Minutes of 45<sup>th</sup> Meeting of the Senate held on August 6, 2020 from 02.00 pm onwards in the Conference Hall of Admin Block of PDPM IIITDM Jabalpur.

#### Members present:

Prof. Sanjeev Jain	Chairman
Prof. Vijay K. Gupta	Member
Prof. P. N. Kondekar	Member
Dr. Dinesh K. Vishwakarma	Member
Dr. Prashant K. Jain	Member
Prof. Puneet Tandon	Member
Dr. Prabin K. Padhy	Member
Dr. Prabir Mukhopadhyay	Member
Dr. Atul Gupta	Member
Dr. Subir S. Lamba	 Member
Prof. Aparajita Ojha	Member
Prof. Tanuja Sheorey	Member
Dr. K. K. Biswas	Member
Dr. Sushil Kumar	Member
Smt. Swapnali D. Gadekar	Acting Registrar & Secretary (Senate)

Following members expressed their inability to attend the meeting due to their prior commitments:

Prof. B. K. Chakravarthy Shri C. M. Venugopalan Shri Jitendra Chaddah

Overview Report of the Chairperson	
	Overview Report of the Chairperson

Chairperson Senate apprised the members about the activities of the last semester. He informed the members that last semester was completed successfully despite all odds with the support of students, faculty and staff. The institute is progressing with more focus towards Innovations. He also informed the Senate that presently Ph.D. students are allowed in campus on need basis.

Senate/45/02	Confirmation of the Minutes of the 44 <sup>th</sup> meeting of the Senate held on
	May 23, 2020

No comments were received on the minutes of the 44<sup>th</sup> meeting of the Senate. The Senate confirmed the minutes.

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Senate/45/03	Action taken report on the decision of the Senate vide 44th meeting of
	the Senate held on May 23, 2020

The Senate noted the actions taken on the decisions of the Senate in its 44<sup>th</sup> meeting.

Senate/45/04	Academic performance report for the last semester (Semester II,
	2019-20)

The report of the academic performance in the last semester was presented before the Senate members. The Senate was apprised that only 8% students opted for SS grade.

The members shown concern about the poor performing students, Heads of the Discipline with Director as the Chairman of the committee will discuss the performance in depth and suggest corrective measures so that performance may be improved.

The Senate also decided to allow students having "C" grade for improvement in addition to "D+", "D" and "F".

Members also suggested that faculty members should help the students during the semester to cope up with the studies by devoting some extra time. The Senate advised to frame a policy (hand holding policy) for the same.

# Senate/45/05 Start of next semester and finalization of Academic calendar

The Senate approved the date of start of the various programs as proposed and guidelines for smooth running of the Semester except point number 9 and 10. The Senate also advised to conduct the classes on Saturday with enhanced timing. The point 1 is modified as:

1. The classes for the coming semester will held online till the Government permit for the opening of the Institute physically.

The labs will be held in demonstration mode, the students can do calculations and be evaluated.

Point number 9: The Senate decided that SS grade would be available but way of allotting the SS grade will be different and authorized Chairperson Senate to approve the revised policy, if any for the same in due course of time.

Point number 10: It is an executional matter and hence removed it from the minutes.

The Senate authorized the Chairperson Senate to modify the dates for starting of the classes based on the prevailing situations and approve the Academic Calendar. In the worst case if UG program does not start from November, one evaluation block may be dropped in current semester and can be completed during summer term.

