अड़तीसवीं सिनेट बैठक का कार्यवृत्त

MINUTES OF THE 38th SENATE MEETING OF IIT MANDI

8th February, 2023

Indian Institute of Technology Mandi

भारतीय प्रौद्योगिकी संस्थान मण्डी
कमांद– 175075, हिमाचल प्रदेश

INDIAN INSTITUTE OF TECHNOLOGY MANDI

KAMAND – 175075, HIMACHAL PRADESH

INDIAN INSTITUTE OF TECHNOLOGY MANDI
KAMAND, HIMACHAL PRADESH

38th SENATE MEETING OF IIT MANDI

WEDNESDAY, 8th February, 2023

INDIAN INSTITUTE OF TECHNOLOGY MANDI

Minutes of the 38th Senate Meeting of IIT Mandi held on 8th February, 2023 at 10:00 AM in Conference Room, C.V. Raman Guest House, IIT Mandi, Kamand.

The following were present:

In the Chair

Prof. Laxmidhar Behera, Director, IIT Mandi

Members:

Prof. Siddhartha Mukhopadhyay, Dept. of Electrical Engineering, IIT Kharagpur

Prof. Binay Kumar Pattnaik, Dept. of HSS, IIT Kanpur

Prof. Subrata Ghosh, Professor, SCS, IIT Mandi

Prof. Chayan Kanti Nandi, Professor, SCS and Dean (Resource Gen. and Alumni Relations), IIT Mandi

Prof. Pradeep C. Parameswaran, Professor & Chairperson, SCS, IIT Mandi

Prof. Rajeev Kumar, Professor, SMME and Dean (I&S), IIT Mandi

Prof. Rahul Vaish, Professor, SMME and Dean (Academics), IIT Mandi

Prof. Arti Kashyap, Professor, SPS and SCEE (dual appointment), IIT Mandi

Prof. Manoj Thakur. Professor, SMSS and Chairperson, SoM, IIT Mandi

Prof. Syed Abbas, Professor, SMSS, IIT Mandi

Prof. Rajendra K. Ray, Professor, SMSS, IIT Mandi

Dr. Venkata Krishnan, Dean (SRIC & IR), IIT Mandi

Dr. Sunny Zafar, Dean (Students) I/c, IIT Mandi

Dr. Samar, Chairperson, SCEE, IIT Mandi

Dr. Atul Dhar, Chairperson, SMME, IIT Mandi

Dr. Shyamasree Dasgupta, Chairperson, SHSS, IIT Mandi

Dr. Muslim Malik, Chairperson, SMSS, IIT Mandi

Dr. Shyam Kumar Masakapalli, Chairperson, SBB, IIT Mandi

Dr. Dericks P. Shukla, Chairperson, SCENE, IIT Mandi

Dr. Prosenjit Mondal, Co-ordinator, Bio-X Centre, IIT Mandi

Dr. Varun Dutt, Chairperson, IKSMHA, IIT Mandi

Dr. Amit Shukla, Chairperson, CAIR, IIT Mandi

Dr. Rahul Shrestha, Associate Professor, SCEE, IIT Mandi

Dr. Jinesh Machchar, Assistant Professor, SCEE, IIT Mandi

Dr. Satyajit A. Thakor, Associate Professor, SCEE, IIT Mandi

Dr. Deepak Swami, Associate Professor, SCENE, IIT Mandi

Dr. Kala Venkata Uday, Associate Professor, SCENE, IIT Mandi

Dr. Bhaskar Mondal, Assistant Professor, SCS, IIT Mandi

Dr. Satvasheel R. Powar, Associate Professor, SMME, IIT Mandi

Dr. Amit Prasad, Associate Professor, SBB, IIT Mandi

Dr. Surya Prakash Upadhyay, Assistant Professor, SHSS, IIT Mandi

Dr. Nitu Kumari, Associate Professor, SMSS, IIT Mandi

Dr. Narendra Kumar Dhar, Assistant Professor, SCEE & CAIR, IIT Mandi

Mr. Hemachandra Bhat, General Manager and Practice Head, Robotics Platforms, Wipro

