

Preparing Academic Programs in line with LMDP :

Curriculum Design Guideline

Part I : NEHEP Contexts

One of the major challenges for Nepal is in linking higher education with the world of work by ensuring that the graduated students are ready to be absorbed in the job or labor market or link up with the market through entrepreneurship. To improve the situation Nepal has launched the priority program Nurturing Excellence in Higher Education Program (NEHEP). Under this program, the expected Results include Area-1 aims to improve the overall graduate employability and boost research and innovation by HEIs in Nepal. This requires improved labor-market relevance, Entrepreneurship, and Collaborative Research. The sub-result areas include:

Sub-RA 1.1 - Improved employability and labor market relevance of teaching

- i. To strengthen academic autonomy: The Sub-RA will help promote and strengthen academic autonomy by supporting competitively selected autonomous/ accredited HEIs to introduce and enhance their own autonomous academic programs that are aligned with local job market needs in the federal context. (A total of 100 market-driven autonomous programs will be introduced by the end of the program.)
- ii. To support the establishment of continuous professional development (CPD) programs for faculty. This Sub-RA will also help to promote teaching and leadership excellence. (A total of 1600 faculties will be trained, and academic leaders will be sensitized.)

Sub-RA 1.2 - Promote collaborative research and innovation:

- i. To support collaborative research and innovation: This Sub-RA will have support provisions to enhance collaborative research and innovation, focusing more on collaborations with industry partners. The program will provide additional competitive research funding for select accredited HEIs, Schools, Central Departments, and Centers of Excellence (COE) to finance collaborative research and innovation with priorities on STEM disciplines. The UGC will set up a national knowledge-sharing platform for research, innovation, and patent management.
- ii. The Sub-RA will support revising and developing regulatory provisions in line with global practices to promote innovation and patenting. Universities will also revise regulatory frameworks for collaborative research and patent management; and
- iii. The Sub-RA will also have support provisions to establish a system for curbing plagiarism.

Sub-RA 1.3 - Encourage entrepreneurship and self-employment:

Under this provision, students, graduates, and faculty will be encouraged to entrepreneurship and self-employment. Competitively selected participants will receive entrepreneur support packages that include entrepreneurship skills training, legal training, financial education, and seed funds. UGC will form a committee of qualified individuals to evaluate the proposals for their innovative ideas and potential to grow as a start-up. Current students, recent graduates, and faculty members from public and private HEIs will be eligible.

This framework focuses on Sub-RA 1.1: Improved employability and labor market relevance of teaching. Specifically, focuses on the preparation of the Labor Market Driven Academic Programs (LMDP).

The Disbursement Linked Indicators (DLI) for the verification of achieving the result in this area include: i) preparation of Standards, operational policies, and guidelines (SOPG) by UGC. Which UGC has prepared and is available in the website: www.ugcnepal.edu.np .

The specific indicator regarding LMDP includes 100 labor- market driven autonomous programs introduced. This DLR is considered achieved when the following conditions are met:

- (i) the guideline for LMDP of autonomous nature is passed by the universities/HEIs;
- (ii) HEIs/programs have approved costed and sustainable human resource development plan; and
- (iii) 100 LMDP, including pre-service teachers' preparation for prospective school teachers, designed, and the first cohort students enrolled as per the LMDP guideline.

The guidelines must include the provision for

- (a) Meeting global, national, and regional/local labor market needs;
- (b) Undertaking regular (at mid-program and cycle completion) for program revision based on market appraisals;
- (c) Setting up labor market feedback system through graduate tracking, and
- (d) Including modules on climate change issues as per the national program.

Pre-requisite:

1. University adopted policy, strategy and guidelines addressing LMDP of autonomous nature
2. Academic leaders sensitized and faculty members trained/oriented

Procedural steps:

1. Need assessments through survey and stakeholder consultations
2. Formation of stakeholder group/committee to engage in curriculum need assessment and feedback as well as in point 3, 5 and 6
3. Curriculum gap analysis and curriculum structure outlines
4. Detail academic program preparation – Detail curriculum along with program schedule (Calendar) , resources, evaluation,
5. Schedule for Curriculum implementation, review and feedback
6. Resource mobilization and at least 5 years Sustainability plan

General Curriculum Features

- Curriculum framework
- Course structure
- Detail curriculum
- On class practical skill/experiences
- Field based study/ observations

- Internal student evaluations
- Internship/ work area experiences
- End semester examinations/ Terminal Examination

Part II: Focusing on LMDP Features in Academic Programs

The relevancy of higher education depends on the linkage between academia and industries. The product of the higher education institutions should be acceptable by the labor market. In the absence of a link between these organizations unemployment or underemployment will take place. Moreover, there will be only a waste of investment in higher education. Each university must design its curricula based on the market needs to cater to the human resources requirement of the country and of course, abroad. Unless and until the curricula learning outcomes address the issue the product of higher education remains nowhere. This guiding framework will help the HEIs to frame labor market intensive curricula in higher education.

