



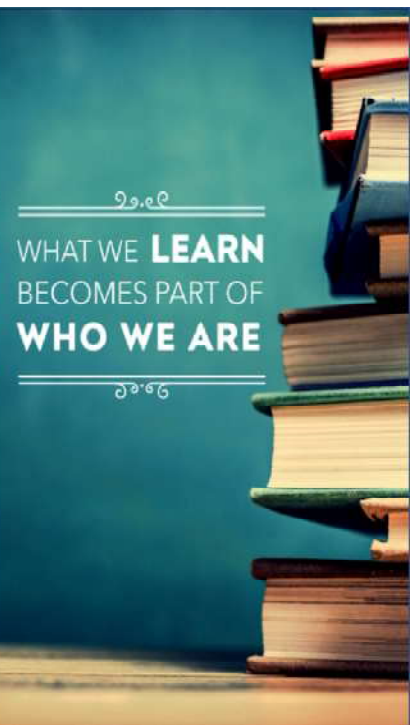
*newsletter*

## Transformation of Engineering Education Mission (Nayee Taleem)



TELL ME AND I FORGET  
TEACH ME AND I REMEMBER  
**INVOLVE ME  
AND I LEARN**

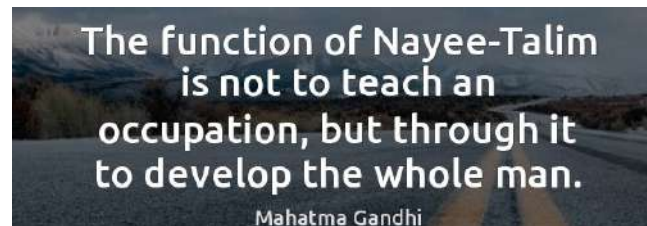
Benjamin Franklin



**Jawaharlal Nehru Engineering College**  
Ranked 2nd in Maharashtra and 5th in India amongst the private Engineering Colleges  
(AISEET 2020)

JNEC's Department of Civil Engineering

## ❖ Change in Engineering Education



The vision of education laid down in the National Educational Policy (NEP) 2020 suggests Gandhiji's ideas on education are relevant even today as it attempts to bring in some key elements of *Nayee Taleem* into the current education system. Along with a robust implementation mechanism, NEP will require a big shift in the mindset of all the stakeholders. *Nayee Taleem* approach presented a concept of learning that went beyond textbooks. The success of this approach hinged a lot on the teacher and her/his motivation to drive learning in children based on every child's interests. The NEP 2020 acknowledges the role of a teacher in shaping the future of the nation. To bridge the gap, it suggests:

- Investing in reinstating the 'status of teachers' by investing in their long-term development
- Giving teachers more autonomy to choose finer aspects of curriculum and pedagogy
- Supporting teachers and community to build smallest viable unit of governance and foster a culture of learning in and around the schools.