Dr. P. Anil Kishan, Associate Dean (Courses), IIT Mandi

Dr. Amit Jaiswal, Associate Dean (Research), IIT Mandi

Dr. Tushar Jain, Head, CCE, IIT Mandi

Mr. Naresh Singh Bhandari, Deputy Librarian, IIT Mandi

Dr. Tulika Srivastava, Associate Professor, SBB, IIT Mandi

Dr. Devika Sethi, Assistant Professor, SHSS, IIT Mandi

Mr. Suresh Rohilla, Deputy Registrar (Academics), IIT Mandi

Student Research Affairs Secretary, IIT Mandi (Special Invitee)

Student General Secretary, IIT Mandi (Special Invitee)

Student Academic Affairs Secretary, IIT Mandi (Special Invitee)
Prof. Satinder Sharma, Professor, SCEE, Dean (Faculty), Co-ordinator C4DFED, and Registrar I/c & Secretary, Senate IIT Mandi

Following Senate members/Special invitees could not attend the meeting due to prior commitments:

Prof. Siddhartha Mukhopadhyay, Dept. of Electrical Engineering, IIT Kharagpur.
Mr. Hemachandra Bhat, General Manager and Practice Head, Robotics Platforms, Wipro.
Prof. Prem Felix Siril, Professor, SBS, IIT Mandi.
Prof. Bharat Singh Rajpurohit, Professor, SCEE, IIT Mandi.
Dr. Rajeshwari Dutt, Associate Professor, SHSS, IIT Mandi.
Student General Secretary, IIT Mandi (Special Invitee).

Following faculty attended the meeting as an Invitee:

Dr. Pradeep Kumar, Associate Professor, SMME, IIT Mandi

The Chairman Senate extended a warm welcome to all the Senate members and Invitees attending the 38th Senate meeting of the Institute.

Thereafter, following agenda items were taken up.

Item No. 38.1:	**To confirm the minutes of the 37th Senate meeting held on 7th October, 2022.**
	The minutes of the 37th Senate meeting held on 7th October, 2022 at IIT Mandi were circulated to members of the Senate on 4th November, 2022 (through email) for comments, if any. No comments have been received on the minutes. Therefore, minutes of the 37th Senate meeting held on 7th October, 2022 were confirmed as circulated.
Item No. 38.2:	**To receive a report on the actions taken for the decisions taken in the 37th Senate meeting held on 7th October, 2022.**
	The Senate noted the actions taken on the decisions taken in its 37th meeting held on 7th October, 2022.
Item No. 38.3:	**To consider the proposal of new branch in B.Tech. programme i.e., B.Tech in Materials Science and Engineering.**
	Dr. Viswanath Balakrishnan, presented a proposal of new branch in B.Tech. in Materials Science and Engineering under School of Mechanical and Materials Engineering. After discussion, the Senate resolved to approve the proposal as placed at **Annexure – A; Page No. 8 to 25** and the same shall be reported to the BoG.
Item No. 38.4:	**To consider the proposal of new branch in B.Tech. programme i.e., B.Tech in General Engineering.**
	Dr. Mrityunjay Doddamani, presented a proposal of new branch in B.Tech. in General Engineering. After discussion, the Senate gave the following suggestions:

1. There should not be conventional UG specialization associated with this degree programme.

2. There should be inputs from Industries and placement cell about job prospectus.

3. There should be USP of the programme w.r.t existing similar program in other IITs.
4. Committee may explore specialization in the discipline of Liberal Art, photography, fashion design, film making, product design etc. In this regard collaboration with NIFT, CEPT etc. desirable where students can spend one year.
5. Committee may explore execution of these specialization with sister institutions.

After incorporating the suggestions, the revised proposal be presented for consideration in subsequent meetings of the Senate.

