
Mean = arithmetic mean value and  $n$  = the number of students

Grades according to absolute marks	Range of Marks	Grade
90 - 100		AA
80 - 89		AB
70 - 79		BB
60 - 69		BC
50 - 59		CC
40 - 49		CD
35 - 40		DD

### Credit Points (SGPA/ CGPA)

The SGPA is an indicator of the overall academic performance of a student in all the courses she/ he has registered during a given semester.

Calculation of Semester Grade Point Average (SGPA)

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

Where,

- $C_i$  - Number of credits earned in the  $i^{\text{th}}$  course of Semester for which SGPA is to be calculated.
- $G_i$  - Grade point earned in  $i^{\text{th}}$  course.
- $i - 1, \dots, n$  represent the number of courses in which a student is registered in the concerned semester.

Similarly, the CGPA indicates the overall academic performance of a student in all the courses registered & successfully earned credits up to and including the latest completed semester/ summer term. It is computed in the same manner as the SGPA, considering all the courses (say,  $n$ ), and is given as follows:

Calculation of Cumulative Grade Point Average (CGPA)

$$CGPA = \frac{\sum_{j=1}^n C_j G_j}{\sum_{j=1}^n C_j}$$

Where,

- $C_j$  - Number of credits earned in the  $j^{\text{th}}$  course of Semester for which SGPA is to be calculated.
- $G_j$  - Grade point earned in  $i^{\text{th}}$  course;

- *j - 1,....n represent the number of courses in which a student was registered & has successfully earned credits upto the semester which CGPA is to be calculated.*
- *The CGPA calculation shall also incorporate in 'FA/FP' grades, however, once the student clears that paper the CGPA will be updated based on new grades.*

#### **Minimum academic requirements**

The minimum CGPA requirement for semester promotion and the award of the Postgraduate degree will be as follows:

- **For semester promotion**, CGPA must be equal or more than 5.5.
- **For award of degree**, CGPA must be equal or more than 5.5.

# Appendix A

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

<b>Department :</b>	<b>Department of Management Studies</b>
<b>Course Name :</b>	<b>Management Fundamentals for Global Business</b>
<b>Credits :</b>	<b>3 L - 3 T - 0 P - 0</b>
<b>Course Type :</b>	<b>Core</b>
<b>Prerequisites :</b>	<b>None</b>

**Course Contents**

This is a core course designed to provide participants with an overview of key business concepts and principles. This course explores the opportunities and challenges of doing business in a globalized world. It covers the foundational knowledge and skills that every business leader should possess, regardless of their industry or functional area.

Business and management – introduction and evolution, historical and contemporary schools of thought, eastern and western philosophy and management styles, globalization, manifestations of globalization, why firms internationalize, global value creation, business models and supply chains, markets and institutions, cross-border activities and collaboration, political, and cultural systems, managing multinationals – issues, challenges, environment and contexts, impacts on the society and environment, regulations and associations.

**Recommended Readings**

- Ricky W. Griffin (2021), “Fundamentals of management”, Cengage Learning.
- Abel Adekola, Bruno S. Sergi (2017) “Global business management: A cross-cultural perspective”, Routledge.
- Julian Gaspar, James Kolari, Richard Hise, Leonard Bierman, L. Murphy Smith (2016), “Introduction to global business: Understanding the international environment & global business functions”, Cengage Learning.
- Kazuyuki Motohashi (2015), “Global business strategy: Multinational corporations venturing into emerging markets”, Springer Nature.
- Sumati Varma (2019), “Fundamentals of International Business (4th Edition)”, Pearson.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Marketing Management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

Defining Marketing for the New Realities, Developing marketing strategies and plan, Creating Long-Term Loyalty Relationships, Analysing Consumer Markets, Analysing Business Markets, Tapping in to Global Market, Identifying Market Segments and Targets, Crafting the Brand Positioning, Addressing Competition and Driving Growth, Setting Product Strategy, Designing and Managing Services, Pricing Concepts for Establishing Value, Designing and Managing Integrated Marketing Communication Plan, Managing Integrated Marketing Channels, Managing a Holistic Marketing Organization for the Long Run.

**Recommended Readings**

- Kotler, P. and Keller, K.L. (2016) Marketing Management, 15th edition, Pearson Education.
- Paul Baines, Chris Fill, Kelly Page & Piyush Kumar Sinha (2013) Marketing Management, 1st edition, Oxford University Press.
- Ramaswamy and Namakumari (2018), Marketing Management: Indian Context Global Perspective, Sage Publication.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Financial management and accounting  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

Introduction to Financial Management; Emerging roles of financial managers in India; Time Value of Money: Future Value; Present Value, Annuity, Perpetuity; Leverages and Cost of Capital: EBIT-EPS analysis; Cost of capital; Techniques of Capital Budgeting; Management of Working Capital; Dividend Policy and Capital Structure; Introduction to Financial accounting; Material & Labour Costing; Overheads; Introduction to Management Accounting; Marginal Costing and Break-Even Analysis.

**Recommended Readings**

- Khan M. Y. and Jain P. K. (2018). Financial Management, McGraw Hill
- I. M. Pandey. (2016). Financial Management, Vikas Publishing House
- Richard A. Brealey, Stewart Myers and Franklin Allen. (2013). Principles of corporate finance, McGraw Hill.
- Prasanna Chandra. (2019). Financial Management Theory and Practice, McGraw Hill. Shashi K. Gupta, Financial Management, Kalyani Publications.
- Cooper, R., & Kaplan, R. S. (2004). Design of cost management system, 2nd edition. New Jersey: Prentice Hall.
- Zvi Bodie; Alex Kane; Alan J. Marcus; Pitabas Mohanty (2019) Investments, 11th Edition Tata McGraw Hill Publishing Co Ltd.
- Khan and Jain, "Management Accounting Text Problems & Cases", Tata McGraw Hill Publishing Co Ltd.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Human capital management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

From administrative function to Human Capital. New trends on the job market and in the organizations. The new role of technology; Strategic HRM – basic models; HRM processes and measurements of their effectiveness; Human resource management strategy and analysis; Recruitment, Employee testing and selection, Adaptations; Performance appraisal and management; Compensation; Motivational system and development; Approaches to human capital effectiveness; CSR and employee well-being

**Recommended Readings**

- M. Armstrong, Armstrong's Human Resource Management Practice: A Guide to People Management. Kogan Page, 2010.
- J. Ingham, Strategic Human Capital Management: Creating Value through People, B T, 2007.
- Baron. M. Armstrong, Human Capital Management: Achieving Added Value through People, Kogan Page 2007.
- Dessler, G. and Varkkey, Biju (2019) Human Resource Management (15th ed.), Pearson
- DeCenzo, D. A., & Robbins, S. P. (2016) Fundamentals of Human Resource Management (12th edition), John Wiley & Sons
- Rao, V.S.P.(2010) Human Resource Management, 3rd Edition, Excel books
- Mello, J. A. (2014) Strategic Human Resource Management, 4th Edition, Cengage learning

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Data Analytics and Decision making  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

This course will provide executives with the foundational knowledge and skills needed to effectively analyze data and make informed decisions. The course will cover basic statistical concepts, data visualization techniques, and data analysis tools. Students will also learn about data-driven decision-making processes and how to integrate data into their decision-making frameworks.

Broad Topics will include: Introduction to Data Analytics and Decision Making; Data Collection and Preparation; Exploratory Data Analysis & Data Visualization; Probability & Decision-making under uncertainty; Making Statistical inferences; Statistical modeling for business problems.

**Recommended Readings**

- Albright, S.C. and Winston, W. L. (2021) Business Analytics: Data Analysis and Decision Making, 6th Edition, Cengage Learning.
- Levin, D. M., Stephan, D. S., and Sazabat, K.A. (2017) Statistics for Managers Using Microsoft Excel, 8e, 8th Edition, Pearson.
- Camm, J. D., Cochran, J. J., Fry, M. J., Ohlmann, J. W., & Anderson, D. R. (2016) Essentials of Business Analytics, Cengage Learning.
- Sharda, R., Delen, D. and Turban, E. (2019) Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4th Edition, Pearson
- Kumar, U. D. (2017) Business Analytics: The Science of Data - Driven Decision Making, Wiley



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Entrepreneurship and Innovation  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

This course will focus on developing an entrepreneurial mindset and fostering innovation within organizations in light of the demands of the VUCA world.

Introduction to Entrepreneurship; Entrepreneurial Process; Opportunity Identification, Idea Generation and Evaluation; Team-Building, Leadership; Business Plan and Model; Finance/Funding/Valuation of a new company; Sales/Marketing; Company Growth, Acquisitions, and Exit Strategies; New Venture Feasibility Study, Intellectual Property and Corporate Law.

Creativity, Invention and Innovation in Organizations; Strategies and Models for Building Innovative Organizations, Identifying and Defining Problems, Different Thinking Types, Tools for Design, Prototyping, Managing Innovation, Fostering Innovation among Entrepreneurs.

**Recommended Readings**

- Tim Mazzarol, Sophie Reboud (2021), "Entrepreneurship and Innovation: Theory, Practice and Context", Springer.
- Jay Mitra (2020), "Indian Entrepreneurship: A Nation Evolving", Springer Nature.
- Jay Mitra (2019), "Entrepreneurship, innovation and regional development: an introduction", Routledge.
- Peter Drucker (2014), "Innovation and entrepreneurship", Routledge.

Proposal for Executive MBA (E-MBA) Program

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Negotiation and Conflict Resolution  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

Understanding Negotiation & bargaining process, phases in the negotiation process, negotiation scenarios: win-win, win-lose, lose-win, lose-lose; models in Negotiation; Negotiation styles, negotiating strategies and tactics for conflict resolution, the role of outside actors in negotiations, Golden rules for negotiation, nature of conflict, conflict management and resolution styles and strategies.

**Recommended Readings**

- Beverly DeMarr and Suzanne de Janasz (2013). Negotiation and Dispute Resolution: Pearson New International Edition
- Allan Barsky (2017). Conflict Resolution for the Helping Professions: Negotiation, Mediation, Advocacy, Facilitation, and Restorative Justice, Third Edition, OXFORD University Press, ISBN: 9780199361182

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Business IT Strategy and Transformation  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

This course will provide an understanding of the role of information technology (IT) in modern organizations and the importance of aligning IT strategies with business goals. The course will cover topics such as IT governance, enterprise architecture, digital transformation, and IT project management. Students will learn how to develop and implement IT strategies that enable organizations to achieve their strategic objectives.

Broad Topics will include: Introduction to IT Strategy and Transformation; Understanding the role of IT in modern organizations; Aligning IT strategy with business goals; Key challenges in IT strategy and transformation; IT risk management; The impact of digital transformation on organizations; Managing digital transformation projects.

**Recommended Readings**

- McKeen, J.D. and Smith, H.A. (2015) IT strategy: issues and practices, 3rd Edition, Pearson
- Rogers, D. L. (2016) Digital Transformation Playbook: Rethink Your Business for the Digital Age, Columbia Business School Publishing
- HBR's 10 Must Reads on Leading Digital Transformation, Harvard Business School Publishing
- Merkow, M. S. and Breithaupt, J. (2014) Information Security: Principles and Practices, 2nd Edition, Pearson
- Laudon, K. C. and Traver, C. G. (2019) E-Commerce: Business, Technology, Society, 13th Edition, Pearson
- Sharan, N. and Khosla, T. (2018) Demystifying Digital Transformation : A Practitioner's Companion, Notion Press

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

<b>Department :</b>	<b>Department of Management Studies</b>
<b>Course Name :</b>	<b>Business Strategy and Competitive Advantage</b>
<b>Credits :</b>	<b>3 L - 3 T - 0 P - 0</b>
<b>Course Type :</b>	<b>Core</b>
<b>Prerequisites :</b>	<b>None</b>

**Course Contents**

This course will focus on developing a strategic mindset and understanding how companies can gain a competitive advantage in their industries.

Introduction to strategy – meaning, dimensions of strategic decisions and types of strategies, business models, strategic management process – formulation, implementation and evaluation, strategic management theories, identifying and analyzing firm's resources, capabilities and core competencies, industry analysis and competitive positioning, environmental scanning and PESTEL analysis, strategic business units, key frameworks and matrices (value chain analysis, five forces framework, generic strategies, SWOT analysis, TOWS matrix, Ansoff matrix, GE matrix, McKinsey framework, vision, mission & objectives), internal and external growth strategies, strategies for competing in a global market, cross country differences, and strategic advantage of nations, sustainability as a business strategy, balanced scorecard, blue ocean strategy, fortune at the bottom of the pyramid, strategy for innovation.

**Recommended Readings**

- Wheelen, T.L., Hunger, JD and Rangarajan, K., “Concepts in Strategic Management and Business Policy”, Pearson Education.
- Jauch, LR and Glueck, WF, “Business Policy and Strategic Management”, Frank Brothers and Co., New Delhi.
- Rita Gunther McGrath, Alex Gourlay (2013), “The end of competitive advantage: How to keep your strategy moving as fast as your business”, Harvard Business Review Press.
- Claude Diderich (2019), “Design thinking for strategy”, Cham, Switzerland: Springer International Publishing.
- Prahalad, C.K., “The Fortune at the bottom of the pyramid”, Pearson Education.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Corporate Governance and Ethics  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Core  
**Prerequisites :** None

**Course Contents**

Introduction to Ethics, Ethical Dilemmas and Decision-making; Investors' rights, privileges, problems, and protection; Ethics in Human resource management; Ethics in production and customer service, Marketing ethics, Ethics of consumer protection; ethical issues in accounting and financial management; Environmental ethics; Ethics of IT; CSR for sustainable development, Future of Indian CSR; CSR reporting; Corporate Governance; Contemporary corporate governance situation and the Indian Scenario.

**Recommended Readings**

- Fernando, A. C. (2018). Corporate Governance: Principles, Policies and Practices. 3rd Edition. Pearson.
- Shaw, W. H (2016). Business Ethics: A Textbook with Cases. 9th Edition. Cengage Learning.
- Ferrell, O. C. and Fraedrich, J. (2016). Business Ethics: Ethical Decision Making & Cases. 11th Edition. Cengage Learning.
- Hartman, L. P. and Chatterjee, A. (2006). Perspectives in Business Ethics (SIE). 3rd Edition. McGraw Hill
- Fernando, A. C. (2012). Business Ethics and Corporate Governance. 2nd Edition. Pearson.
- Cullen, J.G. (2022). Business, Ethics and Society: Key Concepts, Current Debates and Contemporary Innovations. Sage.
- Chandler, D. (2017). Strategic Corporate Social Responsibility: Sustainable Value Creation. 4th Edition. Sage.
- Paleri, P. (2020). Corporate Social Responsibility: Concept, Cases and Trends. Cengage.

**Area Elective Courses: MARKETING**

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Consumer Behavior  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Technology driven consumer Behavior, Segmentation, targeting and positioning, Consumer motivation and personality, Consumer perception, Consumer learning, Consumer attitude formation and change, Persuading consumers, From print and broadcast advertising to social and mobile, Reference group and word of mouth, The family and its social standing, Culture's influence on consumer Behavior, Consumer decision making and diffusion of innovation, Consumer Behavior in Online Era, Consumerism.

**Recommended Readings**

- Leon G. Schiffman, Joseph Wisenblit, S. Ramesh Kumar (2015) Consumer Behavior, 11th Edition, Pearson Education
- Roger D. Blackwell, Paul W. Miniard, James F. Engel, Zillur Rahman (2018), Consumer Behavior, 10th Edition, Cengage
- Mothersbaugh and Hawkins, (2016) Consumer Behavior: Building Marketing Strategies, 13th Edition, McGraw Hill

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Marketing of Services  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction of Services, The Gaps Model of Service Quality, Consumer behavior in services, Consumer expectations, Consumer perceptions of service, Understanding expectations and perceptions through marketing research, Building customer relationships, Service Recovery, Service development and design, Customer-defined service standards, Physical evidence and the servicescape, Employees role in service delivery, Customers' roles in service delivery, Delivering service through electronic channels, Managing demand and capacity, Integrated services marketing communications, Pricing of services, The financial and economic effect of service

**Recommended Readings**

- Zeithaml, Valarie A. and Mary Jo Bitner (2015), Services Marketing: Integrating Customer Focus Across the Firm, 6th Edition, McGraw-Hill
- Lovelock, C. H. and Wirtz, J. (2016) Services Marketing: People, Technology, Strategy, 7th Edition, Pearson India
- Bateson and Hoffman (2018) Service Marketing: Concepts, Strategies, and Cases, 5th edition, Cengage Learning

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Managing Marketing Communication  
**Credits :** 3 L - 3 T - 0 F - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Various models of communication; elements of marketing communication and their role in marketing; need for integrating marketing communication elements; Influence of IMC on consumer behaviour; IMC process – Establishing Objectives and budgets for IMC, Planning for media, source, and message; Evaluating IMC strategies; Social, Legal, and Ethical Issues in IMC, Creativity, and creative execution.

**Recommended Readings**

- Clow, K. E., & Baack, D. (2013) Integrated advertising, promotion & marketing communications, 6th Edition, Pearson Education.
- Belch, G. E., Belch, M. A. & Purani K. (2017) Advertising & Promotion: An Integrated Marketing Communication Perspective (SIE), 9th Edition, McGraw Hill Education
- Schultz, D. E., Tannenbaum, S. & Lauterborn, R. E. (2000) Integrated Marketing Communications: Putting It Together & Making It Work, McGraw-Hill



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Managing Brands  
**Credits :** 3    L - 3    T - 0    P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Brands – Core concepts, challenges, and opportunities; developing a competitive frame of reference for brand management, Brand equity and its sources, Approaches and models of measuring brand equity; Managing brand elements, Planning marketing communication and strategies for managing brands, managing secondary brand associations and brand extensions, Managing brands over time and geography, Contemporary issues in brand management.

**Recommended Readings**

- Keller, K. L., Parameswaran, M. G. P. & Jacob I. (2015) Strategic Brand Management: Building, Measuring, and Managing Brand Equity, 4th Edition, Pearson Education India
- Kapferer, J. N. (2012) The New Strategic Brand Management: Advanced Insights and Strategic Thinking (New Strategic Brand Management: Creating & Sustaining Brand Equity), 5th Edition, Kogan Page
- Sengupta, S. (2005) Brand Positioning: Strategies for Competitive Advantage, 2nd Edition, McGraw Hill Education
- Trott, S. & Sople, V. V. (2016) Brand Equity: An Indian Perspective, PHI Learning

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Managing Customer Relationships  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Relationship approach to managing customers and core premises; Managing customer value expectations and customer perceived value; Customer valuation metrics – Traditional and contemporary; Managing customer lifecycles; Portfolio approach to managing customer relationships; Managing customer experiences and journeys; Managing customer relationships in digital ages; Contemporary issues in managing customer relationships.