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#### a) UG Curriculum

The Senate discussed the proposed new curriculum and approved the same with following modifications:

- 1. Lab learning should be enhanced by assigning projects or through assignments.
- 2. All electives will be 2-0-2 or 3-0-0 mode.
- 3. The proposed discipline project in 3<sup>rd</sup> year to be converted to optional discipline project instead of compulsory.
- 4. IT workshop can run with the help of some well-known software companies. For the benefit of the students, if they wish to get a certificate of proficiency combined with the company a certificate may be issued by taking nominal charges.
- 5. Some elective may be introduced in 3<sup>rd</sup> and 4<sup>th</sup> semester and accordingly core courses may be shifted to higher semester. All core courses to be completed by 5<sup>th</sup> semesters.
- 6. It will be tried to introduce electives such as music, arts, fine arts, etc. May be some minor degree in fine arts can be introduced for students aligned towards the directions. The Chairperson Senate is authorized to form the committee for the same.
- 7. A course on Data structure is to be introduced in 2<sup>nd</sup> or 3<sup>rd</sup> semester.
- 8. One open elective is to be dropped.
- 9. The Senate suggested having a comprehensive examination for the students in VI or VII semester.
- 10. The Senate also suggested for multi exit option. After first year the students may be awarded Certificate in Engineering Sciences. After second year the students may be awarded Diploma. A detailed policy to be brought in the next Senate meeting.
- 11. The Senate suggested bringing a policy for encouraging startup from students and faculty.
- 12. The English course in first semester should focus on the building the grammar from 8<sup>th</sup> standard to 10<sup>th</sup> standard.
- 13. It was suggested to increase the credits for Professional Development Courses.
- 14. Introduction to profession will be evaluated based on small quizzes based on 3-4 lectures.
- 15. The Senate discussed on the credits for the BTP in line with Credits for the PBI. The Senate formed a committee of Heads, PIC academic and Director to decide the credits for the BTP.

The Senate authorized Chairperson Senate to approve the curriculum after the modifications. The Senate decided to implement the new curriculum from this semester itself for all the batches. Based on the suggestions of the Senate, the revised template for the UG curriculum is attached as Annexure I.

b) Credit requirements for the PG programmes:

The Senate also discussed the proposed credit requirement for the PG programmes and decided the following:

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- i) The Senate suggested allowing void semester(s) for Masters students for medical reasons or internship (in India or abroad). The Chairperson Senate is authorized to take final decision in such cases.
- ii) The research (thesis) credits for PhD students will be dropped. The evaluation of performance in a semester will be through research seminar/ progress seminar. For registration in next semester it is required to complete the research seminar/ progress seminar.
- Requirement of teaching credits for PhD students will be dropped and in place of this every PhD student have to do a course on teaching pedagogy (through SWAYAM or in house mode) and submit the certificate of successful completion. However, students who have already completed the requirement of teaching credits will be exempted from the requirement of teaching pedagogy course.
- iv) Masters' students will be advised to attend the professional development courses running for the UG students to enhance their personality.
- v) The Senate decided to reduce credits through course work for the NS students to 12 credits in place of 18 credits in line with Technology and Design students.
- vi) The Senate also approved that in place of "Communication skill" course the students will be asked to appear the courses of B.Tech. and complete them as "S" or "X".

The Senate approved the proposal with modification. The Senate also decided that this would be implemented from this semester for all batches of PG programmes. Based on the decision of the Senate revised requirements for the award of PG degree are enclosed as Annexure II.

## Senate/45/07 Modifications in the guidelines for the Masters and Ph.D. programs

The Senate accepted the proposed modifications with following changes:

- Point 7.10.8 (iii) will be modified as "The comprehensive examination will be oral based only". Further, point 7.10.8 (v), (vi new) will be dropped. The Senate decided that comprehensive examination should focus on the fundamentals related to research area of the student. The duration of comprehensive may be for 1.5 to 2 hours.
- ii) Point 7.10.8 (iv): The Senate decided that as Comprehensive Board is same as RPC, no further requirement of committee approval is required.

Modified guidelines for the Ph.D. Comprehensive examination (clause 7.10.8) are as follows:

- Students registered in the Doctoral programme must pass a Comprehensive Examination designed to test the overall comprehension of the student in subjects relevant for his/her area of research. A student can appear in the Comprehensive Examination only after he/she has completed the minimum course requirements and satisfied the requirement of minimum specified CPI.
- ii) Students must appear for the comprehensice examination within 4 months after the completion of the course work. Any deviaiton from this will require special approval from the Chairperson Senate on recommendation of Convener DPGC and Dean Academic.

