

मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर  
MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

पंजिका संख्या / FILE NO. F4/S-V-1/20-21-Acad

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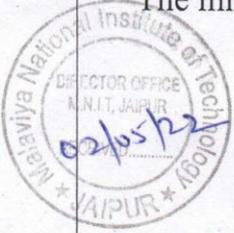
**Note Sheet**

OFFICE OF THE DEAN ACADEMIC

**Sub: Minutes of 44<sup>th</sup> Senate meeting (hybrid mode).**

The 44<sup>th</sup> Senate meeting was held on 8<sup>th</sup> April 2022. Draft minutes of the meeting were circulated to all Senate members for comments till 5.00 PM, 28/04/2022 (Thursday). Some comments received from the members are attached herewith for your kind information.

The minutes of the 44<sup>th</sup> Senate meeting are submitted for kind perusal and approval.



*G. Vard*

Chairman, Senate

02/05/2022

*Mehinda*  
REGISTRAR  
02/05/22  
& Secretary

Registrar



# Malaviya National Institute of Technology Jaipur

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

JLN Marg, Jaipur-302017 (RAJASTHAN) INDIA

## MINUTES OF 44<sup>TH</sup> MEETING OF SENATE HELD ON 08<sup>TH</sup> APRIL 2022

The 44<sup>th</sup> meeting of Senate was held on 08<sup>th</sup> April 2022 from 4.00 PM onwards in Niti Sabhagar Second floor, Prabha Bhawan of the Institute. The meeting was held in hybrid mode. In all 55 members attended the meeting. The list of members who attended the meeting is enclosed as Annexure-A and the list of members who were unable to attend the meeting is enclosed as Annexure-B.

At the outset, the Dean, Academic welcomed the Director & Chairman Senate, Senate members and gave an introduction of new external members Prof. Ashok Kumar Pradhan, Prof Shuchi Srivastava and Prof. Vipul Rastogi and expressed sincere hopes that their contribution would be very valuable and enriching for the Institute. The Chairman Senate in his remarks in his first Senate meeting of MNIT Jaipur welcomed all the members present in the meeting and also appreciated the contribution of the former external Senate members. The Director & Chairman Senate requested all the members of the Senate to observe one minute silence for the COVID victims in World.

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

Item No. 44.1.0	:	<b>To confirm the minutes of the 43<sup>rd</sup> meeting of the Senate held on December 14<sup>th</sup>, 2021.</b>  The 43 <sup>rd</sup> Senate meeting was held on December 14 <sup>th</sup> , 2021. The draft minutes of the meeting were circulated to all the Senate members. No comments were received on the minutes. Thereafter the minutes were approved by the Chairman Senate and were circulated amongst the members for information.  Request of Prof. SK Jana to include his name in the list of senate members who attended 43 <sup>rd</sup> meeting was agreed upon and the minutes of the 43 <sup>rd</sup> Senate meeting were confirmed with this change.
Item No. 44.2.0	:	<b>To note the "Action Taken" on the decisions taken in the 43<sup>rd</sup> meeting of the Senate.</b>  Dean (Academic) apprised Senate of minor changes (1) Item 43-3.4: inclusion of "National Level Examination" for admission to Ph.D. program with Institute Assistantship in Departments of Management Studies and Humanities and Social Sciences. (2) Item 43-3.5: Recommendation of committee in respect of release of Institute Assistantship to Ph.D. students shall also be applicable to M.Tech. students. (3) Item 43-3.7: "a research paper published in open access journal can be considered to meet upto a maximum of one journal publication towards requirement of Ph.D. thesis".  Senate members agreed with all these changes. The "Action Taken Report" of the 43 <sup>rd</sup> meeting of the Senate was noted with aforementioned changes.
Item No. 44-3-0	:	<b>Items for consideration</b>
Item No. 44-3.1	:	<b>To consider implementation of new UG curricular structure.</b>  The matter was deliberated at length and the senate accorded in principle approval to the proposed B.Tech curricular structure.

Certain suggestions were put forth by some Senate members. It was decided that Dean (Academic) shall hold a meeting with HoDs to resolve how to incorporate these suggestions. It was further decided that minutes of this meeting shall be circulated with draft senate minutes to senate members for approval. Minutes of these meeting are placed at Annexure-I

Approved curricular structure after incorporating the decisions of this meeting is placed at Annexure-II.