**Recommended Readings**

- Buttle, F. & Maklan S. (2015) Customer Relationship Management: Concepts and Technologies, 3rd Edition, Routledge.
- Godson, M. (2009) Relationship Marketing, Oxford University Press
- Greenberg, P. (2017) CRM at the Speed of Light, 4th Edition, McGraw Hill Education
- Dyche, J. (2006) The CRM Handbook, 1st Edition, Pearson Education
- Payne, A. (2005) Handbook of CRM: Achieving Excellence through Customer Management, Butterworth-Heinemann
- Sheth, J. N., Atul, P. & Shainesh, G. (2017) Customer Relationship Management: Emerging Concepts, Tools and Applications, McGraw Hill Education

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Marketing Analytics  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Foundation of marketing research and data analysis, Marketing Models and Role of modelling in marketing decision making; Describing and visualizing marketing data; Comparing data samples; Finding and assessing associations; Forecasting and predictive analytics; Choice modelling; Analysis of multi-dimensional consumer behaviour; Classification and segmentation analysis, Trade-off analysis and developing utility functions, Price optimization, Perceptual mapping.

**Recommended Readings**

- Malhotra, N. K., Dash, S. (2015) Marketing Research, 7th Edition, Pearson Education
- Winston, W. L. (2014) Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wiley
- Bendle, N. T., Farris, P. W., Pfeifer, P. E. & Reibstein, D. J. (2016) Marketing Metrics: The Manager's Guide to Measuring Marketing Performance, 3rd Edition, Pearson Education
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2014) Multivariate Data Analysis, 7th Edition, Pearson Education
- Tabachnick, B. G. & Fidell, L. S. (2017) Using Multivariate Statistics, 6th Edition, , Pearson Education

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Marketing for B2B organizations  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Environment of Business Marketing, Organizational Buying Behavior, Customer Relationship Strategies for Business Market, Segmenting the Business Market and Estimating Segment Demand, Business Marketing Planning: Strategies Perspectives, Managing Product for Business Market, Managing Services for Business Market, Delivering value in B2B context: Developing an optimal sales proposition, Managing Business Marketing Channels, Pricing Strategies for Business Markets, Business Marketing, Marketing Performance Management, Business to Business Branding, Market research in B2B context.

**Recommended Readings**

- Hutt, Sharma, and Speh (2014) B2B Marketing A south Asian Perspective, 11th edition, Cengage Learning
- Ellis and Sarkar (2015) Business to Business Marketing: Relationship, Networks, and Strategies, Asian edition, Oxford University Press
- Vitale, Giglierano, and Pfoertsch (2011) Business to Business Marketing: Analysis and Practice, 1st edition, Pearson Education



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Managing Product Portfolios  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Product Management - Challenges, Issues & Opportunities; Product classification; Product platforms; Product line strategies; New Product Development strategy; Applying Portfolio thinking in managing products; Product Lifecycle Management – Managing Commercialization, Growth and Maturity; Product elimination.

**Recommended Readings**

- Baker, M. & Hart, S. (2008) Product Strategy and Management, 2nd Edition, Pearson Education
- Gorchels, L. (2011) The Product Manager's Handbook, 4th Edition, McGraw-Hill Education
- Lawley, B. & Schure P. (2017) Product Management For Dummies, Wiley.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Digital Marketing  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Digital marketing – core concepts; Digital marketing mix; Digital business models; Integrating digital strategy with marketing strategy; Digital Marketing plan; Understanding consumer behaviour in digital environments; Digital Marketing Tools; Social media marketing; Designing digital experiences; Evaluating digital marketing strategies; Challenges, Issues & Opportunities in digital marketing

**Recommended Readings**

- Chaffey, D. & Smith P. R. (2017) Digital Marketing Excellence (SIE), 5th Edition, Taylor & Francis
- Bhatia, P. S. (2017) Fundamentals of Digital Marketing, 1st Edition, Pearson Education
- Dodson, I. (2016) The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns, 1st Edition, Wiley
- Rayan, D. (2016) Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, 4th Edition, Kogan Page

## HUMAN RESOURCES

### MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**Department :** Department of Management Studies  
**Course Name :** Organization change and development  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

#### Course Contents

Understanding Organizational Processes and Change; Understanding System, Structure and Design; Organizational Effectiveness and Excellence; Managing Organizational change; Power, leadership and organizational change; Technology management; Attitude measurement for change management; Change through Performance Management; Organizational Culture and change; Nature of Organizational Development; Organizational Diagnosis and Development; Organizational Development Interventions and Strategies; Approaches and Models; Knowledge Management and Change; Change Management Strategies.

#### Recommended Readings

- Brown, Donald R. and Harvey, Donald (2005 ) Organizational Development, 7th Edition, Pearson
- Bhattacharyya, D.K. (2015) Organizational Change and Development, Oxford Higher Education
- Raina, Ratan, (2018) Change Management and Organizational Development, Sage Texts

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** HR Analytics  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Reinforcement of HR strategy with HR analytics, Critical HR decision- making and people analytics; Predictive HR analytics; Steps for aligning HR analytics with business goals and strategies, HR analytics framework and models, Application of HR and predictive analysis; HR Business Processes and HR Analytics; HR optimization through HR analytics; Performing Root Cause Analysis; HR predictive Modeling and the future of HR Analytics.

**Recommended Readings**

- Nishant Uppal (2020). Human Resource Analytics: Strategic Decision Making. Pearson.
- Manish Gupta, Pratyush Banerjee and Jatin Pandey (2019). Practical Applications of HR Analytics. SAGE Publications India Pvt Ltd; First edition
- Soundararaja, R. and Singh. K. (2016). Winning on HR Analytics: Leveraging Data for Competitive Advantage. First Edition. Sage Publications India Pvt Ltd.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Team Dynamics  
**Credits :** 3    L - 3    T - 0    P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction to teams and groups, understanding group processes and group dynamics, Theories of Group Dynamics, Leadership and Diversity, team work, building the teams, Individual and Group Assessment, Middle Stage Skills, Intervention with Individuals and the Group Task, Evaluating and rewarding Group Work.

**Recommended Readings**

- Robbins, S.P. Judge, T.A. & Vohra, N., "Organizational Behavior," 18th Ed, Pearson Education. (2019)
- Cameron, K.S. & Spreitzer, G.M., "The Oxford Handbook of Positive Organizational Scholarship," Oxford Handbooks. (2012)
- Greenberg, J. & Baron, R., "Behavior in Organizations," 10th Ed, Pearson-Prentice Hall. (2009)
- Levi, Daniel., "Group Dynamics for Teams", 5th Ed, SAGE Publications. (2014).
- Haldar, Uday Kumar( 2010) Leadership and Team Building, Latest edition, Oxford University Press India.
- Mears, Peter and Voehl, Frank, (1994) Team Building, Latest edition, Taylor and Francis Inc.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Managaing Creativity and Innovation  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Defining problem; An introduction to critical thinking; Creativity, creative abilities, creativity vs innovation; data gathering and problem identification; problem-solving and decision-making; perceptual blocks, emotional blocks, cultural blocks, environmental blocks, and Intellectual and expressive blocks; the creative problem solving process; working in groups and leadership; brainstorming; The 'common-sense' (rational) approach; systems thinking; soft systems thinking; complicated problems; Comparative evaluation of the strategies; The ideal problem solving system?; Encouraging and managing creativity; Management of innovation in the organization. Creative work behaviors, innovation competencies.

**Recommended Readings**

- Proctor, T. (2018). Creative Problem Solving for Managers: Developing Skills for Decision Making and Innovation. 5th Edition. Routledge
- Hicks, J. (2004). Problem Solving in Business and Management. 2nd Edition. Cengage Learning.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Competency Mapping and Assessment  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Concepts of Competence, The Interface between Competence and Competency, Competency Management System; Types of competencies; Development of the Personal Competency Framework; Issues Related to Developing Competency Models; Stages in Design of competency model and Competency Gap Analysis; Competency Mapping and Assessment Centres; Design of assessment center, Use of psychometric testing in assessment center; Competency mapping and Integration of Competency Based HR Systems; Leadership Assessment matrix, Competency Model for various HR roles.

**Recommended Readings**

- Sanghi, S. (2016). The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations. 3rd Edition. Sage Publications India Private Limited.
- Sharma, R. R. (2002). 360 Degree Feedback, Competency Mapping and Assessment Centres: For Personal and Business Development. McGraw-Hill Education (India) Pvt Limited.
- Shermon, G. (2004). Competency Based HRM. First Edition. Tata McGraw Hill India.
- Barnfield, H. and Lombardo, M. M. (2014). FYI: For Your Improvement - Competencies Development Guide. 6th Edition. Amazon.com.
- Shermon, G. and Shermon, A. (2017). Talent Assessments - A Manual of Competency Based Assessment Development Tools. Lulu.com

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Contemporary Talent Management  
**Credits :** 3    L - 3    T - 0    P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

An overview of talent management; Talent Inventory-succession planning-developing plan; Strategic talent management: Talent identification and business alignment-performance management & development; Proactive Talent Retention; building high performance teams; Developing core competencies (organizational, functional and leadership competencies); Valuing diversity and inclusion and various issues of performance management; Succession planning; Employee engagement and talent retention; Current trends in Talent management – Recent trends.

**Recommended Readings**

- Berger Lance, Dorothy. Talent Management Handbook: Creating a Sustainable Competitive Advantage by Selecting, Developing, and Promoting the Best People, McGraw-Hill Education.
- The Talent Management Handbook: Creating Organizational Excellence by Identifying, Developing and Promoting Your Best People by Lance Berger and Dorothy Berger, McGraw-Hill. ISDN-978125983554. Publication date: 2017.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Employee Engagement  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

An overview of employee engagement and empowerment; role of motivation theories in employee engagement; Elements and framework of engagement; Consequences of engagement and role of top managers in employee engagement; Recent trends in engagement; Best practices – key improving performance; impact on organisation performance & engagement strategies; Drivers of Employee Engagement - Recent Trends.

**Recommended Readings**

- Christopher Rice & Fraser Marlow, The Engagement Equation: Leadership Strategies for an Inspired Workforce.
- Cotton, J. L. – Employee Involvement: Methods for improving performance and work attitudes. CA: Sage.
- Dale, H. Besterfield, Carol, Besterfield, Glen, H. Besterfield & Mary Besterfield – Total Quality Management. London: Prentice Hall.
- E E Lawler III, The Ultimate Advantage: Creating High Involvement Organisation, Jossey Boss.
- Simon L. Albrecht, Handbook of Employee Engagement: Perspectives, Issues, Research and Practice; Edward.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Diversity, Equity and Inclusion  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction and dynamics of Diversity, Equity & Inclusion, Opportunities and challenges of promoting diversity, equity, and inclusion, Developing metrics for diversity, equity, and inclusion, Uncovering Unconscious Bias, Valuing Differences, Creating a Positive Work Environment, Inclusion and Innovation, Managing and leading transformative change.

**Recommended Readings**

- Jennifer Brown (2017). Inclusion: Diversity, The New Workplace & The Will To Change.
- Michalle E. Mor Barak (2022). Managing Diversity: Toward a Globally Inclusive Workplace. Sage Pubns; 5th edition

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Learning & Development  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction to Employee Learning & Development; Strategic Learning; Need Assessment; Learning: Theories & Program Design; Reinforcement theory; Social learning theory; Goal theory; Need theory; Expectancy theory; Adult Learning theory; Information processing theory; Transfer of Learning; Learning evaluation; Traditional training methods; E-learning and use of technology in training; Employee development; Special issues in training and employee development; Careers and career management; The future of learning and development

**Recommended Readings**

- Noe, Raymond A. (2019) Employee Training and Development, 8th Edition, McGraw-Hill Education.
- Lynton Rolf, P. & Pareek, U. (2000) Training for Organisational Transformation, Latest edition, Sage Publication.
- Pareek , U. (2009) Training instruments in HRD and OD, 3rd Edition, Tata McGraw Hill.
- Blanchard, P. N. (2012) Effective Training: Systems, Strategies and Practices, 4th Edition, Pearson Education.

## OPERATIONS

### MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**Department :** Department of Management Studies  
**Course Name :** Advanced Operations Management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

#### Course Contents

Importance of OM, Competitive advantage; Operations Strategy; Advanced manufacturing Technology; Lean Manufacturing; Six Sigma; Total capacity management; Advanced tools for Inventory management; Demand Forecasting; Total Quality Management - Definition of quality and TQM, Evolution of TQM, Implementation; Total productive Maintenance; Just in time; Business process re-engineering; Supply chain management; Manufacturing Flexibility, FMS; Computer Integrated Manufacturing Systems; ERP; MRP; MPS; Agile Manufacturing.

#### Recommended Readings

- Deshmukh S.G. and Mohanty R.P. , “Advanced Operations Management”, Pearson Education India.
- Vollmann, Berry, Whybark & Jacobs, “Manufacturing Planning & Control for Supply Chain Management”, Mcgraw Hill.
- Mahadevan B., "Operations management: Theory and practice", Pearson Education India; 2015.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Supply Chain Management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Role and evolution of Supply Chain Management: Competitive Strategy and supply chain strategies; Distribution of networks, Network design, Supply chain risk and risk mitigation strategies. Sales and operations planning, Co-ordination in a supply chain, Product availability, Transportation mode and network, Sourcing decisions in a supply chain, sustainability and the supply chain.

**Recommended Readings**

- Chopra S, Meindl P., "Supply chain management: Strategy, planning, and operation". Pearson Education India.
- Christopher M., "Logistics and Supply Chain Management". Pearson Education India.
- Hugos M., "Essentials of Supply Chain Management". Wiley

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Supply Chain Analytics  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Understanding supply chain and its' drivers and metrics; Supply chain analytics; Key issues in supply chain analytics; Concept of Descriptive Analytics in a Supply Chain; Approaches for Optimization and Simulation; Network Planning in a Supply Chain; Facility location decisions; Warehousing Decisions; Concept of 3PL/4PL in a supply chain; Transportation and Travelling Salesman problem in a Supply Chain; Managerial implication of results of analytics.

**Recommended Readings**

- Chopra S, Meindi P., "Supply chain management: Strategy, planning, and operation". Pearson Education India.
- Vijayaraghavan T.A.S, " Supply Chain Analytics ". Wiley
- Gerhard J. P., "Supply Chain Optimization through Segmentation and Analytics (Resource Management)", CRC Press; 1 edition (April 1, 2014)

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Lean Six Sigma  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Lean & Six Sigma -- Introduction, Lean - Evolution & Steps, Lean tools and techniques, Six Sigma – Overview, Six Sigma (basics and history of the approach, methodology and focus), DMAIC, Application of Six Sigma in production and in service industries, Relationship of Six Sigma and Lean Management, Failure mode effect analysis (FMEA), Failure mode effect critical analysis (FMECA), Quality function deployment (QFD), Statistical Process Control (SPC)

**Recommended Readings**

- Pascal Dennis, "Lean Production Simplified", Productivity Press.
- Jeffrey K. Liker, "The Toyota Way", McGraw-Hill Edition Publication.
- Masaaki Imai, "Gemba Kaizen: A Commonsense, Low-Cost Approach to Management", McGraw-Hill Publication.
- James P. Womack and Daniel T. Jones, "Lean Thinking: Banish Waste & Create Wealth in Your Corporation", Simon & Shuster.
- Pyzdek Thomas & Keller Paul, "The Six Sigma Handbook", Third Edition, McGrawHill.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Operations Strategy for Competitive Advantage  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Operations and Competitive strategy, competing through generic operation strategies, Operations Strategy Drivers and Enablers, Operations Strategy for Manufacturing, Operations Strategy for Services, Operations Strategy in Action, Operations Strategy Architecture, Systems and Processes Technology, Leading Operational Innovation: Role of Senior Management, Responsible Strategies, Learning from Indian Perspective.

**Recommended Readings**

- Hill, T., Manufacturing Strategy: Text and Cases, 2nd Edition, IRWIN, 1994
- Chase, R.B. and Aquilano, N. J., Production and Operations Management: Manufacturing and Services, 7th Edition. IRWIN, 1995
- Latona, J. C. and Nathan, J., Cases and Readings in Production and Operations Management, Allyn and Bacon, 1994
- Scott, B. Manufacturing Planning Systems, McGraw-Hill Book Company, 1994
- Schniederjans, M. J. Topics in Just-In-Time Management, Allyn and Bacon, 1993
- Mizuno, S. Management for Quality Improvement: The Seven New QC Tools, Productivity Press, 1988

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Services Operations Management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

The role of service in economy and society; the nature of services; Service encounters - types of service encounters, use of behavioral science, service profit chain; Service strategy & competitiveness; Data envelopment analysis; New service development; Service quality - QFD for service industry; Locating facilities and layout planning; Forecasting demand for services; Managing capacity and demand; Managing facilitating goods; Managing service supply relationships; queuing theory and techniques.

**Recommended Readings**

- Fitzsimmons, J. A. and Fitzsimmons, M. J. (2007). Service Management: Operations, Strategy, and Information Technology, 6th edition, McGraw-Hill.
- Haksever, C., Render B., Russel S. R. and Murdick R. G. (2007). Service Management and Operations. 2nd edition, Pearson.
- Hollins, B. (2007). Managing Service Operations, Sage.
- Johnston, R. and Clark, G. (2009). Service Operations Management. 3rd edition. Pearson.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Production Planning and Control  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Management of Production Systems, Advanced Forecasting Models, Materials Management, Aggregate Planning with mixed strategies, Master Planning Schedule, Capacity Planning, Sequencing and Scheduling, Advanced Planning and scheduling systems, Layout designing, Inventory control under uncertainty, and Theory of Constraint.