Item No. 38.5:   **To consider the proposal of new BS-MS in Chemical Sciences.**

Dr. Bhaskar Mondal, presented a proposal of new BS-MS in Chemical Sciences. After discussion, the Senate suggested to constitute a committee by Dean (Academics) to look into the proposal and to check the other requirements of new O&R etc. for such programmes.

After incorporating the suggestions, the revised proposal will be presented to the Chairman, Senate for approval, and same will be reported in subsequent Senate meeting.

Item No. 38.6:   **To consider the proposal of M.Tech./M.A/M.Tech. (Research) with Specialization.**

Prof. Rahul Vaish, Dean (Academics), presented a proposal of M.Tech./M.A./M.Tech (Research) with Specialization. After discussion, the Senate approved the proposal in principle. A committee will be constituted by the Dean (Academics) for proper execution and to recommend for closing the M.Tech. programme which are not running well and it will be presented in subsequent Senate meeting.

1. MA (R) / MS (R)/M.Tech (R) programs

Institute offers M.Tech. (by Res.) in areas of science, technology, humanities, and social sciences. This program is relatively more popular among engineering disciplines due to its professional name. In order to promote master level research programs the following three research programs can be offered by all schools and centres.

Student can be awarded more appropriate degrees as

Engineering	M.Tech (R)
Science	M.S. (R)
Humanities and Social Sciences	M.A.(R)

APC may recommend appropriate degree based on dissertation and courses credited.

These programs will be governed under the existing O & R of M.Tech (Res.).

The Senate approved the proposal.

2. MA (R) / MS(R)/M.Tech (R) programs with specialization

These programs can be only awarded with specialization subject to completion of minimum 15 credits in specific specialization along with dissertation in the same area.

Some of the proposed specializations are as follows:

- M.Tech (Res.) in Engineering Structures / Construction Technology & Management / Geotechnical Engineering / Transportation Engineering / Environmental Engineering / Remote Sensing & GIS / Water Resource Engineering, etc. M.Tech (Res.) in Thermal

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Engineering/Manufacturing / Automobile Engineering/Manufacturing Engineering / Material Technology / Product Design and Development / Robotics/Control Systems / Computational Mechanics etc.

- M.S.(Res.) in Data Science, Statistics, Computing and Mathematics, Condensed Matter Physics, etc.

Similarly, MA (Res.) can also be awarded in the specialized area of courses and dissertation opted.

The above-mentioned list is not exhaustive and hence Schools and Center's can decide such specialization based on student's/faculty research interest and based on placement aspects.
These specializations can be decided by the various schools and centres and can be advertised every year with the permission of Dean (Academics).

The Senate has also approved the following:

1. M.Tech (R)/MA (R)/MS (R) will not be counted under HTRA cap of faculty. School/Centre chair may decide number of students /faculty based on research facility and other logistics.
2. There will not be thesis title in case of specialization awarded to the candidate. Both the formats are attached for M.Tech. (R), M.Sc. (R) and M.A. (R) on the degree certificate.
3. Every year specializations may vary and can be pre-decided by schools/centres with the approval of Dean (Academics).
4. These will be advertised and selected as same as present M.Tech course based programs.
5. These programs will be governed under the existing O & R of M.Tech (Res.).
6. Credit Structure for M.Tech (R) can be redefined and may be presented in the subsequent Senate meeting.

Format (Attached Annexure-B; Page No. 26 to 32.)

Execution process:

1. **Dean Academic office will collect schools/centres requirements (Name of Specialization and number of tentative seats) every year.**
2. **The Chairman Senate will approve overall M.Tech (R)/MS (R)/MA (R) seat matrix every year.**
3. **Approved seat matrix will not be specified for proposed specialization.**
4. **Reservation norms will be applicable on overall proposed seats (institute level) in M.Tech (R)/MS (R) /MA (R).**

The Chairman Senate has also raised the concern for need of APC, in this regard. The Dean (Acad) Office will review the case and will present comprehensive report in subsequent Senate meeting.

It was also suggested to have Dissertation credits in these programs so that overall credit should be at par as M.Tech. course-based program.