Item No. 44-3.2

**To consider revisions in sponsored category for Ph.D. admission and introduction of new category for admission of professionals to PhD programme.**

After detailed deliberation, the Senate approved the proposal with some minor modifications. The following was approved by the Senate

1. Ph.D. category for Full Time (without Scholarship) is discontinued from forthcoming semester.
2. A new Ph.D Admission Category: Executive/Professional is introduced.
3. For all PhD categories with "experience" as a pre-requisite, only the relevant experience after the qualifying degree shall be admissible.
4. Approved categories of PhD Admission at MNIT Jaipur along with admission requirements is as follows

S.No.	Category	Full Time/ Part Time	Exam	Interview	Experience	NOC/Consent	Institute Scholarship	GATE/ UGC-NET/ National level exam
1.	Full Time with scholarship	Full Time	✓	✓	X	X	✓	✓
2.	Full Time with own scholarship**		X	✓	X	X	X	✓
3.	Full Time Sponsored*		✓	✓	✓	✓	X	X
4.	Off Campus* (beyond 70 km from Jaipur) Sponsored (PT)	Off Campus	✓	✓	✓	✓	X	X
5.	Part Time*	Part Time	✓	✓	✓	✓	X	X
6.	Project Staff (PT)		✓	✓	✓	✓	X	X
7.	Faculty (PT)		✓	✓	✓	✓	X	X
8.	Staff (PT)		✓	✓	✓	✓	X	X
9.	Executive/Professional		X	✓	✓	✓	X	X

Senate also approved the following eligibility requirements for the new Ph.D Admission Category: Executive/Professional

- (1) Only candidates working in following organizations shall be considered:-
  - a. government organizations/laboratories,
  - b. PSUs, and
  - c. Reputed companies i.e. Companies having annual turnover of Rs. 50 Crores or more.
- (2) Candidate should have following educational qualification and experience.
  - a. Post Graduate Degree with at least 12 years professional experience.
  - b. B.Tech. Degree with at least 15 years professional experience.
- (3) Candidates should have demonstrated research potential through research papers in reputed journals/conferences or patents or technology transfer/deployed.

*Dehri*

	<p>(4) The course credit requirement would be as per the current practice for Part-Time candidates.</p> <p>(5) The minimum residency requirements for such candidates will be one semester.</p> <p>(6) All other conditions shall be as per the PG rules and regulations of MNIT Jaipur.</p> <p>Senate also approved the following admission procedure for the new Ph.D Admission Category: Executive/Professional</p> <p>(1) The candidate will be required to make a research proposal presentation to the DFB. Thereafter, the Chairman of the Departmental Selection Committee (DSC) will send the DFB's recommendation to the Office of Dean Academic (ODA).</p> <p>(2) The following committee will conduct the interview of the candidate</p> <table border="0" style="margin-left: 40px;"> <tr> <td>a. Dean (Academic)</td> <td>Chairperson</td> </tr> <tr> <td>b. Dean (Research and Consultancy)</td> <td>Member</td> </tr> <tr> <td>c. Head of the Department</td> <td>Member</td> </tr> </table> <p>(3) The recommendation of the above committee will be approved by the Chairman, Senate for the selection of the candidate.</p>	a. Dean (Academic)	Chairperson	b. Dean (Research and Consultancy)	Member	c. Head of the Department	Member
a. Dean (Academic)	Chairperson						
b. Dean (Research and Consultancy)	Member						
c. Head of the Department	Member						
<p>Item No. 44-3.3</p> <p><i>Hehnd</i></p>	<p><b>To consider establishment of 'Continuing and Digital Education Centre (CDEC)' at MNIT Jaipur.</b></p> <p>The Senate approved the establishment of 'Continuing and Digital Education Centre (CDEC)' at MNIT Jaipur. The objectives of the 'Continuing and Digital Education Centre (CDEC)' will be as follows:</p> <ol style="list-style-type: none"> <li>(1) To offer facilities for the creation and conduct of digital course material and online courses.</li> <li>(2) To improve and build better interactions with industry/Government organisations through certificate courses for the continuing educational requirement</li> <li>(3) To create technically skilled manpower for nation-building</li> <li>(4) To facilitate faculty members conducting various kinds of training programmes by creating a single-window service facility</li> <li>(5) To facilitate organizing programmes/events such as Self-financed Short Term Courses, AICTE-QIP Courses, TEQIP sponsored Courses, GIAN Courses, NPTEL Courses, SWAYAM Courses, Industry Specific courses, Credit-based courses, Courses for Government schemes like GATI Shakti, Skill India.</li> <li>(6) In due course, CDEC should strive for becoming self sustainable and subsequently a revenue-generating centre.</li> </ol> <p>Senate approved identification of appropriate space, providing seed fund and staff for the smooth functioning of such a center in view of its usefulness in facilitating faculty members for their Continuing and digital education related initiatives.</p>						
<p>Item No. 44-3.4</p>	<p><b>To consider credit transfer of SWAYAM National Programme of Technology Enhanced Learning (NPTEL) courses at MNIT Jaipur</b></p> <p>The proposal regarding credit transfer of SWAYAM National Programme of Technology Enhanced Learning (NPTEL) courses at MNIT Jaipur was discussed in the Senate.</p> <p>The Senate approved the following :-</p> <ol style="list-style-type: none"> <li>(1) A student registered for a degree programme at MNIT can opt for NPTEL course only if it is not being offered at MNIT or if the student is doing an internship.</li> <li>(2) A student cannot enroll for any Institute core or Programme core subject through NPTEL. Ph.D. students can opt for courses other than two mandatory courses of "Research Methodology".</li> </ol>						