**Recommended Readings**

- Narsimhan S. L., McLeavy , Production Planning & Inventory Control, Billington, PHI.
- G.Cachon, C. Terwiesch, Operations Management, Mc Graw Hill.
- David, D & James E Bailey, John Wiley & Sons., Integrated Production control Systems, Bedworth

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Sustainable Operations  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Green procurement and sustainable supply chain, Product stewardship and design for the environment, Triple Bottom Line (3BL), Carbon Disclosure, Remanufacturing, Closed-Loop Supply Chains, Sustainable Product Design, LEED building, ISO 14000, and Sustainable Resource Extraction, Greenhouse gas accounting and carbon footprint management, Life Cycle Assessment, Capitalizing on new markets for eco-friendly products and services (environmental entrepreneurship), Managing waste stream and value creation, Risk management in response to uncertain environmental regulations and outcomes.

**Recommended Readings**

- Nunes B., Batista L., Massi D., Bennett D., Sustainable Operations Management Key Practices and Cases. Taylor and Francis
- Souza G., Sustainable Operations and Closed-Loop Supply Chains. Business Expert Press
- Grant D., Trautrim A., Wong C., Sustainable Logistics and Supply Chain Management. Kogan Page.

**FINANCE**

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Project and Infrastructure Finance  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

An overview of project and infrastructure finance; Decision making on infrastructure projects: Cost benefit analysis, engineering economics and capital budgeting; assessment of projects; decision making framework; determining cash flows; estimation of capital costs; estimation of operating costs; taxes and royalties; working capital; Evaluating capital projects: Time value of money; interest and interest rates; evaluation criteria for investment decisions; practical issues in evaluation of projects; sensitivity, scenario, and other decision analysis techniques; Risk assessment: Returns; certainty and uncertainty; portfolio risk; diversification; cost of capital; interest rates and cost debt; Weighted average cost capital, leverage and debt financing; opportunity cost of investment; sources of uncertainty; probability method; risk adjusted discount rate; certainty equivalent method; risk adjustment practices; Monte Carlo simulation; decision tree analysis; utility theory and risk; real options analysis; case studies; Financing of capital projects.

**Recommended Readings**

- Chandra, Prasanna (2017). Projects: Planning, Analysis, Selection, Financing, Implementation, and Review. Eighth edition. McGraw Hill Education
- Finnerty, John D.(2015).Project Financing: Asset-Based Financial Engineering, 3rd Edition. Wiley

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Financial Econometrics  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Objective of the course is to introduce the students to basics of theory and application of econometric methods. Emphasis is on understanding and interpreting relations among economic variables which have a direct impact on the way business is conducted in the world market. The course would take hands-on approach to help students get comfortable with working with dataset. The course would address the problems typically encountered in conducting empirical econometric research, in evaluating results and testing hypotheses in making predictions.

**Recommended Readings**

- Ruppert, David and Matteson, David S. (2015). Statistics and Data Analysis for Financial Engineering with R examples. 2nd Edition. Springer
- Koop, Gary (2006). Analysis of Financial Data. John Wiley & Sons Ltd

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Investment / Wealth Management  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

The Role of Security Markets in Economy; The Organisation and Mechanics of Indian Security Markets; Various Securities and their Characteristics; Various Types of Security Markets and their Functions: Stock Exchanges; OTCEI; Depository; Risk and Return: Utility Theory; Portfolio Theory; CAPM; APT; Multi-factor Models; Options and Futures; Security Analysis: Fundamental Analysis; Technical Analysis of Security Pricing; Market Efficiency and Behavioral Finance; Portfolio Management: Portfolio Theory; Portfolio Criteria; Efficient Set; Portfolio Selection and Diversification; The Shape and the Risk Function (including CAPM Model Technical Analysis, Random Walk and Martingale Model); Portfolio Management; Portfolio Objective; Size of Portfolio; Selection Basis and Readjustment; Timings of Disinvestment; Market Microstructure

**Recommended Readings**

- Edwin J. Elton, Martin J. Gruber, Stephen J. Brown , William N. Goetzmann (2017). Modern Portfolio Theory and Investment Analysis. 9th edition. John Wiley & Sons
- Zvi Bodie, Alex Kane, Alan J. Marcus, Pitabas Mohanty (2017). Investments. McGraw Hill Education



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Behavioural Finance  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Behavioral finance: introduction; Psychology and market people; Bounded rationality in real market conditions; Decision-making process and behavioral biases; Simple experiments on anchoring; Judgment under Uncertainty, Utility/ Preference Functions: Expected Utility Theory [EUT]; Paradoxes (Allais and Others) Prospect Theory; Behavioral biases and their impact on decision making; Implication of Heuristics and Biases for Financial Decision-Making; Behavioral Corporate Finance and Managerial Decision-Making; Emotions and neuroscience; Group Behavior: Conformism, herding, fatal attractions, Investing Styles and Behavioral Finance.

**Recommended Readings**

- Forbes, W. (2011). Behavioural Finance. Wiley India Publication
- Pompian, Michael M. (2012). Behavioral Finance and Wealth Management, 2nd edition, Wiley, New Jersey

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Fixed Income Securities  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

The course is designed to provide a description and analysis of fixed income securities. It covers the broad topical areas of: (i) the institutions, instruments, and operations of fixed income securities markets; (ii) the analysis and valuation of fixed income securities; (iii) the analysis of interest rates and term structure; (iv) interest rate related derivative instruments and how to use these contracts to reduce risk exposure and enhance the yields of fixed income portfolios.

**Recommended Readings**

- Strumeyer, G. (2012). Investing in Fixed Income Securities: Understanding the Bond Market. Germany: Wiley.
- Petitt, B. S., Pinto, J. E., Pirie, W. L. (2015). Fixed Income Analysis. Germany: Wiley.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Fintech  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

This course is designed for Introduction to FinTech and FinTech Business Applications: application in lending and personal finance, crowd-finding and business financing, payments and retail transactions, equity, trading and investment applications, various types of cryptocurrencies, and banking infrastructure and tools.

**Recommended Readings**

- Investment Strategies in Emerging New Trends in Finance. (2021). United Kingdom: IntechOpen.
- Taylor, P. (2022). Emerging FinTech: Understanding and Maximizing Their Benefits. United States: Business Expert Press.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Entrepreneurial Finance  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

This course is designed for understanding the Entrepreneurial Environment; Role of Finance in Entrepreneurship; Organizing and Financing a New Venture; Creating and Recognizing Venture Value; Evaluating the Operating and Financial Performance; Projecting Financial Statements; Securities Law (SEBI, SEC etc) Considerations in Obtaining Venture Financing; Alternate Sources of Financing for Ventures: Angel Investors / Private Equity Finance / Venture Capital; Internet Finance (ICO, Crowdfunding); Professional Venture Capital; Various Security Structures; Exit and Turnaround Strategies; IPO Process and Issues; Listing on SME Exchange: Requirements and Regulations.

**Recommended Readings**

- Da Rin, M., Hellmann, T. (2020). Fundamentals of Entrepreneurial Finance. United Kingdom: Oxford University Press.
- Rogers, S. (2008). Entrepreneurial Finance: Finance and Business Strategies for the Serious Entrepreneur. United Kingdom: McGraw Hill LLC.

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Supply Chain Finance  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction to supply chain and SCF, physical flow and financial flows, linkages of supply chain and financial performance. Overview of Working Capital Management and Supply Chain Finance-demand for liquidity and working capital management. Financing End to end supply chain, Identification of enablers and inhibitors to implementing supply chain finance programmes, risk management approach for SCF programmes.

**Recommended Readings**

- Hofmann, E., Belin, O. (2011). Supply Chain Finance Solutions: Relevance - Propositions - Market Value. Germany: Springer Berlin Heidelberg.
  - Supply Chain Finance: Risk Management, Resilience and Supplier Management. (2018). United Kingdom: Kogan Page.
-



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Corporate Restructuring  
**Credits :** 3 L - 3 T - 0 P - 0  
**Course Type :** Elective  
**Prerequisites :** None

**Course Contents**

Introduction to M&A; Strategic Considerations in M&A; Corporate Governance and Takeover Regulations; Review of Corporate Valuation; Valuing synergies, liquidity and control, Deal Structuring and Financing, Negotiations and Takeover Strategies, Hostile Takeover, Defence Strategies, and Merger Arbitrage, Going Private and Leveraged Buyouts; Asset Restructuring, Cross Border Deals; Joint Ventures and Strategic Alliances; Financial Distress, Bankruptcy, Reorganization, Liquidation. Critical issues in corporate restructuring.

**Recommended Readings**

- Krishnamurthi, C and Vishwanath, S.R (2018). Mergers, Acquisitions and Corporate Restructuring: Text and Cases , 2nd edition, Sage Publication, New Delhi
- Gaughan, P. A (2017). Mergers, Acquisitions, and Corporate Restructuring. 7th edition. John Wiley & Sons Inc.
-

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Course of Independent Study (CIS)  
**Credits :** 6  
**Course Type :** Core  
**Prerequisites :** None

**Description:**

The Course of Independent Study (CIS) is an option for participants who want to explore a given topic of interest in depth. The topic might involve several fields of study to find a solution to a managerial problem, and might be, but not necessarily, inter-disciplinary in nature. Participants are also encouraged to take up research problems addressing the thrust area of Management and address them by providing solutions at the frontier of management theory and practice.

A participant undertaking CIS is expected to gain valuable experience in problem definition, in research, in collecting and collating relevant data, and in undertaking required analysis for drawing actionable conclusions. CIS thus offers an opportunity for an experience well beyond the regular course work.

The broad list of CIS Topics from various functional areas including the name of the supervisor comes from the Program Advisor. These topics are usually indicative in nature, and can be fine-tuned based on the interest of the participant taking them up. The executives can also explore and propose different industry oriented topics for research.

The participants submit a CIS proposal, based on the aforesaid list, to the concerned supervisor, with a copy to the Office, within a stipulated date. The participants may consult the concerned faculty member for any clarification regarding the topic and scope of work.

Once the proposals are submitted, the concerned supervisor will make the final decision about acceptance of the proposal, and will inform the same to the Office. The office informs the same to the concerned participants.

**Topic Selection**

The topic of the CIS will be selected by the individual participant based on her/his interest and some minimum level of advance knowledge in the selected area of study. This might be based on the background of the participant, or issues that might have cropped up during class discussion, etc.

The subject of study should be selected keeping in mind the expected effort required for the CIS. While the initial formulation of the area of study can be quite ambiguous, vague or over-ambitious, successive reformulations with the help of the instructor(s) can bring in the required focus, ensuring the expected depth as well as breadth in the proposed study.

**CIS Supervisor**

The broad list of CIS Topics from various functional areas including the name of the supervisor(s) will be communicated by the Office. These will only be indicative topics, and may be fine-tuned based on the interest of the participant taking them up.

The interested participants will have to submit a CIS proposal, based on the aforesaid list, to the concerned supervisor, with a copy to the Office, within a stipulated date. This date will be informed in due course, but will be before the process of elective course selection. The participants may consult the concerned faculty member for any clarification regarding the topic and scope of work.

Once the proposals are submitted, the concerned supervisor will make the final decision about acceptance of the proposal, and will inform the same to the Office. The Office will, in turn, inform the same to the concerned participants.

This being a participant-centric activity, it is the responsibility of the participant to approach the supervisor(s) to clarify doubts, ask for clarifications, and get the progress of work assessed from time to time. The supervisor(s) will not seek out to the participant for the same.

**Format for CIS Proposal**

- CIS title
- A brief background of the student
- Names of proposed CIS guide(s) in order of preference
- Introduction
- Objective
- Scope
- Research questions
- Methodology/analytical framework
- Bibliography

**Report Copies to be submitted:**

Two copies of the Final CIS report should be submitted, one for library and the other for the self. Both these needs to be submitted to the Office within the stipulated date (to be informed later). One copy will be returned after signature from the evaluator(s). A soft copy of the report, in pdf format, also needs to be submitted.

**Suggestive Report Content**

The report should contain the following:

- Title page
- Acknowledgements
- Table of contents
- List of Tables (required if tables are used)
- List of Figures (required if figures/photos are used)
- Executive summary
- Introduction
- Objective
- Scope/ Research questions
- Methodology/analytical framework
- Primary learning and analysis
- Outcome, Managerial implication
- Conclusion and Recommendations

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Reasearch Project  
**Credits :** 9  
**Course Type :** Core  
**Prerequisites :** None

**Description:**

The program will culminate in a project that will require executives to apply the skills and knowledge they have learned to solve a real-world business problem. The project can be completed individually or in teams, and it will involve presenting a comprehensive solution to the problem.

As part of the requirements to be fulfilled for the award of the degree of Masters in Business Administration (MBA) from Malaviya National Institute of Technology (MNIT), Jaipur, executives/participants are expected to work on a research project and present a report on the same in their fourth semester. This document contains details of expected practices with respect to the research project submission. Clearly general guidelines such as these may not cover all circumstances. Particular emphasis and minor adjustments may be necessary in individual cases. Such adjustments are to be brought to the notice of the faculty and only on their approval it should be incorporated in the thesis. It is thus imperative that executives/participants consult their faculty supervisors for specific advice and guidance on matters pertaining to the design and content of their study and reporting of it.

All executives/participants are required to work independently on individual research project. Each executive/participant will be assigned by the Office/ Course Coordinator a faculty mentor under whose supervision the student shall carry out his/her research project. It is recommended that the executives/participants begin working on their research project immediately after second term. Further executives/participants are advised to meet respective faculty supervisor on a regular basis – as recommended by supervisor or at least once every week in the beginning. It is also advisable to start working as soon as possible.

**The Role of Supervisor**

- a) Suggest some general areas of research for consideration and where possible, any examples of current research relevant to the topic.
- b) Discuss possible directions for the study and advise on aims and objectives; Be available for regular meetings
- c) Examine written work and provide constructive criticism. It is not the responsibility of the supervisor to correct spelling mistakes, etc., other than to point out these are present: nor is it the duty of the supervisor to organize the presentation content of the work, although advice may be provided if enough work has been submitted.



d) Make executive/participant aware of inadequate progress or any other facts which could impede the completion of a successful piece of work.

**Student's Responsibilities**

a) To make appointments on a regular basis. If facing any difficulty in arranging appointments the executive/participant must contact the Course-coordinator.

b) Provide written work for the supervisor to comment on; maintain proper log of own progress.

c) Submit written work in advance of appointment in order that the supervisor has time to offer constructive criticism.

d) Comply with the regulations as detailed in this document.

**STRUCTURE OF THE RESEARCH PROPOSAL**

The areas covered in the research proposal are expanded below.

**Title Page**

- Proposed Title
- Name of executive/participant
- Course
- Supervisor's Name

**The Research Question/Problem/Topic or Hypothesis**

- Identify your area of research keeping it broad enough to embrace existing literature; but sufficiently narrow to allow a detailed investigation
- The area identified could form a working title

**Introduction and Rationale for Research**

- Explain why you think this is a valid research topic
- What will the research contribute to the field?

**Research Aim and Objectives**

- The aim of the research project should indicate what you wish to achieve
- The objectives are a list of goals which must be completed in order to satisfy the aim (usually about 4-6) • e.g. to provide a state of the art review • to determine how a particular market operates to establish a typology • to assess the impact of something

**Research Methodology**

- Choose methods which will allow you to meet each of the objectives listed above; justify your methods chosen and the disadvantages of the methods rejected
- Try to use a mix of methods

**Proposed Timeline for various activities**

A schedule of activities to be completed along with specific milestones and timelines

**SPECIFIC ASPECTS OF THE RESEARCH PROJECT**

What follows is an attempt to provide with some generic guidelines, and some helpful advice on acceptable practices in structuring the research project and the subsequent report. However executives/participants are still advised to consult respective faculty supervisors for specific advice in relation to the research project.



**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Comprehensive Vive-Voce-I  
**Credits :** 4  
**Course Type :** Core  
**Prerequisites :** None

**Description:**

This course is designed to test the students' understanding and application of various business concepts, principles, and theories. This course aims to assess the students' critical thinking, problem-solving, communication, and presentation skills in a real-time and interactive format. It will consist of a comprehensive oral examination (in Semester II) that is conducted by a panel of experts from the industry and academia. The examination is designed to cover a broad range of business topics, covered in all the core courses of semester I and II.

---

Proposal for Executive MBA (E-MBA) Program

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**

**Department :** Department of Management Studies  
**Course Name :** Comprehensive Vive-Voce-II  
**Credits :** 4  
**Course Type :** Core  
**Prerequisites :** None

**Description:**

This course is designed to test the students' understanding and application of various business concepts, principles, and theories. This course aims to assess the students' critical thinking, problem-solving, communication, and presentation skills in a real-time and interactive format. It will consist of a comprehensive oral examination (in Semester IV) that is conducted by a panel of experts from the industry and academia. The examination is designed to cover a broad range of business topics and the experience and learning from the projects completed by the executives.

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**Proposal for promote interdisciplinary and multi-disciplinary B.Tech. major projects.**

A proposal is put forth for introducing multidisciplinary and interdisciplinary project. Academics has explore the possibility, modalities, challenges, and mechanisms for offering interdisciplinary/multidisciplinary B.Tech. projects to students. Practices of other institutes in India and abroad was studied in details and after careful deliberation, the following proposal is put forth to address the important recommendations of NEP 2020.

- 1) **Interdisciplinary project:** Interdisciplinary study allows for the synthesis of ideas and characteristics from many disciplines. At the same time, it addresses students' individual differences and helps them develop important transferable skills. This can bring strong, challenge-driven platforms for strategy and long-term collaboration that hunt down specific challenges that are often directly relevant to industry and society. They also offer common access to department infrastructures as well as to several centers of excellence.
- 2) **Information dissemination to the stakeholders:** The stakeholders i.e. students shall be informed by the Academics, with details of interdisciplinary projects. They shall be motivated to apply for the same as per the process specified. Faculty members shall be updated about the promotion amongst students for undertaking of multidisciplinary/ interdisciplinary projects.
- 3) **The process of collection of application:**
  - A format for application form shall be developed for submission of the project proposal, his shall be released by AD, UG to students for filling up.
  - The students shall be advised to submit the application forms after due signature from the departmental project coordinators from respective departments. The group shall submit a detailed project proposal to the committee and will be required to present the proposal in front of the committee. Approval of the projects is subject to committee recommendations.
  - The project group shall have one supervisor each from respective departments of all participating students.
  - The proposals collected by AD, UG shall be moved through an Interdisciplinary Project Evaluation Committee (IPEC) formed by Dean, Academics, for evaluations of project submitted by the students.
  - The above committee shall comprise at least one faculty expert from each of the participating departments/ centres, AD (UG), supervisor(s) of the project submitted,

MIIC representative and CDEC representative. The committee shall be headed by a convener appointed by the competent authority.