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- iii) The mode of Comprehensive Examination will be oral and focus on the fundamentals related to the research area of the student. The duration of examination may be 1.5 to 2 hours.
- The Comprehensive Examination Board of a Doctoral student shall be same as his/her RPC. The thesis supervisor of the student shall be the Convener of the Comprehensive Examination Board. The dates for written and oral examination will be decided by the committee and will be intimated to the academic office through Convener DPGC. Any changes in the Comprehensive Examination Board will require approval from Chairperson Senate through DPGC convener and Dean Acacemic.
- v) The oral examination will be conduced in open mode.
- vi) A student shall be considered to have passed the Comprehensive Examination on the recommendation of the Comprehensive Examination Board. The convener of the Comprehensive Examination Board shall be responsible to send the report of the Comprehensive Examination to the Dean Academic for approval through Convener, DPGC. Any dispute in the opinion of the Comprehensive Examination Board shall be put up before the Chairperson Senate through DPGC Convner and Dean Academic. The decision of the Chairperson Senate will be final and will be binding to all.
- Vii) If a student fails in the Comprehensive Examination in his/her first attempt, a second Comprehensive Examination shall be conducted by the same Board that was constituted earlier unless otherwise changed by Dean Academic on the recommendation of the DPGC. A student shall be recommended for termination if he/she fails to pass the Comprehensive Examination even after two attempts. All such cases shall be brought to the notice of the Senate.
- viii) After the comprehensive examination, Doctoral Student needs to register for progress seminar in every semester till she/he appears for the open seminar.

The Senate decided to implement the same with immediate effect.

## Senate/45/08 Modified SWAYAM policy and guidelines

The Senate approved the policy for the SWAYAM. It is decided to implement it from Semester I, 2020-21.

## Senate/45/09 Modification in the policy for Academic Dishonesty

The Senate deferred the agenda item. The Senate authorized Chairperson Senate to approve the policy.

# Senate/45/10 Confirmation of Degree for the next convocation

The Senate recommended the names of B.Tech. students (258 out of 267 students) for the award of degree to the BoG for approval. The Senate also authorized Chairperson Senate to recommend additional names to the BoG after the result of PG and summer term, who fulfills the requirement of the Degree.

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### Senate/45/11

#### Change of grading pattern for the Ph.D.

The Senate accepted the proposal for grading of course work for PhD students as equivalent to UG and Master's students as A+, A, B+, B, C+, C, D+, D and F.

#### Senate/45/12

#### **Modified Provisional Degree Certificate**

The Senate decided to include the name of the father and mother names in Degree and provisional degree. The Senate formed the following committee to finalize the template for the degree and provisional degree and authorized the Chairperson Senate to approve the same:

- 1. Prof. Aparajita Ojha
- 2. Prof. Puneet Tandon
- 3. Prof. Vijay Kumar Gupta

#### Senate/45/13

Ratification of approvals accorded by the Chairperson Senate

The Senate ratified the approval of Chairperson Senate for the results of the last semester.

#### Senate/45/14

Any other item with the permission of the Chair

#### 14.1 Attendance requirement for the current semester

The Senate decided that requirement of attendance will be waived for this semester.

14.2 Modification in 7.10.14 (iv): In case two out of three examiners rejects PhD thesis

The student may re-register and he/she may be given waiver of the course work.

#### 14.3 Number of examiner for the PhD thesis evaluation

The Senate decided that the PhD thesis to be sent to one examiner from India and one examiner from out of India.

### 14.4 Panel of Examiner for PhD thesis

The Senate decided that panel of examiner may consists of 4 examiner from outside India from the top 400 QS/Times ranked Institutes and 4 examiner from India. The Senate authorized Chairperson to add examiner of his/her choice, if needed.

The meeting ended with thanks to all the present.