Item No. 38.7:   **To consider the proposal of award of B.Tech. degree with Specialization.**

Prof. Rahul Vaish, Dean (Academics) presented the proposal of award of B.Tech. degree with Specialization. After discussion, the Senate approved the following proposal in principle with a suggestion to finalize all the requirements to float the programme. The Senate also approved that only single degree will be awarded .

All B.Tech degrees have Discipline electives component ranging from 15-20 credits. These electives largely cover all areas of main discipline of UG programme. There is a possibility that these electives can be offered in more specialized area baskets.

Completion of 15 credits from the discipline electives baskets (in same specialization) can be considered for specialization in own discipline.

Some of the possible specializations could be:

Mechanical Engg.	Specialization in "Thermal Engg.", "M/C Design", "Product development & Manufacturing" etc.
Civil Engg.	"Structural Engg.", Environmental Engg." etc.
Electrical Engg.	"VLSI" "High Voltage" etc.
Engg. Physics	Classical Mechanics, Biophysics, Quantum Mechanics, Optics & Atomic & Molecular Physics,

The Schools/centers can decide such provisions in all B.Tech degrees based on student's job prospects, resources, and students interest.

In order to fulfill the requirement of specialization, student should have minimum 7 CGPA in respective basket of specialization.

Item No. 38.8:   **To consider the proposal for granting permission to extend degree duration (UG/PG).**

Prof. Rahul Vaish, Dean (Academics) presented the following proposal for granting permission to extend degree duration for UG and PG programmes :

Programme	Minimum Duration	Maximum duration
Under graduate (B.Tech.)	4 yrs.	Can be extended maximum upto 2 more years *(after completion of four years from the date of registration)* based on the recommendation of Faculty advisor and School Chairs. Prior approval of Dean (Academics) is necessary for continuing registration after 4 yrs. *(This approval needs to be obtained every semester with proper plan of completion).*
Postgraduate degrees (course based) (M.Tech, MSc, MBA, MA etc.)	2 yrs.	Can be extended maximum upto 1 more year *(after completion of Two years from the date of registration)* based on the recommendation of Faculty advisor/ supervisor and School Chair. Prior approval of Dean (Academics) is necessary for continuing registration after 2 yrs. *(This approval needs to be obtained every semester with proper plan of completion).*

After brief discussions, this was approved by the Senate.

Item No. 38.9:   **To consider the proposal of modification in the programme M.Tech. in Mechanical Engineering with Specialization in Energy Systems.**

Dr. Atul Dhar, Chair SMME presented the following proposal of modification in the programme M.Tech. in Mechanical Engineering with Specialization in Energy Systems.

1.	**Replacing Core Course HS540**: Energy: Environment Policy and Law with Open Elective Courses such as: –ME513 Finite Element Method for Engineers –ME601: Advanced Finite Element Methods –HS540 is suggested to be included in the list of electives –Any other course with sufficient out of discipline exposure
2.	**Replacing ME631**: Heat Transfer and Fluid Flow in Energy Systems with ME604: Experimental Methods in Thermal Engineering

The motivation for this change is to effectively handle the teaching load of the faculty of SMME by replacing the course with similar course content.

After brief discussions, this was approved by the Senate.

Item No. 38.10:   **To consider the revision in course curriculum of M.Sc. in Applied Mathematics.**

Dr. Nitu Kumari, presented a proposal of revision in course curriculum of M.Sc. in Applied Mathematics. After discussion, the Senate resolved to approve the proposal as placed at **Annexure – C; Page No. 33 to 37.**

Item No. 38.11:   **Any other agenda item with the permission of the Chairman, Senate.**

None.

Item No. 38.12:   **To report decisions/action taken by the Chairman, Senate.**

The Senate noted the decisions taken by the Chairman, Senate on behalf of the Senate, as given in the agenda.

Item No. 38.13:   **Issues to be discussed by the Senate without Student Members being present.**

None.

The meeting concluded with a vote of thanks to the Chair and to the Members.

Chairman, Senate 31/3/23

Registrar I/c & Secretary-Senate 31-3-2023