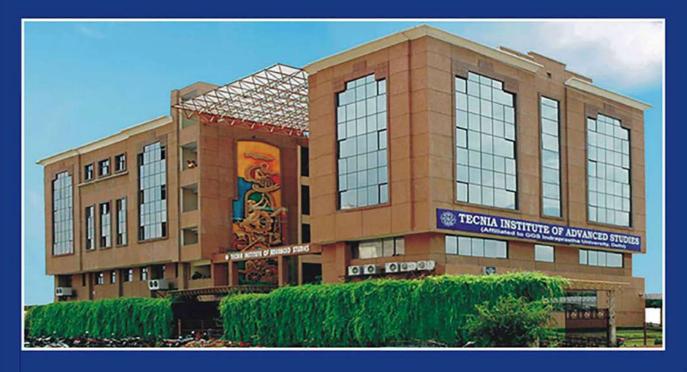




# Living World of Diversity ...



# **Technical Teachers Training Policy** Guidelines & Procedures



# Internal Quality Assurance Cell TECNIA INSTITUTE OF ADVANCED STUDIES NAAC ACCREDITED GRADE "A" INSTITUTE

Recognized Under Sec. 2(f) of UGC Act 1956, Approved by AICTE, Ministry of HRD, Govt. of India, Affiliated to Guru Gobind Singh Indraprastha University.

INSTITUTIONAL AREA, MADHUBAN CHOWK, ROHINI, NEW DELHI, 110085

ISO 9001:2015, ISO 14001:2015, ISO 21001:2018 & ISO 51001: 2018 Certified Institute; Rated as 'A' Category by JAC, Govt. of NCT of Delhi; A++ Category - Best Business School by AIMA - Business Standard Survey & Included in Top 100 B & IT School by Dalal Street Investment Journal. -: An Initiative of Tecnia Internal Quality Assurance Cell :-

# TECHNICAL TEACHERS TRAINING POLICY

Guidelines & Procedures

SL. NO.	PARTICULARS	DESCRIPTION
1	Policy Number	TIAS/IQAC/2019-22/
2	Policy Structure	The policy describes the training needs for different cadre of faculty, expectations as good teacher, prescribe structure of training, resource persons, resource material (both print and online modes), sustainable system, making mandatory, successful completion of at least one subject course through MOOCs / Open Online Courses every year for the faculty of MBA, BBA, BA(JMC) & BCA Programme.
3	Scope of the Policy	The policy details the procedure followed by the Institute while organizing, providing implementing, monitoring and evaluating, assisting/felicitation of teacher training on following aspects: Orientation towards Technical Education & Curriculum Aspects; Professional Values, Ethics, Ecology & Sustainable Development; Communication Skills, Modes and Knowledge Dissemination; Instructional Planning and Delivery; Technology Enabled Learning and Life-long Self- learning; Effective Modes of Student Assessment and Evaluation; Creative Problem Solving, Innovation and Meaningful R&D Miscellaneous Aspects (Institutional Management & Administrative Procedures)
4	Policy Status	Original –Version -1.0
5	Originated By	Adopted from "A Comprehensive Training Policy for Technical Teachers" April 2018 & November 2018, AICTE
6	Reviewed By	<ul> <li>Director, Internal Quality Assurance Cell (IQAC), Tecnia Institute of Advanced Studies, Delhi</li> <li>Coordinator, TIAS-IQAC, Tecnia Institute of Advanced Studies, Delhi</li> </ul>
7	Effective Date of Policy	22/07/2021
8	Approving Authority	The Academic Council, TIAS and BoG of Tecnia Institute of Advanced Studies, Delhi
9	Amendment Number	Nil
10	Effective Date of Amended Policy	Nil

# SOP FOR IMPLEMENT OF TECHNICAL TEACHERS TRAINING POLICY

N E OF ADVAA Madhuban Chowk S INST 301 Rohini

Dr. Ajay Kumar, Director

Tecnia Institute of Advanced Studies (Affiliated to GGSIP University, Delhi) Madhuban Chowk, Rohini, Delhi-85

# THE INSTITUTE

Tecnia Institute of Advanced Studies ("TIAS") is a Flagship of Tecnia Group of Institutions; one of the Premier NAAC accredited "A" Grade Institute; Approved by All India Council For Technical Education (AICTE), Ministry of Human Resource Development (MHRD), Government Of India (GoI) and Affiliated to Guru Gobind Singh Indraprastha University, Delhi; Recognized under Section 2(f) of University Grants Commission Act, 1956. The Institute conducts Master of Business Administration (MBA), Bachelor of Business Administration (BBA), Bachelors of Arts Journalism and Mass Communication BA (JMC) & Bachelor of Computer Applications (BCA) programmes in both shifts. The institute is ISO (hereinafter ISO refers to International Organization For Standardization) 9001:2015, ISO 14001:2015, ISO 21001:2018 & ISO 51001: 2018 Certified and Instituted is Top 50 Best B-School in North Zone by The Week Hansa Research Survey, Top 50 Private Institute in India by Times BBA Education Ranking Survey; The institute has established Institution Innovation Council (IIC) under the Norms of MHRD's Innovation Cell, GoI Dated 11.09.2019 to promote Innovation and Start up and also established Entrepreneurship Development Cell. Institute provides Value Added Programs & Career Counseling Session, Capabilities Enhancement Program on Technical and Soft Skill Expertise knowledge for development of young professional. The institute had setup TIAS-NPTEL Local chapter to complete MOOCs Course with e- certification for making students employable. Institute has ultra- Modern infrastructure and impart Value Based Education, conducts Training, Research & Consultancy, National and International Conferences and Seminars, Faculty Exchange Programme, Technical cum Cultural Fest etc. since 1998. The Institute is located at a prime location and has State-of-the-Art facilities, erudite faculties, dedicated staff members and an ambience to fulfill admirable academic pursuit.

#### VISION

To impart holistic development, by inculcating knowledge, ethics, professional acumen including socially concerned attitude to carve out an edge in dynamic environment.

#### MISSION

To make a thorough professional and responsible citizen through student centric teaching learning process, co-curricular, extra-curricular, enrichment, extension and outreach activities and research environment.

#### **CORE VALUES**

Being a professional institute, we subscribe to, in our dealings and hold ourselves accountable to all stakeholders by maintaining integrity, honesty, openness, personal excellence, constructive self-criticism, continual self-improvement, mutual respect, professionalism, quality service & standards, innovation, objectivity and honoring our commitments.

# QUALITY POLICY

To provide quality education, training and expertise to improve the quality of life by improving the capabilities of human resources, thinking process, practices and performance in the Management, Information Technology and Media disciplines by adopting the quality management system through continual improvements.

