Working Paper #76

Policy for NUST Faculty Placement Program

Sponsored by ICON Dte

Preamble

- 1. The ability of a faculty to possess current knowledge about industry processes and practices is one of the fundamental cornerstones of teaching. This document highlights procedure for executing faculty placements in the industry.
- 2. The prime objective of faculty placement program is to provide faculty an opportunity to be enlightened with industrial environments enabling them to initiate industry-related research, undertake processes improvement as well as innovative work and provide technical support in a multidisciplinary environment that will also enable the faculty members to educate and train their students according to the real-world industry problems.
- 3. Moreover, it will provide substantial benefits to the industry as the faculty will be able to provide them with solutions of the up-most challenges faced by the Industry and also an opportunity of R&D requests and development as well.
- 4. Faculty members will be placed in public & private sector organizations, services & manufacturing industries in Pakistan covering a wide array of domains including but not limited to; Health, Textile, Chemical, Materials, Agriculture, Biotechnology, Machine Learning/Artificial Intelligence, Energy, Chemistry, Avionics, Economics, Business and Social Sciences etc.
- 5. Faculty Placement Program will be managed by Innovation & Commercialization Office NUST (ICON).

Purpose

- 6. To enhance university-industry linkages in advancing innovation and industrial research, NUST Faculty Members are placed in the relevant industry annually, during summer break, under the overall ambit of Faculty Placement Program. Through this program, faculty members are given an opportunity to gain practical insight and industrial exposure leading to enhanced university industry linkages. Purpose of the faculty placement program is:
 - a. To enhance the industrial exposure of Faculty members by providing practical insight that can be transferred further to students

- b. Study the workflow, industrial practices and standards of the host industry and analyse their problems including both technical and nontechnical issues
- c. Explore potential research and development areas of mutual interest and secure R&D projects/partnerships for NUST
- d. Secure Jobs, Internships and Trainings for NUST students
- e. Introduce NUST and its capacities to the industries in Pakistan
- f. Promote NUST's agenda for university-industry linkage and technology transfer
- g. Propose the use of PDC's platform for conducting training sessions for industrial experts
- h. Build strong ties with the industry and recommend annual continuation of the faculty placement program in same or other relevant industries

Salient Aspects

- 7. NUST Faculty Placement Program will be launched annually through which the nominated FMs will be placed in relevant industries for a period of 1 2 weeks. The bulk of faculty members will be placed in the Summer semester break (June-July), with additional opportunities shared with Schools/Colleges throughout the year.
- 8. 2x/3X/5x Faculty Placements (Depending on the size/number of Faculty in respective Schools/Colleges), are mandatory for each School/College during the summer semester break. However, others may be accommodated during the entire course of the academic calendar based on the availability of the faculty members and relevant industries. All Schools/Colleges to encourage Faculty to take part in the program. ICON to ensure maximum placements for Faculty.

 9. Primary responsibility of coordinating with the Industry and arranging the placement lies
- 9. Primary responsibility of coordinating with the Industry and arranging the placement lies with ICON with ILOs of respective schools providing additional support.
- 10. The Industry usually requests the placement of relevant faculty via ICON. ICON will compile general areas of specialization, requested from various organizations. Details of relevant industry, specialization sought, and associated NUST School shall be shared with NUST Schools/Colleges by April-May every year, to nominate FMs desirous of availing Industry placement, along with their preferred dates for the cohort.
- 11. Simultaneously, ICON will also send an official request to all NUST Schools/College about faculty nominations and preferred areas/industry for the program for the entire program.

- 12. ICON will work closely with the Schools and nominated faculty to finalize the particular Industries to be visited under the faculty placement program before summer break.
- 13. All ILOs in NUST Schools/Colleges will be the point of contact with ICON on the faculty placement and will arrange all visits in coordination with ICON. In case of absence of ILO, Principals will nominate PoC for the program.
- 14. Pre placement meeting will be arranged with Principal, respective faculty member, HoD Research, ILO and ICON, two weeks before the finalization of placement schedule and initiation of minute sheet.
- 15. Subsequent to the points given above, ICON will consolidate the faculty nominations received from each School/College through EION one month before the commencement of the summer semester, in May-June, and take approval for move sanction and TA/DA as per NUST's policy.
- 16. For all faculty placements transport arrangements will be managed by Schools/Admin, based on the approved move sanction. No TA/DA will be applicable for visits within the close vicinity of the twin cities.
- 17. For visiting out-station Industries, 5 day-trip will be preferred, so as to avoid additional logistics and costs. In special cases, separate approval will be taken by the School. For out-station visits, appropriate accommodation will be arranged by the School or Faculty.
- 18. Objectives and rationale desirable of the program for better engagement include the following:
 - a. Introduction of and to getting acquainted with NUST at all levels.
 - b. Faculty to study the workflow, industrial practices and standards of the host industry and analyse their problems including both technical and non-technical.
 - c. Faculty to explore potential research and development areas of mutual interest after deliberations with the host industry.
 - (1) Identification of specific needs, problems etc. that the host industry is currently facing. What are the expectations of the host industry? What solutions could be proposed.
 - See the possibility of new products and methodologies that could improve the competitiveness of the host industry. They may identify NUST School