- (3) Grades awarded to students enrolled for NPTEL courses shall be accepted provided enrollment is approved by DUGC/DPGC of the respective department.
- (4) Credits as assigned to a NPTEL course shall be accepted without any change.
- (5) Maximum credits earned through NPTEL courses shall be as follows:

S.No.	Degree Programme	Maximum credits allowed
1	B.Tech/B.Arch.	6 credits
2	MSc/M.Tech/M.Plan/MBA	3 credits
3	PhD	3 credits

- (6) Following is the proposed mapping of NPTEL score and certificate category to MNIT grades.

S.No.	NPTEL Score and Certificate category	Mapping to MNIT Grades
1	<40% No certificate	FP / FA (fail grade)
2	40% - 59% Successfully completed	< 45% DD
		< 50% CD
		< 60 % CC
3	60% - 89% Successfully completed	< 70% BC
		< 80% BB
		< 90 % AB
4	>= 90% Successfully completed	AA

Senate members agreed unanimously that MNIT Jaipur must establish a local NPTEL center under the aegis Continuing and Digital Education Center and offer relevant technical content.

Item No. 44-3.5

**To consider modifications in distribution of evaluation components for theory and lab courses.**

The matter regarding the modifications in distribution of evaluation components for theory and lab courses was discussed in the meeting.

The Senate approved the following distribution for various evaluation components. In courses with credit structure having both theory and laboratory elements, distribution of the marks for theory and laboratory shall be based on credits assigned to each.

	Theory Course			Laboratory Course		
	Evaluation Component	Approved	Proposed	Evaluation Component	Approved	Proposed
1	CWS	20%	20-30%	PRS	60%	40-60%
2	MTE	30%	20-40%	PRM	20%	20-30%
3	ETE	50%	30-50%	PRE	20%	20-30%

It was decided that the course coordinators must announce the distribution, within the first week of the semester, to the students.

Item No. 44-3.6

**To consider the programme of M. Tech. (Steel Technology) for Zero Year during academic session 2022-23.**

The Senate approved the proposal submitted by the Department of Metallurgical & Material Engineering regarding the zero year for the M. Tech. (Steel Technology) programme during academic session 2022-23.

Item No. 44-3.7

**To consider the eligibility criteria for admission to M.Tech. (Metallurgical & Materials Engineering) proposed by the Department of Metallurgical & Material Engineering.**

The proposal regarding the eligibility criteria for admission to M.Tech. (Metallurgical & Materials Engineering) proposed by the Department of Metallurgical & Material Engineering

was approved as proposed by the Senate.

Approved eligibility criteria for admission to M.Tech. (Metallurgical & Materials Engineering) is as follows.