# TECNIA INTERNAL QUALITY ASSURANCE CELL (TIQAC)

The NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) conducts assessment and accreditation of (HEI) recognized institution to undertake the 'Quality Status' of the institution. NAAC evaluates the institutions for its conformance to the standards of quality in terms of its performance related to the educational processes and outcomes, curriculum coverage, teaching-learning processes, faculty, research, infrastructure, learning resources, organization, governance, financial wellbeing and student services. In pursuance of above for its performance evaluation, assessment & accreditation & quality up-gradation of higher education, NAAC proposes to establish an Internal Quality Assurance Cell (IOAC) as a postaccreditation guality sustenance measure. Since guality enhancement is a continuous process, the IQAC will become a integral part of the institution's system & work towards realization of the goals of quality enhancement & sustenance. The prime task of the IQAC is to develop a system for conscious, consistent & catalytic improvement in the overall performance of the institute for the post-accreditation period, it will channelize all efforts & measures of the institution towards promoting its holistic academic excellence. The Tecnia Institute of Advanced Studies was accredited on 11-Sept.-2017 with CGPA of 3.11 of 'A' Grade by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL. IQAC established at Institute continued to strive for the betterment of systems, processes and policies setup. The NAAC visited the Institute Campus from  $28^{th} - 29^{th}$  August 2017 (First Cycle) taking the tangible efforts to further has established a concrete Tecnia-IQAC hosting in TIAS-ERP in Institute.

# IQAC VISION

To shape and certify the quality culture in the Institute with an intention of assured all round excellence.

# **IQAC MISSION**

To channelize the efforts and establish the actions of the institute towards quantify academic and administrative talent and to be the change agent for leading and remove deficits to enrich the quality

# IQAC GOALS

IQAC shall evolve mechanisms and procedures for:-

- To ensure timely, efficient and progressive performance appraisal of academic, administrative and financial tasks
- To ensure relevance and quality of academic and research programmes
- To develop equitable access to and affordability of academic programmes for various sections of society
- To optimize and integrate modern methods of teaching and learning
- To ensure credibility of evaluation procedures; adequacy, maintenance and functioning of the support structure and services
- To develop research sharing and networking with other institutions in India and abroad

# IQAC DOLES

The doles of the IQAC are:-

- To contribute meaningfully to ensure heightened level of clarity and focus on institutional functioning towards quality enhancement through internalization of the quality culture
- To act as a nodal agency in the Institute to empower, integrate and coordinate among various quality-related activities including adoption dissemination and institutionalize of best practices, for quality outcomes
- To build an organized methodology for decision-making, quality changes, documentation of the various programmes/activities to improve institutional functioning and internal communication for quality improvement

# IQAC ROLES

The roles of the IQAC are:-

- To develop, disseminate information and application of quality benchmarks for various academic and administrative activities of higher education.
- To facilitate the creation of a learner-centric environment conducive to quality education and faculty maturation to adapt the required knowledge and technology for participatory teaching and learning process
- To establish network to coordinate, facilitate and implement feedback response on quality- assurance initiatives by involving the stakeholders
- from students, parents and other stakeholders
- To organize inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- To develop and maintain institutional database through TIAS-ERP (MIS) for the purpose of maintaining, enhancing, quality culture in the institution.
- Periodical conduct academic and administrative audit and its follow-up to prepare the Annual Quality Assurance Report (AQAR) as per guidelines and parameters for onward submission to NAAC.

# A TECHNICAL TEACHERS TRAINING POLICY

With rapidly changing technological scenario in the context of ever-increasing global connectivity as well as competitiveness in modern times, the role of technical education in economic development has become very significant and challenging. Also, as a consequence of intensive technological developments, the concerns of sustainability, environmental degradation, resource depletion and inclusive growth have become more relevant. The need for well-qualified professionals is more critical with complex problems that affect the quality of life of everyone, everywhere for

businesses seeking well-rounded ICT and Management professionals who face global challenges. Further, the concerns about making the educational curricula and training more conducive to the national needs are becoming a top priority.

In the past few decades, there has been a spectacular increase in the number of technical institutions. The thrust on improving the quality of education in such a wide spectrum, that requires serious introspection; a large number of technical teachers are being recruited afresh every year. The technical institution requires the technical manpower needed to meet the requirements. The most important component require is the information-knowledge transition. The teaching professionals or teachers join this profession immediately after the completion of their post graduate or research degrees and then progress in their career requires training, which prepares them to take on the role in the teaching profession.

Another important issue worth pondering is that the teaching profession in the technical education domain does no longer attracts the best academic performers and many times, it becomes the last choice. There has to develop mechanism to motivate academically brilliant candidates to take up the teaching profession and groom them for providing quality education. Also to emphasize that with such a downside trend, a vicious cycle is created that continues to operate, and results in degradation of the quality of education.

Given the above, the need of the hour is to adequately augment the quality of technical education and making it more and more appropriate to the present requirements so as to become very acute and that's requires effort on the part of the statutory agencies as well as the all stakeholders. The AICTE has launch a number of initiatives to cope up with this situation. The AICTE Council in its 49th meeting held on 14th March 2017 comprehensively discuss with all the stakeholders in technical institution, to effectively improve the quality measures in the Institute. The measures include:-

- an exhaustive revision in the current curricula;
- training of teachers;
- mandatory student orientation program at the time of induction;
- examination reforms;
- mandatory accreditation;
- mandatory internship;
- effective industry interaction;
- Advance perspective planning, etc.

The most important is to implement a "Technical Teachers Training Policy". As per the directions issued in AICTE "A COMPREHENSIVE TRAINING POLICY FOR TECHNICAL TEACHERS" for inducing a mandatory course for teachers at the entry level. The "Technical Teachers Training Policy" includes a training program at the induction level of newly recruited technical teachers called "inductee teachers" as well as propose additional training inputs at various stages of the teaching career of technical teachers. The AICTE provides mandate and set the modalities; deliberated on all the feedback, comments and suggestions; includes all the disciplines/ domains handled by the AICTE including Management, MCA, etc. for other domains and appropriate modifications and alterations can be worked out accordingly.

# > The Rationale and Need for the Training Policy

The Technical Teachers Training Policy of AICTE brings in tangible improvement in quality of technical education in the country; The pace-setting institutions recruited teachers without undergoing any training and are left to fend for themselves in working up in their profession with an expectation that they will become competent teachers by trial and error, totally unmentioned. It may be appreciated that to be a proficient teacher in any field, one should have a sound knowledge and associated skills of the subject and its application with the prevailing practice scenario in real life. One should also have the requisite teaching skills needed to scientifically plan for instructional delivery and communicate the knowledge and skills to the students in an effective manner. This has to be done in a manner so that they are motivated and fascinated to acquire knowledge and associated skills and visualize its application for helping them to become competent professionals, capable of contributing effectively towards the welfare of the society and also their career development.