- / faculty that could be engaged further to add value to the host industry through a multidisciplinary project.
- (2) Discover the possibility to undertake fully funded turnkey project / consultancy work for the industry from the platform of NUST. This can be related to field/area relevant to faculty visiting and may identify other relevant School which shall be taken on board on project basis.
- d. Identification of and securing jobs, internships, and trainings for NUST students.
- e. Identification of topics/areas/projects for final year students (Final Year Projects).
- f. Identification areas for training to be conducted through NUST Professional Development Center (PDC).
- 19. On completion of the placement, faculty will submit a Post Placement Report to ICON, within 10 days of the placement. A draft format for standard post placement report is attached as Annex A.
- 20. ICON will compile the Post Placement Reports received from faculty members and share a relevant information, if any, with respective Offices of Research, Innovation & Commercialization (ORIC), for further follow-up on respective academic KPIs.
- 21. Post Placement meeting will be arranged with Principal, nominated faculty members, HoD Research, ILO and ICON after completion of the placement in the respective industry.
- 22. All Schools/Colleges to prepare an Analysis Report annually after completion of all Faculty Placements in their respective Schools/Colleges.
- 23. On the completion of the faculty placement, ICON will request industry to share feedback from the industry.
- 24. ICON will write an appropriate note of thanks to the Industry after the completion of the placement for their support and hospitality.
- 25. In continuation of this program, industry representatives will be invited by ICON to NUST and given an opportunity to spend time with academia and create a mutual bridge for knowledge and technology transfer.

Benefits to NUST

26. The faculty members will be given an opportunity to experience real time industrial environment that will enable them to apply their knowledge-based research, analyse and identify

industrial problems and utilize their skillset in identification and eventual development of industry oriented viable projects/ innovations.

- 27. Faculty placements will be continued on mutual basis to understand the need of the industries and improve coordination in technology transfer initiatives.
- 28. Faculty placements will be helpful in highlighting the strengths of NUST to the industry and bringing new R&D projects to our faculty and students. These projects, once completed, will have huge potential to be commercialized later on. Moreover, the program will enable NUST to secure internships, job positions and trainings.
- 29. Strategic links will be formed with industry to enhance commitment to, and facilitate industry placements with a view to building societal capacity to support a knowledge-based economy.

Comments of Research Directorate

30. The proposal was deliberated and endorsed by UCRIP held on 30 Dec 2022.

Recommendation of Research Directorate

- 31. Proposed Policy for NUST Faculty Placement Program is recommended for approval with immediate effect.
- 32. Academic council is requested for the decision.

Post Placement Report

1.	1. Name:				
2.					
3.	Industry Visited:				
4.	Location of the Industry: (plant site, head office etc.)				
5.	Dates of Visit:				
6.					
7.	Contact information:				
8. Introduction to the Industry:					
Provide a brief introduction to the industry as to what it does (manufacturing, processing etc.).					
9. Visit Plan:					
7. Visit i idii.					
Provide a tabulated visit plan for the departments you visited during your placement.					
Date		Place/ Department		Comments	
10. Details of the departmental visits					
Provide the details of the visit to each department against each entry in the visit plan					
11. Needs and Problems faced by the industry related to your area of expertise					
Provide a detailed description of the needs and problems that are being faced by the industry that you identified during your placement. Is there any way you can improve the processes involved in the host industry?					
12. Research / Industrial / Consultancy Projects Proposed:					
S. No. Title of the proposed research project					
Please identify any funding opportunities for the proposed projects. Has the host industry promised any funding for the proposed projects?					
13. Trainings/Workshops Proposed:					
S.	S. No. Title of training / workshop				
14. Internships/Jobs slots:					
No. of Internship / Job Positions			Domain (engineering	, management etc)	
General Observations:					

Recommendations: