UGC Guidelines for Synchronization of Apprenticeship / Internship in Degree Programmes of HEIs

H M Naveen

Assistant Professor, Department of Mechanical Engineering, RYM Engineering College, Ballari, Karnataka, India

ABSTRACT

With the sole objective of making the fresh graduates to be ready for employment with the necessary knowledge, competencies and the attitude, the UGC has framed the guidelines for higher educational institutions to offer apprenticeship and/or internship integrated degree programme at the under-graduate level. The scheme will focus on outcome-based learning and will equip the students to demonstrate workforce abilities for potential employment. The Apprenticeship/Internship degree programme will be embedded in the general stream with cooperation between industry and academia. This will bring a close relationship between education and industry/service sectors on a sustainable basis apart from helping the industry in securing good quality manpower. Across the global, Apprenticeship/Internship is considered as the most efficient and effective structured training programme for exposure to the real working environment. This strategy has an enormous scope to combine work-based learning with theoretical knowledge of respective disciplines. Amendments made in Apprenticeship Act/Rules during 2014-19 have given scope to link Apprenticeship programme to Education. Further, the UGC taking into consideration the present situation has framed new guidelines to improve the employability of students in the general stream ; to focus on outcome-based learning ; and to promote linkage between the degree programmes and industry. In this regard, the present article will introduce the readers with regard to the programme objectives, scope, duration, credit mechanism, assessment, learning outcome, role of HEIs, roles of Industry Associations, Sector Skill Councils and Board of Apprenticeship Training and lastly, monitoring by UGC. These guidelines have been designed keeping in view the visionary goal set by the NEP, 2020 for holistic development of the students.

Keywords: Apprenticeship, Internship, HEIs, NEP (2020), Industry-Academia Linkages

I. INTRODUCTION

AIndia is going to have a largest population in the world by 2030 in the working population age group.

But extending employment opportunities for these graduates is a major challenge. Improving employability of these students requires a new vision with curricular support for employment. It is essential

not only to improve the quality of education but also to make it relevant in terms of providing employment opportunities. The education system has to be revised to suit the requirements of the society at large and the economy in particular. Further, with a large number of students enrolled in general degree programmes every year, there is a consensus among stakeholders to shift from 'academic' to 'employment' approach. The linkage between the general degree curriculum and employer's requirement calls for an effective shaping and restructuring of degree programmes, driven by changing needs of the industry and service sector.

Aligned with the Sustainable Development Goals (SDGs), the Government of India has undertaken various initiatives to enable youth to fully participate in the job market and gain access to employment services. Despite this, finding gainful employment opportunities is a challenge for most of the graduating students. Particularly, when we consider this for the general stream students, limited employment opportunities for graduates is a major challenge. The main reason for this phenomenon is lack of employable skills. Therefore, there is a need to bridge the connection between 'what is taught in the class' and 'what is required by the society'. The competencies demanded by the industry need to be embedded in the university curriculum so that the gap between the Employment – Employability is overcome. This remodeling in turn needs a institutionalized framework for industry – academia linkage to increase the employability of the students.

Apprenticeship / Internship has a prominent role to play in linking higher education with the requirements of the industry and the world of work. This is considered to be one of the most effective ways to develop skilled manpower for the country. World over, apprenticeship is considered as the most efficient and effective structured training for exposure to the real working environment. This has enormous potential to combine work-based learning with theoretical knowledge of related disciplines. Through Apprenticeship/Internship, students may actively engage with the practical side of their learning like problem-solving, creative thinking, digital skills, teamwork, etc. The experience in Apprenticeship/Internship will augment the employability of students in the general stream substantially and will also bring a close relationship between education and industry/service sectors on a sustainable basis apart from helping the industry in securing good quality manpower.

Accordingly, with the objective of making the fresh graduates employment–ready with the necessary knowledge, competencies and attitude, the UGC has framed *Guidelines for Higher Education Institutions to Offer Apprenticeship / Internship Embedded Degree Programme*. The UGC Guidelines will provide an option for Higher Educational Institutions (HEIs) to embed Apprenticeship / Internship in any UG degree programmes specified by UGC. This will focus on outcome-based learning in degree programme and will enable students to demonstrate workforce abilities for potential employment. These guidelines will enable the Apprenticeship / Internship embedded Degree programme in General Stream with cooperation between 'industry' and 'academia'.

II. NATURE AND SCOPE OF THE PROGRAMME

Amendments made to Apprenticeship Act and Apprenticeship Rules during 2014 to 2019 have opened up the prospect of linking apprenticeship programme to education. The existing provisions will enable non-engineering graduates, fresh non-graduates without any prior skill training, and students undergoing training as an integrated component of the curricula to undergo Apprenticeship training for a minimum of six months to a maximum of three years. The flexible curricular structure will create new possibilities for outcome-based learning and facilitate graduation degree prescribed in terms of such learning outcomes.

i. Objectives

The general objectives of the programme as stated in the guidelines are:

i. To improve the employability of students pursuing undergraduate level general degree programme.

ii. To focus on outcome-based learning in degree programmes.

iii. To promote active linkage between the higher education system and industry, non-commercial and commercial enterprises / organizations.

ii. Scope of the Programme

• Any UG degree programme in various disciplines as specified by the UGC under Section 22(3) of the UGC Act, 1956 is eligible for Apprenticeship / Internship embedded Degree programme.

• An Apprenticeship / Internship embedded Degree programme shall be treated at par with the UG degree programmes as specified by the UGC under Section 22(3) of the UGC Act, 1956.

• The HEIs in consultation with Sector Skill Councils, AICTE, FICCI, CII, commercial and non-commercial organizations or enterprises, and industry would design the Apprenticeship / Internship embedded Degree programme in consistent with these guidelines.

• The HEIs may plan the number of seats for Apprenticeship / Internship training as per the available facility and infrastructure.

• The HEIs should have a prior MoU with discipline specific commercial and non-commercial organizations or enterprises, offices, industry, etc., for providing Apprenticeship / Internship.

iii. Duration

• The period of Apprenticeship / Internship training shall be decided on the basis of the individuals requirements of course concerned.

• The HEIs shall have the flexibility to schedule Apprenticeship / Internship within the course duration.

• Any UG degree programme will have an option to schedule at least one semester of Apprenticeship / Internship as part of the Degree programme without altering the total duration of the programme.

• The schedules of Apprenticeship / Internship shall be scheduled either continuously or at intervals depending upon the requirement and practicality of the discipline concerned.

iv. Credit Mechanism

Credits for Apprenticeship / Internship programme shall be included in the total credits of the entire programme. The total credits assigned to a particular degree programme shall continue to follow the CBCS. Accordingly, a student will have to earn 132 credits for the award of UG degree. Credits for Apprenticeship / Internship training may be suitably accommodated in the CBCS by the HEI. At least 20 per cent of the total Credits for the degree programme should be assigned to Apprenticeship / Internship. The HEIs may evolve its own mechanism to give academic credits for the Apprenticeship / Internship undergone as part of the programme. In case, the HEIs are still following the annual scheme, suitable provisions may be introduced accordingly. Apprenticeship / Internship training may be introduced *in lieu* or in addition to the courses of the Degree programme by assigning due weightage corresponding to the period of Apprenticeship / Internship. Apprenticeship /

Internship training should be assigned in the specific domain areas of their coursework. National Occupation Standards (NOS) can be an approach to align the courses and curriculum to the standards set by the industry. If required, relevant course(s) may be introduced / realigned to provide basic knowledge/training in the area of Apprenticeship / Internship.

As per the CBCS guidelines, wherever a University requires that an applicant for a particular M.A./M.Sc./Technical/Professional course should have studied a specific discipline at the UG level, it is suggested that obtaining 24 credits in the concerned discipline at the UG level may be deemed to be considered sufficient to satisfy such a requirement for admission to the M.A./M.Sc./Technical/Professional course.

v. Assessment

Institutions may opt for any mechanism for the Apprenticeship / Internship assessment in consultation with commercial or non-commercial organizations / enterprises / offices / industry / industry associations / sector skill councils where the Apprenticeship / Internship is proposed to be imparted. The Apprenticeship / Internship can also be done within the area of National Apprenticeship Training Scheme (NATS) operated by Bureau of Apprenticeship Training (BOAT) under MHRD. Accordingly, evaluation of Apprenticeship / Internship can be done by commercial / non-commercial organizations / enterprises, /offices, /industry, / industry associations / sector skill councils where the Apprenticeship is proposed to be imparted and by the faculty of the Institutions.

