Online Conference

Bridging Asia-Pacific and Europe: New Qualifications and Competencies in TVET
KOSEN Education and Deep Learning Contest

Identifying New Qualifications and Competencies in TVET: Suitable approaches and instruments to share successful projects

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National Colleges of Technology, KOSEN, were founded in 1962 with a first batch of 12 colleges, and expanded to 51 colleges nationwide.
Various Contests/Competitions
- Robot Contest, Programming Contest, Design Competition, English Presentation Contest, etc.
- Since 2020, Deep Learning Contest

KOSEN
- 5/7-year Consecutive Engineering Education (age 15-20/22)
- Regular Course (5 yrs.)
- Advanced Course (2 yrs.)
- High school + University
  - Graduation Research
  - Engineering Design
  - Internship
  - Preparation for Univ. Entrance Exam
  - Liberal Arts
    - General Education
    - Experiments and Hands-on Practices
    - Graduation Research
    - Engineering Design
    - Internship
    - Preparation for Univ. Entrance Exam
    - Liberal Arts (S&T)
     - Research
     - Engineering Design
     - Graduation Research
     - Internship
     - Preparation for Univ. Entrance Exam

Experiments and Hands-on Practices
Robot Contest

Majored Engineering Subjects
Liberal Arts
(Mathematics, Science & Physics, English)
KOSEN was established in 1962 in response to the strong demands of the industry in Japan.

KOSEN developed diverse engineers with practical & creative skills to be able to work in various fields.

KOSEN is developing HR with:
1) advanced practical skills for engineers
2) abilities to grow further by own after graduation

※ Combination of **Deep Learning Technology** and **Hardware** (censor, robot) is essential.

Rapid Growth of Internet late 1990s - early 2000s

2016

Breakthrough by AI, Machine Learning, and Deep Learning Technology 2010s -
Deep Learning Contest/DCON

KOSEN EDUCATION

Experiments & Hands-on Practices

Generic Skills required for Engineers

Classroom Lectures (Math & Science)

Immense in fields of interests (junior high school graduates, age 15)

Competencies for Future Engineers
Deep Learning Technology Entrepreneurships

= Deep Learning Contest
Since 2020
Deep Learning Contest/ DCON

New Company was launched by students (2020 Winners)