ACTION PLAN

for

IMPLEMENTATION

of

NATIONAL EDUCATION POLICY

for

Holistic Multidisciplinary Education

Presented in the HR Committee Meeting on 3rd July 2021

&

Approved

By

THE BOARD OF GOVERNORS, MITS GWALIOR on 31/07/2021 (Item No. 1)

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Draft for Implementation of National Education Policy 2020 (NEP 2020)

Preamble: The National Education Policy 2020 (NEP 2020) aims at offering **Multidisciplinary, Holistic** and **Value Based Education** with **utmost Flexibility**. The policy mentions that **the quality higher education must aim** to develop **good, thoughtful, well – rounded** and **creative individuals**. It must enable an individual **to study one or more specialized areas of interest** at a deep level and also develop character, ethical and constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service and 21st century capabilities **across a range of disciplines**. This blend of offering will certainly prepare the students for more meaningful and satisfying lives and work roles and enable the country to become a **knowledge economy**. The policy further emphasizes on **developing holistic individuals** and therefore, it raises the requirement that an **identified set of skills and values** also needs to be incorporated **at each stage of learning**.

To achieve its aim, the main focus of National Education Policy 2020 is the achievement and realization of following aspects :-

- More **"Holistic** and **Multidisciplinary Education"** at Under Graduate Level

- Promotion of **"Online Education"** and **Open Distance Learning (ODL)**

- Enable students to become – **well rounded across disciplines including Artistic, Creative & Analytic, as well as sports**

- Towards **"Knowledge of Many Arts"** or **"Liberal Arts"**

- **Imaginative and Flexible Curricular Structures –** enable **creative combinations of disciplines** for study

- **Multiple Entry and Exit Options,** that is removing currently prevalent rigid boundaries and creating new possibilities for life-long learning

- The **Choice Based Credit System** is to be revised **for instilling flexibility**

- Moving towards **faculty and institutional autonomy**

- **Revamping curriculum, pedagogy, assessment and student support for enhanced student experiences**

- **Integration of "Humanities and Arts" with STEM: Science, Technology, Engineering and Mathematics as STEAM – for positive learning Outcomes**

- Journey towards- **Teaching Intensive University, Research Intensive University** and **Autonomous Degree Granting College (AC)**

National Education Policy 2020 (NEP 2020): **NEP Attributes and Strategies**

NEP Attributes	Strategies
Multidisciplinary Education	• Provisioning of Minor Specialization through additional credits
Choice and Flexibility	• Provisioning of Honours through additional credits
Cross Disciplinary Thinking	• Provisioning of Open Courses (from other disciplines)
Online Education	• Provisioning of MOOC based courses from various learning platforms / other institutions • Credit transfer facilitation through MOOC based learning platforms / other institutions • Development of Institutional MOOCs for credit transfer
Accessibility and Flexibility for Teaching Learning	• Provisioning of Blended Teaching Learning under various modes of Teaching Learning, as per the nature of the course
Holistic and Multidisciplinary Education, Knowledge of Many Arts" or "Liberal Arts", Integration of all branches of Creative Human Endeavour	• Provision of Novel engaging course options through in-house mentoring system • External mentoring from various other institutions
Skill Development and Creativity	• Provision of Skill based Projects for effective learning
Industrial/External Working Exposure through Internship	• Provision of full semester Internship with industry/ organizations • Scope enhancement (inclusion of SMEs, businesses artists, craft persons etc. for the enrichment of external working environment)
All Round involvement	• Inclusion of Extra Curricular Activities and attainments in the Curricula through credits (Professional Development)
Move Away from high-stake examinations (unburden the students)	• More continuous and comprehensive evaluation • Implementation of Multiple Mode Logical Pattern Examination (MMLPE) System • Emphasis on internal assessment and evaluation through well structured mechanism
Integration of "Humanities and Arts" with STEM: Science, Technology, Engineering and Mathematics as STEAM	• Provision of Mandatory Value based Courses for positive learning Outcomes • Enhancement of scope by provisioning more value based courses, as per NEP 2020
Innovative / Multidisciplinary Research	• Promote research activities by extending support to Research Assistants (RAs)/ students/ faculty members • Provision for Research Internship for active engagement of students with the practical side of their learning
Industry Readiness	• Provision of Industry Collaborative Courses • Provision of Industry Partnership Programmes • Provision of Vocational Courses