A faculty member who completes his/ her studies in a timely manner, and joins the academic career normally enjoys 30-35 years of the total working period. The first deliverable viz. 'outputs' is quantifiable in a short duration from the start of the academic career. The second deliverable viz. 'outcomes' comes in a medium duration say 10-15 years of working and the third, 'impacts' is visualized in a long duration say beyond 20-25 years. A faculty member is required to provide quality outputs in the short run so that they lead to meaningful outcomes for the disciplines in the medium duration which in turn cause a valuable impact for the nation in the long duration. Thus, a faculty member is required to plan the efforts of effective teaching learning and implementation to make the academic career meaningful.

Truly speaking, knowledge of practice, i.e. its application helps to be a subject expert and, therefore, competent enough for teaching. Such situations are ensured in several other professions, whereas the teachers are simultaneously the practitioners as well. In the domain of technical education, this condition is totally missing. Therefore, means need to be evolved to provide exposure to technical teachers. Guiding them to carry out meaningful R&D, sponsored projects, consultancy etc. provides such an avenue to some extent for which proper training and exposure is required. Hence, it is essential to have such skills and leadership enhancement programs for young professionals entering the teaching profession and continuing such efforts to be able to fulfill the expectation better and succeed to face the global challenges.

There is another important challenge, they have to keep themselves abreast with the latest developments in their fields or the cutting edge technologies in an effort to be at par with the 'world-class' and on the other hand, it is equally important to develop the competence to visualize the indigenous needs creatively and to find appropriate solutions which are useful and user-friendly. To develop such competence and culture of creative innovation, one needs proper training and practice. Only when teachers themselves acquire the skill of proper need analysis, meaningful literature review, problem framework and creative problem solving, thus, can carry out meaningful work and guide the students properly.

A core requirement for effective classroom interaction is that the teachers develop the art of preparing a systematic lesson plan and a lively classroom interaction. This is an area of basic teaching competence. Further, appropriate pedagogical techniques, different modes of learning by the students as well as effective modes of evaluation of the desired learning outcomes are required to be mastered by the teachers to be successful. These skills have to form an important part of their training.

Faculty member has to set the pace of activities in the career. In the beginning, the faculty member is not comfortable with student engagement, institutional development and teaching-learning activities. While the faculty becomes comfortable with student development activities and improved competence in teaching-learning and institutional development, there is usually a quantum improvement in the technology and its relevance to the industry at national and international levels. A teacher has to contribute effectively for professional grooming of the student, institutional development and address relevance to industry.

A need of new domains of 'Teacher Training' has arisen because of increasing use of ICT tools in the modern teaching-learning process, in seeking information and in knowledge dissemination. There is a deluge of new software, online platforms, e-modes of teaching-learning, e-sources of information, etc. and the teacher has to learn how to make judicious use of these tools without getting lost in the quagmire and not becoming obsolete is of paramount importance.

#### > Need for Orientation in Human Values

The important area of teacher competence has been in the domain of value inculcation, attitude formation, personality development, social responsibility and the ethical conduct of the profession realization has become more significant. There is strong complementarity between human values and skills. All the acquired skills are harnessed in accordance with the value perception. Faculty inculcates a holistic perception and universal human values, all the skills are likely to get misused under the influence of greed, fear, selfishness, jealousy, etc. While the human beings have been able to empower themselves with sophisticated technology, simultaneous enrichment with human values has become all the more important.

Training in human values with an appropriate process of self-exploration happens to be, important component of the training of teachers. They must also be able to visualize the interrelationship and interaction between science, technology, environment, social and ethical values. In past, innovative experiments were conducted towards integrating human values in technical education in professional institutions and technical universities. The development of effective teacher orientation programs, resource material which is useful in providing teacher training. The real foundation of sustainable development lies in the appropriate integration of science, technology and human values. Teachers with value-orientation are effective mentors and counselors for students and create a value-centric environment in institution and mold the thinking of the students enabling a holistic development of their personality. Active academics and intelligence quotient (IQ) alone cannot help to build a nation of good citizens unless it is blended with the due and active preparation of students in emotional quotient (EQ) and social quotient (SQ).

### > Continuous Teaching Learning

A teacher has to learn the knack of continuous learning, updating and life- long learning at successive stages of the teaching career, training inputs about curriculum development, infrastructure development, institutional development, discipline and other important aspects of educational administration and policy formulation etc. It requires the development of a Technical Teachers Training Policy for inductee teachers and teachers working at different stages of their careers as well as meeting different needs, the size of the problem is comprehensive.

#### **PREVIOUS INITIATIVES**

The technical teachers must undergo training program with full seriousness. Quality Improvement Programs (QIP) to facilitate the enhancement of quality of in-service teachers. In this respect, they have been helpful and therefore, need to be continued. The effort towards, improving the teaching skills, ICT capabilities and more importantly the values and attitudes have been rather missing and need to be appropriately incorporated. Training-focused Technical Teacher Training Institutes are required for teachers actively engaged in training and development of technical education in all aspects. The institutes were renamed as the Institute of National Importance are asked to carry out the training of technical teachers.

These institutes have the necessary infrastructure and expertise for online modes of interaction, these institutes have long experience of technical teacher training, curriculum development, instructional resource development and to conduct Conference (National/International), Seminar, Webinar, Workshops, STP, MDP, FDP, Capability Enhancement Program, Summer/ Winter Schools and etc. which needs to be appropriately harnessed in the future after appropriate revamping and orientation. An Academic Staff Colleges (ASCs) established by UGC for providing orientation and refresher programs for teachers, government agencies like MHRD, AICTE, UGC, etc. provide ample support for conducting QIP, Short-Term Refresher Courses, Orientation Program, Research Methodology further reference

"UGC Gazette NOTIFICATION; No. 285; New Delhi, the 11th July, 2016; No.F.1-2/2016 (PS/Amendment) -In exercise of the powers conferred under clauses (e) and (g) of sub-section (1) of Section 26 of University Grants Commission Act, 1956 (3 of 1956), the University Grants Commission Pg. 28; APPENDIX-III - TABLE: III;

MINIMUM ACADEMIC PERFORMANCE AND SERVICE REQUIREMENTS FOR PROMOTION OF TEACHERS IN COLLEGES"

S.	Teacher	Minimum Academic Performance
No.		
1	Asst. Prof./	One Orientation and one Refresher / Research
	equivalent cadres	Methodology Course of 2/3 weeks duration.
	from Stage 1 to	
	Stage 2	
2	Asst. Prof./	One course / programme from among the categories of
	equivalent cadres	refresher courses, methodology workshops, Training,
	from Stage 2 to	Teaching-Learning-Evaluation Technology Programmes,
	Stage 3	Soft Skills development Programmes and Faculty
		Development Programmes of 2/3 week duration.