(Swapnali D. Gadekar)

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Acting Registrar & Secretary (Senate)

Prof. Sanjeev Jain Chairperson, Senate

Revised Curriculum effective from August 2020

			2020 Batch	tch			
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7/8	Semester 8/7
NS1 (3L+2T, 4C) I course on Mathematics	NS3 (3L+2T, 4C) Mathematics II	ES5 (2L+2P, 3C) Data Structure	DC4 (4C)	DP1 (1L+6P, 4C) Engineering Design	MN2 (8P, 4C) Fabrication Project	OE7 (3C)	Project-based Internship (15C)
NS2 (3L+1T+2P, 4C) I Course on Physics	NS4 (3L+1T+2P, 4C) NS104 Physics II	DC1 (4C)	DC5 (4C)	DC8 (3C)	0E4 (3C)	OE8 (3C)	(PBI: Optional in 7 <sup>th</sup> semester)
HS1a (1L+2T, 2C) HS101 Effective Communications (OR) HS1b Alternate	HS3 (2L+2T, 3C) HS102 Indian Culture, Ethics and Human Values	DC2 (4C)	DC6 (4C)	DC9 (3C)	OE5 (3C)	OE9 (3C)	ORBTP
ES1 (2L+3P, 3C) Introduction to Programming	ES3 (2L+3P, 3C) DS101 Engineering Graphics	DC3 (4C)	DC7 (4C)	DC10 (3C)	OE6 (3C)	OE10 (3C)	(09C.) + 2 OEs (3-0-0-3) (Total: 6C)
Prof DC1/ SM1 (1L, 1C) Introduction to Profession	ES4 (3L+2P, 4C) ES101 Basic Electronics	OE1 (3C)	OE2 (3C)	OE3 (3C)	HS3 (2L, 2C) Ecology and Environment Science		
		NS5 (2L, 2C) Biology for Engineers (Batch A)	NS5 (2L, 2C) Biology for Engineers (Batch B)	7			
		IT Workshop I (3P, 2C)	IT Workshop II (3P, 2C)	IT Workshop III (3P, 2C)	IT Workshop IV (3P, 2C)		
ES2 Innovation Theory and Practice (1L+2P, 2C)	d Practice (1L+2P, 2C)	PR Disciplin	PR Discipline Project (2C)	OPR Optional Di	OPR Optional Discipline Project (2C)		
PC1 Professional Development Course (1C)	opment Course (1C)	PC1 Professional Dev	Development Course (1C)	PC3 Professional De	PC3 Professional Development Course (1C)	PC4 Professional Development Course (1C)	elopment Course (1C)
Total Credits 14	21	20/22	26/24	18	18	16	15
Credits per year	35	,	46		36	31	
Total Degree Credits				148			
Note:							
1. The	The credits of Projects (Innovation, Discipline projects) and PDC are allotted/counted in the end of even semester.	wation, Discipline projec	cts) and PDC are allotted	Vounted in the end of e	ven semester.		
2.	Discipline core courses/	Open Elective can be of	any one of the following	structures 3-0-2, 2-2-2,	Discipline core courses/ Open Elective can be of any one of the following structures 3-0-2, 2-2-2, 3-0-0, 3-1-0, 3-1-2 with credit count limit on credit counts.	edit count limit on credit	counts.