Facilitation of Training and Innovative Teaching, Learning & Assessment	• Training of faculty members and technical staff for enrichment of their knowledge • Adoption of Criterion Based Grading • Diversity of learning methods to be included for more effective modeling of Outcome Based Education (OBE) Model
Cross disciplinary and Interdisciplinary thinking, Innovation	• Focus on Interdisciplinary Projects
Promote Entrepreneurship, Start-up activities	• Provision of Skill based Courses in Local / Regional Language • Facilitation for Incubation Centre, Start-up and Business Development training and support
Promote future skill areas and innovative domains	• Introduction of new Programmes in emerging areas • Provision of Certificate Courses • Provision of courses for Industry Persons (industrial executives / manpower)
Quality Assurance	• NBA/NAAC Accreditation • NIRF Ranking
Degree with Research at UG Level	• Provisioning of Research oriented major project for the award of UG Degree with Research
Multiple Entry and Exit Options	• Provisioning to offer certificate, diploma & Bachelor degree for enhanced choice and flexibility
Promote Education through Open Distance Learning (ODL)	• Provision for the courses and Grades (with credit transfer) through Distance Learning
Academic Bank of Credit (ABC)	• Accountability of Credits earned by an individual from various institutions /platforms
Digital Infrastructure: Enhancement of Capability and Capacity	• MOOC Development Centre, Smart Class Rooms • Arrangement of advanced technology tools with latest state of the art digital infrastructure
To attain the status of "Teaching Intensive University" or "Research Intensive University" or "Autonomous Degree Granting College (AC)"	• Expansion in multidisciplinary education and research activities • Arrangement of resources as per the requirement of regulatory bodies • Arrangement of Building, Amenities and other infrastructure [as needed for attaining the status of Teaching Intensive University or Autonomous Degree Granting College (AC)] • Arrangement of faculty and staff as per norms

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

National Education Policy 2020 (NEP 2020): Action Plan

					Timeline/Target						Specific Resource Requirement		
S. No.	NEP philosophy (Target)	Offering /Context	Action alreadyTaken / Achievement	Action to be taken	2020-21	2021-22	2022-23	2023-24	2024-25	Activities under specified timeline	Physical Resources (PR)	Human Resources (HR) / Other Resources	Financial Requirement (in Lacs)
1	**Minor Specialization**	Choice and Flexibility / Multidisciplinary Orientation	Provisioned in the Flexible Scheme /Curriculum	Scope enhancement viz. inclusion of other disciplines with the Minor Specialization	9 Disciplines	13 Disciplines	16 Disciplines	18 Disciplines	20 Disciplines	Collaborations and collaborative mode delivery i.e. through the experts of other prominent institutions		Resource Persons and External Mentoring Support	10
2	**Honors**	Choice and Flexibility	Provisioned in the Flexible Scheme /Curriculum	Increase in additional Courses (related to Major discipline)	9 Disciplines	13 Disciplines	17 Disciplines	21 Disciplines	25 Disciplines		Laboratory Infrastructure		670
3	**Multidisciplinary Education**	Promote Cross disciplinary thinking for Innovation	Provisioning of Open Courses(from other disciplines)has already been done. More than 50 open courses are being offered	Extent and diversity will be increased	54 Open Courses	59 Open Courses	64 Open Courses	69 Open Courses	75 Courses	MoUs with other institutions/ universities of multidisciplinary nature		Resource Persons and External Mentoring Support	75
4	**Online Education through MOOCs**	Credit Transfer, Self Learning through SWAYAM/NPTEL Platform / Multidisciplinary Orientation	Provisioned in the Flexible Scheme /Curriculum	· MOOCs of other prominent Global Universities will be allowed for Credit Transfer •Adoption of more MOOC based learning platforms for credit transfer •Improved mentoring and monitoring	9% Credits	14% Credits	16% Credits	18% Credits	20% Credits	•High bandwidth Internet connection availability •Provisioning for course registration / examination fee support to bright students	1000 MBPS Internet Connectivity		250
5	**Credit Transfer from MOOC based Learning Platforms**	Honor the courses and Grades (offered by external agency - SWAYAM/NPTEL	**2824 credits** have already been transferred to the transcript of 777 students for 182 MOOC courses		777 Beneficiary	1880 Beneficiary	2080 Beneficiary	2700 Beneficiary	3300 Beneficiary				