3	Asst. Prof./ (Stage 3) to Associate Professor (Stage 4)	<ul> <li>At least three publications in the entire period as Assistant Professor (twelve years). However, in the case of College teachers, an exemption of one publication may be given to M. Phil. holders and an exemption of two publications may be given to Ph. D. holders.</li> <li>One course / programme from among the categories of methodology workshops, Training, Teaching-Learning - Evaluation Technology Programmes, Soft Skills development Programmes and Faculty Development Programmes of minimum one week duration.</li> </ul>
4	Asso. Prof. (Stage 4) to Professor (Stage 5)	A minimum of five publications since the period that the teacher is placed in stage 3 in UGC Care
5	Professor (Stage 5) to Professor (Stage 6).	Additional credentials are to be evidenced by: (a) post- doctoral research outputs of high standard; (b) awards / honours / recognitions / patents and IPR on products and processes developed / technology transfer achieved; and (c) Additional research degrees like D.Sc., D.Litt., LL.D., etc.,

#### **APPENDIX – III: TABLE I**

#### ACADEMIC PERFORMANCE INDICATORS (API) FOR CAREER ADVANCEMENT SCHEME (CAS) PROMOTIONS FOR ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR AND PROFESSOR AND FOR DIRECT RECRUITMENT OF ASSOCIATE PROFESSOR AND PROFESSOR IN UNIVERSITIES AND COLLEGES.

	Direct Teaching Hours per week
Assistant Professor	16
Associate Professor	14
Professor	14

Based on the teacher's self-assessment, API scores are proposed for (a) teaching related activities; domain knowledge; (b) participation in examination and evaluation; and (c) contribution to innovative teaching, new courses etc. The minimum API score required by teachers from this category is different for different levels of promotion. The self- assessment score should be based on objectively verifiable records. It shall be finalized by the screening cum evaluation / selection committee. Universities may detail the activities, in case institutional specificities require, and adjust the weightages without changing the minimum total API scores required under this category.

CATEGORY I: TEACHING, LEARNING AND EVALUATION RELATED
ACTIVITIES

	ACTIVITIES							
Cate gory	Nature of Activity	Assist Profes		Associate Professor		Associate Professor Professor		sor
	-	Max.	Actual Score	Max.	Actual	Max.	Actual	
		Score		Score	Score	Score	Score	
Ι	a. Direct Teaching	70	Actual hours	60	Actual	60	Actual	
			spent per		hours		hours	
					spent per		spent per	
			academic		academic		academic	
			year		year		year	
			÷ <b>7.5</b>		÷7.75		÷7.75	
	b. Examination	20	Actual hours	20	Actual	10	Actual	
	duties (question		spent per		hours		hours	
	paper setting,		academic		spent per		spent per	
	Invigilation,		year		academic		academic	
	evaluation of		÷10		year		year	
	answer scripts) as				÷10		÷10	
	per allotment							
	c. Innovative	10	Actual hours	15	Actual	20	Actual	
	Teaching -		spent per		hours		hours	
	learning		academic		spent per		spent per	
	methodologies,		year		academic		academic	
	updating of		÷10		year		year	
	subject contents/				÷10		÷10	
	courses, mentoring							
	etc.							

Note:

- 1. Direct Teaching 16/14/14 hours per week include the Lectures/ Tutorials/ Practical / Project Supervision / Field Work.
- 2. University may prescribe minimum cut-off, say 75%, below which no scores

may be assigned in these sub-categories.

3. In consonance with established academic and teaching traditions, and with a view to reinforcing a student-centric and caring approach the teachers are encouraged to work with students, beyond the structure of classroom teaching. Indicatively, this could entail mentoring, guiding and counseling students. In particular teachers would be the best placed to identify and address the needs of students who may be differently abled, or require assistance to improve their academic performance, or to overcome a disadvantage. There are no prescribed hours for such efforts, measured either in weeks or months, or in the context and calculation of the API scores, these are nevertheless important and significant activities that could be carried out by teachers.

# CATEGORY II: PROFESSIONAL DEVELOPMENT, CO-CURRICULAR AND EXTENSION ACTIVITIES

Based on the teacher's self-assessment, Category II API scores are proposed for Professional development, co- curricular and extension activities; and related contributions. The minimum API required by teachers for eligibility for promotion is fixed in Table II (A). A list of items and scores is given below. The selfassessment score should be based on objectively verifiable records and shall be finalized by the screening cum evaluation committee for the promotion of Assistant Professor to higher grades and selection committee for the promotion of Assistant Professor to Associate Professor and Associate Professor to Professor and for direct recruitment of Associate Professor and Professor.

The model table below gives groups of activities and API scores. Universities may detail the activities or, in case institutional specificities require, adjust the weightages without changing the minimum total API score required under this category.

Categ ory II	Nature of Activity	Maxim um API Score	Actua I score
a.	<ul> <li>Student related co-curricular, extension and field based activities.</li> <li>(i) Discipline related co-curricular activities (e.g. remedial classes, career counseling, study visit, student seminar and other events.)</li> <li>(ii) Other co-curricular activities (Cultural, Sports, NSS, NCC etc.)</li> <li>(iii) Extension and dissemination activities (public /popular/ Lectures/ talks/ seminars etc.)</li> </ul>		Actual hours spent per academic year ÷ 10
b.	Contribution to corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities. i). Administrative responsibility (including as Dean / Principal / Chairperson / Convener / Teacher-in-charge/similar other duties that require regular office hrs for its discharge) (ii). Participation in Board of Studies, Academic		Actual hours spent per academic year ÷ 10

	and Administrative Committees		
С.	Professional Development activities (such as participation in seminars, conferences, short term training courses, industrial experience, talks, lectures in refresher / faculty development courses, dissemination and general articles and any other contribution)	15	Actual hours spent per academic year ÷ 10

# CATEGORY-III: RESEARCH AND ACADEMIC CONTRIBUTIONS

Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API scores required for teachers from this category are different for different levels of promotion in universities and colleges. The self-assessment score shall be based on verifiable records and shall be finalized by the screening cum evaluation committee for the promotion of Assistant Professor to higher grades and Selection Committee for the promotion of Assistant Professor to Associate Professor and Associate Professor to Professor and for direct recruitment of Associate Professor and Professor.