- The shortlisted projects by the committee shall be called for presentations in front of the above committee for evaluation on following points:
    - i) Clarity of purpose of various multidisciplinary participants.
    - ii) Objectives of the project with definite time lines
    - iii) Innovation in the project
    - iv) Requirement of funding from the institute
  - Once the committee recommends the projects to be funded by the institute, academics shall sent the necessary communication to the respective departments. The department shall evaluate the projects as per the normal process of semester wise evaluations being done. The departmental presentation in respective departments shall be attended by full team of students working in the projects to provide support in the work done by each student. Grading of intradepartmental groups will be done as per UG regulations section 2.e(i), refer point number 4 for details about marks/ grading.
  - In case a project proposal has been recommended for funding and later stage decides to break the group and work in their respective departments on a single area project, then an application has be submitted by all the participants specifying their withdrawal from the process. They shall not be eligible for any funding later.
  - In case a project proposal has not been recommended for funding but they still want to work on a multi/ inter disciplinary project, they shall give an application in this regard to the committee. They shall be allowed to work on the project as per the process specified in point (g).
  - The mode of dissemination of funds shall be decided as per the project plan submitted by each team. The respective supervisors shall be responsible for proper utilization of funds released.
  - The institute level project evaluation committee shall take the presentation of the projects selected for funding at least two times in the semester.
  - In case the team wants to convert their project into an innovative idea and want to work for converting their idea into a commercialize product, MIIC shall provide all support to the team.
- 4) Marks/ grades:
- i) Intra-department group:
    - Final presentation and grading shall be done as per the departmental policy.
    - In case, one of the supervisors is from another department, the department shall invite the joint supervisor for the final presentation with prior information.

- Distribution of marks between supervisor, co-supervisor (if any), departmental committee, and external expert (if any) shall be decided by the parent department and communicated to the concerned members in advance.
- ii) Inter-department group:
  - The Inter Departmental project shall be reviewed in all the respective departments the student group comprises of. All the group members shall be present in the presentations in respective departments and provide support wherever needed, to provide consistency in presentation.
- 5) **Grant for interdepartmental projects:** To encourage interdisciplinary or multidisciplinary projects, a grant (up to 1 lac INR) may be awarded to the approved groups to pursue the project. The decision made by the selection committee will be final. **The group shall be encouraged for converting their innovative project into a startup.**
  - IIPC convener, along with the committee, shall evaluate the funded projects and review their progress as per the work plan submitted in the proposal by the team. The IIPC shall reserve the right to stop funding in case the work done by the group is not found satisfactory.



## Criteria for Selection of an All Rounder UG Student of MNIT Jaipur 2023

		CGPA					
		Up to 6.0	6.1 to 7.0	7.1 to 8.0	8.1 to 9.0	9.1 to 9.5	Above 9.5
1	<b>Academic Performance</b>						
	Score (Max. 20)	4	8	12	16	18	20
2	<b>B. Tech./ B. Arch project</b>	Participation in any competition, like Hackathon, BAHA, SAE or any other					
		Certification of contribution from project outcomes in commercial/ industrial/ social/ technical/ any other field					
	Score (Max. 10)	10					
3	<b>Sports/Games</b>	Won 1 <sup>st</sup> / 2 <sup>nd</sup> / 3 <sup>rd</sup> prize					
		10 / 8/ 6					
	Score (Max. 25)	10	15	8	12	8	12
4	<b>Extra-Curriculum activities</b>	Participation in any competition, like Hackathon, BAHA, SAE or any other					
		Certification of contribution from project outcomes in commercial/ industrial/ social/ technical/ any other field					
	Score (Max. 25)	8	12	8	12	8	10

### Annexure-SC

		CGPA					
		Up to 6.0	6.1 to 7.0	7.1 to 8.0	8.1 to 9.0	9.1 to 9.5	Above 9.5
3	<b>Sports/Games</b>	Won 1 <sup>st</sup> / 2 <sup>nd</sup> / 3 <sup>rd</sup> prize					
		10 / 8/ 6					
	Score (Max. 25)	10	15	8	12	8	12
4	<b>Extra-Curriculum activities</b>	Participation in any competition, like Hackathon, BAHA, SAE or any other					
		Certification of contribution from project outcomes in commercial/ industrial/ social/ technical/ any other field					
	Score (Max. 25)	8	12	8	12	8	10

## Criteria for Selection of an All Rounder UG Student of MNIT Jaipur 2023

5	<b>Outreach Activities and Social Responsibility</b>	Unnat Bharat Abhiyan (UBA)/ Swaccha Bharat Abhiyan or similar activity	Participation in any Govt. Flag ship Program	Wellness activity e.g. Blood donation/ Helped a student or Others at the time of need	Contribution by making a remarkable upward movement in CGPA	Worked with NGO/ Start-up	Volunteer for any activities showing significant contribution or creativity	Any other significant contribution			
		Score (Max. 10)	5	5	5	8	5	5	5		
6	<b>Achievements</b>	Placements			Higher studies				Selected in PSU through GATE score		
		Up to 10 Lakh	10-20 Lakh	Above 20 Lakh	Foreign Institute/Institute with QS ranking $\leq$ 500		IIT	NIT		Other Inst.	
		Score (Max. 10)	5	8	10	10	8	8		6	10
		<b>Total score 100</b>									

**Note: Conditions for not permitting to get “Best all-rounder award”**

- Involved in/ invoked/ attracted any in-disciplinary action from the department/ institute during course of the study.
- Student awarded punishment for a major in-disciplinary or malpractice in examination.
- Student has been expelled from the institute for any period during the course of study.
- Student has got FP (Failing grade ) grade in any subject at any stage during his/ her course of study at the institute till the time of the award (except on medical ground).
- No punishment for involvement in violation of code of conduct.

# Malaviya National Institute of Technology Jaipur

## Department of Mechanical Engineering

### Minutes of DUGC Meeting

Date 02/03/2023

The meeting of DUGC of the Mechanical Engineering Department was held on 02<sup>nd</sup> March 2023 at 10:30 AM in the Head of Department Office. The agenda items were circulated through email to all the DUGC members on 1<sup>st</sup> March 2023. The following members were present in the meeting:

1. Prof. Dilip Sharma, Head of Department (I/C)
2. Dr. Harlal S Mali, Convener DUGC
3. Dr. Dinesh Kumar, Convener DPGC
4. Dr. Anup Malik, Program advisor (I year)
5. Dr. Gulab Pamnani, Program advisor (II year)
6. Dr. Tapas Bajpai, Program advisor (IV year)
7. Dr. Nikhil Sharma, Program advisor (III year)-

The following members could not attend the meeting:

1. CR of 3rd Year- MOHAMMAD ZAID KHAN(2020ume1867)
2. CR of 4th Year –Sagar Upadhyay (2019ume1160)

The committee deliberated on the circulated agenda items and recommended the following:-

#### Agenda Item No.

1. The committee deliberated upon the request submitted by students of 2022-2023 B. Tech Mech Engg Batch. As enclosed in annexure A and B.

Sr No.	Student Name	Student ID	Reason/ Remarks
1	Mohit Sharma	2022UME1179	To get admission in other colleges. (cancellation)
2	Rajat Sharma	2022UME1822	Pursuing start-up for the future. (withdrawal)

The committee recommends the cancellation / withdrawal of admission of Mohit Sharma (2022UME1179) and Rajat Sharma (2022UME1822) from the institute. The documents related to them are attached as **Annexure-A and B** respectively.

2. Submission of medical proofs by Shantanu Bajpai (2019ume1826) for his 8<sup>th</sup> semester withdrawal and activation of ERP

#### Background

Shantanu Bajpai (2019ume1826) has been facing medical issues due to which he was not able to continue the course from 6th semester onwards. He has taken the semester withdrawal of 6th and 7th semester and wants to do the same in 8th semester due to the same reason. In addition to that he wishes to keep his ERP profile status active so that he can avail medical insurance in the coming semester also. The request was submitted to Academic Session through DUGC, however, the section wants medical proof from the candidate.

Due to his prolonged sickness, the student has sent the copies of medical proofs to his adviser, Dr Tapas Bajpai. The matter is brought before the DUGC to check these scanned documents and recommend to share with the academic office so that the request for the semester drop can be considered. (Enclosed at annexure C).

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

### Minutes of 33<sup>rd</sup> Meeting of Academic Affairs Committee (AAC)

The 33<sup>rd</sup> meeting of Academic Affairs Committee (AAC) was held on 17 April, 2023 at 04:30 PM near the office of Dean Academic for discussing the various issues. The following members attended the meeting:

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

Items No.	Particular
33-1.1	<p>To consider the matter of Ms. Manisha Kumari 2019UEC1021 regarding waiver/dropping the open elective of 7<sup>th</sup> Semester.</p> <p>AAC discussed the matter and decided to allow to drop the open elective CST203-Data Structures and Algorithms (Credits 4) registered by Ms. Manisha Kumari 2019UEC1021 of 7<sup>th</sup> Semester. The AAC also advises the program advisors take full care to avoid such matters during the approval of course registration.</p>
33-1.2	<p>To consider the issue of the Ph.D. student's absence from Invigilation duties during the End-Term Examination of Odd Semester 2022-23 (I year UG) and Mid Term Examination of Even Semester 2022-23 (II, III, IV, V Year UG &amp; I, II Year PG), which took place from 20.02.2023 to 05.03.2023.</p> <p>AAC discussed the matter case by case and decided to deduct one day scholarship from the month of April 2023 for those students who have either not given any reason for absence or the given reason is not admissible to AAC. Academic Section will inform to the concerned Ph.D. Scholar through Email regarding deduction of one day scholarship amount.</p>
33-1.3	<p>To consider the matter of Mr. Shantanu Bajpai (2019UME1826) regarding Semester Withdrawal on Medical Ground.</p> <p>Mr. Shantanu Bajpai has taken 02 Semesters withdrawal i.e. in 06<sup>th</sup> and 07<sup>th</sup> Semester. Now he wants semester withdrawal in 8<sup>th</sup> semester also.</p> <p>As per the UG Regulations Manual, clause 11.4 "A student will be permitted for semester withdrawal only twice in the entire duration of his programme."</p> <p>Looking to the above clause AAC decided to refer the matter to the Senate for consideration.</p>

33-1.4	<p>To consider the matter for not charging late registration fee from the students whose family income is below 1 lac and having discrepancies in their documents.</p> <p>AAC discussed the matter and decided to waive-off the late registration fee from the students whose family income is below 1 lac and having discrepancies in their documents.</p>
33-1.5	<p>To consider the matter to entertain new applications for fee remission.</p> <p>AAC discussed the matter and decided not to entertain new applications, due to end of the financial year and expiry of the last date for submitting the claim form.</p>
33-1.6	<p>To consider the Academic Calendar for Odd Semester 2023-24.</p> <p>AAC discussed the Academic Calendar for Odd Semester 2023-24 and finalized after some minor corrections.</p>
33-1.7	<p>To consider the revision in Academic Calendar 2022-23.</p> <p>AAC discussed the revision in Academic Calendar 2022-23 and finalized after some minor corrections.</p>
33-2.0	<p>Any other item with permission of chair.</p>



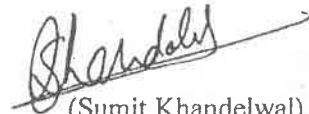
(Jyotirmay Mathur)  
Dean Academic



(Suja George)  
ADPG



Prof. Rajeev Shringi  
(Chairman, SUGB)



(Sumit Khandelwal)  
ADUG





दैनिकी  
संख्या  
MNIT  
DIARY  
NO.

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पृष्ठ संख्या  
Page No.

पंजीक संख्या@FILE NO. - \_\_\_\_\_

कार्यालय टिप्पणी  
Note Sheet


Date : 01-05-2023

1

A student of B. Tech. Mechanical Engineering Department Mr. Shantanu Bajpai (St. Id. 2019UME1826) has applied for 8<sup>th</sup> semester withdrawal on Medical Ground after availing two semester withdrawal 6<sup>th</sup> & 7<sup>th</sup> on Medical Ground. As he mentioned in his application that he is suffering from serious renal diseases, the Academic Affairs Committee (AAC) considered his request which is duly recommended by the DUGC of the concern department.

2

The Academic Affairs Committee further decided to take a comments and recommendation from Institute dispensary. So the photocopy of the student treatment documents with his application are attached herewith for recommendation and comments from the Institute dispensary.

  
1.5.23 Anil Kumar Vanjani  
(Superintendent) Academic

AR (AAC)

Bun  
1/5/23

DR (A)

Shantanu  
1/5/23

Medical Office

Institute Dispensary

2578  
1/5/2023

3

1/5/23 Going thru record of patient, etc  
Case of CKD & renal transplant in renal  
patient's request may be considered favorably  
as per rules of Institute

  
M.A.

50  
2/05/2023  
1.5.23  
Superintendent  
(Academic)

## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

### Guidelines for starting post-doctoral fellowship programme

#### ESSENTIAL QUALIFICATIONS

- i. A Ph.D. degree holder in the relevant/ allied branch of Engineering/ Science/ Management/ Humanities and Social Sciences.
- ii. All the degrees acquired by the candidate must be in first class, with at least one degree from CFTI/ Centrally Funded Institutes.
- iii. Apply within five years after completing his/ her Ph.D.
- iv. The candidates who have completed their Ph.D. under the supervision/ co supervision of the faculty members from MNIT Jaipur can apply for the fellowship after 3 years of completion of their Ph.D. degree.
- v. The maximum age limit shall be 35. Relaxation in age will be as per Government of India norms for recruitment of faculty.

#### SELECTION CRITERIA

- i. A proposal must be submitted by the aspiring post-doctoral fellow with the consent of a faculty member of MNIT Jaipur as a mentor. The proposal submitted by the fellow must not be mere extension of the Ph.D. work. The expertise brought in by the applicant will be an important criterion in the selection process.
- ii. Candidate must have a minimum of three SCI/ ESCI/ SCIE indexed publications.
- iii. Reservations as per Government of India norms will be followed.

#### PERIOD OF ENGAGEMENT

The duration of the fellowship shall be for a period of 3 years. However, initially the offer will be made for two years and extendable for one more year based on performance evaluation. Review will be conducted every year. Review will be based on quantifiable outcomes based on the deliverables proposed in the initial proposal and publications. DPGC /DREC may evaluate the progress and recommend the extension.

#### FELLOWSHIP AND OTHER BENEFITS

- i. A fellowship of Rs. 60,000 per month plus HRA may be offered throughout the duration of the engagement.
- ii. The fellowship offered is purely temporary in nature and the fellowship may be terminated by the Institute at any point in time by giving one month notice based on the performance/ conduct of the fellow. Similarly, the post-doctoral fellow must give one month notice if he/ she wants to discontinue the fellowship.
- iii. The post-doctoral fellows engaged by the Institute will not be eligible to receive any other fellowship from Government/ non-Governmental sources during the period of engagement.
- iv. A contingency grant of Rs. 1,00,000 per annum towards purchasing consumables, attending conferences (within India), meeting publication charges etc., will be made available to the fellow on

the recommendation of the mentor. If the candidate discontinues within one year of joining the fellowship, he/ she must return the contingency grant availed by him/ her.

- v. Medical facilities as applicable to an employee of the Institute will be extended to the post-doctoral fellow.
- vi. The post-doctoral fellows will also be provided with suitable Hostel/ Campus accommodation as per MNIT Jaipur norms if requested and if available.
- vii. The post-doctoral fellow will be allowed a maximum of 15 days casual leave on pro rata basis.
- viii. Women post-doctoral fellows are eligible for maternity leave subject to the following conditions:
  - a. They must have put at least six months service prior to proceeding on maternity leave.
  - b. The Institute PDF duration or service after rejoining from maternity leave should not be less than six months.
  - c. Maternity leave will be sanctioned on submitting the original medical certificate.
  - d. Fellowship for the maternity leave period will be given only on rejoining from maternity leave.

#### **WORKS TO BE ASSIGNED**

- i. A teaching load equivalent to 8 hours per week will be assigned to the fellow along with other related academic activities.
- ii. The post-doctoral fellow is expected to assist the mentor in writing external project proposals. Apart from quality research work, post-doctoral fellows will also be encouraged to write funding proposals along with the mentor.
- iii. Post-doctoral fellows are eligible to act as Co-guide for B.Tech./B. Arch./M.Tech/M.Plan./M.Sc./ MBA students.

#### **TARGETS TO BE ACHIEVED DURING THE PERIOD OF ENGAGEMENT**

- i. Minimum of one SCI/ ESCI publication per year with the post-doctoral fellow as the first author must be accepted or published.
- ii. The post-doctoral fellow will present a progress report to the DPGC/DREC every year describing the research work carried out and research results supported by reprints or proofs or manuscripts of the papers published or accepted for publication for this purpose.
- iii. Further extension of PDF after two years will be based on quantifiable outcomes based on the deliverables proposed in the initial proposal and publications.
- iv. The fellowship may be terminated by the Institute if the progress/ conduct of the candidate is unsatisfactory by giving one month notice to the post-doctoral fellow.
- v. Any rights related to the IP generated out of post-doctoral research are as per the Institute's IPR policy published from time to time.



