Department of Computer Science and Engineering
National Institute of Technology Calicut

NIT Campus (PO), Calicut-673601, India

DCC Meeting Minutes

Date: 29/09/2021 and 04/10/2021   **Time: 12:20 PM to 1:00 PM**   **Venue/Mode: Online**

Agenda Item:

1. **Revision of PG Curriculum incorporating National Education Policy (NEP) 2020**

The DCC meeting started online at 12:20 PM. The Chairperson welcomed all members to the meeting.

Agenda Item 1: Revision of PG Curriculum incorporating National Education Policy (NEP) 2020

The item was presented by Dr. Priya Chandran, PG Coordinator, CSED. The DCC discussed the agenda and consolidated opinions of the members were collected through email. The responses to the questions, approved by the DCC are attached in Annexure 1.

The meeting started on 29/09/2021 at 12:20 PM, continued till 1:00 PM, and resumed on 04/10/2021 at 12: 20 PM and closed at 12:30 PM.

K. Murali Krishnan

Annexure 1

Questionnaire to seek opinion of all academic departments on fundamental changes to be incorporated in the PG curriculum for implementation of National Education Policy (NEP) 2020 and National Innovation and Start-up Policy (NISP) guidelines

(Section 11 in NEP has items related to PG programs. Pls see the attachment)

1. Related to section 11.2, 11.5 and 11.6 of NEP 2020:

Question (A)	CSED opinion
Whether the multi-disciplinary approach specified in the UG curriculum needs attention while preparing the PG curriculum? *One option will be to have open electives from other departments related to the project part of the PG to be undertaken. Please suggest alternative methods, if any.*	**More electives may be included in the curriculum.** **Provision to choose two electives from other departments or from a "common pool" of open electives.** **Provision for students to choose one elective in third semester, instead of second, if they wish to, for help with their project work.**

2. Related to section 11.9: The undergraduate degree will be of either 3 or 4-year duration, with multiple exit options ...... The 4-year multidisciplinary Bachelor's programme, however, shall be the preferred option .... :

Context: Currently, in India, UG in Engineering is 4 years, Architecture is 5 years and Sciences is 3 years (4-year honours programs are available at very few places). It is unclear on how the UG programs will be established nationally upon NEP implementation. PG Curriculum revision for Science streams in NITC were separate from Engineering, Architecture and Management until this round. The M.Sc. programs currently have 70 credits (M.Tech. in Engineering has 60) to include more courses to bridge the gap.

Question (B)	CSED opinion
i) Is it necessary to have a uniform structure for all PG programs with similar program structure and credit requirements?	**Not necessary. The present system of flexible uniformity may continue, with credit ranges clearly specified for identically named programmes.**

ii) Do we need to have options in PG curriculum to accommodate 3-year UG and 4-year UG (Research) separately?	**The present admission requirements, in terms of years of study, may be retained in this curriculum revision. For programmes proposed later, appropriate criteria may be worked out, taking into consideration the criterion for admission to similar programmes at other institutes of national importance and CFTIs**

3) Section 11.10. "HEIs will have the flexibility to offer different designs of Master's programmes: (a) there may be a 2-year programme with the second year devoted entirely to research for those who have completed the 3-year Bachelor's programme; (b) for students completing a 4-year Bachelor's programme with Research, there could be a 1-year Master's programme; and (c) there may be an integrated 5-year Bachelor's/Master's programme…"

Context: So far, M.Tech. after 4-year B.Tech./BE in relevant discipline is for two years (60 credits) with the second year largely devoted to a project. For M.Sc., designed for admitting students after 3-year B.Sc., is for two years (70 credits) with the project partly covering the fourth semester alone. The 10 credits difference plus the difference is project credits are for "bridging this year-gap" for students coming after 3-year B.Sc.

Question (C)	CSED opinion
NEP 2020 prescribes a one-year PG program for those students with a 4-year UG (with Research) and 2-year PG with a second year fully dedicated to research for a 3-year UG graduate.	
i) Whether the departments have the opinion that current M.Tech/M.Plan/MBA/M.Sc. are compliant to the NEP2020 prescription? *The committee's observation is that the current M.Tech./M.Plan/MBA programs may be easily modified to comply with the NEP2020, while major changes in M.Sc. curriculum in NITC may be necessary.*	**The existing NEP compliance can be strengthened by adding the flexibility of open electives, as mentioned in Answer 1.**
ii) It looks like the 4-year UG program in the NEP prescription comes with an option "With Research". Do we need to accommodate students (soon to be coming) and prescribe a one-year version of our PG programs?	**The existing programmes need not be modified, but we can retain the possibility of proposing new programmes in future that serve such a purpose, especially in areas of high demand.**

Context: One suggestion is to tune all our UG/PG programs to include flexibility to take more electives in 3rd and 4th year such that staying a year further will get (a limited number of students) master's degree in a relevant discipline.

Question C	CSED opinion
iii) In this regard any department would like to convert existing PG programs or start afresh a 5-year integrated UG-PG program? This question is particularly relevant to Science departments. Does the curriculum committee need to account for this scenario in preparing curriculum?	**CSED does not wish to change the existing M. Tech programmes. Starting a five year integrated programme is not in our <u>immediate</u> agenda. Hence the current curriculum revision need not take it into account.**
iv) Question exclusive for Science departments: NEP requires a second year to be devoted to a project. Does the existing M.Sc. programs need to be modified to accommodate these requirements by ignoring the "bridge-gap"? Or to use the difference of 10 credits (compared with MTech) for adding just 3 very essential extra courses as "bridge-gap" in the first year of M.Sc.?	**NA**

4. It is suggested that UG/PG programmes are to include NISP 2019 recommendations. This is to introduce courses on innovation and entrepreneurship courses.

Question (D):	CSED opinion
What is the department's opinion to prescribe in the revised curriculum, at least one common elective course (with credits) for all PG programs on one of the topics prescribed by NISP on innovation and entrepreneurship? Which department can offer such courses (SOMS/MED/external agency) and can coordinate such courses?	**A common elective in the pool is sufficient. Maybe taken in the third semester too. Any department or agency that has the expertise may be assigned the task.**