

# Vision

~Aiming for the university to lead social innovation through "Engineering with heart and mind for humanity"~

## Co-creation with Chukyo area industries

For engineering to build a healthy future society, technological development through dialogue with people must be emphasized. In the fourth period, we set a goal to be a university that declares and promotes "engineering for creation of happiness." It means that we pursue how engineering can best perform as communication of "Engineering with heart and mind for humanity" to establish a future vision or ideal society through dialogue, rather than simply by technological development. We cultivate engineers from various aspects to create a new social infrastructure through dialogues with various people from objective and panoramic viewpoints while remaining close to stakeholders. We also promote world-level advanced research based on global and diverse cooperation to facilitate technological development and business solution by "Co-creation with Chukyo area industries" while leading the regional industries.

# Strategy

## Social Co-creation

Strategy 1

### Contribute to creation of future society

~Partnership with communities, Return of research achievements~

We lead the establishment of engineering technology that supports social innovation by co-creatively utilizing and promoting our accumulated advanced and sophisticated research achievements in line with the requirements and expectations of our stakeholders.



## Engineer Cultivation (Education)

Strategy 2

### Practice education based on "Engineering with heart and mind for humanity," remaining close to stakeholders

~Cultivation of diverse human resources with rich cultural perspective to create a future society~

We cultivate autonomous engineers and researchers who can cooperatively contribute to technology creation and business solutions in light of composite viewpoint/value while realizing the responsibility of engineering with a rich cultural perspective and consistently high-level expertise/ability in place.



## Research and Development

Strategy 3

### Promote world-level advanced research required by the region

~Creation of scientific knowledge and innovation that responds to the regional industries~

We focus on world-level research promotion and cultivation of young researchers by expanding our research functions and further enhancing global collaboration toward the creation of scientific knowledge that will contribute to the creation of a regional future society.

## Organizational Enhancement

Strategy 4

### Create a foundation to maximize functions of education/research/social contribution

~Securing governance with autonomy and transparency~

While increasing autonomy and transparency, we smoothly promote each strategy of social co-creation, engineer cultivation, and R&D to enhance the foundation for realizing our vision. We also pursue the system and environment by which we earn credibility and support from our stakeholders.



# Tactics (Initiatives) \*

- ✔ **Enhance "Innovation hub" function for regional technology innovation and business solutions**
  - (1) Communicate the progress of NI Tech vision and achievements/performance of education/research to the community through dialogue with stakeholders
  - (2) Promote cooperative innovation creation and its social implementation that lead to social innovation
  - (3) Apply the business model to the research achievements and promote "utilization of technology" together with companies (utilization of NI Tech co-creation foundation)
  - (4) Promote academic guidance (academic consultation and support), commissioned and joint research, project research, and shared use of facilities that lead to collaborative innovation creation with regional industries
- ✔ **Enhance regional industries recurrent education**
  - (5) Cultivate human resources for local SMEs by further enhancing and making more flexible our proven advanced technology education programs and methods of taking courses (including IT use)
  - (6) Establish a new co-creation program for local SMEs human resource development that incorporates new requests of stakeholders
- ✔ **Strengthen the functions of research centers with excellent social co-creation capabilities**
  - (7) Take focused measures on the budget for an on-campus research center that aims for the social implementation of accumulated research achievements as assets, especially contributing to areas including welfare/medical care, drug discovery, safety/security and material manufacturing that target building a human-friendly social infrastructure

- ✔ **Cultivate engineering human resources with objective and rich cultural perspectives**
  - (8) Expand the education and ethical education to cultivate objective and cultural perspectives to all the courses of undergraduate education of Fundamental Engineering Program, Advanced Engineering Education Program, Creative Engineering Program and Master courses/ Doctoral courses, to develop engineers/researchers who can see engineering evolution objectively with their "mind's eye" (perspective of happiness)
  - (9) Expand the engineering design education cultivated in the Creative Engineering Program to the entire university
- ✔ **Practice education through Industry-Academia-Government Collaboration and global collaboration**
  - (10) Promote long-term internships and design projects that focus on diversified collaboration in cooperation with overseas universities and regional companies
  - (11) In the Doctoral courses, cultivate autonomous researchers by developing guidance systems to support a wide range of students' research plans
- ✔ **Provide diversified academic courses**
  - (12) Enhance Master programs that accommodate regional needs and Doctoral education that addresses composite challenges
  - (13) Enhance Master's/Doctor's programs in collaboration with overseas universities
  - (14) Accommodate students' needs by developing remote classes and learning systems to enable students to learn flexibly, such as studying multiple areas per their diverse study plans

- ✔ **Promote world-level fundamental research**
  - (15) Focus on strengthening world-level integrated/interdisciplinary research by gathering excellent researchers (new frontier), and promote fundamental research that leads to business solutions related to SDGs such as carbon neutrality which aims to develop an earth-friendly environment
  - (16) Proactively approach the acquisition of external funds based on research achievements
  - (17) Students from Master courses/Doctoral courses participate voluntarily in the group that conducts world-level integrated/interdisciplinary research as a main focus, and practice innovative creation
- ✔ **Promote world-level research through global collaboration**
  - (18) Promote international joint research using research network with leading overseas institutions to engage in cutting-edge research focusing on innovation creation
  - (19) Strengthen and expand systemic global research collaboration with world-level universities using the overseas researcher system and the invitation system for overseas researchers

- ✔ **Ensure governance that incorporates external knowledge**
  - (20) Constantly pursue autonomous/transparent governance that is compliant with the basic scope of governance (National University Corporation Governance Code)
- ✔ **Ensure compliance**
  - (21) Enhance training to improve normative consciousness and moral values of students and faculty members
- ✔ **Listen to the opinions of stakeholders and reflect them in management**
  - (22) Hold regular stakeholders' meetings and implement university management based on opinions from outside the university
- ✔ **Develop an environment of diversity and inclusion**
  - (23) Increase young and female faculty members and researchers through the STARTUP Assistant Professor System
  - (24) Increase excellent foreign researchers
  - (25) Secure diversified human resources through a cross-appointment system that enables us to employ people who are currently enrolled at other institutions including companies
- ✔ **Develop education/research environment for co-creation**
  - (26) Realize the ARTFUL CAMPUS Initiative that nurtures rich sensibilities of students and faculty members
  - (27) Support student life by providing scholarships using donations, enhancing the student counselling system, and promoting extracurricular activities

\* Tactics (initiatives) are examples of specific implementation items initially envisioned, that will be updated as necessary, such as through the progress of the business year