**MNIT Jaipur**

**Schemes**

for

**Undergraduate Programmes**

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

DEPARTMENT OF ARCHITECTURE AND PLANNING

I/V

Proposed Teaching Scheme for B.Arch							
Semester I							
S. No	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1		Environmental Science and Ecology	IC	Theory	2	2-0-0-0	2
2		Architectural Structures (Statics) - I	PL	Theory	3	2-1-0-0	3
3		Architectural Drawing	PC	Practical	4	2-0-4-0	6
4		Architectural Presentation Technique & Model Making - I	PC	Practical	3	1-0-4-0	5
5		Building Construction & Materials - I	PC	Practical	4	2-0-3-0	5
6		Introduction to Architecture and Basic Design	AD	Studio	6	2-0-0-4	6
Total Credits & Teaching hours/ semester					22		27
Educational Tour as part of Basic Design Studio							

Semester II							
S. No	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1		History of Architecture - I	PC	Theory	3	2-2-0-0	4
2		Architectural Structure - II	PL	Theory	3	2-1-0-0	3
3		Surveying and Introduction to GIS	PL	Theory	3	2-0-2-0	4
4		Architecture Presentation Techniques & Model Making - II	PC	Practical	3	1-0-4-0	5
5		Building Construction & Materials - II	PC	Practical	4	2-0-3-0	5
6		Architectural Design - I	AD	Studio	7	1-0-0-6	7
Total Credits & Teaching hours/ semester					23		28
Note: Visiting industry/practicing architects for design & construction studios							

*Natishp...*

*Rup...*  
30/5/23



DEPARTMENT OF ARCHITECTURE AND PLANNING

II/V

Semester III							
S. No	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1		History of Architecture - II	PC	Theory	3	2-2-0-0	4
2		Architectural Structures - III	PL	Theory and Practical	3	2-0-2-0	4
3		Building Science - I	PC	Practical	3	2-0-2-0	4
4		Comp. Applications for Architects	PC	Practical	2	1-0-2-0	3
5		Building Construction & Materials - III	PC	Practical	4	2-0-3-0	5
6		Architectural Design - II	AD	Studio	7	1-0-0-6	7
Total Credits & Teaching hours/ semester					22		27
Note: Visiting industry/practicing architects for design & construction studios							
Educational Tour as part of Design Studio							

Semester IV							
S. No	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1		History of Architecture - III	PC	Theory	3	2-2-0-0	4
2		Building Services - I	PC	Theory	3	2-2-0-0	4
3		Architectural Structures - IV	PL	Theory	3	2-1-0-0	3
4		Technical Communication & Writing	PL	Theory	2	1-2-0-0	3
5		Building Construction & Materials - IV	PC	Practical	4	2-0-3-0	5
6		Architectural Design - III	AD	Studio	7	1-0-0-6	7
Total Credits & Teaching hours/ semester					22		26
Note: Visiting industry/practicing architects for design & construction studios							

*Natishipratic*

*Rish Swang,*  
30/5/23

DEPARTMENT OF ARCHITECTURE AND PLANNING

III/V

Semester V							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Theory of Design and Architectural Appreciation	PC	Theory	3	2-1-0-0	3
2		Building Services - II	PC	Theory	3	2-2-0-0	4
3		Quantity Survey and Specifications	PC	Theory	2	1-2-0-0	3
4		Building Construction & Materials - V	PC	Practical	4	2-0-3-0	5
5		Architectural Design - IV	AD	Studio	7	1-0-0-6	7
6		Program Elective - I	PE		3		4
7		Honours Elective - I/ International Internship (assessment after VI semester summer vacation)	B.Arch(H)		0/3	2-1-0-0	0/3
Total Credits & Teaching hours/ semester					22		26
Note: Visiting industry/practicing architects for design & construction studios							
Educational Tour as part of Design Studio							
Electives in Sem V							
1		Universal Design In Built Environment	PE	Practical	3	1-0-3-0	4
2		Product Design	PE	Practical	3	1-0-3-0	4
3		Vernacular Architecture	PE	Practical	3	1-0-3-0	4

Semester VI							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Building Science - II	PC	Theory	3	2-2-0-0	4
2		Site Planning & Landscape	PC	Practical	3	1-0-3-0	4
3		Building Construction & Materials - VI	PC	Practical	4	2-0-3-0	5
4		Architectural Design - V	AD	Studio	7	1-0-0-6	7
5		Program Elective - II	PE	Practical	3		4
6		Open Elective - I	OE	Theory	3		3
7		Honours Elective - II/ International Internship (assessment after VI semester summer vacation)	B.Arch(H)		0/3	2-1-0-0	0/3
Total Credits & Teaching hours/ semester					23		27
Note: Visiting industry/practicing architects for design & construction studios							
Electives in Sem VI							
1		Interior Design	PE	Practical	3	1-0-3-0	4
2		Human-Computer Interaction Design	PE	Practical	3	1-0-3-0	4
3		Design for Healthcare Facilities	PE	Practical	3	1-0-3-0	4
Electives in Sem VI							
1		Construction Planning and Management for large Infrastructure Projects	OE	Theory	3	3-0-0-0	3
2		Urban Infrastructure Planning and Management	OE	Theory	3	3-0-0-0	3
3		Water Sensitive Urban Planning	OE	Theory	3	3-0-0-0	3

*Intship/practic*

*Ping Sharma*  
30/5/23

Semester VII							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Introduction to Planning	PC	Theory	3	2-2-0-0	4
2		Building Services - III	PC	Theory	3	2-2-0-0	4
3		Working Drawings	PC	Theory	4	2-0-4-0	6
4		Architectural Design - VI	AD	Studio	7	1-0-0-6	7
5		Program Elective - III	PE		3		4
6		Program(Flexible) Elective - III-A			3		4
7		Honours Elective - III/ International Internship (assessment after VI semester summer vacation)	B.Arch(H)		0/3/6	2-1-0-1	0/3/6
8		Honours Elective - III/ International Internship (assessment after VI semester summer vacation)	B.Arch(H)		0/3/6	2-1-0-0	0/3/6
Total Credits & Teaching hours/ semester					23		29

Note: Visiting industry/practicing architects for design & construction studios

Electives in Sem VII							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Illustration and Painting	PE		3	1-0-3-0	4
2		Earthquake Resistant Architecture	PE		3	2-2-0-0	4
3		Energy Efficient Architecture	PE		3	1-0-3-0	4
Core Electives in Sem VII							
1		Building Information Modelling (BIM) application for Built Environment	PE		3	1-0-3-0	4
2		Parametric Design and Computational Geometry	PE		3	1-0-3-0	4

Semester VIII							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Practical Training	PT		12		0
2		Research Paper/ Online Course/Monograph Writing	B.Arch(H)		0/3		0/3
Total Credits & Teaching hours/ semester					12		NA

*Natishpiper*

*Rishu Swain,*  
30/5/23

## DEPARTMENT OF ARCHITECTURE AND PLANNING

V/V

Semester IX							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Thesis Preparatory Seminar	AT	Studio	7	1-0-0-6	7
2		Architectural Design - VII	AD	Studio	7	1-0-0-6	7
3		Construction Management	PC	Theory	3	2-1-0-0	3
4		Program Elective - IV	PE		3		4
5		Program (Flexible) Elective - IV-A	PE		3		4
6		Honours Elective - IV/Research Paper/ Online Course/Monograph Writing	B.Arch(H)		0/3/6		0/3/6
7		Honours Elective - IV/Research Paper/ Online Course/Monograph Writing	B.Arch(H)		0/3/6		0/3/6
Total Credits & Teaching hours/ semester					23		25

Note: Visiting industry/practicing architects for design &amp; construction studios

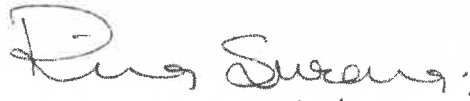
Electives in Sem IX							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Housing	PE		3	1-0-3-0	4
2		Campus Planning	PE		3	1-0-3-0	4
3		Urban Sociology	PE		3	2-2-0-0	4
Core Electives in Sem IX							
1		Landscape Design	PE		3	1-0-3-0	4
2		Urban Infrastructure Planning	PE		3	2-2-0-0	4

Semester X							
S. No	Course Code	Course	Category	Type	Credits	L-T-P-S	Hours/Week
1		Thesis Project	AT	Studio	11	1-0-0-10	11
2		Professional Practice	PC	Theory	3	2-1-0-0	3
3		Open Elective - II	OE		3	3-0-0-0	3
4		Program Elective - V	PE		3		4
5		Program (Flexible) Elective - V-A	PE		3		4
6		Honours Elective - V/Research Paper/ Online Course/Monograph Writing	B.Arch(H)		0/3/6	2-1-0-0	0/3/6
7		Honours Elective - VI/Research Paper/ Online Course/Monograph Writing	B.Arch(H)		0/3/6	2-1-0-0	0/3/6
Total Credits & Teaching hours/ semester					23		25
Electives in Sem X							
1		Urban Design	PE		3	1-0-3-0	4
2		Architecture and Development Legislation	PE		3	2-2-0-0	4
3		Building Economics and Estate Management	PE		3	2-2-0-0	4
4		Architectural Journalism	PE		3	2-2-0-0	4
Core Electives in Sem X							
1		Urban Conservation	PE		3	2-2-0-0	4
2		Urban Finance	PE		3	2-2-0-0	4

Total Credits &amp; Teaching Hours for B.Arch

215

240

  
 Dr. Rina Surana  
 30/5/23  
 Convener, B.Arch Curriculum Revision Committee

  
 Dr. Satish Pipralia  
 Head, Department of Architecture and Planning





**I Semester:**

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Institute Core			18	-	-	-
2.	CHT101	Introduction to Chemical Engineering	PC	Theory	3	3	0	0
3.	CHT102	Chemical Engineering Thermodynamics-I	PC	Theory	4	3	1	0
<b>Total</b>					<b>25</b>			

**II Semester:**

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Institute Core			18	-	-	-
2.	CHT103	Chemical Process Calculations	PC	Theory	4	3	1	0
3.	CHT104	Process Instrumentation	PC	Theory	3	3	0	0
<b>Total</b>					<b>25</b>			

  
HoD, Chemical

  
Convener, DUGC



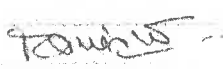


III Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Computer Aided Numerical Methods	PC	Theory	4	2	2	0
2.		Fluid Mechanics	PC	Theory	4	3	1	0
3.		Mechanical Operations	PC	Theory	4	3	1	0
4.		Chemical Engineering Thermodynamics-II	PC	Theory	4	3	1	0
5.		Chemical Technology	PC	Theory	3	3	0	0
6.		PL/EAS -I	PL/EAS	Theory	3	3	0	0
7.		Fluid Mechanics Lab	PC	Lab	2	0	0	3
8.		Mechanical Operations Lab	PC	Lab	2	0	0	3
<b>Total</b>					<b>26</b>	<b>17</b>	<b>5</b>	<b>6</b>

IV Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Chemical Reaction Engineering-I	PC	Theory	4	3	1	0
2.		Heat Transfer	PC	Theory	4	3	1	0
3.		Mass Transfer-I	PC	Theory	4	3	1	0
4.		Industrial Pollution Abatement	PC	Theory	3	3	0	0
5.		PL/EAS - II	PL/EAS	Theory	3	3	0	0
6.		Chemical Reaction Engineering Lab	PC	Lab	2	0	0	3
7.		Heat Transfer Lab	PC	Lab	2	0	0	3
8.		Industrial Pollution Abatement Lab	PC	Lab	2	0	0	3
<b>Total</b>					<b>24</b>	<b>15</b>	<b>3</b>	<b>9</b>

  
HoD, Chemical

  
Convener, DUGC

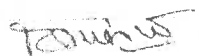


V Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Mass Transfer-II	PC	Theory	4	3	1	0
2.		Optimization of Chemical Processes	PC	Theory	3	3	0	0
3.		Process Dynamics and Control	PC	Theory	4	3	1	0
4.		Process Safety and Hazards Management	PC	Theory	3	3	0	0
5.		Chemical Reaction Engineering-II	PC	Theory	4	3	1	0
6.		Process Instrumentation and Control Lab	PC	Lab	1	0	0	2
7.		Mass Transfer Lab	PC	Lab	2	0	0	3
<b>Total</b>					<b>21</b>	<b>15</b>	<b>3</b>	<b>5</b>

VI Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Plant Design & Process Economics	PC	Theory	3	3	0	0
2.		AI & ML in Chemical Engineering	PC	Theory	4	2	2	0
3.		Transport Phenomena	PC	Theory	4	3	1	0
4.		Petroleum Refining and Petrochemicals	PC	Theory	3	3	0	0
5.		Process Equipment Design	PC	Theory	4	3	1	0
6.		Petroleum Lab	PC	Lab	1	0	0	2
7.		Process Equipment Design Lab	PC	Lab	2	0	0	3
<b>Total</b>					<b>21</b>	<b>14</b>	<b>4</b>	<b>5</b>

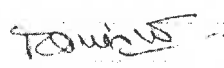
  
HoD, Chemical

  
Convener, DUGC



VII Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Training Seminar	PC	Theory	2	0	0	2
2.		Minor Project	Project	Theory	3	0	0	3
3.		Management	-	Theory	3	3	0	0
4.		Program Elective-I	PE	Theory	3	3	0	0
5.		Program Elective-II	PE	Theory	4	3	1	0
6.		Open Elective-I	OE	Theory	3	3	0	0
<b>Total</b>					<b>18</b>	<b>12</b>	<b>1</b>	<b>5</b>
<b>Program Elective-I</b>			<b>Program Elective-II</b>					
	Conventional & Alternate Energy Resources			CFD in Chemical Engineering				
	Solid & Hazard Waste Management			Mechanical Design of Process Equipment				
	Nano-materials & Characterization			Advanced Process Control				

  
HoD, Chemical

  
Convener, DUGC



VIII Semester:

S. No.	Course Code	Course Title	Category	Type	Credit	L	T	P
1.		Major Project  OR  In Lieu of the Major Project any two courses offered in the Advanced Electives to be opted	Project	Practical/ Theory	6  OR  6	0  6	0  0	6  0
2.		Advanced Elective-I	PE	Theory	3	3	0	0
3.		Advanced Elective-II	PE	Theory	3	3	0	0
4.		Advanced Elective-III	PE	Theory	3	3	0	0
5.		Open Elective - II	OE	Theory	3	3	0	0
<b>Total</b>					<b>18</b>	<b>12/ 18</b>	<b>0</b>	<b>6</b>
<b>Advanced Elective-I</b>			<b>Advanced Elective-II</b>					
		Hydrogen and Fuel Cell Technology		Data Science for Chemical Engineers				
		Waste to Energy Technologies		Process Piping and Design				
		Polymer Science and Technology		Process Integration				
		Advanced Separation Processes		Process Modelling and Simulation				
<b>Advanced Elective-III</b>								
		Bio-Process Engineering						
		Advanced Mass Transfer						
		Polymer Process Modeling						

*[Signature]*  
HoD, Chemical

Convener, DUGC

## Scheme and Syllabi

B. Tech. with Minor in Industrial Safety

Offered by

Department of Chemical Engineering

B. Tech. with Minor in Industrial Safety

S. No.	Course Code	Course Title	Semester	Type	Credit	L	T	P
1.		Process Safety and Hazards Management	V	Theory	3	3	0	0
2.		Industrial Regulations and Occupational Health Management	V	Theory	3	3	0	0
3.		Industrial Pollution Abatement	VI	Theory	3	3	0	0
4.		Plant Design & Process Economics	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					18	18	0	0

External Members:

1. Prof. Kaustubha Mohanty (IITG)

2. Prof. V.C. Srivastava (IITR)

3. Prof. Anand Kishore Kola (NITW)

4. Dr. Rakesh Baghel (Alumnus &amp; Industry Expert)

Internal Members:

1. R.K. Vyas - R.K. Vyas

12/5/2023

2. Manish Vashistha - Manish Vashistha

12/5/23

3. V.K. SANGH - V.K. SANGH

14/0/23

4. Dipaloy Datta - Dipaloy Datta

12/5/23

5. V. Subbaramaiah - V. Subbaramaiah

12/5/23

6. Sushant Upadhyay - Sushant Upadhyay

12/5/23

0011



## Annexure-3

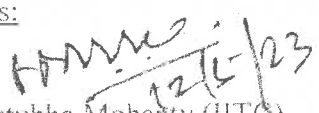


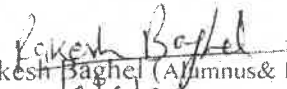
## Scheme and Syllabi

## B. Tech. Chemical Engineering with Honors

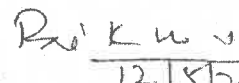

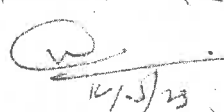
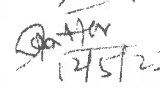
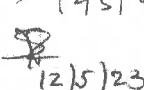
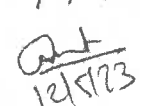
## B. Tech. with Honors

S. No.	Course Code	Course Title	Semester	Type	Credit	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.		Industry 4.0	VIII	Theory	3	3	0	0
<b>Total</b>					<b>18</b>	<b>18</b>	<b>0</b>	<b>0</b>

External Members:

1. Prof. Kaustubha Mohanty (IITG)  12/5/23
2. Prof. V.C. Srivastava (IITR)  12/5/23
3. Prof. Anand Kishore Kola (NITW)  12/5/23
4. Dr. Rakesh Baghel (Alumnus & Industry Expert)  12/5/23

Internal Members:

1. R. K. Vyas -  12/5/2023
2. Manish Vashistha -  12/5/23
3. V.K. SANGH -  12/5/23
4. Dipaloy Datta -  12/5/23
5. V. Subbaramaiah -  12/5/23
6. Sushant Upadhyaya -  12/5/23

## PROPOSED SCHEME FOR B.TECH PROGRAM IN CIVIL ENGINEERING AS PER NEP2020

SEM I	Code	Course Name	Credits	LTP
INSTITUTE CORE COURSES (18 CREDITS)				
	22CET103	Surveying	3	3 0 0
	22CEP104	Surveying Lab	1	0 0 2
	22CEP105	Introduction to Civil Engineering	1	0 0 2
	<b>TOTAL</b>		<b>23</b>	

SEM II	Code	Course Name	Credits	LTP
INSTITUTE CORE COURSES (18 CREDITS)				
	22CET106	Mechanics of Solids	4	3 1 0
	22CET107	Engineering Geology	3	3 0 0
	22CEP108	Geology Lab	1	0 0 2
	<b>TOTAL</b>		<b>26</b>	

SEM III	Code	Course Name	Credits	LTP
INSTITUTE CORE COURSES (18 CREDITS)				
		Construction Materials	3	3 0 0
		Construction Materials Lab	1	0 0 2
		Fluid Mechanics	4	3 1 0
		Fluid Mechanics Lab	1	0 0 2
		Structural Analysis	4	3 1 0
		Structural Analysis Lab	1	0 0 2
		Building Technology	2	2 0 0
		Building Drawing - I	1	0 0 2
		Introduction to Machine Learning	2	2 0 0
		Machine Learning Lab	1	0 0 2
		Numerical Methods and Optimization	3	2 1 0
		Soft Skills and Personality Development	2	2 0 0
		Soft Skills Lab	1	0 0 2
	<b>TOTAL</b>		<b>26</b>	