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Template for 2019 Batch

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Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7/8	Semester 8/7	
NS101 (3L+2T, 4C) Mathematics I	NS103 (3L+2T, 4C) Mathematics II		DC4 (4C)	DP1 (1L+6P, 4C) Engineering Design	MN2 (8P, 4C) Fabrication Project	OE7 (3C)	Project-based Internship (15C)	
NS1022 (3L+1T+2P, 4C) Engineering Mechanics	NS104 (3L+1T+2P, 5C) Electrodynamics and Optics	DC1 (4C)	DC5 (4C)	DC8 (3C)	OE4 (3C)	OE8 (3C)	(PBI: Optional in 7th semester)	
HS101 (1L+2T, 2C) Effective Communications Skills	HS3 (2L+2T, 2C) HS102 Culture and Human Values	DC2 (4C)	DC6 (4C)	DC9 (3C)	OE5 (3C)	OE9 (3C)	OR	
ES1 (2L+3P, 5C) Fundamental of Electrical and Electronics Engg.	ES3 (1L+3P, 3C) DS101 Engineering Graphics	DC3 (4C)	DC7 (4C)	DC10 (3C)	OE6 (3C)	OE10 (3C)	2 OEs (3-0-0-3) (Total: 6C)	
ES2 (2L+2P, 4C) Fundamental of Computing	ES3 (3L+2P, 5C) ES103 Data Structure and Algorithm	OE1 (3C)	OE2 (3C)	OE3 (3C)	HS3 (2L, 2C) Ecology and Environment Science	OE11 (3C)		
			NS5 (2L, 2C) Biology for Engineers					
		IT Workshop I (3P, 2C)	IT Workshop II (3P, 2C)	IT Workshop III (3P, 2C)	IT Workshop IV (3P, 2C)			
Optional F	Optional Project 1 (2C)	PR Disciplir	Discipline Project (2C)	OPR Optional Di	OPR Optional Discipline Project (2C)			
		PC1 Profession	PC1 Professional Development Course (1C)	PC3 Professional De	PC3 Professional Development Course (1C)	PC4 Professi Cou	PC4 Professional Development Course (1C)	
Total 19 Credits	61	17	26	18	18	16	15	
Credits per year	38		43		36		31	
Total De	Total Degree Credits				148			
Note:								

The credits of Projects (Innovation, Discipline projects) and PDC are allotted/counted in the end of even semester.

Discipline core courses/ Open Elective can be of any one of the following structures 3-0-2, 2-2-2, 3-0-0, 3-1-0, 3-1-2 with credit count limit on credit counts.

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Template for 2018 Batch

Semester 8/7	Project-based	Internship (15C) (PBI: Optional	in 7" semester) OR BTP	2 OEs (3-0-3) (Total: 6C)				PDC4 Professional Development Course (1C)	15	31			
Semester 7/8	0E4 (3C)	OE5 (3C)	OE6 (3C)	0E7 (3C)	OE8 (3C)			PDC4 Developm	16				in the second se
Semester 6	MN2 (8P, 4C) Fabrication Project	OE1 (3C)	0E2 (3C)	OE3 (3C)	HS3 (2L, 2C) Ecology and Environment Sc.	IT Workshop IV (3P, 2C)	OPR Optional Discipline Project (2C)	PDC3 Professional Development Course (1C)	18	38			ester.
Semester 5	DP1 (1L+6P, 4C) Engineering Design	DC6 (3C/4C)	DC7 (3C/4C)	DC8 (3C)	DC9 (3C)	ITcWorkshop III (3P, 2C)	Optional Dis	Professional (1			146		d of even sem
Sem	DP1 (1) Engineer	9DC	DC7	DC	DC	ITcWo (3)	OPR	PDC3	20				ed in the en
Semester 4	ES205 Fundamental of Robotics (2L+2P,4C)	MS201: Management Concept and Technology (3L,4C)	PC3 (3L+1T,4C)	PC4 (3L,4C)	PC5 (2L,2C)	PL1 (3P,2C)	Optional Project 1 (2C)		20	39			nd PDC are allotted/count
Semester 3	NS5 (3L+1T, 4C)	ES4 Digital Electronics (3L,4C)	MN201 Manufacturing Process (2L+2P,4C)	PCI (3L+2P,5C)	PC2 (2L,2C)		Optional Pr		19				vation, Discipline projects) a
Semester 2	NS103 (3L+2T, 4C) Mathematics II	NS104 (3L+1T+2P, 5C) Electrodynamics and Optics	HS102 (2L+2T, 2C) Culture and Human Values	DS101 (1L+3P, 3C) Engineering Graphics	ES103 (3L+2P, 5C) Data Structure and Algorithm		Optional Project 1 (2C)		19	38	Total Degree Credits		The credits of Projects (Innovation, Discipline projects) and PDC are allotted/counted in the end of even semester.
	f, 4C) s I	-2P, 4C) chanics	r, 2C)) s Skills	P, 5C) al of and inge.	P, 4C)		ptional Pro		19		Total Degr		I. Th
Semester 1	NS101 (3L+2T, 4C) Mathematics I	NS102 (3L+1T+2P, 4C) Engineering Mechanics	HS101 (1L+2T, 2C)) Effective Communications Skills	ES101 (2L+3P, 5C) Fundamental of Electrical and Electronics Engg.	ES102 (2L+2P, 4C) Fundamental of Computing		0		Total Credits	Credits per year		Note:	

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Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7/8	Semester 8/7
NS101 (3L+2T, 4C) Mathematics I	NS103 (3L+2T, 4C) Mathematics II	NS5 (3L+1T, 4C)	ES205 (2L+2P,4C) Fundamental of Robotics	DS302 (2L+4P, 5C) Engineering Design	HS3 (3L,4C) HS Open Elective	OE1 (3C)	Project-based Internship (15C)
NS102 (3L+1T+2P, 4C) Engineering Mechanics	NS104 (3L+1T+2P, 5C) Electrodynamics and Optics	ES204 (3L,4C) Digital Electronics	MS201 (3L,4C) Management Concept and Technology	PC6 (4C)	PC9 (4C)	OE2 (3C)	(PBI: Optional in 7th semester)
HS101 (1L+2T, 2C) Effective Communications Skills	HS102 (2L+2T, 2C) Culture and Human Values	MN201 (2L+2P,4C) Manufacturing Process	PC3 (3L+1T,4C)	PC7 (4C)	PE2 (4C)	OE3 (3C)	OR
ES101 (2L+3P, 5C) Fundamental of Electrical and Electronics Engg.	DS101 (1L+3P, 3C) Engineering Graphics	PC1 (3L+2P,5C)	PC4 (3L,4C)	PC8 (4C)	PE3 (4C)	OE4 (3C)	(09C) + 2 OEs (3-0-0-3) (Total: 6C)
ES102 (2L+2P, 4C) Fundamental of Computing	ES103 (3L+2P, 5C) Data Structure and Algorithm	PC2 (2L,2C)	PC5 (2L,2C)	PE1 (2C)	HS304 (2L, 2C) Ecology and Environment Science	OE5 (3C)	
			PL1 (3P,2C)	PL2 (3P,2C)	PL3 (3P,2C)	>	
Optional Pa	Optional Project 1 (2C)	Optional F	Optional Project 1 (2C)	OPR Optional Discipline Project (2C)	ipline Project (2C)		
				PC3 Professional Development Course (1C)	evelopment Course	PC4 Professio	PC4 Professional Development Course (1C)
Total Credits 19	19	51	20	21	21	16	15
Credits per year	38		39	42			31
Total Deg	Total Degree Credits			150			
Note:							

The credits of Projects (Innovation, Discipline projects) and PDC are allotted/counted in the end of even semester, I.

Discipline core courses/ Open Elective can be of any one of the following structures 3-0-2, 2-2-2, 3-0-0, 3-1-0, 3-1-2 with credit count limit on credit counts. ۲.



### Credit requirement for Masters' and Ph.D. program effective from August 2020:

	M.Tech.	M.Des.	[after ME/	Ph.D. in NS [after M.Sc./ MA]	Integrated Ph.D./ Ph.D. in Engg. [after B.Tech./ B.E./]
Minimum total number of credits\$	27	53	18	18	36
Minimum number of credits through the course work	21	45	12	12	30
Maximum duration to complete the course work	3 semesters	3 semesters	2 semesters	2 semesters	4 semesters
Minimum number of credits through Graduate/Progress Seminar (each 2 credits)	04	04	06	06	06
Credits through Summer Internship	-	02			
Credits through Professional Development courses	02	02			

All PhD students must complete a course on teaching pedagogy course through SWAYAM or in-house mode.

<sup>&</sup>lt;sup>&</sup> The Masters' students will be advised to attend the professional development courses running for the UG students to enhance their personality.