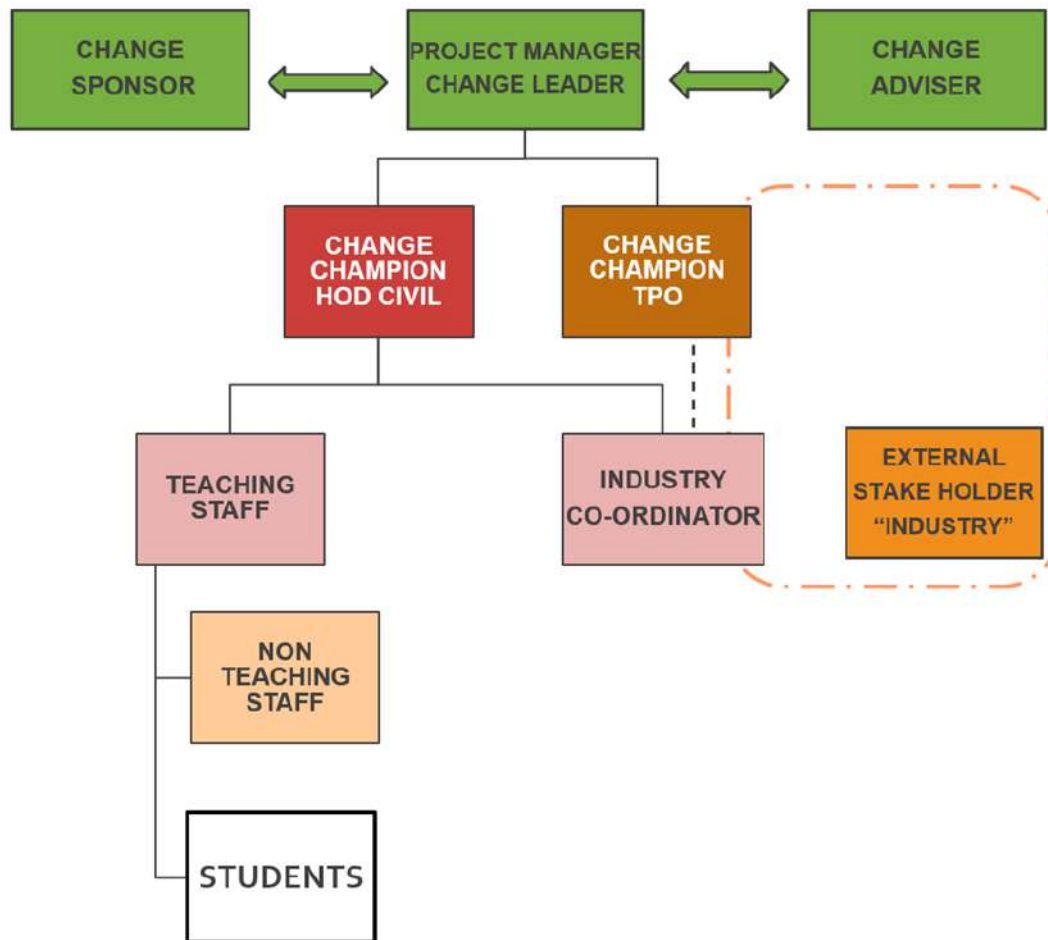
*Nayee Taleem* approach emphasised on the importance of education through any productive work that we do in our everyday life (learning by doing). In the light of the need & vision statement of the university, **MGM University has decided to undertake new initiative Transformation of Engineering Education Mission (TEEM) on the principles of Gandhian philosophy 'Nayee Taleem**. This shall be new model of education based on Gandhian way of Learning By Doing (LBD) and imparting & empowering students by multi-disciplinary skills. Engineering is vital to successful, sustainable civilisation. So much rests on the shoulders of future generations of engineers that we must give them the best possible foundation to their professional lives.

This means ensuring that engineering graduates can apply theoretical knowledge to industrial problems as well as exhibit theoretical understanding, creativity and innovation, team-working, technical breadth, and business skills. To do this, engineering degree programmes must keep pace with the changing requirements of industry, with much more interaction between departments and industry.

## ❖ Program kick-off

The program was kicked off on 1<sup>st</sup> June 2021. The first phase of the program is scheduled for one year and shall continue the set practices from there onwards till June 2024. During the first one year of the program; the second-year students of CIVIL DEPARTMENT admitted for the academic year 2021-22, shall be undergoing the revived & evolving syllabus as per the skills-based lesson plans and pedagogy. **The Project charter** is put in place & circulated among all stake holders for entire overview of the project.

➤ **Key Stake Holders:**



➤ **Project Objectives**

- ✓ Transforming behaviour traits of stakeholders to produce synergy of collaboration among.
- ✓ Creating academic leadership which shall handhold & lead students till desired outcome.
- ✓ Adoption of evolving curriculum as demanded by industry & employability skills.
- ✓ Fostering strategic alliance with industries for knowledge sharing, training & employment.
- ✓ To produce self-motivated, employable, and ethical engineers who become torch bearers.