Name of the Programme	Group	Degree Eligibility with degree codes	GATE Codes
M.Tech. (Metallurgical and Materials Engineering )	Group 1	B.E/B.Tech (All Engineering Branches) (T999), M.Sc. in Applied Physics-S503), M.Sc. in Materials Science- (S518), M.Sc. in Physics-(S523), M.Sc. in Engineering Physics and Instrumentation - (S535), M.Sc. in Nano Science and Technology-(S546), M.Sc. in Materials Science Solid State Physics-(S558)	MT, ME, XE,PH, CY, PI, CH

**Item No. 44-3.8 : To consider the proposed change in student intake for various M.Tech programmes**

Senate approved the change in student intake in the M.Tech programmes as proposed by the respective department.

Following is the approved student intake from academic year 2022-23 and onwards.

S No	Name of Programme	Department	Approved Student Intake
1	M. Tech. (Metallurgical & Materials Engineering)	Metallurgical & Materials Engineering	15
2	M.Tech (Chemical Engineering)	Chemical Engineering	15
3	M.Tech (Materials Science and Engineering)	Material Research Centre	15

**Item No. 44-3.9 : To consider the proposal regarding uniformity in policy for conduct of re-exam for MTE and ETE for PG students who miss their exam for genuine reasons.**

Based on the recommendations of the SPGB given in its 49<sup>th</sup> meeting held on 21<sup>st</sup> February 2022, the senate decided to adopt the following guidelines as stipulated in UG regulations regarding the conduct of re-exam for MTE and ETE for PG students who miss their exam for genuine reasons

Hence, the approved, guidelines for PG regulations will be as follows :-

“A student who misses MTE (Mid Term Examination) and/or ETE (End Term Examination) for genuine reasons may reappear for the same within 2 weeks after the last day of the exam.”

**Item No. 44-3.10 : To consider a new course "LCA of RE systems" to be offered as a programme elective for M.Tech (Renewable Energy)**

Based on the recommendations of the SPGB given in its 49<sup>th</sup> meeting held on 21<sup>st</sup> February 2022, the Senate approved a new programme elective “LCA of RE Systems” for M.Tech (Renewable Energy) as proposed by the Centre for Energy and Environment.

**Item No. 44-4-0 : Items for Ratification and Reporting**

**Item No. 44-4.1 : Minutes of the 49<sup>th</sup> meeting of SPGB held on 21<sup>st</sup> February, 2022.**

The minutes of 49<sup>th</sup> meeting of Senate Postgraduate Board (SPGB) were noted and ratified.

Item No. 44-4.2	: To report the minutes of 23 <sup>rd</sup> and 24 <sup>th</sup> meeting of Academic Affairs Committee meeting held on 06 <sup>th</sup> December 2021 and 21 <sup>st</sup> January 2022.  The 23 <sup>rd</sup> and 24 <sup>th</sup> meetings of Academic Affairs Committee were noted and ratified.
Item No. 44-4.3	: To note the revised Academic Calendar X Semester B.Arch. 2021-22, I & II Semester B.Tech./B.Arch. 2021-22, IV Semester B.Tech./B.Arch. 2021-22, VI Semester B. Tech./B.Arch. & VIII Semester B.Tech. 2021-22 and Revised PG (M.Tech./ M.Plan./MBA/M.Sc.) & Ph.D. Even Semester 2021-22.  Aforementioned academic calendars were noted and ratified.
Item No. 44-4.4	: To report the continuation of Ph.D. scholar Mr. Sandeep Kumar Gupta (2016RCP9033) in the Ph.D. programme in the Department of Computer Science & Engg.  Continuation of Mr. Sandeep Kumar Gupta (2016RCP9033) in the Ph.D. programme (Department of Computer Science and Engineering), as approved by SPGB, was noted and ratified.
Item No. 44-4.5	: To report the payment of HRA to the Ph.D. students who have not submitted the documents for release of HRA in specified time limit and to revise the frequency of submission of documents for release of HRA.  SPGB's decision in respect of payment of HRA to PhD students was noted and ratified.
Item No. 44-4.6	: To report the minutes of meeting of the unfair means committee held on March 03, 2022.  The minutes of the unfair means committee were noted and ratified.
Item No. 44-4.7	: To report the name of new three external Senate members nominated by the Chairperson, Board of Governors, MNIT Jaipur.  Chairperson, Board of Governors, MNIT Jaipur has nominated following for a period of two years. 1. Prof. Ashok Kumar Pradhan Department of Electrical Engineering IIT Kharagpur Email: <a href="mailto:akpradhan@ee.iitkgp.ac.in">akpradhan@ee.iitkgp.ac.in</a> , <a href="mailto:pradhan.ashok@gmail.com">pradhan.ashok@gmail.com</a>  2. Prof Shuchi Srivastava Professor, Department of Humanities & Head of Management Studies MANIT Bhopal Email: <a href="mailto:shuchi_rajendra@yahoo.co.in">shuchi_rajendra@yahoo.co.in</a>  3. Prof. Vipul Rastogi, Department of Physics IIT Roorkee Email: <a href="mailto:vipul.rastogi@ph.iitr.ac.in">vipul.rastogi@ph.iitr.ac.in</a>  The nomination has been made as per Section 14(d) of NIT Act 2007 "three persons, one of whom shall be woman, not being employees of the Institute, to be nominated by the Chairperson in consultation with the Director, form amongst educationists of repute, one each from the field of science, engineering and humanities". The above mentioned external members of the Senate were noted and ratified by the Senate.
Item No. 44-5.0	: Any other items with permission of chair.
Item No 44-5.1	: To consider the proposed curricular structure of B.Arch. programme.