Traditionally universities prepare curriculum based on experts' opinions even without giving any space to their key stakeholders. The result of which has resulted in not addressing the stakeholders' concern in curriculum. The needs of the market, the expectation of the parents, and the interest of the students should all be addressed in labor market-based curricula.

The University Grants Commission through its NEHEP has made provisions of monetary support to universities to revise the existing curricula and/or to design new curricula towards this. The UGC will also support universities with grants to implement the new curricula.

Rationale

- When designing educational programs, universities traditionally consider the potential of the internal environment of educational organizations and the requests of entrants.
- The current and prospective demands of the labor market are often not considered.
- The necessity of joint activity of the university and employers in designing educational programs is felt.
- The principles of technological effectiveness, predictability, systemic nature, cooperation and continuity in designing higher educational programs on the basis of the requests of the labor market are justified worldwide
- At various stages of the design of educational programs, various forms of interaction between subjects of the labor market should be used.
- The ways of operative correction of the goals and objectives of educational programs, their content and structure should be redesigned based on the requests of the labor market.
- Research study on curriculum development shows that the design of educational curricula largely become the domain of the professional community and requires the development of partnership with market institutions aimed at maximum coordination and implementation of all participants' interests in the process.

Principles of labor market intensive curricula

Universities' educational curricula designing based on the requests of the labor market should be based on the following principles:

1. *The principle of adaptability:* Curriculum development need to be based on cultural, general, and professional competencies that should be possessed by graduates.
2. *The principle of predictability:* Including the needs of employers regarding labor resources, curricula should focus on the perspective needs of socio-economic development of the country.
3. *The principle of consistency:* It demands the integrated design of the structure and content of the curriculum. It talks much about current and future needs of employers that begins with professional orientation and ends with employment.
4. *The principle of cooperation:* Curriculum design is a joint task of various entities concerned with the labor market and higher education institutions. Thus a mutual cooperation between these unities must exist regarding the quality of future specialists' training, equal participation in the process of development, implementation, and evaluation of educational curricula quality.
5. *The principle of continuity:* Integrity of social partnership in the process of educational curricula designing, ensures the improvement of the contents and technologies of professional education, and provides ample space to address the changing requirements of the labor market.

What does labor market need in higher education curricula mean?

- The expectations of employers and graduates are studied before making a curriculum.
- Substantial attention is paid to the demands of the labor market for the successful professional adaptation of graduates in the content of higher education.
- Considering the position of students, their professional perspectives in the design of higher education programs is addressed.
- The concept of educational curricula designing is based on the ideas of competence based and system approaches.
- The concept is partnership as a special type of interaction between universities and the labor market for joint implementation of specific measures aimed at improving the efficiency of higher professional education.

Purpose

The main purposes of this guideline are to:

- help universities explore market needs while designing their curricula.
- assist universities to design and implement curricula that address labor market needs.
- support universities in designing new curricula and/or revising existing curricula towards fulfilling the demand of the labor market.

The process to design labor market-based curricula

The basic premise behind designing the labor market need based curricula is the involvement of concerned stakeholders. Therefore, it is essential that the potential labor market is identified related to the subject, discipline, and the kind of skills required in graduates. The following approach will be useful in designing such curriculum:

1. *Needs assessment through survey*: A survey is essential to identify the needs of the related industry and the stakeholders. This gives a sound base for designing the curricula.
2. *Needs analysis through DACUM*: A DACUM is a term that denotes “Developing a Curriculum”. The DACUM is designed to identify the needs of various entities involved in education. Especially, the university students and the job market. This type of workshop involves key people concerning the education, skills, and the requirement of the labor market. The workshop demands two days to explore and find the needs of the graduates and the job market, integrate them, and suggest the curriculum developers to follow the result.
3. *Gap findings in the curricula*: The results of the market survey and DACUM clearly tell the knowledge, skill, and attitudinal gap to meet the labor market requirements.
4. *New curriculum needs*: After the gap is identified universities can decide whether they need a new curriculum or revise the existing curricula to meet the gap.
5. *Orientation to the curriculum developers based on the findings*: Before starting to draft a new curriculum or revising the existing one, the curriculum developers need to have the knowledge about the gap.
6. *Curriculum design with a provision of practical skills and internship provisions*: It is always important that the curricula designed by the university be sensitive towards competency-based approach, provide practical skills in the discipline, and a well-designed internship program for practice.
7. *Curriculum dissemination among concerned stakeholders including the employers*: Once such curriculum is framed or developed each stakeholder has a right to know and provide input.
8. *Curriculum approval by Academic council*: Once the curricula gets a final shape by incorporating additional concerns from the stakeholders, it will be ready for approval by the University Academic Council.
9. *Curriculum implementation*: The university, then implements the curriculum, monitors closely, publish evaluation reports and prepares a ground for revision.

Post-curricular activities

1. Provide students with information on how to select courses wisely. Based on the skills demand and course offering information, a system can be built to offer individual learning and career path options for each student. This would help students achieve

their career goals. The system can also show how the selection of courses at the university may affect their potential job opportunities.

2. Use of online courses and short courses to supplement the curriculum gap. Since the curriculum update cycle does not necessarily meet with the skills demanded in the labor market, one way to solve this issue is to offer short courses or use online courses from MOOCs.
3. Analyze the skills and competencies of the faculty members and identify their skill needs for in-service teacher education.
4. Develop a toolkit of different data infographics and visualization templates for labor market and curriculum data analysis. This would help scale the method and share the results for a wider scale of end users, practitioners, and decision makers in a user-friendly and easy to consume format.
5. Develop training materials for professionals to analyze, interpret and apply the results in various contexts. Training materials are needed to educate more people to get the most out of this analysis.
6. Provide opportunities to learn/benchmark other universities' curriculum. Continuous improvement of curricula and course descriptions require benchmarking among Labor market analysis and curriculum gap assessment.
7. More detailed future forecasts can be possible if other data sources could be used. For instance, public investment announcements and governmental foresight reports could be used as possible data sets to help improve the quality of future forecasts.
8. Enable cross-disciplinary approaches to systematically develop skills of faculty and students. Since more combined skillsets from different disciplines would be needed in the future, it would be useful for students and faculties to learn in an interdisciplinary approach while deepening one or two specific subjects.
9. By providing wide understanding on skills demand, we can help universities to make right decisions when developing the future curricula and courses.

The UGC will also support the universities to clarify the concepts of labor market-based curricula on demand. If universities have any confusion about this guideline, they can contact UGC for clarity.

University Grants Commission

Sanothimi, Bhaktapur

LMDP Curriculum Development Outline

2023

1. Profile of the Course:
 - a. Course Title:
 - b. Course Code:
 - c. Credit Value:
2. Introduction and Rationale of the Course: (250 words)
3. Total Student Learning Time (Volume of Learning):
 - a. Face-to-Face
 - b. Online:
 - c. Practical
 - d. Internship
 - e. Labor market experience:
4. Prerequisites:
5. Learning Outcomes (Knowledge, Skills and Competencies):

Learning Outcomes	Knowledge	Skill	Competence
LO 1			
LO 2			
LO 3			
LO 4			
LO 5			

6. Pedagogical Strategies:
7. Mode of Delivery:
8. Assessment Methods and Types:
 - a. Internal Assessment
 - i. Class Participation and Discussion:
 - ii. Individual Assignments:
 - iii. Collaborative Assignments:
 - iv. Project-Based Paper Presentation:
 - v. Field visit research (Market Related)
 - vi. Practical (inside institution, outside institution)
 - b. External Assessment /Examination:
9. Mapping Course Learning Outcomes and Program Learning:

Learning Outcomes	Knowledge	Skill	Competence
Total Learning			

Outcomes			
Unit 1 Learning outcomes			
Unit 2 Learning Outcomes			
Unit 3 Learning Outcomes			

10. Do the Unit wise learning outcomes cover the total learning outcomes of the course? (If not revise and assure)

11. Unit-Wise Content Details:

Unit	Contents	Allocated Hour
1		
2		
3		
4		
5		

12. Course Professor/Instructor/Tutor:

a. Name:

b. Contact Address: Phone: --- email: ----

c. Contact Hours in the institution:

13. Detailing the Course