Categor Y	Activity	Faculties of Languages / Humanities / Arts / Social Sciences / Library / Physical education / Management	Maximum score for University / College teacher*
III (A)	Research Papers published in:	Refereed Journals as notified by the UGC# Other Reputed Journals as notified by the UGC#	25 per Publication 10 per Publication
III (B)		Text / Reference Books published by International Publishers, with ISBN/ISSN number as approved by the University and posted on its website. The List will be intimated to UGC.	•
	Publications other than journal	Subject Books published by National level publishers, with ISBN/ISSN number or State Central Govt. Publications an approved by the University and posted on its website. The List will be intimated to UGC.	20 per Book for Single Author
	articles (books, chapters in books)	Subject Books, published by Other local publishers, with ISBN/ISSN number as approved by the University and posted on its website. The List will be intimated to UGC.	15 per Book for Single Author

1	<b></b>		
		Chapters in Books published by	International –
		National and International level	10 per
		publishers, with ISBN/ ISSN number	Chapter
		as approved by the University and	National – 5 per
		posted on its website. The List will	Chapter
		be intimated to UGC.	
III (C)	RESEARCH P		
III (C) (i)	Sponsored	Major Projects with grants above Rs.	20 per Project
	Projects	5 lakhs	15 mars Duciest
		Major Projects with grants above Rs.	15 per Project
		3 lakhs up to Rs. 5 lakhs	10 may Dyainat
		Minor Projects with grants above Rs. 1 lakh up to Rs. 3 lakhs	10 per Project
III (C) (ii)	Consultancy	Amount mobilized with a minimum of	10 for every
	Projects	Rs. 2 lakhs	Rs.10 lakhs and
			Rs.2 lakhs,
			respectively
III (C)	Projects	Major Policy document prepared for	30 for each
(iii)	Outcome /	international bodies like WHO/UNO/	International /
	Outputs	UNESCO/ UNICEF	20 for each
		etc. Central / State Govt./Local	national level
		Bodies	output or
			patent.
			Major policy
			document of
			International
			bodies - 30
			Central
			Government –
			20, State Govt
			10
			Local bodies – 5
III (D)	RESEARCH		
	GUIDANCE	Desure envende d	<b>F</b>
III(D)(i)	M.Phil.	Degree awarded	5 per
		Denver and d / These is a density of	candidate
III(D) (ii)	Ph.D.	Degree awarded / Thesis submitted	15/10 per
	Followshine		candidate
III E	Fellowships, Awards and		
	Invited		
	lectures		
	delivered in		
	conferences		
	/ seminars		
III(E)(i)	Fellowships/	International Award / Fellowship	15 per Award
(-)(')	Awards	from academic bodies/associations	/ 15 per
			Fellowship
		National Award/Fellowship from	10 per Award
		academic bodies/associations	/ 10 per

			Fellowship
		State/University level Award from academic bodies/associations	5 Per Award
III(E)(ii)	Invited lectures / papers	International	7 per lecture / 5 per paper presented
		National level	5 per lecture / 3 per paper presented
		State/University level	3 per lecture / 2 per paper presented
	The score under this sub- category shall be restricted to 20% of the minimum fixed for Category III for any assessment period		
III(F)	Developme nt of e- learning delivery process /material		10 per module

Intended to improve the quality of technical teachers and also support the training of teachers in industries and other research institutions, but the programs need more systematic organization and monitoring after which these would also contribute to the in- service training programs. Needless to emphasize that they should learn from the experiences gained from earlier initiatives as well as use the infrastructure created and appropriately assimilate these in the Technical Teachers Training Policy.

# **BROAD OBJECTIVES OF THE TECHNICAL TEACHERS TRAINING POLICY**

The training needs of teachers in their career are visualized in two distinct categories of:-

- ✓ Faculty Induction Program (FIP) to be provided just after the recruitment of inductee teachers and
- ✓ In-Service Training Program (ITP) catering to the specific requirement at various levels of their teaching career.

The Institute broad objectives for the Technical Teachers Training Policy for inductee teachers are as under:-

- To clearly demarcate the training needs at different levels of career and for different categories of teachers, keeping in mind their present status, the expectations from a good teacher and the ground reality of technical education for the programme in the Institute. This will naturally characterize the training needs at the time of induction as well as at the successive stages of the academic career.
- To prescribe the structure and the contents of the training program at different cadre levels of faculty i.e. AP, AP-1, AP-2, AP-3, Asso. Professor, Professor.
- To propose a feasible mechanism to effectively implement the desired Training Policy for all the departments of the Institute.
- To monitor, facilitate and successively improve the quality of training by proposing to develop suitable resource persons, resource material (both print and online modes) and carrying out action taken on teaching/research.
- To recognize the salient implications of the policy and suggest ways and means to appropriately deal with these to establish a sustainable system for training of technical teachers in the Institute.
- Continuous updating of technical subject expertise (theory and practice) by making mandatory, the successful completion of at least one subject course offering through technology-based means i.e. Massive Open Online Courses (MOOCs) and/or Open Online Courses every year.

# TRAINING NEEDS (During The Faculty Induction Program (FIP)

Training requirements of Faculty Induction Programme (FIP) for teaching skills, enhancement and leadership requires additional general as well as domain-specific requirements; needs instructional as well as guided exposure to best practices and demonstrative situations. The policy recognizes the following requirements to be met in the training:

- General orientation of present scenario and challenges of technical education and the spectrum of duties and expectations.
- Basic understanding of the teaching-learning process, the psychology of learning and effective pedagogical techniques.
- Training for preparing lesson plans and effective instructional process and initiatives for developing competence in communication skills in various modes relevant to the technical profession.
- Inculcation of a holistic perception, professional values and ethical attitudes.
- Exposure to relevant ICT tools and aids for effective teaching-learning and resources for lifelong self-learning.
- Training on appropriate use of various modes of student evaluation.
- Training in creative problem-solving; research methodology; conducting guidance for R&D projects etc.
- Guided exposure to good teaching practices, learning methods, lab development and organization of practical classes etc.
- Training on miscellaneous aspects other than teaching and research, such as administrative procedures, financial procedures and legal implication etc.

# Faculty Induction Program (FIP)

The first and a very significant training input shall be in the form of a Faculty Induction Program (FIP) to be provided to inductee teachers. The AICTE at length

on the different aspects of this program, including the contents, time duration, structured way of delivery, an assessment etc. and suggests the following to be followed:

- This phase of the Training Program for the inductee teachers can be kept during the one-year probation period of the teachers, just after their selection.
- Keeping in view large numbers of inductee teachers, the training can be conducted through Massive Open Online Courses (MOOCs) mode followed by contact programs organized in summer and winter vacations.
- The induction training can be spread over two terms. The total contact hours proposed for the training would be in the range of 450-480 hours in the first term. This will be followed by the second term which would include on the job training and exposure to industrial/ field practices.

# **CONTENTS (Instructional Modules for FIP)**

These modules and their content that follows in this section serve as a guide to provide an overall understanding of the topics to be covered. The minimum knowledge and skills that will have to be acquired after course completion are also outlined.