SEM IV	Code	Course Name	Credits	LTP
INSTITUTE CORE COURSES (18 CREDITS)				
		Design of RCC Structures	3	3 0 0
		RCC Design, Drawing, and Detailing	1	0 0 2
		Hydraulic Engineering	4	3 1 0
		Hydraulics Lab	1	0 0 2
		Geotechnical Engineering I	4	3 1 0
		Soil Mechanics Lab	1	0 0 2
		Environmental Engineering I	3	3 0 0
		Public Health Engineering Lab	1	0 0 2
		Transportation Engineering I	3	3 0 0
		Highway Materials Lab	1	0 0 2
		Advanced Surveying	2	2 0 0
		Introduction to Satellite Based Positioning	2	2 0 0
		Advanced Surveying & GNSS Lab	1	0 0 2
	PL/EAS	Building Drawing - II	1	0 0 2
	<b>TOTAL</b>		<b>28</b>	

## PROPOSED SCHEME FOR B.TECH PROGRAM IN CIVIL ENGINEERING AS PER NEP2020

Code	Course Name	Credits	L T P
	Design of RCC Systems	4	3 1 0
	Design of Steel Structures	4	3 1 0
	Structural Design & Drawing	1	0 0 2
	Environmental Engineering II	3	3 0 0
	Environmental Engineering Lab	1	0 0 2
	Geotechnical Engineering II	4	3 1 0
	Geotechnical Engineering Lab	1	0 0 2
	Hydrology	4	3 1 0
	<b>TOTAL</b>	<b>22</b>	
	MINOR/ HONOURS COURSE 1	3	3 0 0
	MINOR/ HONOURS COURSE 2	3	3 0 0

Code	Course Name	Credits	L T P
	Transportation Engineering II	3	2 1 0
	Environmental System Design	1	0 2 0
	Water Resources Engineering	4	3 1 0
	Estimation and Costing	4	3 1 0
	Construction Project Management	3	3 0 0
	Construction Management Lab	1	0 0 2
	Civil Engineering Practical Applications	1	0 0 2
	Basic Management	3	3 0 0
	<b>TOTAL</b>	<b>20</b>	
	MINOR/ HONOURS COURSE 3	3	3 0 0
	MINOR/ HONOURS COURSE 4	3	3 0 0

Code	Course Name	Credits	L T P
	Training Seminar	2	0 0 4
	Program Elective 1 (CEPE01)	3	3 0 0
	Program Elective 2 (CEPE02)	3	3 0 0
	Program Elective 3 (CEPE03)	3	3 0 0
	Open Elective 1	3	3 0 0
	Minor Project	3	0 0 6
	<b>TOTAL</b>	<b>17</b>	
	MINOR/ HONOURS COURSE 5	3	3 0 0

Code	Course Name	Credits	L T P
	Program Elective 4 (CEPE04)	3	3 0 0
	Program Elective 5 (CEPE05)	3	3 0 0
	Open Elective 2	3	3 0 0
	1 Major Project OR 3 EL	9	0 0 18 or (3 0 0) x 3
	<b>TOTAL</b>	<b>18</b>	
	MINOR/ HONOURS COURSE 6	3	3 0 0

**TOTAL CREDITS FOR B.TECH IN CIVIL ENGG: 180**

### THE HONOURS PROGRAM IN CIVIL ENGINEERING OFFERS TWO (2) TRACKS:

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

TRACK 2	INDUSTRY TRACK**	Credits	L T P
Course 1	Urban Water Conveyance System Design	3	3 0 0
Course 2	Introduction of Spatial Data Collection and Analysis	3	3 0 0
Course 3	Construction Information Modeling and Automation	3	2 1 0
Course 4	Finite Element Method	3	2 1 0
Course 5	Structural Analysis - II	3	2 1 0
Course 6	Design of Steel Structural Systems	3	2 1 0
Course 7	Industrial Waste Treatment	3	3 0 0
Course 8	Concrete Technology	3	3 0 0
Course 9	Sustainable Building Project Delivery	3	3 0 0

- \* For students preparing for GATE, UPSC, and other competitive exams
- \*\* For students aspiring for core Civil Engineering companies as a career option

Department of Computer Science and Engineering

First Semester					
S. No	Code	Subject	L-T-P	Credit	Type
		<i>Programming with Python</i>	2-0-0	2	IC
		<i>Programming lab</i>	0-0-2	1	IC
		<i>Other Institute Core Subjects</i>		15	IC
	CST1xx	Problem Solving using C	2-0-2	3	DC
	CST1xx	Discrete Mathematics	3-0-0	3	DC
				24	

Second Semester					
S. No	Code	Subject	L-T-P	Credit	Type
		<i>Programming with Python</i>	2-0-0	2	IC
		<i>Programming with Python lab</i>	0-0-2	1	IC
		<i>Other Institute Core Subjects</i>		15	IC
	CST1xx	Data Structures	3-0-0	3	DC
	CST1xx	Logic System Design	2-0-0	2	DC
	CSP1xx	Data Structures Lab	0-0-2	1	DC
	CSP1xx	Logic System Design Lab	0-0-2	1	DC
				25	

Semester-wise Scheme and Syllabus

Scheme and Syllabus of 3<sup>rd</sup> Semester

Third Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	CST2xx	Digital Circuits and Microprocessors	3-0-0	3	DC
	CST2xx	Design and Analysis of Algorithms	3-0-0	3	DC
	CST2xx	Object Oriented Analysis and Design	3-0-0	3	DC
	CST2xx	Data Communications	3-0-0	3	DC
	CST2xx	Foundation of Learning	3-0-0	3	DC
	MMT2xx	Social Sciences and Professional Ethics	3-0-0	3	MM
	CSP2xx	Digital Circuits and Microprocessors Lab	0-0-3	2	DC
	CSP2xx	Design and Analysis of Algorithms Lab	0-0-3	2	DC
	CSP2xx	Object Oriented Analysis and Design Lab	0-0-3	2	DC
	CST2xx	Technical Writing	1-0-2	2	DC
				<b>26</b>	



# Department of Computer Science and Engineering

## Scheme and Syllabus of 4<sup>th</sup> Semester

Fourth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	CST2xx	Computer Organization and Architecture	3-0-0	3	DC
	CST2xx	Computer Networks	3-0-0	3	DC
	CST2xx	Theory of Computation	3-1-0	4	DC
	CST2xx	Machine Learning	3-0-0	3	DC
	CST2xx	Database Information Systems	3-0-0	3	DC
	MMT2xx	Industrial Management	3-0-0	3	MM
	CSP2xx	Machine Learning Lab	0-0-3	2	DC
	CSP2xx	Computer Networks Lab	0-0-3	2	DC
	CSP2xx	Database Information Systems Lab	0-0-3	2	DC
				<b>25</b>	

# Department of Computer Science and Engineering

## Scheme and Syllabus of 5<sup>th</sup> Semester

Fifth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	CST3xx	Operating System	3-0-0	3	DC
	CST3xx	Software Engineering	3-0-0	3	DC
	CST3xx	Compiler Design	3-0-0	3	DC
	CST3xx	Cryptography	3-0-0	3	DC
	CST3xx	Program Elective-1	3-0-0	3	PE
	CSP3xx	Operating System Lab	0-0-3	2	DC
	CSP3xx	Compiler Design Lab	0-0-3	2	DC
	CSP3xx	Cryptography Lab	0-0-3	2	DC
				21	

# Department of Computer Science and Engineering

## Scheme and Syllabus of 6<sup>th</sup> Semester

Sixth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
	CST3xx	Digital Image Processing	3-0-0	3	DC
	CST3xx	Parallel and Distributed Computing	3-0-0	3	DC
	CST3xx	Artificial Intelligence	3-0-0	3	DC
	CST3xx	Program Elective-2	3-0-0	3	PE
	MExxx	Industry 4.0	3-0-0	3	EAS
	CST3xx	Computer and Network Security	3-0-0	3	DC
	CSP3xx	Digital Image Processing Lab	0-0-3	2	DC
	CSP3xx	Parallel and Distributed Computing Lab	0-0-3	2	DC
				22	

Seventh Semester					
S. No	Code	Subject	L-T-P	Credits	Type
1		Open Elective - 1	3-0-0	3	OE
2		Minor Project		3	DC
	CSTxxx	Advance Elective-1	3-0-3	5	AE
	CSTxxx	Advance Elective-2	3-0-3	5	AE
	CSP7xx	Training Seminar	0-0-3	2	DC
				18	

Honors					
	CSTxxx	Honors Elective-3		3	
				3	

Minor CSE					
	CSTxxx	Software Engineering		3	DC
				3	

Eighth Semester					
S. No	Code	Subject	L-T-P	Credits	Type
1		Open Elective - 2	3-0-0	3	OE
2		Major Project	0-0-12	6	
	CSTxxx	Advance Elective-3	3-0-3	5	AE
	CSTxxx	Advance Elective-4	3-0-3	5	AE
				19	

Honors					
	CSTxxx	Honors Elective-4		3	
				3	

Minor CSE					
	CSTxxx	Artificial Intelligence		3	DC
				3	

*F. Lewis*

## Department of Computer Science and Engineering

### Pool 1: Electives: 3-0-0 (Credits 3, Semesters 5/6)

1.	5G and Beyond ✓
2.	Advanced Algorithms ✓
3.	Blockchain Technologies ✓
4.	Cyber Physical Systems ✓
5.	Deep Learning ✓
6.	Evolving Architectures ✓
7.	Malware Analysis ✓
8.	Artificial Neural Networks ✓
9.	Nature Inspired Algorithm ✓
10.	Parallelizing Compilers ✓
11.	VLSI Algorithms ✓
12.	Wireless Security ✓
13.	Wireless Networks ✓



## Department of Computer Science and Engineering

Pool 2: Electives: 3-0-3 (Credits 5, Semesters 7/8)

1.	Advanced Computer Networks ✓
2.	Advanced Database Systems ✓
3.	Biometrics ✓
4.	Computer Vision ✓
5.	Data Analytics ✓
6.	Data Mining ✓
7.	Decentralized Learning ✓
8.	Embedded System Design ✓
9.	Full Stack Development ✓
10.	Information Retrieval ✓
11.	Natural Language Processing ✓
12.	Program Analysis ✓
13.	Software Testing ✓
14.	Social Network Analysis ✓
15.	Topics in Operating System ✓
16.	Topics in Computing ✓
17.	IoT based Robotics ✓
18.	Internet of Things (IoT) ✓

# Curriculum Structure of B. Tech. (Electrical Engineering)

## I Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Basic Electrical Engineering	Institute Core	3 (2 1 0)
2.	Electrical Engineering Lab	Institute Core	1 (0 0 2)
3.	Power Generation Sources	Program Core	4 (3 1 0)

## II Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Network Theory	Program Core	4 (3 1 0)
2.	Measurements and Actuators	Program Core	4 (3 1 0)
3.	Measurement and Instrumentation Lab	Program Core	1 (0 0 2)
		Total Credits (I & II Sem)	36 (Fixed) + 13 = 49

*05* *Dr. Man*

# Curriculum Structure of B. Tech. (Electrical Engineering)

## III Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Electrical Machines-I	Program Core	4 (3 1 0)
2.	Integrated Electronics	Program Core	4 (3 1 0)
3.	Advanced Engineering Mathematics	Program Linked Course-1 (Department of Mathematics)	4 (3 1 0)
4.	Analysis & Design of Digital Logic Circuits	Program Core	4 (3 1 0)
5.	Network, Systems and Signals	Program Core	4 (3 1 0)
6.	Advanced Programming for Design	Program Core	2 (2 0 0)
7.	Electrical Software and Simulation Lab	Program Core	1 (0 0 2)
8.	Electronic Devices and Circuit Lab	Program Core	1 (0 0 2)
9.	Electrical Machines-I Lab	Program Core	2 (0 0 3)
		<b>Total Credits</b>	<b>26</b>

## IV Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Microprocessor and Microcontroller	Program Core	4 (3 1 0)
2.	Electrical Machines-II	Program Core	4 (3 1 0)
3.	Transmission and Distribution Systems	Program Core	4 (3 1 0)
4.	Power Electronics-I	Program Core	4 (3 1 0)
5.	Control System Engineering	Program Core	4 (3 1 0)
6.	Seminar	Program Core	1(0 0 2)
7.	Digital Electronics and Microprocessor Lab	Program Core	1 (0 0 2)
8.	Electrical Machine Lab - II	Program Core	2 (0 0 3)
9.	Control System Lab	Program Core	1 (0 0 2)
		<b>Total Credits</b>	<b>25</b>

*Handwritten signatures*

# Curriculum Structure of B. Tech. (Electrical Engineering)

## V Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Power System Switchgear and Protection	Program Core	4 (3 1 0)
2.	Principles of Communication Engineering	Program Linked Course-2 (Department of Electronics and Communication)	4 (3 1 0)
3.	Computer Architecture and Organization	Program Core	4 (3 1 0)
4.	Modern Control Engineering	Program Core	4 (3 1 0)
5.	Power Electronics-II	Program Core	4 (3 1 0)
6.	Power System Lab	Program Core	1 (0 0 2)
7.	Power Electronics Lab	Program Core	1 (0 0 2)
8.	Honours Course 1 (Optional)		3 (3 0 0)
9.	Honours Course 2 (Optional)		3 (3 0 0)
		<b>Total Credits</b>	<b>22 (+6)</b>

## VI Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Operation and Control of Power Systems	Program Core	4 (3 1 0)
2.	Electric Drives & Control	Program Core	4 (3 1 0)
3.	Digital Signal Processing	Program Core	4 (3 1 0)
4.	Advanced Power Transmission	Program Core	4 (3 1 0)
5.	Industrial Machine Learning	Program Core	4 (3 1 0)
6.	Power System and Electrical Design Lab	Program Core	1 (0 0 2)
7.	Electrical Drives Lab	Program Core	1 (0 0 2)
8.	Honours Course 3 (Optional)		3 (3 0 0)
9.	Honours Course 4 (Optional)		3 (3 0 0)
		<b>Total Credits</b>	<b>22 (+6)</b>




# Curriculum Structure of B. Tech. (Electrical Engineering)

## VII Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Training Seminar	Program Core	2 (0 0 3)
2.	Program Elective 1		4 (3 1 0)
3.	Program Elective 2		4 (3 1 0)
4.	Open Elective 1		3 (3 0 0)
5.	Open Elective 2		3 (3 0 0)
6.	Minor Project	Project	3 (0 0 6)
7.	Honours Course 5 (Optional)		3 (3 0 0)
		<b>Total Credits</b>	<b>19 (+3)</b>

## VIII Semester

S. No.	Course Title	Course Type	Credits (L T P)
1.	Major Project (Option A)	Program Elective	6 (0 0 12)
2.	Option B	Elective 1	3 (3 0 0)
		Elective 2	3 (3 0 0)
3.	Advance Elective 1		4 (3 1 0)
4.	Advance Elective 2		4 (3 1 0)
5.	Basic Management	Program Core/Management (Department of Management Studies)	3 (3 0 0)
6.	Honours Course 6 (Optional)		3 (3 0 0)
		<b>Total Credits</b>	<b>17 (+3)</b>

**Total Credits = 180 (+18)**

*ms*      *Dr. ...*



# Curriculum Structure of B. Tech. (Electrical Engineering)

## List of Program Electives (for VII Semester)

S. No.	Course Title	Credits (LTP)
1.	Computer Aided Power System Analysis	4 (3 1 0)
2.	Optimal Control Systems	4 (3 1 0)
3.	Advanced Electric Drives & Control	4 (3 1 0)
4.	Power System Restructuring, Deregulation and Economics	4 (3 1 0)
5.	High Voltage Engineering	4 (3 1 0)
6.	Electrical Machine Design	4 (3 1 0)
7.	Utilization of Electrical Power	4 (3 1 0)
8.	Robotics	4 (3 1 0)
9.	Basics of Image Processing	4 (3 1 0)

## List of Advance Electives/Electives (Option B) for VIII Semester

S. No.	Course Title	Credits (Advance Elective) (LTP)	Credits (Option B) (LTP)
1.	Modelling and Analysis of Distribution Systems	4 (3 1 0)	3 (3 0 0)
2.	Power System Reliability	4 (3 1 0)	3 (3 0 0)
3.	Smart Grid Systems	4 (3 1 0)	3 (3 0 0)
4.	High Power Converters	4 (3 1 0)	3 (3 0 0)
5.	Power System Stability	4 (3 1 0)	3 (3 0 0)
6.	Electric Vehicle Technology	4 (3 1 0)	3 (3 0 0)
7.	Applications of Power Electronics in Power Systems	4 (3 1 0)	3 (3 0 0)
8.	Intelligent Systems & Control	4 (3 1 0)	3 (3 0 0)
9.	Industrial Drives & Control	4 (3 1 0)	3 (3 0 0)
10.	Biomedical Signal Processing	4 (3 1 0)	3 (3 0 0)

## B. Tech. with Honours (List of Courses)

S. No.	Course Title	Semester	Credits (LTP)
1.	Modelling & Simulation of Power Electronic Systems	V	3 (3 0 0)
2.	Special Electrical Machines and Applications	V	3 (3 0 0)
3.	Advanced Power System Protection	VI	3 (3 0 0)
4.	Nonlinear Control Systems	VI	3 (3 0 0)
5.	Power System Dynamics	VII	3 (3 0 0)
6.	Switched Mode Power Conversion	VIII	3 (3 0 0)
		<b>Total Credits</b>	<b>18</b>

*Handwritten signature*

*Handwritten signature*

## Curriculum Structure of B. Tech. (Electrical Engineering)

### Open Elective (For other departments)

S. No.	Course Title	Credits (L T P)
1.	Control System Engineering	3 (3 0 0)
2.	Energy Conservation and Management	3 (3 0 0)
3.	Electric Vehicle Technology	3 (3 0 0)
4.	Smart Grid Systems	3 (3 0 0)

*ms*

*Dr. Anil Kumar*

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

First Semester COMMON to ALL Branches

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	I		Technical Communication (Basic/ Advanced)	PC	Theory	2	2-0-0
2	I		Mathematics I	PC	Theory	4	3-1-0
3	I		Physics	PC	Theory	3	2-1-0
4	I		Computer Science and Programming	PC	Theory	2	2-0-0
5	I		Basics of Electronics Engg.	PC	Theory	2	2-0-0
6	I		Basics of Electrical Engg.	PC	Theory	3	2-1-0
7	I		Language Lab (Basic/ Advanced)	PC	Lab	1	0-0-2
8	I		Electrical Engineering Lab	PC	Lab	1	0-0-2
9	I		Electronics Engineering Lab	PC	Lab	1	0-0-2
10	I		Programming Lab	PC	Lab	1	0-0-2
11	I		Physics Lab	PC	Lab	1	0-0-2
					<b>Total</b>	<b>21</b>	

First Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	I		Network Theory	PC	Theory	3	3-0-0
2	I		Electronic Measurement and Instrumentation	PC	Theory	3	3-0-0
					<b>Total</b>	<b>6</b>	

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

Second Semester COMMON to ALL Branches

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	II		Basic Economics	PC	Theory	2	2-0-0
2	II		Mathematics II	PC	Theory	4	3-1-0
3	II		Chemistry	PC	Theory	3	2-1-0
4	II		Engineering Drawing and Sketching	PC	Theory	2	1-1-1
5	II		Environmental Science and Ecology	PC	Theory	2	2-0-0
6	II		Introduction to Mechanical systems	PC	Theory	2	2-0-0
7	II		Product Realization through Manufacturing	PC	Lab	1	0-0-2
8	II		Chemistry Lab	PC	Lab	1	0-0-2
					Total	17	

Second Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	II		Signals and Systems	PC	Theory	3	3-0-0
2	II		Electronic Devices and Circuits	PC	Theory	3	3-0-0
3	II		Signals and Systems Lab	PC	Lab	1	0-0-2
4	II		Electronic Devices and Circuits Lab	PC	Lab	1	0-0-2
					Total	8	

0030

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

**CURRICULUM SECOND YEAR**

Third Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	III		Analog Communication	PC	Theory	3	3-0-0
2	III		Digital Logic Design	PC	Theory	3	3-0-0
3	III		Linear Integrated Circuits	PC	Theory	3	3-0-0
4	III		Data Structures & Algorithms	PC	Theory	3	3-0-0
5	III		Operating Systems	PC	Theory	3	3-0-0
6	III		Electro-magnetic Field Theory	PC	Theory	3	3-0-0
7	III		Analog Communication Lab	PC	Lab	2	0-0-3
8	III		Digital Logic Design Lab	PC	Lab	2	0-0-3
9	III		Linear Integrated Circuits Lab	PC	Lab	2	0-0-3
10	III		Data Structures & Algorithms Lab	PC	Lab	2	0-0-3
11	III		Operating Systems Lab	PC	Lab	1	0-0-2
					Total	27	

Fourth Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	IV		Digital Communication Systems	PC	Theory	3	3-0-0
2	IV		Computer Architecture	PC	Theory	3	3-0-0
3	IV		Microwave Engineering	PC	Theory	3	3-0-0
4	IV		Control Systems Engineering	PC	Theory	3	3-0-0
5	IV		Analog CMOS IC	PC	Theory	3	3-0-0
6	IV		Digital Signal Processing	PC	Theory	3	3-0-0
7	IV		Digital Communication Systems Lab	PC	Lab	2	0-0-3
8	IV		Microwave Engineering Lab	PC	Lab	2	0-0-3
9	IV		Analog CMOS IC Lab	PC	Lab	2	0-0-3
10	IV		Digital Signal Processing Lab	PC	Lab	2	0-0-3
11	IV		Control Systems Engineering Lab	PC	LAB	1	0-0-2
					Total	27	
12	IV		Audit Course : Soft Skills & Personality Development	OE	Theory	3	2-1-0



**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

**CURRICULUM THIRD YEAR**

Fifth Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	V		Microprocessors	PC	Theory	3	3-0-0
2	V		Antenna & Wave Propagation	PC	Theory	3	3-0-0
3	V		VLSI Testing & Testability	PC	Theory	3	3-0-0
4	V		Embedded Systems	PC	Theory	3	3-0-0
5	V		Digital CMOS IC	PC	Theory	3	3-0-0
6	V		Microprocessors Lab	PC	Lab	1	0-0-2
7	V		Antenna & Wave Propagation Lab	PC	Lab	1	0-0-2
8	V		Digital CMOS IC Lab	PC	Lab	2	0-0-3
9	V		Embedded Systems Lab	PC	Lab	2	0-0-3
					Total	21	
10	V		HONS 1:	PE	Theory	3	3-0-0
11	V		HONS 2:	PE	Theory	3	3-0-0
12	V		Minor 1:	PE	Theory	3	3-0-0
13	V		Minor 2:	PE	Theory	3	3-0-0
			Earn 6 Credits HONS/Minor		Total	27	
14	V		Universal Human Values & Ethics			2	2-0-0

Sixth Semester Dept. of ECE

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	VI		Basics of Management	PC	Theory	3	3-0-0
2	VI		Optical Communication Systems	PC	Theory	3	3-0-0
3	VI		Wireless & 5 G communication	PC	Theory	3	3-0-0
4	VI		Neural Networks & Fuzzy Logic	PC	Theory	3	3-0-0
5	VI		Satellite & Radar Engineering	PC	Theory	3	3-0-0
6	VI		Optical Communication Systems Lab	PC	Lab	2	0-0-3
7	VI		Neural Networks and Fuzzy Logic Lab	PC	Lab	2	0-0-3
					Total	19	
10	VI		HONS 3:	PE	Theory	3	3-0-0
11	VI		HONS 4:	PE	Theory	3	3-0-0
12	VI		Minor 3:	PE	Theory	3	3-0-0
13	VI		Minor 4:	PE	Theory	3	3-0-0
			Earn 6 Credits HONS/Minors		Total	27	

0032

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

**CURRICULUM FOURTH YEAR  
Seventh Semester Dept. of ECE**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	VII		Programme Elective 1	PE	Theory	3	3-0-0
2	VII		Programme Elective 2	PE	Theory	3	3-0-0
3	VII		Programme Elective 3	PE	Theory	3	3-0-0
4	VII		Open Elect 1:*/MOOCS#	OE	Theory	3	3-0-0
5	VII		Open Elect 2:*/MOOCS#	OE	Theory	3	3-0-0
6	VII		Minor Project	PC	Lab	3	0-0-3
7	VII		Training Seminar	PC	Lab	2	0-0-3
					<b>Total</b>	<b>14/20</b>	
10	VII		HONS 5:*	PE	Theory	3	3-0-0
11	VII		HONS 6:*	PE	Theory	3	3-0-0
12	VII		Minor 5:*	PE	Theory	3	3-0-0
13	VII		Minor 6:*	PE	Theory	3	3-0-0
			Earn 6 Credits HONS/OTH SP.		<b>Total</b>	<b>26</b>	

**Eighth Semester Dept. of ECE**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	VIII		Programme Elective 4	PE	Theory	3	3-0-0
2	VIII		Programme Elective 5	PE	Theory	3	3-0-0
3	VIII		Programme Elective 6	PE	Theory	3	3-0-0
4	VIII		Major Project	PC	Lab	6	0-0-6
5	VIII		Open Elect 1:*/MOOCS#	OE	Theory	3	3-0-0
6	VIII		Open Elect 2:*/MOOCS#	OE	Theory	3	3-0-0
					<b>Total</b>	<b>15/21</b>	
7	VIII		HONS 5:*	PE	Theory	3	3-0-0
8	VIII		HONS 6:*	PE	Theory	3	3-0-0
9	VIII		Minor 5:*	PE	Theory	3	3-0-0
10	VIII		Minor 6:*	PE	Theory	3	3-0-0
			Earn 6 Credits HONS/OTH SP.		<b>Total</b>	<b>27</b>	

**Important Instructions**

- 1) (\*) Indicated subject can be taken in either VII/VIII Semester.
- 2) The department elective list is attached as a separate sheet.
- 3) One Semester Industrial Internship is permitted for students either in VII/VIII Semester.
- 4) Waiver in internship will be given only for departmental program electives and open electives for maximum 16 credits.

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

- 5) One Credit Courses will be offered by the department in addition to above credits.
- 6) (#) In exceptional cases, MOOCS courses can be allowed in lieu of OPEN Electives 1 and 2 with due permission from DUGC. MOOCS courses should preferably be chosen from NPTEL/SWAYAM/EDX or other reputed having proctored examination. The course approval and evaluation would be moderated by DUGC with respective faculty guide having freedom of evaluating upto 50% of the total weightage.
- 7) A student of plain BTech may be allowed to choose electives from any one or more of the Tables (programme electives, Honors' baskets)
- 8) A honors student can choose programme electives from any other one or more Tables except her/his own Honors
- 9) All courses of M.Tech. would be available to students as Program Elective

**Seventh and Eighth Semester Program Elective List, Dept. of ECE**

**Each subject is 3 Credit (L-T-P as 3-0-0)**

Sl. No.	Course Code	Course Name
1		GRAPH THEORY
2		ARTIFICIAL INTELLIGENCE & EXPERT SYSTEMS
3		ADVANCED ERROR CONTROL CODES
4		IMAGE PROCESSING
5		CAD ALGORITHMS FOR VLSI PHYSICAL DESIGN
6		CAD ALGORITHMS FOR SYNTHESIS OF VLSI SYSTEMS
7		SYSTEM LEVEL DESIGN & MODELLING
8		PROBABILITY THEORY & STATISTICS
9		ADVANCED MICROPROCESSORS & MICRO-CONTROLLERS
10		COMPUTER NETWORKS
11		ADV. MICROWAVE ENGG
12		DESIGN OF MICROSTRIP ANTENNA
13		ADVANCED ANTENNA SYSTEMS
14		MICROWAVE INTEGRATED CIRCUITS
15		POWER ELECTRONICS
16		SEMICONDUCTOR OPTO-ELECTRONICS
17		MEMORY DESIGN & TESTING
18		ELECTRONIC MANUFACTURING TECHNOLOGY
19		FORMAL VERIFICATION OF DIGITAL HARDWARE & EMBEDDED SOFTWARE
20		PARALLEL COMPUTING ARCH
21		BIO-MEDICAL ENGINEERING
22		CURRENT-MODE ANALOG SIGNAL PROCESSING
23		OPTICAL CODES AND APPLICATIONS
24		ADAPTIVE SIGNAL PROCESSING
25		VLSI SIGNAL PROCESSING ARCHITECTURES
26		FPGA PHYSICAL DESIGN
27		VLSI TECHNOLOGY
28		INFORMATION THEORY & CODING
29		SYSTEM DESIGN USING FPGAs

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

30		INSTRUMENTATION & CONTROL
31		WIRELESS AND MOBILE ADHOC NETWORKING
32		CRYPTOGRAPHY
33		DESIGN OF MIC AND MMIC'S
34		ADVANCED MOBILE SYSTEMS
35		SMART AND PHASED ARRAY ANTENNA DESIGN
36		ADVANCED TOPICS IN COMMUNICATION
37		PHOTONIC INTEGRATED DEVICES AND SYSTEMS
38		EMI/EMC
39		WIRELESS SENSOR NETWORKS
40		COMPUTATIONAL ELECTROMAGNETICS
41		ADVANCED PHOTONIC DEVICES AND COMPONENTS
42		TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT
43		ADVANCED NETWORKING ANALYSIS
44		ADVANCED DIGITAL SIGNAL & IMAGE PROCESSING
45		MICROELECTRONIC DEVICES AND CIRCUITS
46		ADVANCED COMPUTER ARCHITECTURE
47		MICRO AND NANO ELECTRO MECHANICAL SYSTEMS
48		SYNCHRONOUS & ASYNCHRONOUS SEQUENTIAL CIRCUITS
49		ESTIMATION AND DETECTION
50		RF INTEGRATED CIRCUITS
51		PATTERN RECOGNITION AND MACHINE LEARNING
52		QUANTUM COMPUTING
53		PHOTONIC SWITCHING
54		SYSTEM LEVEL DESIGN & MODELING
55		FUNDAMENTALS OF PHOTONICS
56		FOUNDATIONS OF MACHINE LEARNING
57		FOUNDATIONS OF DATA SCIENCE
58		ADVANCED SEMICONDUCTOR DEVICES & CIRCUITS
59		QUANTUM MECHANICS FOR ELECTRONICS ENGINEERING
60		EMBEDDED SYSTEMS DESIGN & CYBER PHYSICAL SYSTEMS
61		MEDICAL ENGINEERING & SYSTEMS
62		MIXED SIGNAL IC DESIGN

**HONORS AND MINOR SPECIALIZATION**

- A. The students will have the option to choose from a basket of multiple sub-domains within the parent department (through Honors) or sub-domains of departments other than the parent department (Minor Specialization).
- B. Requirements for Honors and Minor Specialization programs
- i. Honors and Minor programs start from V Semester.
  - ii. Minimum CGPA requirements for registration shall be 7.50 at the end of IV semester. Students of a department will be allowed to register for Honors program offered by

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

their parent department, while students of a department will be allowed to register for Minor program offered by any other department.

- iii. Number of additional credits shall be 18 with 6 courses (or 5 courses + 1 mini project of 3 credits) as prescribed by the department offering Honors/Minor program.
  - iv. The student is required to plan registration for Honors/Minor program courses, in order to complete all the six courses by the end of VIII semester.
  - v. Maximum number of students enrolled in any course of a Minor program shall be 30. The allotment of students in the minor program shall be on the basis of CGPA.
  - vi. The student will not be allowed to continue/register for Honors/ Minor specialization if his/her CGPA falls below 7.50. In case, his/her CGPA improves to 7.50 or higher in subsequent semester(s), he/she may be allowed to continue.
  - vii. Students should be prepared to write more than one exam in a day.
- C. After successful completion of the requirements of the Honors program, the student will be awarded a degree in “name of the discipline” with “Honors” (e.g. Bachelor of Technology in Civil Engineering with Honors or Bachelor of Technology in Mechanical Engineering with Honors etc.).
- D. After successful completion of the requirements of the Minor program, the student will be awarded a degree in “name of the discipline” with minor specialization in “name of the minor specialization” (e.g. Bachelor of Technology in Electrical Engineering with Minor Specialization in Environmental Engineering or Bachelor of Technology in Computer Science and Engineering with Minor Specialization in Quantum Mechanics etc.).

**Table-I: MINOR in Electronics and Communication Engineering**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1			Analog Communication		Theory	3	3-0-0
2			Digital Logic Design		Theory	3	3-0-0
3			Signals and Systems		Theory	3	3-0-0
4			Electronic Devices and Circuits		Theory	3	3-0-0
5			Linear Integrated Circuits		Theory	3	3-0-0
6			Wireless and 5G Communication		Theory	3	3-0-0
7			Digital Communication Systems		Theory	3	3-0-0
8			Embedded Systems		Theory	3	3-0-0

- 1) The student has to do 6 courses. The (\*) indicated two subjects can be taken in either VII/VIII semester considering the provision for one semester industrial internship.

0036



**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

**Honors offered by Department of Electronics and Communication Engineering**

**Table-II Honors in Machine Learning and Signal Processing**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1			Modeling, Optimization and Transforms		Theory	3	3-0-0
2			Multirate Signal Processing		Theory	3	3-0-0
3			Medical Engineering and Systems		Theory	3	3-0-0
4			Computer Vision		Theory	3	3-0-0
5			Reduced order modeling, Optimization and Machine Intelligence		Theory	3	3-0-0
6			VLSI Signal Processing Architecture		Theory	3	3-0-0
7			Mini Project on Machine Learning and Signal Processing		Practical	3	0-0-6
8			Adaptive Signal Processing		Theory	3	3-0-0
9			Advanced Digital Signal and Image Processing		Theory	3	3-0-0
10			Pattern Recognition and Machine Learning		Theory	3	3-0-0
11			Mini Project on Machine Learning and Signal Processing		Practical	3	0-0-6

- 1) The student has to do 6 courses. The (\*) indicated two subjects can be taken in either VII/VIII semester considering the provision for one semester industrial internship.
- 2) The student has to do 6 courses. The (\*) indicated two subjects can be taken in either VII/VIII semester considering the provision for one semester industrial internship.

**Table-III Honors in VLSI Design**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1			CAD ALGORITHMS FOR VLSI PHYSICAL DESIGN		Theory	3	3-0-0
2			CAD Algorithms for Synthesis of VLSI Systems		Theory	3	3-0-0
3			Digital System Design & FPGA		Theory	3	3-0-0
4			Formal Verification of Digital Hardware & Embedded Software		Theory	3	3-0-0

**UG SCHEME : Department of Electronics & Communication Engineering,  
Malaviya National Institute of Technology Jaipur**

5			Micro- & Nano- electro-mechanical Systems (MEMS & NEMS)		Theory	3	3-0-0
6			Mini Project on VLSI Design		Theory	3	3-0-0
7			Mixed Signal IC Design		Theory	3	3-0-0
8			Nanotechnology & Emerging Applications		Theory	3	3-0-0
9			System Level Design & Modeling		Theory	3	3-0-0
10			VLSI SIGNAL PROCESSING ARCHITECTURES		Theory	3	3-0-0
11			VLSI Technology		Theory	3	3-0-0
12			Quantum Computing		Theory	3	3-0-0

- 3) The student has to do 6 courses. The (\*) indicated two subjects can be taken in either VII/VIII semester considering the provision for one semester industrial internship.

**Tabel V Honors in Embedded & Intelligent Systems**

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1			Advanced Embedded software design		Theory	3	3-0-0
2			Advanced Microcomputer Systems & Interfacing		Theory	3	3-0-0
3			CAD Algorithms for Synthesis of VLSI Systems		Theory	3	3-0-0
4			Computer vision		Theory	3	3-0-0
5			Formal Verification of Digital		Theory	3	3-0-0
6			Hardware & Embedded Software		Theory	3	3-0-0
7			Mini Project on Embedded Systems		Practical	3	0-0-6
8			Pattern Analysis & Machine Intelligence		Theory	3	3-0-0
9			Reduced order Modeling, Optimization & Machine intelligence		Theory	3	3-0-0
10			Embedded SoC Design		Theory	3	3-0-0
11			Probabilistic Machine Learning & AI Quantum Computing		Theory	3	3-0-0
12			Internet of Things & IIoT		Theory	3	3-0-0

- 1) The student has to do 6 courses. The (\*) indicated two subjects can be taken in either VII/VIII semester considering the provision for one semester industrial internship.

UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

First Year (I and II Semester)

S. No	Course Code	Course Title	Category	L	T	P	Credits	No of Hrs	Total Credit	Syllabus at Page-No.
1	22CYT101	Engineering Chemistry	BS	2	1	0	3	3		
2	22CYP102	Engineering Chemistry Lab	BS	0	0	2	1	2		
3	22PHT101	Classical Physics	BS	2	1	0	3	3		
4	22PHP103	Classical Physics Lab	BS	0	0	2	1	2		
5	22MAT101	Mathematics I	BS	3	1	0	4	4		
6	22MAT102	Mathematics II	BS	3	1	0	4	4		
7	22EET101	Basics of Electronics and Electrical Eng.	EAS	3	0	0	3	3		
8	22EEP102	Electrical Engineering Lab	EAS	0	0	2	1	2		
9	22ECP101	Electronics Engineering Lab	EAS	0	0	2	1	2		
10	22CET101	Engineering Drawing and Sketching	EAS	1	1	1	2	3		
11	22CST101	Programming with Python	EAS	2	0	0	2	2		
12	22CSP102	Programming with Python Lab	EAS	0	0	2	1	2		
13	22CET102	Environmental Science	EAS	2	0	0	2	2		
14	22MET101	Introduction to Mechanical Systems	EAS	2	0	0	2	2		15
15	22MEP102	Product Realization through Manufacturing	EAS	0	0	2	1	2		16
16	22HST101	Basic Economics	HSS	2	0	0	2	2		
17	22HST102 / 22HST103	English Communication Skills (Basic) / English Communication Skills (Advanced)	HSS	2	0	0	2	2		
18	22HSP104 / 22HSP105	Communication Skills lab (Basic) / Communication Skills lab (Advanced)	HSS	0	0	2	1	2		
							36	44	36	
19	22MET103	Applied Probability and Statistics	PC	2	1	0	3	3		Sem I-17
20	22MET104	Casting, Welding and Forming	PC	3	0	0	3	3		Sem I-18
21	22MEP105	Casting, Welding and Forming Lab	PC	0	0	2	1	2		Sem I-19
22	22MET106	Engineering Thermodynamics	PC	3	1	0	4	4		Sem II-20
23	22MET107	Engineering Mechanics	PC	2	1	0	3	3		Sem II-21
							14	15	14	
							50			

*Dr. S. K. Singh*  
19/05

*K. Singh*

UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

III Semester										
S. No	Course Code	Course Title	Category	L	T	P	Credits	No of Hrs	Total Credit	Syllabus at Page- No.
1		Materials Science and Engineering	PC	3	0	0	3	3		22
2		Fluid Mechanics	PC	3	1	0	4	4		23
3		Solid Mechanics	PC	3	1	0	4	4		24
4		Kinematics of Machines	PC	2	1	0	3	3		25
5		Mechanical Measurements and Metrology	PC	3	0	0	3	3		26
6		Industrial Engineering	PC	2	0	0	2	2		27
7		Computer-Aided Machine Drawing	PC	0	0	4	2	4		28
8		Materials Science and Engineering Lab	PC	0	0	2	1	2		29
9		Fluid Mechanics Lab	PC	0	0	2	1	2		30
10		Mechanical Measurements and Metrology Lab	PC	0	0	2	1	2		31
11		Industrial Engineering Lab	PC	0	0	2	1	2		32
							25	31	25	
IV Semester										
1		I C Engines	PC	3	0	0	3	3		33
2		Operations Planning and Control	PC	2	1	0	3	3		34
3		Science of Machining	PC	3	1	0	4	4		35
4		Dynamics of Machines	PC	3	1	0	4	4		36
5		Heat Transfer	PC	3	1	0	4	4		37
6		I C Engines Lab	PC	0	0	2	1	2		38
7		Science of Machining Lab	PC	0	0	2	1	2		39
8		Kinematics and Dynamics of Machines Lab	PC	0	0	2	1	2		40
9		Heat Transfer Lab	PC	0	0	2	1	2		41
10	xxxxxxx	Program Elective-1	PE				3	3		
							25	29	25	

*Handwritten signature*  
19/05

*Handwritten signature*  
19/05

UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

V Semester										
S. No	Course Code	Course Title	Category	L	T	P	Credits	No of Hrs	Total Credit	Syllabus at Page-No
1		Design of Machine Elements	PC	3	1	0	4	4		42
2		Operations Research	PC	2	1	0	3	3		43
3		Fluid and Turbo Machines	PC	3	1	0	4	4		44
4		Computer Aided Design & Computer Aided Manufacturing	PC	3	0	0	3	3		45
5		Computer Aided Design & Computer Aided Manufacturing Lab	PC	0	0	2	1	2		46
7	xxxxxxx	Program Eelctive-2	PE				3	3		
8	xxxxxxx	Program Elective-3	PE				3	3		
9	xxxxxxx	Introduction to Standardization	Audit	1	0	0	1	1		57
10	xxxxxxx	Honors-1	H				3			
11	xxxxxxx	Honors-2	H				3			
		Semester Credits in B Tech (Only)					21	23	21	
		Semester Credits in B Tech (Hon.)					27		24	
VI Semester										
1		Refrigeration and Air Conditioning	PC	2	1	0	3	3		47
2		Design of Mechanical Systems	PC	3	1	0	4	4		48
3		Advanced Machining & Additive Manufacturing	PC	3	0	0	3	3		49
4		Advanced Machining & Additive Manufacturing Lab	PC	0	0	2	1	2		50
5		Refrigeration and Air-conditioning Lab	PC	0	0	2	1	2		51
6		Computer Aided Engineering Lab	PC	0	0	2	1	2		52
7	xxxxxxx	Program Elective-4	PE				3	3		
8	xxxxxxx	Program Elective-5	PE				3	3		
9	xxxxxxx	Program Elective-6	PE				3	3		
10	xxxxxxx	Honors-3	H				3			
11	xxxxxxx	Honors-4	H				3			
		Semester Credits in B Tech (Only)					22	25	22	
		Semester Credits in B Tech (Hon.)					28		28	

*Signature*  
19/10/22

*Signature*

DUGC Convener

HOD

Page 8

0041



UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

VII Semester										
S. No	Course Code	Course Title	Category	L	T	P	Credits	No of Hrs	Total Credit	Syllabus at Page-No
1	xxxxxxx	Basics of Management	Mgt.	3	0	0	3	3		53
2		Training Seminar	PC	0	0	2	2	2		54
3	xxxxxxx	Program Elective-7	PE				3	3		
4	xxxxxxx	Open Elective -I	OE				3	3		
5		Mini Project	Proj.	0	0	6	3	6		55
6	xxxxxxx	Program linked EAS/BS	P-EAS	x	x	x	3	3		
7	xxxxxxx	Honors-5	H				3			
		Semester Credits in B Tech (Only)					17	18	17	
		Semester Credits in B Tech (Hon.)					20		20	
VIII Semester										
1		Major Project	Proj.	0	0	18	9	18		56
2	xxxxxxx	Advanced Elective-1	AE				3	3		
3	xxxxxxx	Advanced Elective-2	AE				3	3		
4	xxxxxxx	Open Elective -2	OE				3	3		
5	xxxxxxx	Honors-6	H				3			
		Semester Credits in B Tech (Only)					18	18	18	
		Semester Credits in B Tech (Hon.)					21		24	
Total Credits in B Tech (Only)									178	
Total Credits in B Tech (with Honors)									196	

*Handwritten signature*  
19/05

*Handwritten signature*

UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

List of Program Electives / Advanced Electives / Open Electives										
Sem.	Course Code	Course Title	Category				Credits	No of Hrs	Total Credit	Syllabus at Page- No
				L	T	P				
4th		Work Study and Ergonomics	PE-1	2	1	0	3	3	3	58
		Mechatronics in Manufacturing		2	1	0	3	3		59
		Machine Learning		2	1	0	3	3		60
5th		Design of Heat Exchangers	PE-2 and PE-3	2	1	0	3	3	6	61
		Automobile Engineering		3	0	0	3	3		62
		Design of Mechanisms		2	1	0	3	3		63
		Robotics Engineering		3	0	0	3	3		64
		Product Design and Development		2	1	0	3	3		65
		Design Thinking for Innovations		2	1	0	3	3		66
6th		Finite Element Methods	PE4, PE5 and PE6	3	0	0	3	3	9	67
		Metal Forming		3	0	0	3	3		68
		Mechanical Vibrations		3	0	0	3	3		69
		Supply Chain Management		2	1	0	3	3		70
		Quality System Engineering		3	0	0	3	3		71
		Power Plant Engineering		3	0	0	3	3		72
		Project Management		3	0	0	3	3		73
		Friction, Wear and Lubrication		3	0	0	3	3		74
		Intellectual Property Rights and Technology Transfer		2	1	0	3	3		75
7th		Mechanics of Composites	PE7	3	0	0	3	3	3	76
		Air Conditioning System Design		2	1	0	3	3		77
		Tool Engineering		3	0	0	3	2		78
		Material Selection in Mechanical Design		3	0	0	3	2		79
		Lean Six Sigma		3	0	0	3	3		80
		Occupational Health and Safety		3	0	0	3	3		81
		Welding Engineering & Technology		3	0	0	3	3		82
	Entrepreneurship and Business Incubation	2	1	0	3	3	83			
8th		Data Analytics	AE1 and AE2	3	0	0	3	3	6	84
		Fracture Mechanics		3	0	0	3	3		85
		Reliability and Maintainability Engineering		3	0	0	3	3		86
		Advanced Engineering Materials		3	0	0	3	3		87
		Sustainable Manufacturing and Life Cycle Engineering		3	0	0	3	3		88
		Computational Fluid Dynamics		3	0	0	3	3		89
		Flexible Manufacturing System		3	0	0	3	3		90
		Smart Manufacturing		3	0	0	3	3		91
		Machinery Fault Diagnosis		3	0	0	3	3		92
		Microfluidics		3	0	0	3	3		93
Total Courses				09 Courses out of 34				27		

DUO Convener

*[Signature]*  
19/05

HOD

*[Signature]*

Page 10

0043

UG SCHEME 2022: Department of Mechanical Engineering

Malaviya National Institute of Technology Jaipur

Honours and / or Minors Offered by Mechanical Engineering department										
S. No	Course Code	Course Title	Sem.				Credits	No of Hrs	Total Credit	Remarks
				L	T	P				
		<b>Advanced Manufacturing Technologies</b>								
1		Metal Additive Manufacturing	V	3	0	0	3	3		94
2		AM, PM&M, Mfg. Automation Lab	V	0	0	6	3	6		95
3		Precision Manufacturing and Measurement	VI	3	0	0	3	3		96
4		Manufacturing Automation	VI	3	0	0	3	3		97
5		Micro-Nano Fabrication	VII	2	1	0	3	3		98
6		Project on AMTs	VIII	0	0	0	3	6	18	99
		<b>Supply Chain Analytics</b>								
1		Data Science for Supply Chain Management	V	2	1	0	3	3		100
2		Modelling Sustainability	V	2	1	0	3	3		101
3		Business Logistics	VI	2	1	0	3	3		102
4		Prescriptive Analytics	VI	2	1	0	3	3		103
5		Supply Chain 4.0	VII	2	1	0	3	3		104
6		Project on Supply Chain Analytics	VIII	0	0	6	3	6	18	105
		<b>Robotics &amp; Automation</b>								
1		Kinematics and Dynamics of Robotic Manipulators	V	2	1	0	3	3		106
2		Control of Robots and Automation Systems	V	3	0	0	3	3		107
3		Robot Vision and Sensing	VI	3	0	0	3	3		108
4		Programming, Control and Automation Lab	VI	0	0	0	6	3		109
5		Artificial Intelligence for Robotic systems	VII	2	1	0	3	3		110
6		Project on Robotics and Automation	VIII	0	0	6	3	6	18	111
		<b>Advanced Thermal Systems</b>								
1		Advanced Fluid Mechanics	V	3	0	0	3	3		112
2		Numerical Methods and Data Visualization	V	2	1	0	3	3		113
3		A. Design of Heat Exchanger / B. Environment, Social and Governance	VI	2	1	0	3	3		114 115
4		High Performance computing and AI in thermal-fluid system	VI	2	1	0	3	3		116
5		A. Computational Heat Transfer / B. Experimental Methods in Thermal Sciences	VII	3	0	0	3	3		117 118
6		Thermal simulation Lab & Project	VIII	0	0	6	3	6	18	

*Done,*  
19/05

*[Signature]*

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR  
DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

Curriculum structure of B.Tech Programme

Semester I & II

S. N.	Course Code	Course Title	Category	L	T	P	Credits	Contact Hrs	Total Credits
1		Chemistry	BS	2	1	0	3	3	
2		Chemistry Lab	BS	0	0	2	1	2	
3		Physics	BS	2	1	0	3	3	
4		Physics Lab	BS	0	0	2	1	2	
5		Mathematics I	BS	3	1	0	4	4	
6		Mathematics II	BS	3	1	0	4	4	
7		Basics of Electronics and Electrical Eng.	EAS	3	0	0	3	3	
8		Electrical Engineering Lab	EAS	0	0	2	1	2	
9		Electronics Engineering Lab	EAS	0	0	2	1	2	
10		Engineering Drawing and Sketching	EAS	1	1	1	2	3	
11		Computer Science and Programming	EAS	2	0	0	2	2	
12		Programming Lab	EAS	0	0	2	1	2	
13		Environmental Science and Ecology	EAS	2	0	0	2	2	
14		Introduction to Mechanical Systems	EAS	2	0	0	2	2	
15		Product Realization through Manufacturing	EAS	0	0	2	1	2	
16		Basic Economics	HSS	2	0	0	2	2	
17		Technical Communication	HSS	2	0	0	2	2	
18		Language Lab	HSS	0	0	2	1	2	
							36	44	36
19	SEM-I	Introduction to Engineering Materials	PC	3	0	0	3	3	
20	SEM-I	Fuels, Furnaces and Refractories	PC	3	1	0	4	4	
21	SEM-II	Introduction to Physical Metallurgy	PC	3	1	0	4	4	
22	SEM-II	Mineral Processing	PC	3	0	0	3	3	
							14	14	14


  
 kishore  
 (DUGT/01/01/01)

## Semester III

S. N.	Course Code	Course Title	Category	L	T	P	Credits	Contact Hrs	Total Credits
1		Introduction to Extractive metallurgy	PC	3	0	0	3	3	
2		Electrometallurgy and Corrosion	PC	3	1	0	4	4	
3		Mechanical Behaviour and Testing of Metals	PC	3	1	0	4	4	
4		Metallurgical Thermodynamics and Kinetics	PC	3	1	0	4	4	
5		Foundry Technology	PC	3	1	0	4	4	
6		Testing of Materials Lab	PC	0	0	2	2	2	
7		Foundry Technology Lab	PC	0	0	2	2	2	
8		Mineral Processing Lab	PC	0	0	2	2	2	
9		Fuel, Furnaces and Refractories Lab	PC	0	0	2	1	2	
							26	27	26

## Semester IV

1		Mechanical Working of Metals	PC	3	1	0	4	4	
2		Iron Making	PC	3	1	0	4	4	
3		Phase Transformation	PC	3	1	0	4	4	
4		NDT and Evaluation	PC	3	0	0	3	3	
5		Transport Phenomena	PC	3	1	0	4	4	
6		Metallography and Structural Characterization Lab	PC	0	0	2	2	2	
7		Electrometallurgy and Corrosion Lab.	PC	0	0	2	1	2	
8		NDT and Metallurgical Analysis Lab	PC	0	0	2	1	2	
9		Metal Working Lab	PC	0	0	2	1	2	
							24	27	24

S. K. S. Kumar

M. J. C.

K. K. K.

2

S. K. S.

S. K. S.



## Semester V

S. N.	Course Code	Course Title	Category	L	T	P	Credits	Contact Hrs	Total Credits
1		Materials Characterization	PC	3	0	0	3	3	
2		Production of Sponge Iron and Ferroalloys	PC	3	0	0	3	3	
3		Introduction to Nano Materials and Technology	PC	3	0	0	3	3	
4		Powder Metallurgy	PC	3	1	0	4	4	
5		Principles of Heat Treatment	PC	3	1	0	4	4	
6		Materials Characterization Lab	PC	0	0	2	1	2	
7		Extractive Metallurgy and Thermodynamics Lab	PC	0	0	2	1	2	
8		Powder Metallurgy Lab	PC	0	0	2	1	2	
9		Heat Treatment and Thermodynamics Lab	PC	0	0	2	1	2	
10		Departmental Elective-I	PE	3	0	0	3	3	
							24	28	24

## Semester VI

1		Joining of Materials	PC	3	0	0	3	3	
2		Steel Making	PC	3	1	0	4	4	
3		Non-Ferrous Extractive Metallurgy	PC	3	0	0	3	3	
4		Composite Materials	PC	3	1	0	4	4	
5		Joining of Materials Lab	PC	0	0	2	1	2	
6		Departmental Elective-II	PE	3	0	0	3	3	
							18	19	18

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

## Semester VII

S. N.	Course Code	Course Title	Category	L	T	P	Credits	Contact Hrs	Total Credits
1		Training Seminar	PC	1	0	4	3	5	
2		Minor Project	PC	0	0	6	3	6	
3		Departmental Elective-III	PE	3	0	0	3	3	
4		Departmental Elective-IV	PE	3	0	0	3	3	
5		Departmental Elective-V	PE	3	0	0	3	3	
6		Open Elective-I	OE	3	0	0	3	3	
							18	23	18

## Semester VIII

1		Major Project	PC	0	0	9	6	9	
2		Basic Management	PC	3	0	0	3	3	
3		Departmental Elective-VI	AE	3	0	0	3	3	
4		Departmental Elective-VII	AE	3	0	0	3	3	
5		Open Elective-II	OE	3	0	0	3	3	
							18	21	18

Total Credits: 36+14+26+24+24+18+18+18=178

Kishore

Sreekanth

Sreekanth

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR**  
**DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING**

Curriculum structure For B.Tech Honours Degree

**Semester V**

S. N.	Course Code	Course Title	Category	L	T	P	Credits	Contact Hrs	Total Credits
1		Departmental Elective-VIII	PE	3	0	0	3		
2		Departmental Elective-IX	PE	3	0	0	3		

**Semester VI**

1		Departmental Elective-X (from M.Tech. electives)	PE	3	0	0	3		
2		Departmental Elective-XI	PE	3	0	0	3		

**Semester VIII**

1		Advanced Elective-1 (from M.Tech. courses)	AE-I	3	0	0	3		
2		Advanced Elective-2 (from M.Tech. courses)	AE-II	3	0	0	3		



Prof. Upender Pandel  
(Head of the Department)



Dr. Sree Kumar Vadakke Madam  
(DUGC Convener)