# NEP | 2020

# Best Practices

## NEP Cell

Karunya Institute of Technology and Sciences

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# Contents

# National Education Policy 2020

### Best Practices

### Karunya Institute of Technology and Sciences

## 1   Introduction

Since India will have the highest population of young people in the world over the next decade, providing high-quality educational opportunities to them will determine the future of our country. To gain leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation, quality education is the best way. United Nations General Assembly had set-up seventeen Sustainable Development Goals (SDGs) in 2015 which are to be achieved by 2030. India adopted the global education development agenda reflected in the Goal 4 (SDG4) and seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030. Moreover, the following concerns need to be addressed.

- Skilled workforce particularly involving mathematics, computer science, and data science, in conjunction with multidisciplinary abilities across the sciences, social sciences, and humanities need to be developed.
- To meet the world's energy, water, food, and sanitation needs, new skilled labour, particularly in biology, chemistry, physics, agriculture, climate science, and social science are required.
- The growing emergence of epidemics and pandemics will also call for collaborative research in infectious disease management and development of vaccines and the resultant social issues heightens the need for multidisciplinary learning.
- There will be a growing demand for humanities and art, as India moves towards becoming a developed country as well as among the three largest economies in the world.
- Education must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields.
- Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and, of course, enjoyable.
- Education must build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for gainful, fulfilling employment.
- The gap between the current state of learning outcomes and what is required must be bridged through undertaking major reforms that bring the highest quality, equity, and integrity into the system, from early childhood care and education through higher education.

In view of this, the National Education Policy 2020 (NEP 2020) was launched on 29 July 2020. It outlines the vision of India's new education system.

# 2 Best Practices on NEP 2020 in KITS

The following table shows the best practices in KITS inline with NEP 2020.

| Ref | Activities mentioned in NEP2020 | Related Best Practices in KITS |
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| 9.3 (i), 12.5 | Open Distance Learning (ODL) | Karunya Centre for Online and Distance Education has been initiated |
| 11.9 | Academic Bank of Credits | Registered with National Academic Depository (NAD) – Initial steps done |
| 11.12 | Startup and incubation centers | Karunya Technology Business Incubation Park (K-TBIP) has been established |
| 11.12, 20.6 | Industry-Academic Linkages | Department-wise industrial linkages have been established |
| 11.12 | Competitions for promoting Innovations | Karunya Innovation and Design Studio conducts competition for students for innovative ideas |
| 12.1 | Fitness and Good health, Psycho-social well being | Sports Field and Gymnasium facilities are available. Sports competitions are conducted |
| 12.4, 12.10, 14.4.2 | Support for students from socio-economic disadvantaged backgrounds, Freeships and scholarships | Merit Scholarships are provided for students. Government scholarships are also available for eligible students. Scholarship for Girls are provided |
| 12.9 | Sports/Arts clubs, Activity clubs, Community service projects | NSS, NCC, Nature club, YRC, Rotaract etc., |
| 14.4.2 | Provide socio-emotional and academic support and mentoring for all such students through suitable counselling and mentoring programmes | Well-structured mentoring system is available in KITS |
| 14.4.2 | Ensure sensitization of faculty, counsellor, and students on gender-identity issue and its inclusion in all aspects of the HEI, including curricula | Gender sensitization & Women care cell |
| 14.4.2 | Strictly enforce all no-discrimination and anti-harassment rules | Anti-Sexual Harassment and anti-ragging committees |
| 20.3 | Agricultural courses | BSc (Agri) Program is offered |

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| 20.6, 23.2 | Preparing professionals in AI, 3D machining, Big Data, ML, Biotechnology, nano technology | 1. Programs with specializations (AI, Machine Learning and Data Science)<br>2. M.Sc Nano-Science Program<br>3. B.Tech (Bio-tech)<br>4. B.Tech (Mechanical with 3D Printing Specialization) |
| Pg.5 | Continuous review of progress based on sustained research and regular assessment by educational experts | 1. Academic Audit for courses taught by teachers<br>2. Research Audit for Ph.D Scholars<br>3. Planning and Monitoring Board – With Educational Experts |
| 9.3 f | Reaffirming the integrity of faculty and institutional leadership positions through merit-appointments and career progression based on teaching, research, and service | Appraisal Policy with clear guidelines on evaluation based on teaching, research and service is available. Career advancement for faculty members is based on teaching and research skills |
| 11.2 | HEIs will focus technology development centres; centres in frontier areas of research | The various departments of KITS have technological centers and specialized labs to promote research |
| 12.1 | Along with providing suitable resources and infrastructure, such as quality libraries, classrooms, labs, technology, sports/recreation areas, student discussion spaces, and dining areas, a number of initiatives will be required to ensure that learning environments are engaging and supportive, and enable all students to succeed. | KITS has a very good library facility which is well equipped with modern facilities and resources in the form of CD-ROM, On-line databases, e-journals, e-books, audio video cassettes, books, journals, and project reports. Excellent lab facilities, class room, sports fields, gallery halls and hygienic dining halls are available for the students |

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| 12.9 | All HEIs will ensure quality medical facilities for all students in their institutions. | Karunya Hospital has state-of-the-art operating rooms with facilities for laparoscopic- endoscopic and other advanced surgeries. Diagnostic facilities are available for master health checkup -High-class dental services are available at the well-equipped dental department - The Pain Relief Centre offers high quality physiotherapy and modern pain relief therapy using lasers and nerve blocks |
| 17.4 | The societal challenges that India needs to address today, such as access for all its citizens to clean drinking water and sanitation, quality education and healthcare, improved transportation, air quality, energy, and infrastructure, will require the implementation of approaches and solutions that are not only informed by top-notch science and technology but are also rooted in a deep understanding of the social sciences and humanities and the various socio-cultural and environmental dimensions of the nation. | KITS has 25 technological missions with faculty and student members to address all the societal problems through research and innovation |
| Introduction section of NEP2020 | With climate change, increasing pollution, and depleting natural resources, there will be a sizeable shift in how we meet the world's energy, water, food, and sanitation needs. | Mission of KITS: To find solutions to human problems in areas relating to water, food, health and sustainable energy through scientific, social and technological research. |