#### **MODULE 1: Orientation towards Technical Education & Curriculum Aspects**

To be responsive to internal requirements and to meet the challenges, it is important that various aspects of the technical education system in the country are well understood by the inductee teachers. These teachers should understand the role and linkage of stakeholders and challenges/ issues affecting the quality of technical education. The technical teachers need to be also well conversant with the curricular aspects as it is the *'key constituent'* of any educational programs. Hence approaches, implementation, monitoring and evaluation aspects are to be understood.

#### Contents:-

- Overview of technical education- the present scenario and emerging challenges; excellence in technical education – criteria for quality education.
- Domains of Learning-Cognitive, Affective and Psychomotor as per revised Bloom's Taxonomy; Cognitive process dimension and knowledge dimension; program objectives and learning outcomes at different levels.
- Psychology of learning and motivation; principles of instruction and learning; understanding the teaching- learning process.
- Four pillars of learning proposed by UNESCO
  - learning to know;
  - learning to do;
  - learning to be and
  - learning to live together.
- Interpreting the curriculum and its characteristics; curriculum and instruction; curricular and extra-curricular modes of student-teacher interaction; alternative modes of learning; curriculum implementation, monitoring and evaluation.
- Need for correlating knowledge to professional practice, research & development.
- Expected understanding
- Analyze the issues and challenges in the domain of technical education, especially concerning quality and excellence.
- Formulate learning outcomes at different levels in all domains of learning and

explain the application of cognitive process and knowledge dimensions.

 Apply the concepts, principles and processes of instruction and learning to ensure effective implementation of the curriculum.

#### MODULE 2: Professional Values, Ethics, Ecology & Sustainable Development

The technical education system should be able to equip the student with not only technical/ managerial competency but also professional values, ethics and moral values. Professional ethics and sustainable development need to be inculcated in inductee teacher who should play a role model to peers and students.

#### Contents:-

- Understanding the essential complementarities of values and skills.
- Understanding the human reality correctly and the inherent interconnectedness and order in the whole existence.
- Guru-Shishya parampara relationship.
- Developing a holistic perception of human happiness; prosperity; life-goals, needs and relationships; ethical human behavior Sarvejana Sukhino Bhavantu.
- Mentoring and counseling; personality development.
- Understanding the ecology and basic parameters of sustainable development.
- Salient values and attitudes for professional excellence and personality development; social responsibility as good citizens and also as technical professionals.

#### Expected understanding:-

- Develop an adequate appreciation of the essential complementarities of values and skills and a better understanding of the human reality vis-à-vis co-existence with the rest of nature.
- Comprehend the prime basis of values, relationships and holistic perception and their significance in the profession.
- Demonstrate ethical and responsible professional behavior in the performance of his or her duties and roles

#### MODULE 3: Communication Skills, Modes and Knowledge Dissemination

Effective communication is the life-blood of education, and hence teacher needs the ability to transfer ideas, views, attitude and feeling etc., effectively and efficiently, through all forms- speaking, reading, writing, listening etc. The inductee teacher should be made aware of nuances of communication skills and strategies to implement these as knowledge dissemination which is affected by the communication media and hence the effective use in instruction is also critical to utilization and delivery.

#### Contents:-

- Basic concepts, models, verbal and non-verbal and written communication; the importance of communication skills in the teaching-learning process and in knowledge dissemination; barriers in communication.
- Different modes of communications and respective media.
- ✤ Application of principles of communication to improve the instructional process and for effective professional interaction with peers, superiors and

subordinates.

- Proficiency in oral communication; logical discussion and presentation; use of dialogue mode: right pronunciation and command of the language.
- Various modes of written communication- research papers, articles, technical reports, project proposals/ reports, thesis, manuals etc. Learning to write minutes, summary of deliberation, executive summary etc. in an effective manner; Nontechnical communication, official correspondence, file notes etc.
- Introduction to modern media & methods, appropriate use of Educational Technology (ET) and audiovisual aids.

#### Expected understanding:-

- Develop requisite competence in communication skills and the use of various modes of knowledge dissemination needed by a technical teacher.
- Communicate effectively and clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teachinglearning and assessment.

### MODULE 4: Instructional Planning and Delivery

This is one of the core skills for effective delivery in the learning process. The inductee teacher should be able to appreciate the process of human learning and curriculum design philosophies to interpret it rightly and deliver it effectively and efficiently. This would help the teacher attain the planned outcome of the teaching-learning experiences.

#### Contents:-

- Interpretation of learning outcomes; a clear grasp of the subject matter; learning outcome objectives.
- Preparation and effective implementation of the lesson plan for systematic presentation in the classroom.
- Effective chalkboard work; the right pace of delivery; use of interactive mode; frequent recapitulation and summing up the key points.
- Correlating lecture inputs effectively with tutorial exercises, home assignments and laboratory work as well as indicating relevance to prevailing practices.
- Supplementing with brief handouts/ class-notes and references for detailed study.
- Appropriate instructional strategies and suitable teaching methods and media for effective instruction and learning by students appropriate to the subject matter/ course content.
- Feedback mechanisms for continuous improvement in the teaching-learning process.

#### Expected understanding:-

Develop requisite learning materials and methodologies that are appropriate to the level of students and the subject content, accomplishment of learning outcomes and development of the competencies in the students as targeted in the program of study, applying the principles related to:-

- i. Learning and instruction
- ii. Instructional planning and delivery
- iii. Practicum in the lab classes

 Organize and deliver class/ laboratory/ workshop based and industry/ service sector-oriented instruction and learning to promote students' overall ability, personality and social development.

# MODULE 5: Technology Enabled Learning and Life-long Self-learning

With the explosion of data and information and also the evolution of new technologies, including internet and other ICT techniques, technology-enabled or enhanced learning can make teaching-learning process more efficient and effective. The young inductee teachers should know about the necessity of technology in the learning process and make effective use of technology in self-learning. The teacher should be able to develop content for such media by appreciating the effectiveness of new technology paradigms. The need and importance of emerging systems of instructions like ICT based online learning platforms, e-sources of information MOOCs and other open learning systems; various ICT modes and educational technology aids and their effective usages.

#### Contents:-

- Suitable online and offline techniques and tools for the assessment of appropriate learning outcomes.
- Effective use of library facilities, use of research journals and classified research material.
- Need for lifelong learning through own experience and by interaction through seminars, workshops, conference and refresher courses etc.; continuous updating of knowledge.

#### Expected understanding:-

- Integrate information and communication technologies in preparing and delivering of teaching-learning online and offline, print and non-print instructional learning material and activities for instructional management and professional development purposes.
- Engage in the continuous professional development of self through developing lifelong learning skills.

#### MODULE 6: Effective Modes of Student Assessment and Evaluation

The assessment and evaluation of the effectiveness of the teaching-learning process should have the characteristics of validity, reliability and objectivity to match the needs of society. The content should enable the inductee teacher to scientifically design various tools of assessment and also sensitize towards the guidelines for evaluation and assessment.