The Senate approved the proposed curricular Structure of B.Arch. programme.

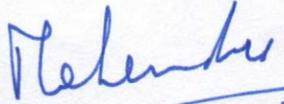
Item No 44-5.2

: **To consider the proposed change in student intake for M.Tech. programmes offered by the Department of Mechanical Engineering**

The Senate approved the request of Department of Mechanical Engineering in respect of change in student intake to be notified in the seat matrix to CCMT. The Senate approved the following student intake for various M.Tech programmes of the Department of Mechanical Engineering.

S No	Name of Programme	Department	Student Intake	
			Current	Proposed
1.	M. Tech. (Design Engineering)	Mechanical Engineering	22	20
2.	M.Tech. (Industrial Engineering)	Mechanical Engineering	25	20
3.	M.Tech. (Production Engineering)	Mechanical Engineering	22	20
4.	M.Tech. (Thermal Engineering)	Mechanical Engineering	20	20

The meeting ended with vote of thanks to the Chair.

  
Registrar & Secretary

Chairman Senate

The list of Senate members who attended online/offline 44<sup>th</sup> Senate meeting:

S. No.	Name
1.	Prof. N. P. Padhy
2.	Prof. Ashok Kumar Pradhan
3.	Prof. Shuchi Srivastava
4.	Prof. Vipul Rastogi
5.	Prof. A. B. Gupta
6.	Prof. B. L. Swami
7.	Prof. D. Boolchandani
8.	Prof. G. D. Agarwal
9.	Prof. G. S. Dangayach
10.	Prof. Ghanshyam Singh
11.	Prof. Girdhari Singh
12.	Prof. Gunwant Sharma
13.	Prof. Harpal Tiwari
14.	Prof. Himanshu Chaudhary
15.	Prof. Jyoti Joshi
16.	Prof. Jyotirmay Mathur
17.	Prof. K. K. Sharma
18.	Prof. K. R. Niazi
19.	Prof. Kanupriya Sachdev
20.	Prof. M. K. Shrimali
21.	Prof. M. L. Mittal
22.	Prof. M. M. Sharma
23.	Prof. Mahender Choudhary
24.	Prof. Manju Singh
25.	Prof. Manoj Fozdar
26.	Prof. Mohammad Salim
27.	Prof. Nupur Tondon
28.	Prof. R. C. Gupta
29.	Prof. Ragini Gupta
30.	Prof. Raj Kumar Vyas
31.	Prof. Rajeev Shringi
32.	Prof. Rajendra Kumar Goyal
33.	Prof. Rajesh Kumar
34.	Prof. Rajive Tiwari
35.	Prof. Rakesh Jain
36.	Prof. Ravindra Nagar
37.	Prof. S. D. Bharti
38.	Prof. S. P. Chaurasia
39.	Prof. Sanjay Mathur
40.	Prof. Sushant Kumar Jana
41.	Prof. Tarush Chandra
42.	Prof. Urmila Brighu
43.	Prof. Vibhuti Singh Shekhawat
44.	Prof. Vijay Laxmi
45.	Prof. Vineet Sahula
46.	Prof. Y.P. Mathur
47.	Dr. Dinesh Gopalani
48.	Dr. Dipti Sharma
49.	Dr. Kamalendra Awasthi