#	Title				Milestone 1	Milestone 2	Milestone 3	Milestone 4	Milestone 5				
6	**Online Education through MITS MOOCs**	Credit Transfer, Self Learning	MOOCs development initiated for selective Open and mandatory courses	Coverage to maximum "open category courses" for multidisciplinary orientation	10 MOOC Courses	30 MOOC Courses	60 MOOC Courses	90 MOOC Courses	120 MOOC Courses	Training to faculty and staff for MOOCs development, Incremental Operating Cost (IOC)	Additional Equipments and AMC	Dedicated Staff and Training Support	100
7	**Blended Teaching Learning**	Promote Accessibility and Flexibility	Course wise 'Mode of Teaching' is provisioned in the Scheme Structure	Enhancement in the Effectiveness through Innovative Practices and Tools	12.5 % Courses	17.5% Courses	22.5% Courses	27.5% Courses	32.5% Courses	Training support to faculty members		Pedagogical Training	10
8	**Novel and engaging course options (through inhouse mentoring system and external mentoring from the various departments of other institutions or through ODL mode)**	Holistic & Multidisciplinary Education, Cross-disciplinary and interdisciplinary thinking, Knowledge of Many Arts" or "Liberal Arts"	Different clubs are functional (related to various dimensions such as dance, music etc.) Diversification through Club Mentoring System	Integration of all branches of Creative Human Endeavour in the curricula and offering Credits through mentoring, related to- NSS, NCC, Languages, Literature, Music, Philosophy, Indology, Arts, Dance, Theatre, Culinary Arts, Mentoring Skills, Public Speaking, Vedic Maths, Sociology, Agriculture, Economics, Sports, Meditation, Yoga , Ayurveda, and other such subjects as a part of curricula . Assessment through Relative Grading and Inclusion of weightage in the Indirect assessment for the effective achievement of Program Outcomes (POs)	Informal Learning	02 Credits	04 Credits	04 Credits	04 Credits	External mentoring support		External Resource Persons	15
9	**Skill based Projects**	Promote skill development and Creativity	Provision of Project Based Learning has been done	Effectiveness will be enhanced through collaborative learning	29.5% Students	59.65% Students	82.72% Students	100% Students	100% Students	Domain Specific Collaboration		Mentoring Support	10
10	**Internship**	Exposure to industrial/ external working environment	Provisioning (credits) for Full Semester Internship at industry / external organization. Internship policy prepared	Enhancement of resources and more collaborations for internships · Inclusion of internship with businesses artists, craft persons, SMEs etc.	4 Credits / 63 Modules	4 Credits / 81 Modules	6 Credits / 99 Modules	6 Credits / 117 Modules	6 Credits / 135 Modules	Off Campus Faculty resource on part-time basis (for mentoring and monitoring at various internship locations)		Off Campus Faculty	120