The students may be assigned grade/marks corresponding to the credits earned as per CBCS guidelines. In case of institution which are still following annual pattern, marks may be assigned to the students. The students must pass the Apprenticeship /

Internship course. Reappearance for failed students/in-completed Apprenticeship / Internship training is mandatory. The marks secured by the student in Apprenticeship / Internship course will be reflected in the semester and final grade sheet.

vi. Learning Outcome

The underlying assumption of the learning outcome-based approach to curriculum planning and development is that, higher education qualification such as Bachelor's Degree is awarded on the basis of demonstrated achievement of outcomes (expressed in terms of knowledge, understanding, skills, attitudes and values) and on the basis of demonstrated achievement of academic standards (expected of graduates of a programme of study). UGC through the Learning Outcome based Curriculum Framework (LOCF) provides for flexibility and innovation in programme design and syllabus development of HEIs. These institutions offering Apprenticeship / Internship embedded Degree programme should develop and maintain domain specific Learning Outcomes for the Apprenticeship / Internship Programme. Apprenticeship / Internship learning outcomes will focus on knowledge and abilities that prepare students for potential employment. This will enable students to demonstrate workforce professional abilities within the required domain of their chosen subject.

Further, students graduating from the Apprenticeship / Internship embedded degree programme shall be eligible to take admission into the specific subject in which they have earned their UG degree (i.e., bachelor's degree) as well as in subject(s) for which they have taken 24 credits in the core subjects as part of their UG programme. Such students shall also be considered eligible for transdisciplinary vertical mobility into such courses where entry qualification is a Bachelor's Degree without specific requirements in a particular discipline.

Ultimately, embedding Apprenticeship / Internship will offer a kind of a traineeship which shall be undertaken not on the campus but at the premises of the workplace like commercial or non-commercial organizations or enterprises, or offices, or industry, or industry associations to get work-based learning in identified discipline/trade.

III. PROCEDURE

i. Role of the HEIs

The HEIs are encouraged to offer the Apprenticeship / Internship embedded Degree programme to the students. These institutions will make the students to be aware about the programme along with its merits to motivate them to opt for Apprenticeship / Internship embedded Degree programme and elicit their interest in participation. The HEIs in consultation with Sector Skill Councils and/or industry / industry associations and/or commercial / non-commercial organizations / enterprises and/or offices, would design the embedded Degree programme in a way that is consistent with the these guidelines. The HEIs shall have an Apprenticeship Cell with an overall role of a facilitator and counsellor for Apprenticeship / Internship related activities. The HEIs concerned must obtain the approval from their respective Academic Executive Bodies as required by their Statutes. This programme will benefit the HEIs in –

> ➢ promoting Industry – Academia linkages
> ➢ improving Institution's credibility and in brand building
> ➢ improving the teaching-learning process
> ➢ functioning of the Placement Cell

ii. Role of Industry Associations, SSC and BOAT

• The Industry Associations like Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII), commercial and non-commercial organizations or enterprises and industry would assist the HEIs in designing the Apprenticeship / Internship embedded Degree programmes.

• Sector Skill Councils (SSC) and Board of Apprenticeship Training (BOAT) will play an important role in helping the HEIs in designing the Apprenticeship / Internship embedded Degree programmes in a way consistent with these guidelines.

iii. Monitoring by UGC

The UGC will maintain a dedicated portal for obtaining relevant information from the HEIs. Institutions offering Apprenticeship / Internship – embedded Degree programme(s) will be required to submit details regarding the programme(s) on the specified portal.

Accordingly, in the Apprenticeship / Internship embedded degree programme, if a student has completed 24 credits as a core course which also forms a part of the core course in a concerned discipline of CBCS at the UG level, the student will be considered eligible for admission in that CBCS discipline in the M.A./M.Sc./Technical/Professional programme, for e.g., a student who has completed BBA (Logistics Apprenticeship) with 24 credits in Economics, the student will be eligible to apply for M.A./M.Sc. course in Economics.

Hence, HEIs will have to ensure that in the Apprenticeship / Internship embedded Degree programme, at least 24 credits are being offered as core course which otherwise form a part of a regular UG programme within the CBCS. For e.g., a BBA (Logistic-

Apprenticeship / Internship) will necessarily have 24 credits (within its 12 core papers) from a subject area – for e.g., BA (Economics) or BA (Vocational Studies) or (Materials Management) – which are in the UGC list of Bachelor courses in CBCS. This will ensure vertical mobility of the student upto PG level.

IV. CONCLUSION

While launching the UGC Guidelines on Apprenticeship / Internship embedded degree programmes, Education minister said that the guidelines have been designed keeping in mind the visionary goal set by the NEP, 2020 to ensure holistic development of the students. This includes providing them with the necessary theoretical knowledge as well as hands–on experience and training. The Apprenticeship / Internship embedded Degree Programmes will go a long way in helping institutes to design degree programmes that are based on practical training which help in development of the necessary skill-set for the students that is required by the job market.