50.	Dr. Manish Vashishtha
51.	Dr. Monica Sharma
52.	Dr. Nand Kumar
53.	Dr. Sumit Khandelwal
54.	Dr. Vatsala Mathur
55.	Dr. Vivakanand

The list of members who could not attend 44<sup>th</sup> Senate meeting:

S. No.	Name
1.	Prof. A. K. Vyas
2.	Prof. Ajay Singh Jethoo
3.	Prof. Alok Gupta
4.	Prof. Alok Ranjan
5.	Prof. Dilip Sharma
6.	Prof. Kailash Singh
7.	Prof. Lava Bhargava
8.	Prof. Mahesh Kumar Jat
9.	Prof. Nirutpam Rohtagi
10.	Prof. R. P. Yadav
11.	Prof. Rohit Goyal
12.	Prof. S. K. Tiwari
13.	Prof. Sudhir Kumar
14.	Prof. Suja George
15.	Prof. T. C. Gupta
16.	Prof. Upendra Pandel
17.	Prof. Vijay Janyani
18.	Prof. Vikas Gupta

**MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY**  
**Office of Dean Academics**

**Meeting with Head of the Departments**

Date: April 12, 2022

Subject: Minutes of the Meeting

The proposed curricular structure of UG programmes was placed for consideration of the Senate of MNIT Jaipur vide agenda item no. 44-3.1. The Senate accorded its 'In Principle' approval to the same. Some points/suggestions were raised by few senators and the Senate resolved that the Dean Academics shall hold a meeting with the Head of the Departments to form a consensus on the various points submitted by the senators. The suggestions given by the senators are as given below, along with the proposer's name

Prof. Himanshu Chaudhary

- A. Basic sciences courses need not be common across various disciplines and every science department may offer multiple courses with different course contents which can be chosen by different department for their respective UG programmes,

Prof. ML Mittal

- B. Offering a basic course of mechanical engineering (both theory and laboratory) under 'Institute Core' category  
C. Offering a course on drawing and sketching under 'Institute Core' category for all the students to impart knowledge of sketching and 3D visualization.

Prof. Vatsala Mathur

- D. The mathematics courses have been proposed with a L-T-P structure of 2-1-0 and it will be difficult to complete the syllabus with this contact structure as well as reducing the syllabus of the courses so as to complete the same in the proposed L-T-P structure will result in leaving out some important topics.

Prof. Vijay Janyani

- E. It will be difficult to conduct the proposed course of Basics of Electronics and Electrical Engineering (L-T-P structure of 3-0-0) jointly with the Department of Electrical Engineering and it will be good to break this course into two different units each having a L-T-P structure of 2-0-0.

The meeting was held on April 12, 2022 at 03:30 PM in the Old Senate Hall, Prabha Bhawan, MNIT Jaipur. The meeting was attended by the following members:

- |                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| • Prof. Urmila Brighu | Dean, Academics                                             |
| • Prof. Jyoti Joshi   | Head, Department of Chemistry                               |
| • Prof. M.L. Mittal   | Head, Department of Mechanical Engineering                  |
| • Prof. R.K. Goyal    | Head, Department of Metallurgical and Materials Engineering |
| • Prof. R.K. Vyas     | Representing the Head, Department of Chemical Engineering   |
| • Prof. Rajeev Tiwari | Head, Department of Electrical Engineering                  |
| • Prof. Sanjay Mathur | Head, Department of Civil Engineering                       |
| • Prof. Vijay Janyani | Head, Department of Electronics and Comm. Engineering       |
| • Dr. Dinesh Gopalani | Head, Department of Computer Science and Engineering        |
| • Dr. Dipti Sharma    | Head, Department of Humanities and Social Sciences          |

- Dr. Kamlendra Awasthi      Head, Materials Research Centre
- Dr. Nand Kumar              Head, Department of Architecture
- Dr. Vatsala Mathur          Head, Department of Mathematics
- Dr. Venkataratnam  
Kamma                          Representing the Head, Department of Physics
- Dr. Vivekanand V.          Head, Center for Energy and Environment
- Dr. Sumit Khandelwal       Associate Dean (UG)

All the above points were discussed in the meeting and the resolutions are given hereunder.