❖ **Program Status Updates&Completed Milestones**

Activity Code	Activity	Duration in Days	Start Date	Finish date	TIME LINE															
					Jun-21				Jul-21				Aug-21				Sep-21			
					W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4
	<b>Placement of students in 2nd year</b>	<b>1127</b>	<b>1-Aug-21</b>	<b>31-Aug-24</b>	[Timeline bar]															
	<b>Faculty Development</b>	<b>1158</b>	<b>1-Jul-21</b>	<b>31-Aug-24</b>	[Timeline bar]															
<b>MS01</b>	<b>Behaviour Assessments for Staff</b>	<b>60</b>	<b>1-Jun-21</b>	<b>30-Jul-21</b>	[Timeline bar]															
1000	Staff Data Collection	1	1-Jul-21	1-Jul-21	[Timeline bar]															
1001	Issuance of assessment link	1	2-Jul-21	2-Jul-21	[Timeline bar]															
1002	Individual counselling with staff	8	5-Jul-21	12-Jul-21	[Timeline bar]															
1003	Leadership Training	2	13-Jul-21	14-Jul-21	[Timeline bar]															
1004	Value statement by faculties	3	15-Jul-21	17-Jul-21	[Timeline bar]															
1005	Defining Project Values	6	17-Jul-21	22-Jul-21	[Timeline bar]															
1006	Visualisation of Character	8	23-Jul-21	30-Jul-21	[Timeline bar]															
					[Timeline bar]															
<b>MS02</b>	<b>Skill Set Finalisation</b>	<b>53</b>	<b>1-Jun-21</b>	<b>23-Jul-21</b>	[Timeline bar]															
2000	Identification of Job Roles				[Timeline bar]															
2001	Collection of job descriptions				[Timeline bar]															
2002	Identification of Technical skills				[Timeline bar]															
2003	Identification of Professional skills				[Timeline bar]															
2004	Identification of Soft skills				[Timeline bar]															
					[Timeline bar]															
<b>MS03</b>	<b>Adequacy of Syllabus &amp; Finalisation</b>	<b>75</b>	<b>1-Jun-21</b>	<b>14-Aug-21</b>	[Timeline bar]															
3000	Relating Skill sets with syllabus				[Timeline bar]															
3001	Identifying subject flows				[Timeline bar]															
3002	Revising Syllabus in line of skills				[Timeline bar]															
3003	Preparing Lesson Plans				[Timeline bar]															
3004	Connecting skills with lesson plan				[Timeline bar]															
					[Timeline bar]															
<b>MS04</b>	<b>Pedagogy Designing</b>	<b>56</b>	<b>1-Jul-21</b>	<b>25-Aug-21</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS05</b>	<b>Designing Evaluation system</b>	<b>25</b>	<b>1-Aug-21</b>	<b>25-Aug-21</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS06</b>	<b>Standardising Academic procedure</b>	<b>304</b>	<b>1-Jul-21</b>	<b>30-Apr-22</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS07</b>	<b>Industry Interaction</b>	<b>335</b>	<b>1-Jul-21</b>	<b>31-May-22</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS08</b>	<b>Setting of inhouse workshop</b>	<b>304</b>	<b>1-Jul-21</b>	<b>30-Apr-22</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS09</b>	<b>Project Communication</b>	<b>302</b>	<b>1-Aug-21</b>	<b>31-May-22</b>	[Timeline bar]															
					[Timeline bar]															
<b>MS10</b>	<b>Transferring Advisory Role to JNEC</b>	<b>61</b>	<b>1-Apr-22</b>	<b>31-May-22</b>	[Timeline bar]															
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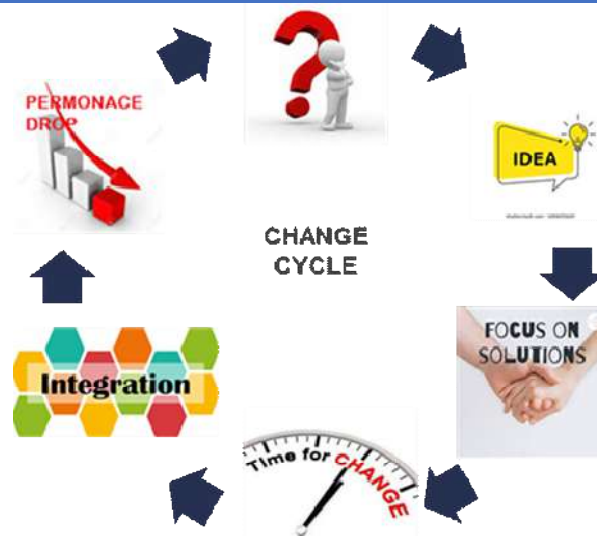
**Legends**

- Planned
- Completed

Key Activities started:

1. Behaviour based Faculty Assessments (1000 & 1001) as a part of MS 01 are conducted.
2. First round of presentations by all faculties for Skill Set Finalisation (2000) as a part of MS 02 are over.
3. Relating skill sets with syllabus (3000) as a part of MS03 is undertaken.
4. Lesson plan preparation (3003) is undertaken based on Revision 0 of the syllabus.

❖ Implementation Roadmap



*Change, after all, is only another word for growth, another synonym for learning, we can all do it, if we want to.*

- Charles Handy

➤ Execution of Change

A first key to unlock that door remains civil engineers' education and training. In order to close the gap between the required skills by industry and what is being offered in degree program, the change is concentrated at three levels. First one is Adequacy of Syllabus based on skills set identified, second is the way engineering is being taught i.e., Pedagogy and third is Behavioural Aspects coupled with Value Orientation. These changes are being executed stepwise as mentioned in the summary milestones. One of the activity is assigning the group of students to the concerned faculty who in turn will be responsible for the entire period of the project in terms of the objective deliveries.

➤ Reinforcing Change

While making a change is difficult, sustaining a change can be even more difficult. This is why reinforcement is such a critical component of successful change. It encompasses the mechanisms and approaches so that the new way stays in place. Successful reinforcement shall be taken up through celebrations of achievements, rewards and recognition, feedback system for staff & students, corrective actions, grievance redressal, visible performance measurement & accountability mechanisms.

