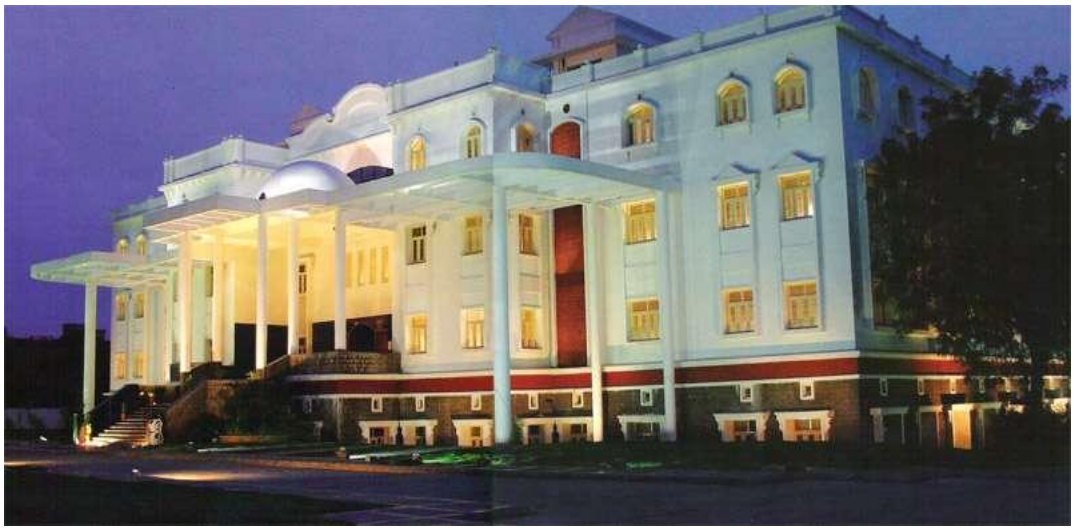
G.NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE (FOR WOMEN)
(AUTONOMOUS)

TRAINING POLICY

FOR TECHNICAL TEACHERS

Shaikpet, Hyderabad - 500 104
Telangana State

Website: www.gnits.ac.in
Email: principal@gnits.ac.in



GNITS TRAINING POLICY FOR TECHNICAL TEACHERS

1.1.Introduction

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. A proficient teacher in any field 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.

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 such as the medical profession, the legal profession, etc. where as the teachers are simultaneously the practitioners as well. In the domain of technical education, this condition is very scantily catered to or is totally missing. Therefore, some ways and means need to be evolved to provide such 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 fulfil the expectation better and succeed to face the global challenges.

There is another very important challenge for the present day technical teachers. On the one hand, 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, they can carry out meaningful work and guide the students properly.

A need of new domains of 'Teacher Training' has also 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.

1.2 Need for Orientation in Human Values

Another very important and yet grossly neglected area of teacher competence has been in the domain of value inculcation, attitude formation and personality development. Realization of their social responsibility and the ethical conduct of the profession is becoming more and more significant.

1.3 Continuous Teaching Learning

A teacher has to learn the knack of continuous learning, updating and lifelong learning. Also 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. will also be needed.

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.

2.Objectives of the Training Policy for inductee teachers:

- To demarcate the training needs at different levels of career and for different categories of teachers.
- 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 research.
- Continuous updating of technical subject through technology-based means i.e. Massive Open Online Courses (MOOCs) and/or open online courses every year.

The Faculty development /Training is planned in different stages starting with a fresher in (stage 1) two terms of faculty induction program .Stage2 is for staff having experience 5-10 years, stage 3 for staff having 10-15 years, while for stage 4 for 20-30 years of experience.

Stage 1:

3.1 First Term of Faculty Induction Program(FIP):

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 in MOOCs/contact programs organized in summer and winter vacations

Various Modules to be delivered in FIP:

1.Orientation towards Technical Education & Curriculum Aspects:

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

Outcomes:

- 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.

2. Professional Values, Ethics, Ecology & Sustainable Development

Professional ethics and sustainable development need to be inculcated in inductee teacher who should play a role model to peers and students.

Outcomes:

- Develop an adequate appreciation of the essential complementarities of values and skills and a better understanding of the human reality
- Comprehend the prime basis of values, relationships and holistic perception and their significance in the profession.

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.

Outcomes:

- 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 teaching-learning and assessment.

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.

Outcomes:

- Learning and instruction
- Instructional planning and delivery
- Practicum in the engineering classroom

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

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.

Outcomes:

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

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.

Outcomes

- 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, projects and case studies, thesis evaluation.

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 teacher should comprehend the fundamentals of creativity and innovation and apply them in research and development initiatives.

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

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.

Outcomes:
- 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

3.2 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.

Stage -2:
In-Service Training Needs At Various Levels:
(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.

4.Financial Implication

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

b)The GNITS will bear the expenses appropriately when the inductee teachers are sent for FIP at the training institutions during the contact mode.

Principal