#	Parameter	Description	Provision	Additional Provision	Yr1	Yr2	Yr3	Yr4	Yr5	Support 1	Support 2	Support 3	Target
11	All round involvement (Extra Curricular Activities: Creative, Analytic, Artistic, Sports etc.)	Inclusion of Extra Curricular Activities and attainments in the Curricula	Weightage of 01 Credit given in the form of **"Professional Development" component**	Provision of 02 Credits (in the VIII Semester), from the batch admitted in 2020-21 academic session	01 Credit	01 Credit	01 Credit	02 Credits	02 Credits	External Mentoring Support through MoUs with Universities and institutions for specific areas	Equipments and Accessories for Music, Sports etc. to strenghten the club activities	Dedicated Staff and External Resource Persons	45
12	More continuous and comprehensive evaluation	Move Away from high-stakes examinations **(unburden the students)**	Multiple Mode Logical Pattern Examination **(MMLPE)** System has been implemented from Dec. 2020 examinations	Emphasis on internal assessment and evaluation through well structured mechanism	29.5% Students	59.65% Students	82.72% Students	100% Students	100% Students	Training on Exam reforms and digital infrastructure for digital evaluation and assessment	High end servers and MIS	Training Support	180
13	Mandatory Value based Courses	To address the missing links between Science and Technology and Development of humanistic, ethical, constitutional and universal human values	Indian Constitution and Traditional Knowledge is being offered as Value Added Course, NSS / NCC as qualifier	Additional courses will be introduced for the integration of "Humanities and Arts" with STEM: Science, Technology, Engineering and Mathematics – for positive learning Outcomes	4.7% Courses	4.7% Courses	6.9% Courses	9% Courses	11% Courses	External mentoring support		External Resource Persons	10
14	Research Internship	Active engagement of students with the practical side of their learning	Provision exist for Innovative / Multidisciplinary Research	Provision for research internship will be made, with the faculty and researchers at other institutions / research organizations as a part of curricula	5% Students / Support to 06 Research Assistants	7% Students / Support to 10 Research Assistants	10% Students / Support to 15 Research Asssiatnts	13% Students / Support to 20 Research Asssiatnts	15% students / Support to 25 Research Asssiatnts	MoUs and Collaborations for Research Internship		Resource Persons for Mentoring / Guidance	120

#	Category	Objective	Current Status	Strategy	Y1	Y2	Y3	Y4	Y5	Requirement (Industry)	Infrastructure	Manpower	Budget
15	**Industry Collaborative Courses**	Industry Readiness:- to expose the students with the industrial practices and requirements	Industry person is the member of Board of Studies (BoS) of every department · Contents of curriculum are aligned with the industrial demand and recent practices	Arrangements will be made for the partial or full content coverage of selective courses by the industrial expert (in collaboration with the internal faculty)	01 Credit	02 Credit	03 Credit	04 Credits	06 Credits	Strengthening the Industry – Institute Interface through MoUs and Collaborations and MDP/FDPs		Industry Resource Persons and Resources for the conduction of MDP /FDPs	30
16	**Industry Partnership Programmes**	To offer industry collaborated Degree programmes		Collaboration and designing of industry based Curriculum			01 Programmes	02 Programmes	04 Programmes	Industry Collaboration, Physical Infrastructure and Manpower	Building, Amenities and other infrastructure	Faculty and trained staff	150
17	**Vocational Courses**	To train the manpower for industry	Four programmes approved by AICTE	To facilitate for starting the approved programmes			22.22% Courses	25% Courses	25% Courses	Creation of additional industry based infrastructure	Machines, Equipments and other items for the development of Laboratories / workshops	Resource Persons from industries and Trained Staff	170
18	**Facilitation of Training**	Training of faculty members and technical staff for enrichment of their knowledge on recent advancements / emerging areas	Good no. of faculty members have already been trained (under the support of TEQIP-III) on the future skill training areas such as Data Science, IoT, Robotics, Cyber Security etc.	Opportunity for attending frequent training programmes will be provided	Faculty: 60% / Staff: 30%	Faculty: 70% / Staff: 45%	Faculty: 80% / Staff: 60%	Faculty: 90% / Staff: 75%	Faculty: 90% / Staff: 90%	Provisioning to extend training support in terms of financial requirement		Financial Support for Attending Training Programs	80