Apprenticeship embedded degree programmes will have the way ahead for enhancing the employability of students after they complete their education. The integrated degree programmes will allow the higher educational institutions to prepare the students for the needs of the job market. Apprenticeship Scheme and Internship Embedded course will create a sustainable skilling eco-system. The scope of the National Apprenticeship Training Scheme (NATS) has been broadened to give apprentices to students from Humanities, Commerce and Science besides Engineering stream. NAT scheme has been extended for the next five years which make around 9 lakh students employable through Apprenticeship training. Under the scheme students will be given apprenticeship in the emerging and frontier technology, such as, AI, drone technology as well as in new evolving and emergent areas including expertise required for Production Linked Incentive Scheme, and Gati Shakti Programme of the Government.

V. REFERENCES

[1]. GoI (2019). Draft National Education Policy. New Delhi : Ministry of Human Resource Development (MHRD).

[2]. GoI (2020). National Education Policy, 2020. New Delhi : Ministry of Human Resource Development (MHRD).

[3]. GoI (2021) Sarthaq (Part-I). New Delhi : Department of School Education and Literacy, Ministry of Education.

[4]. GoI (2021) Sarthaq (Part-II). New Delhi : Department of School Education and Literacy, Ministry of Education.

[5]. GoI (2021) Quality Mandate for Higher Education Institutions in India. New Delhi : University Grants Commission.

[6]. UGC (2020) UGC Guidelines for Higher Education Institutions to Offer Apprenticeship / Internship Embedded Degree Programme. New Delhi : University Grants Commission.

[7]. NIEPA (2020) NEP 2020 : Implementation Strategies. New Delhi : National Institute of Educational Planning and administration.

[8]. H. M. Naveen, "NEP, 2020: Curricular and Pedagogical Reforms for Online and Digital Education", International Journal of Scientific Research in Science, Engineering and Technology, Volume 8 Issue 3, pp. 411-420, 2021, DOI: 10.32628/IJSRSET2183182

[9]. H. M. Naveen, "Restoration of Quality in Engineering Colleges through Blended Mode of Teaching and Learning during Pandemic", International Journal of Computer Techniques, Volume 8 Issue 4, pp. 01-11, 2021, DOI: 10.29126/23942231/IJCT-v8i4p1

[10]. H. M. Naveen, "AICTE Initiatives for Quality Enhancement in Technical Education", International Journal of Scientific Research in

Science and Technology, Volume 8 Issue 4, pp. 382-390, 2021, DOI: 10.32628/IJSRST218466.

[11]. H. M. Naveen, "IPSIT Model: An Indian Framework for Blended Learning (BL)", International Research Journal of Engineering and Technology, Volume 8 Issue 9, pp. 773-781, 2021.

[12]. H. M. Naveen, "NEP, 2020: Establishment of National Educational Technology Forum (NETF) for Online Teaching and Learning", International Journal of Innovative Research in Science, Engineering and Technology, Volume 10 Issue 9, pp. 12531-12535, 2021, DOI:10.15680/IJIRSET.2021.1009036.

[13]. H. M. Naveen, "NEP, 2020 Perspectives and Future of Technical Education in India", International Journal of Creative Research Thoughts, Volume 9 Issue 9, pp. b468-b471, 2021.

[14]. H. M. Naveen, "Enhancement of Accountability in Learning among Engineering Graduates through 4MAT Model of Instruction", International Journal of Scientific Research in Science and Technology, Volume 8 Issue 5, pp. 116-124, 2021, DOI: 10.32628/IJSRST218512

[15]. H. M. Naveen, "Content and Technology Based Pedagogy of Enriching Knowledge and Thinking Skills among Engineering Graduates", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Volume 7 Issue 5, pp. 28-34, 2021, DOI : 10.32628/CSEIT217516.

[16]. H. M. Naveen, "AICTE Guidelines 2021, for Open and Distance Learning and Online Education in Higher Technical Institutions", International Journal of Latest Engineering Research and Applications, Volume 6 Issue 9, pp. 10-15, 2021.

[17]. H. M. Naveen, "Establishment and Operation of Academic Bank of Credits (ABC) in Higher Education", International Journal of Engineering Applied Science and Technology, Volume 6 Issue 5, pp. 166-169, 2021.

[18]. H. M. Naveen, "NEP, 2020 : General Education Embedded with Skill and Vocational Education" International Journal of Scientific Research in Science, Engineering and Technology, Volume 09 Issue 01, pp. 65-75, 2022, DOI : 10.32628/IJSRSET229121

Cite this article as :