- A. It was decided that the Department of Chemistry and Department of Physics will prepare multiple course contents (minimum two, one for the circuit branches and other for non-circuit branches) in consultations with the various departments. It was also decided that both the departments will be offering two courses (one theory and one laboratory) with a total of 4 credits. The departments may make a choice of (3-0-0 and 0-0-2 or 2-1-0 and 0-0-2 or 3-1-0 and 0-0-2/2 for theory and laboratory courses, respectively). However, the L-T-P structure will be common across all the different courses of one department.
- B. It was decided that a course on 'Introduction to Mechanical Systems' with a L-T-P structure of 2-0-0 and 'Product Realization through Manufacturing' with a L-T-P structure of 0-0-2 will be offered by the Department of Mechanical Engineering. It was suggested that the course on 'Product Realization through Manufacturing' shall include advanced and recent technologies and may exclude less relevant technologies.
- C. It was discussed that the fundamentals of various projections shall be covered before the students can be exposed to any 3D visualization or associated sketching. Hence, it was decided that the course of Computer Aided Engineering Drawing with a proposed L-T-P structure of 1-1-1 will be sufficient to provide fundamentals of drawings to the students of UG programmes. If any department wishes to train students for higher learning in this area, a corresponding course can be offered under the Programme linked Engineering Arts and Sciences category. It was also discussed that the nomenclature of proposed course on Computer Aided Engineering Drawing may be revised to 'Engineering Drawing and Sketching' to eliminate unnecessary emphasis given to the drawing tool instead of the course.
- D. It was decided that the L-T-P structure of both the courses of mathematics may be kept as 3-1-0 i.e. same as being offered under the current scheme.
- E. It was decided that the proposed course on Basics of Electronics and Electrical Engineering shall be offered jointly by the departments and the coordination of the same may be decided by the departments as per mutual convenience.

In light of the above decisions/recommendations, the credits under Institute Core category increase to 36 from the current proposed credits of 33. This increase of credits in Institute Core courses will be compensated by bringing the limit of Discipline Specific Courses to 121 – 139 (against 124 – 142, as proposed for B.Tech. only degree).

The meeting was concluded with thanks to the chair.

Table 1: Credit Structure (revised) for the Proposed Scheme

Course type	Proposed scheme		
	B. Tech. Only	B. Tech. with Honors	B. Tech. with Minor Specialization
<b>Total Credits</b>	<b>178 – 184</b>	<b>196 – 202</b>	<b>196 – 202</b>
<b>Institute core</b>	<b>36<sup>#</sup></b>	Same as for B.Tech. only programme	Same as for B.Tech. only programme
<i>Basic Sciences</i>	<i>16<sup>a</sup></i>		
<i>Fundamental Engg. (EAS)</i>	<i>15<sup>b</sup></i>		
<i>Humanities &amp; Social Science</i>	<i>5<sup>c</sup></i>		
<b>Discipline specific courses</b>	<b>121 – 139<sup>#</sup></b>	<b>124 – 142 + 18<sup>**</sup></b>	Same as for B.Tech. only programme
<i>Programme core</i>	<i>109 – 136</i>	<i>124 - 154</i>	
<i>Programme elective</i>			
<i>Advance elective</i>			
<i>Project</i>	<i>3 – 12</i>	<i>3 – 12 + (0 – 3)<sup>**</sup></i>	
<i>Management</i>	<i>3</i>	<i>3</i>	
<b>Other courses</b>	<b>9 – 21</b>	Same as for B.Tech. only programme	<b>9 – 21 + 18<sup>**</sup></b>
<i>Open electives</i>	<i>6</i>		<i>As per detail of minor program</i>
<i>Programme linked EAS/BS</i>	<i>3 – 15</i>		

a: These courses include

<b>Chemistry</b>	<b>(3 credits, 2-1-0)<sup>#</sup></b>
Chemistry Lab	(1 credit, 0-0-2)
<b>Mathematics I</b>	<b>(4 credits, 3-1-0)<sup>#</sup></b>
<b>Mathematics II</b>	<b>(4 credits, 3-1-0)<sup>#</sup></b>
<b>Physics</b>	<b>(3 credits, 2-1-0)<sup>#</sup></b>
Physics Lab	(1 credit, 0-0-2)