#	Item	Objective	Status	Target / Description	Year 1	Year 2	Year 3	Year 4	Year 5	Support 1	Support 2	Support 3	Value
19	**Provision for Criterion Based Grading**	Assessment of student achievement based on learning goals	OBE model has been conceptualized and in practice	Adoption of relative grading system & Diversity of learning methods to be included for more effective modeling of OBE Model	80% Direct Assessment / 20% Indirect Assessment	80% Direct Assessment / 20% Indirect Assessment	70% Direct Assessment / 30% Indirect Assessment	60% Direct Assessment / 40% Indirect Assessment	60% Direct Assessment / 40% Indirect Assessment	Innovative Teaching, Learning & Assessment and Pedagogical Training support	ICT based equipments and tools	Training Support	105
20	**Interdisciplinary Projects**	To promote Cross-disciplinary and interdisciplinary thinking, Innovation and Societal need based project development	Motivation to the students and faculty members to undertake Interdisciplinary Projects	Assessment based provision - to support and meet out financial expenses will be made	10% Students	15% Students	20% Students	25% Students	30% Students	Provision to extend financial support for innovative interdisciplinary projects	Financial Support for Recurring and Non-Recurring Items required for Innovative Research	Travel Support for visiting other Research Organizations and Institutions	95
21	**Skill based Courses in Local / Regional Language**	To promote Entrepreneurship	Imparted through EDC	Multilevel programmes will be offered with enhanced scope and dimensions	44% Courses / 11 Courses	60% Courses / 15 Courses	76% Courses / 19 Courses	92% Courses / 23 Courses	100% Courses / 25 Courses	Training needs for diversification	Equipments and other items for the development of Laboratories / workshops	Trained Staff	65
22	**Start-up**	Promote Entrepreneurship	Induced the Concept of Skill in the curriculum	Inclusion of weightage (credits) in the curricula, as an alternate to internship / Start-up policy to be prepared			0.6 % Students	0.86 % Students	1.06 % Students	Facilitation for Incubation Center, Start-up and Business Development training and support	Space and other infrastructure for Incubation Centre	Training Support	155

23	**New UG Programmes to be added**	To offer the programmes in diversified domains as per the societal and industrial need	The institute has started 04 UG Programmes in Emerging Areas in the Session 2020-21. The institute has also applied to AICTE for approval of three new programmes for Session 2021-22: Computer Science and Design, Artificial Intelligence and Data Science, Artificial Intelligence and Machine Learning	Curriculum development as per the nature of the programmes and arrangement of other related facilitation.	13 Programmes / 4000 Students	16 Programmes / 4660 Students	18 Programmes / 5440 Students	20 Programmes / 6340 Students	20 Programmes / 6340 Students	Infrastructure and resources (equipments, items, computing facility etc.)	Building, Amenities and other infrastructure	Faculty and trained staff	1400
24	**Certificate Courses**	To train the students and manpower in future skills and innovative domain	Some of the faculty members and students have already been trained	Design of Certificate courses to offer the same	09 Modules	18 Modules	27 Modules	36 Modules	36 Modules	Training and collaboration		Training and travel Support	5
25	**Courses for Industry**	To Train the industrial executives / manpower		Design of Industry need based modules / courses on the recent technological requirements		02 modules	03 modules	05 modules	05 modules	Industrial collaborations		Managerial Support	4
26	**Accreditation**	To provide quality assurance to all stakeholders	Three UG programmes are NBA Accredited for 03 Years. The institute is NAAC Accredited with 2.89 CGPA and B++ Grade	The institute will apply to NBA for the Accreditation of other eligible programmes. The institute will apply to NAAC for second cycle of Accreditation process	NBA: 03 programmes / NAAC: B++ Grade	NBA: 06 programmes / NAAC: B++ Grade	NBA: 06 programmes / NAAC: A Grade	NBA: 09 programmes / NAAC: A Grade	NBA: 09 programmes / NAAC: A Grade	Requirement as per NBA/NAAC Accreditation Bodies		Application fees and other arrangements	50
27	**Ranking**	To get the recognition at National and International level	The institute has applied for NIRF Ranking	Enhancement in collaborations and interaction with the outside world	Applied for	Applied for	NIRF ranking under 200	NIRF ranking under 200	NIRF ranking under 100	Collaborations with Govt./ Non Govt. organizations. Enhancement of interaction with industries and society		Travel and other managerial support	5