➤ People Management

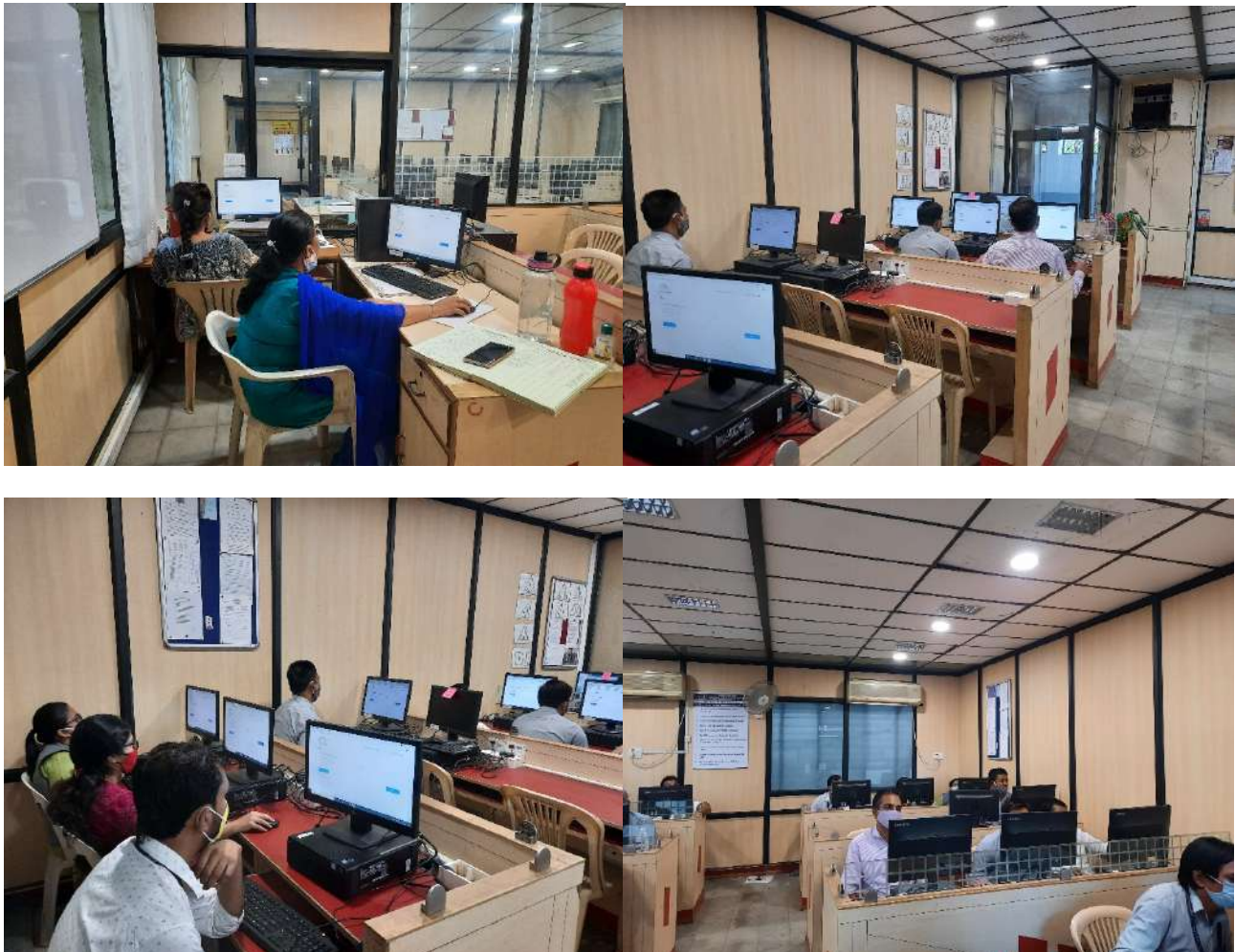
A formal approach for managing change beginning with the leadership team (Change Leaders/ change champions) and then engaging key stakeholders (change agents) is being adopted through Behaviour assessments, Counselling sessions, Faculty development Programs, Training need Analysis, Leadership Trainings. Ownership is often best created by involving people in identifying problems and crafting solutions.

## ❖ Heads-up / what's next

In July 2021 we have planned for

1. Individual counselling for faculty members
2. Faculty Development Program based on the group report
3. Preparing Lesson Plans & connecting them with skills set
4. Identifying subject flows
5. Revising Syllabus in line of skills
6. Pedagogy Designing

## ❖ Moments of the Month



**Faculty Assessment conducted by Brainberg Knowledge Solutions Pvt Ltd.**