#### Contents:-

- Clear identification of outcome expectations.
- Concepts, principles, characteristics and process of student evaluation in the process of education.
- Assessment tests and performance measures, rubrics, etc. to assess cognitive, psychomotor and affective learning outcomes using scientific principles of evaluation.
- Valid and reliable schemes and tools for student assessment; effective design of question paper.
- Evaluation through written tests, quizzes, objective questions, viva-voce

through home assignments and open book examination.

- Evaluation through projects and case studies.
- Mechanism for project and thesis evaluation.
- Relevance of alternative modes of evaluation.
- Student self-assessment tools.
- Analysis, interpretation and reporting of test data

#### Expected understanding

- Evaluate student progress in learning the subject and mastering the related competencies.
- Devise and use suitable online and offline techniques and tools for assessment of appropriate learning outcomes.

### MODULE 7: Creative Problem Solving, Innovation and Meaningful R&D

Increasing creativity and innovation are the hallmark of development of the institution, society and nation. The inductee teacher should be able to increase own attitude towards creativity and innovation and also that of the students. Therefore, the teacher should comprehend the fundamentals of creativity and innovation and apply them in research and development initiatives.

#### Contents:-

- Introduction to the creative problem-solving process, needs analysis, problem formulation, innovative concept generation, feasibility analysis, detailed design etc.
- Hunting for innovative solutions; design and development.
- Understanding different research designs including methodologies and their appropriateness to problems; action research proposal; problem identification, literature review, research instruments appropriate to the research problem, steps of analysis and synthesis, presentation of results and conclusions etc.; action research report.
- Guidelines for developing a research field for oneself.
- R&D through teamwork.

#### Expected understanding

Develop an understanding of creative problem-solving processes, research methodology and action research, including familiarity with the reference sources and their use.

#### MODULE 8: Miscellaneous Aspects

#### (Institutional Management & Administrative Procedures)

A teacher should be aware of the basic skills required to emerge as a leader and execute tasks as a manager and contribute to the growth and development of the institution. The teacher should also have a basic understanding of the administration, finance and legal requirements. The need for well-qualified professional could not be more critical when the country is faced with complex problems that affect the quality of life of everyone, everywhere and businesses seeking more well-rounded engineers and professionals who can take on leadership roles.

The public perception of the engineering profession is also on a downward spiral as

is the enrolment of young in professional schools. The teacher is the cornerstone of engineering institution, responsible for inculcating management and leadership skills, in the students. In most of the professional programs such as legal, medical, accountancy etc. fresh entrants are required to go through a skills enhancement program of different forms, before entering the profession. In the profession of engineering and also its teaching, there is no such practice, and hence it is felt essential to have such skills and leadership enhancement program for young professionals to be able to fulfill the expectations better and successfully.

### Contents

- Familiarization with the institutional vision framework and administrative procedures; financial and purchase procedure; relevant legal matters etc.;
- Modes of interaction with external organizations.
- Feedback from alumni and prospective employers, etc. for continuous improvement.

### Expected understanding:

- Describe the purpose and meaningfulness of institutional vision, missions; administrative, financial, purchase and management processes in institutional functioning.
- Relate to alumni and employers for continuous development and improvements.

# > Details of the Second Term of FIP

In the second term of the training, the inductee teacher is expected to work under a mentor (who may be one of the senior faculty) at the institute. The inductee teacher will be teaching one subject and also one laboratory course under the guidance of a senior teacher as a mentor. In this term, the teacher will practically implement the learning acquired under the course studied in the first term.

The mentor will assist the teacher in his/ her endeavour to pick up the right practices on curriculum implementation and evaluation etc. The teacher in the laboratory course will have to understand the laboratory class handling and also develop new experiments to understand the working of laboratory equipment, process of conduct of laboratory experiments and student assessment. The faculty, in this term, will also be required to practice communication skills by preparing and presenting a paper on state-of-the-art of a subject chosen under the guidance of the mentor. The teacher will also be expected to prepare a mock funding proposal for a research project to be submitted to a funding agency. The teacher will also be expected to spend 2-3 weeks as part of training in an industry/ research laboratory etc. as decided by the mentor.

# IN-SERVICE TRAINING NEEDS AT VARIOUS LEVELS

Continuous knowledge updating through suitably designed refresher courses always be needed at all levels of the teaching career. These will mostly be subject-specific in the area of specialization.

Also, it will mandate for these teachers to undergo MOOCs in a phased manner as

discussed in FIP as well as to provide requisite training modules to train the inservice teachers for the responsibilities required to be carried out in their next professional cadres and also for the specialized inputs such as :-

- Intellectual Property Right (IPR) issues,
- Sustainable Development,
- Action Research,
- Curricular Review,
- Infrastructure Development Etc.

#### Some Details of the In-service Training Programs at Various Stages of Teaching Career

**Stage 1** – Faculty Induction Program (already described above)

**Stage 2** – During Lecturer/ Assistant Professorship – having experience of 5-10 years

- Refresher Modules for knowledge updating, newer developments and thrust areas in the concerned fields.
- Training for research guidance, sponsored project planning and conduction, consultancy etc.
- Training for lab development and preparing manuals.
- Training on IPR issues, patenting, technology transfer/dissemination and ethical issues in R & D.
- Training on organization of conferences, workshops, symposia etc.
- Training in basic principles of education technology through MOOCs.

**Stage 3** – During Associate Professorship – having an experience of 10-15 years

- Refresher Modules for knowledge updating, newer developments and thrust areas in the concerned fields.
- Training in curriculum development, resource material development and best practices in teaching and research through MOOCs.

**Stage 4** – During Professorship/HOD-around 20-30 years

- Refresher Modules for knowledge updating, newer developments and thrust areas in the concerned fields.
- Training courses in Institutional Management and promotion of Entrepreneurship development
- Training in leadership; preparing vision, mission and strategy by involving all stakeholders.
- Training on collaborative research with industry, institutions, government agencies and NGOs.
- Planning for departmental growth, motivation and efficiency.
- Removal of obsolescence and planning for continuous growth of the departments and the institution.
- Effective interaction with monitoring and collaborating agencies.
- Facilitating a value-based ethical environment in the institutional handling disciplinary issues.
- Liaison with governmental monitoring/ regulatory bodies.

# MODE OF CONDUCT AND EVALUATION

The training program will be coordinated and supervised by the respective National Technical Teacher Training Institute to which the inductee teacher to undergo MOOCs within the framework of broad guidelines given in FIP. These programs will be based on applied aspects which are useful for technical teachers. The institution of the inductee teacher will be required to share responsibility and accordingly well experienced senior faculty member will be identified as a mentor by the Principal/ Director.