b: These courses include

Basics of Electronics and Electrical Engg.	(3 credits, 3-0-0)
Electrical Engineering Lab	(1 credit, 0-0-2)
Electronics Engineering Lab	(1 credit, 0-0-2)
<b>Engineering Drawing and Sketching</b>	<b>(2 credits, 1-1-1)<sup>#</sup></b>
Computer Science and Programming	(2 credits, 2-0-0)
Programming Lab	(1 credit, 0-0-2)
Environmental Science and Ecology	(2 credits, 2-0-0)
<b>Introduction to Mechanical systems</b>	<b>(2 credits, 2-0-0)<sup>#</sup></b>
<b>Product Realization through Manufacturing</b>	<b>(1 credit, 0-0-2)<sup>#</sup></b>

Programme linked EAS courses can be taken from the pool of other courses.

c: These courses include

Basic Economics	(2 credits, 2-0-0)
<b>Technical Communication (Basic/ Advanced)</b>	<b>(2 credits, 2-0-0)<sup>#</sup></b>
<b>Language lab (Basic/ Advanced)</b>	<b>(1 credit, 0-0-2)<sup>#</sup></b>

<sup>#</sup>: Revised on the basis of discussions in the meeting with the Head of the Departments

<sup>\*\*</sup>: For Honors/Minor program as applicable

**Table 2: Credits and contact hours of Current and Proposed Schemes**

Semester	Current Scheme		Proposed scheme					
	Credits	Contact Hours per week	B. Tech. Only		B. Tech. with Honors		B. Tech. with Minor Specialization	
			Credits	Contact Hours per week	Credits	Contact Hours per week	Credits	Contact Hours per week
Semester I	24	28/27	25	28	25	28	25	28
Semester II	22	27/28	25	28	25	28	25	28
Semester III	23 – 26	26 – 29	25	28	25	28	25	28
Semester IV	23 – 27	28 – 30	25	28	25	28	25	28
Semester V	24 – 26	27 – 30	21	24	21 + 6	31	21 + 6	31
Semester VI	24 – 26	27 – 30	21	24	21 + 6	31	21 + 6	31
Semester VII	16 – 26	18 – 32	18 <sup>#</sup>	20	18 + 3	24	18 + 3	24
Semester VIII	23 – 32	24 – 33	18 <sup>*</sup>	20	18 + 3	24	18 + 3	24

#: Including 3 credits for minor project (mandatory for every student)

\*: Including 6- 9 credits for major project (optional)

~: The range of ratio of total teaching load of a program to total graded credit units, as per the current schemes, is 1.11 to 1.14 (Dept. of ECE has 1.20). An average factor of 1.13 has been used to calculate teaching load from credits in a particular semester.

- A. The above limits of credits for each semester are indicative and the departments may revise the above limits by  $\pm 2$  credits for each semester.
- B. Two projects have been proposed in the new scheme. The minor project (3 credits) will be carried out during VII semester while major project will be carried out during VIII semester (6 – 9 credits). Minor project will be compulsory for all students of the department. Major project will be optional for B.Tech. only program, and the student may earn the required credits against major project through elective courses offered by the parent department. However, students opting for Honors/ Minor Specialization/Internship have to compulsorily register for major project in VIII semester.
- C. A student will be allowed to register for 2 additional theory courses beyond the regular courses in a particular semester.
- D. 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).
- E. 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 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.
- F. 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.).
- G. 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.).
- H. Students will have following exit options:

**Table 3: Exit options and eligibility condition**

S. No.	Exit option with	Eligibility Condition
1	Diploma Certificate	After successfully completing all courses of I to IV semesters or The student has earned 100 credits through graded courses
2	B.Sc. Degree	After successfully completing all courses of I to VI semesters or The student has earned 142 credits through graded courses
3	B.Tech. Degree	After successfully completing all courses of I to VIII semesters

- I. Maximum duration of completing a UG program shall be 6 years (12 semesters) from initial registration excluding semester withdrawals, if the student has not exercised any exit option and has completed his registration in every semester.
- J. Maximum duration of completing a UG program shall be 8 years (16 semesters) from initial registration excluding semester withdrawals, for students who have exercised any exit option given in table 3 above.
- K. Non-graded credits need to be earned by the students.
- L. A student seeking admission after exercising exit option needs to return original degree/diploma certificate to MNIT Jaipur.
- M. Minor specialization can be offered by any department.