#	Initiative	Description	Present Status	Provision / Action	Y1	Y2	Y3	Y4	Y5	Resources	Infrastructure	External Support	Budget (Lac)
28	**Degree with Research**	Flexibility and Choice	---	Provision to undertake Analytical/ Research/ Knowledge based major project in the last semester of study as an alternate to internship			5% students	10% students	15% students	Collaborations with research organizations for external support and mentoring	High end equipments and Softwares	External Resource Persons for collaborative Research	155
29	**Multiple Entry and Exit Options**	Flexibility and Choice	---	Provisioning to offer certificate, diploma & Bachelor degree			09 Programme	13 Programme	16 Programme	Curriculum development support from institution of eminence		External Support from Academia and industry persons	5
30	**Open Distance Learning (ODL)**	Honor the courses and Grades (with credit transfer) acquired through Distance Learning	—	Provisioning will be made from the Academic Year 2023-24 onwards				18 courses	20 courses	Collaborations with the institutions of repute for courses in Open Distance Learning (ODL) mode		Registration Fee	150
31	**Academic Bank of Credit (ABC)**	Accountability of Credits earned by an individual from various institutions /platforms	Account of Credits is being maintained for Additional Courses	Creation of Digital store of academic credits earned from various recognized Institutions /MOOC platforms, so that the degrees can be awarded taking into account credits earned		25% students	50% students	75% students	100% students	Dedicated Machines / High End Servers and specific MIS module	High end servers, computing facility and MIS module		80
32	**Digital Infrastructure**	To enhance the capability and capacity	Existing infrastructure can only cater the present needs	Advanced technology tools with latest state of the art digital infrastructure will be augmented	60%	60%	80%	100%	120%	Digital Infrastructure	High end servers, Networking, digital boards, storage etc.	Dedicated trained staff	315
	Total												4634

Total expenditure towards the implementation of NEP 2020 action plan in the next Five years is Rs. 4634 Lac i.e. Rs. 926.8 Lac per Annum plus Rs. 200 Lac in the fifth year for attaining the status of Teaching Intensive University or Autonomous Degree Granting College (AC), as per the policy of NEP 2020.

#	Initiative	Description	Present Status	Provision / Action	Y1	Y2	Y3	Y4	Y5	Resources	Infrastructure	External Support	Budget (Lac)
33	To attain the status of **"Teaching Intensive University"** Or **"Autonomous Degree Granting College (AC)"**	More flexibility and academic autonomy - to offer the best	Presently, the institute is UGC Autonomous	Expansion in multidisciplinary courses in the form of Open Courses, Value Added Courses through in-class mode and MOOCs based learning with mentorship		50%	60%	80%	100%	Resources as per the requirement of regulatory bodies	Building, Amenities and other infrastructure	Additional faculty and staff	200

MITS Gwalior NEP 2020 action plan is dynamic and has scope and capability for changing scenarios and technological advancements with future needs
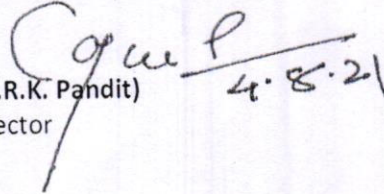
Ref. No. 244

Date: 04.08.2021

Resolution

The Board of Governors in its meeting held on 31.07.2021 as follows:

The Board of Governors approved the recommendations of the HR Commitee regarding the NEP-2020 Strategic Implementation Plan for MITS, Gwalior.

Action to be taken accordingly.

(Dr.R.K. Pandit)   4.8.21
Director

Copy to:-

Dean (Academics)
Controller Examination
Registrar
HR Section
Director Office