The mentor would be coordinating the complete training activities of the inductee teacher in both the terms. Besides, he/she will coordinate the subject and laboratory class to be handled by the inductee teacher and also help in assessing the work done by the inductee teacher in the classroom, laboratory and project preparation etc. The mentor will keep a complete record of the progress of the inductee teacher. The instructional inputs as designed and indicated will be delivered by the coordinating Technical Teacher Training Institutes. The magnitude of training also brings the services of eminent experts for outsource some of the modules.

MOOCs will also be added for training and made mandatory available to the inductee teacher. Besides training through MOOCs, inductee teachers will undergo contact programs during summer and winter vacations at some training institutes. The inductee teacher will be assessed for the instructional inputs on the basis of written examination, viva, relevant reports, etc. at the end of the first term and the mentor will assist in the evaluation of the work done in the second term, including a teaching performance as well as the laboratory work and industrial training.

A certificate of having undergone both phases of FIP shall be issued to the inductee teacher at the end of the training program. The Academic Committee suggests the following nomenclatures for the certificate shall be:

Induction Training in Educational Technology or Induction Training in Technical Education.

#### IMPLEMENTATION ASPECTS

Having provided the basic framework of the Training Policy covering both the stages i.e. induction and during different career levels and also having spelt out the broad components of the training, the mode of conducting the training phases, the Academic Committee deliberated on various aspects of implementation of the program, keeping in view the scale of the program to be offered to number of teachers as well as a institute requirements.

The Academic Committee, keeping in view above aspects and the wide range of professional subjects to be handled in the training schedule, suggests that an Apex Body preferably by AICTE for overall planning, coordination and monitoring of the Training Policy for its effective implementation. The suggested Apex Board (for education technology) will have a representation of MHRD, AICTE, UGC, State Technical Universities, NITTTRs, other Training Centers, Industry representatives and eminent academicians. It is also suggested/ recommended that for proper networking and implementation, three categories are identified viz.,

Mentoring (Institution), Training (Institution) and Beneficiary (Institution)

# **MENTORING (Institution)**

NITTTRs which are specialized institutions dedicated to Technical Teacher Training and some of the IITs having management & educational technology departments will be mentoring faculties and will be expected to provide resource persons (i.e. training the trainers) and also the training curriculum and resource material through MOOCs is invited. They will also be helping Teacher Training through MOOCs, offer guidance and monitor their efficacy besides that of the training activities. They will be engaged in continuous action research to augment the quality of training. Apart from these specialized tasks, these faculties will also be engaged directly in training of the inductee teachers as well as conducting in-service training programs.

### **TRAINING (Institution)**

In this category, there should be select technical institutions of national repute, like IITs/NITs with well- established infrastructure as well as teaching and research environment. It will be necessary to provide Teacher Training in these institutions which will take up the responsibility of carrying out the training of teachers in the designated region. These institutions will have necessary core faculty which will be supplemented with the part-time services of the expert faculty members of the institute as well as outsourcing experts from other agencies as needed.

# **INSTITUTION (Beneficiary)**

The institution would avail as well as contribute their resources to get their teachers trained. Their active participation in the training process will be essential. They would be designated as local mentors for the teachers under training. The networking of these institutes is depicted in the diagram given below:



Fig. : Implementation Aspects

# FINANCIAL IMPLICATIONS

There are three major stakeholders in the training program:

- (i) The teacher under training,
- (ii) The institutions (beneficiary) and
- (iii) Statutory Agencies MHRD/AICTE/UGC etc.

The Committee deliberated in detail regarding the financial implications of the training and made the following suggestions:-

a) The inductee teacher during FIP will be on probation for a period of one year and undergo the mandatory faculty development program, in letter & spirit to fulfill the desired objectives for the effective teaching-learning process. He/ she will earn the annual increment only after successful completion of FIP or otherwise further probation.

- b) The institution (self-financing) will prefer the inductee teachers are sent for FIP at the training institutions during the contact mode.
- c) Substantial part of the training expenditure, for example strengthening/ establishing additional training centers, hiring experts, the cost of training the trainers and development of resources like MOOCs will have to be borne by the government agencies such as MHRD, AICTE, etc.

# **EXPECTED OUTCOME (From the Proposed Training Program)**

- It is strongly believed and expected that the Comprehensive Training Program as envisaged in this policy document if properly implemented, will go a long way in improving the quality of technical education in the institute.
- The institutional environment, discipline and motivation of students/ teachers will also boost up, thus improving the quality of teaching-learning processes.
- The grooming in professional skills, values and attitudes will have a profound impact on shaping up the young minds and transforming them into socially responsible technical professionals.
- Organization of continuous in-service training programs will help the teachers to keep themselves abreast with the latest developments and also correlate their teaching to the prevailing practice and indigenous development as per the needs of the country.
- It will also promote a culture of continuous learning from the seniors and ensure a cohesive teamwork within the department as well as institute.
- A major area of student-teacher interaction outside the classroom, which is presently conspicuous by its absence will also develop, enabling proper mentoring, counseling and healthy personality development among the students.

# POSSIBLE IMPLICATIONS

There may be some other possible implications in implementation of the proposed policy, some of which are listed below:-

- Need for revamping and restructuring of the institute to be able to implement the new mandate and if necessary set up new agenda.
- Networking with prospective inductee teacher training institute for initiating teacher training centers.
- The possibility of linking the newly recruited teachers/other training programs with probation and promotion of the faculty.
- The possible implications of the impact of training programs with accreditation processes.
- Motivating technical institutions not approved to implement the training programs.
- The possibility of following the training of faculty in the institutions of higher learning.
- The issues involved in the process of certification and recognition of certification agencies.

The training programs proposed in this Policy document embeds the concepts of flexibility and responsibility. The flexibility is in the hands of the faculty to plan,

execute and bring to fruition their academic goals in line with the academic vision of the institution. Also, the institutions have to play a proactive role in understanding the importance of faculty training and preparing a Plan of Action for effective implementation. The Policy throws a great responsibility on institute to prepare MOOCs, train the trainers, and hire the services of other resource organization / persons for effective implementation of MOOCs through online and contact modes for bringing positive improvements in the teaching-learning process. All connected agencies and authorities are supposed to play a proactive role in the success of the proposed Policy.

#### **ISSUING OF THE CERTIFICATE BY THE INSTITUTION (Mentoring)**

The training programs proposed for development of faculty members embeds the concepts of flexibility and responsibility. The flexibility is in the hands of the faculty member to plan, execute and bring to fruition their academic goals in line with the academic vision of the institution. Also, the responsibility of concluding the academic activities places a few requirements on the conduct of faculty members on the fronts of personal ethics, stakeholders' engagement, professionalism and academic value system. With the constructive contribution from the government bodies, mentor institute and the beneficiary the proposed training policy will light up new avenues.