Talents cultivation is the primary mission of universities. Top universities need to cultivate first-rate talents for the country and society.

Along with the social and economic development, China’s higher education has entered a new stage of quality improvement.
On the market side, progress in SciTech, along with globalization, make the demand side of engineering talents change rapidly, and create urgent need for innovative talents.
To make talent cultivation more adaptive to the demand, many top universities in China have been spearheading undergrad education reforms.

In recent years, together with other C9 members, HIT has undertaken a profound reform in undergrad education.
The Principles

Centered around students, driven by student learning and development

Insist on the fundamental task of educating socially responsible citizens
Insist on the central position of talents cultivation
Insist on undergrad education’s foundational role

Oriented to the country’s innovation driven development strategy
Oriented to future social development and progress

Construct a “Trinity” mode of talents cultivation, meaning Building core values, Developing comprehensive capabilities and Exploring multi-dimensional knowledge

Establish an organic curriculum system by fusing general education, specialized education, innovation through practice and personality development

Enhance the characteristics of talents cultivation, including laying a solid foundation, emphasizing practice, rigorous process and aspiring to innovate

One center
Three insistence
“Trinity” mode
Curriculum system

Two orientations

Characteristics of talents
1. Establish a new “categories + majors” system

Switch from the old system of 96 independent majors to a new system of 32 “categories + majors”.

- In the first 2 years, students study by categories. Curriculum includes fundamental and categorical courses.
- These courses are thoroughly discussed and are lectured by elite faculty members, to assure the students have a better chance of laying a solid academic foundation.
1. Establish a new “categories + majors” system

- For the next two years, students undergo education by majors. Curriculum includes specialized and elective courses for the majors.

- Each category has 3-5 majors. Major modules and courses can be flexibly adjusted by their home colleges according to market demand.

On one hand, fundamental education is more concentrated and emphasized; on the other hand, the system is more flexible to meet the requirement.
2. To give students more autonomy and choices

- A large number of elective innovation courses and cross-disciplinary courses open to different majors.
- All students have the opportunity to switch categories at the end of the first academic year, and all students can choose majors within their categories.
- Establish larger numbers of cross-disciplinary minors. Largely lower the credit for these minors, to encourage students to take the path of “major + cross-disciplinary minor ”.
3. Education through Innovation practice

Innovation practice and training runs through four years

- Freshmen:
  - Professional introduction and seminar
  - Classroom design

- Sophomore:
  - Integrated design

- Junior:
  - Diploma project
  - Innovative Design
  - Discipline Competition

- Senior:
  - Innovative experiments

Annual project plan

In class

Out of class
3. Education through Innovation practice

All research platforms are open to students. Make it a tradition and culture to let students participate in research projects. Permeate innovation practice through the whole process of higher education.
HIT has done a tremendous amount of work in reconstructing curricular system, reforming pedagogy, establishing the QA system and using IT in teaching etc.

There’s still a long way to go, and we will not stop endeavoring…
THANKS

HARBIN INSTITUTE OF TECHNOLOGY