

## Seven Tokyo Tech Principles for Good Practice in Learning

### Competency for Self-Directed, Lifelong Learning for Students

Tokyo Institute of Technology (Tokyo Tech) encourages you to develop a deep understanding of society, self-improvement capabilities, communication skills, as well as a broad perspective not limited to outstanding knowledge in your field of expertise and related science and engineering fields, but that also encompasses a wide range of studies in science and technology.

Needless to say, we are living in an unpredictable world and facing numerous shifts in technologies as well as a global movement, which will sometimes be far beyond our predictions. You will need more than what you have learned, memorized, or achieved. It is essential to acquire competency for self-directed, lifelong learning to contend with those challenges. We hope you are determined to strive for it.

Before entering university, you may have got by learning passively and doing what you were told. However, at Tokyo Tech, you will be encouraged to develop your critical thinking skills, understand your strengths, and identify your aspirations. This education will prepare you for your future.

The Institute fully supports you in identifying and realizing your own goals. As such, following our spirit of learning, we introduce the “Seven Tokyo Tech Principles” that will help you in your academic life.

#### **1. Actively Connect with Professors**

Direct communication with professors and researchers offers experience more valuable than only listening to them lecture from afar. To begin with, you can try asking questions after lectures or visiting their laboratories to learn from their deep expertise and get to know their personalities. Knowledge about their research fields as well as their career paths may guide you in choosing your own steps to take. In addition, familiarize yourself with researchers of the past 100 years by frequenting the library, and search recent research trends via international websites.

Tokyo Tech professors and faculty members are there to help you. They can share with you both their enjoyable and painful experiences of learning and life in general. The Institute strives to provide you with an academic environment where educational encounters will inspire and motivate you in your studies.

#### **2. Build Cooperative Relationships with Other Students**

While you may be able to work well individually, each person’s abilities contributing to a group effort will work effectively in accomplishing more difficult and challenging tasks. Many great achievements by the collaborative work of diverse members have been recognized in society. This is also true of learning. Interaction, sharing ideas, and friendly competition with your fellow students will further refine your ideas.

Tokyo Tech professors encourage you to establish connections and develop relationships with other students, by offering opportunities for group work and activities. Critical feedback from others will also help you further advance your learning. The Institute has launched an educational system and academic environment that promotes cooperative relationships among students.

### **3. Engage with Active Learning**

You will learn very little just by passively listening to lectures, simply memorizing lecturer notes, and reiterating them in an exam. Reflect on subject matters taught in the classroom and compare them with your own ideas. Actively participate in group work where diverse and ingenious ideas come together and are generated through brainstorming. Learning is the combination of the acquisition of knowledge, skills and attitudes, none of which stand alone.

Tokyo Tech professors recognize achievements when your abilities are showcased by taking action, and practicing and applying what you learn. The Institute supports learning and teaching methods that enable students to engage in active learning.

### **4. Monitor Your Academic Progress**

To know how much you have achieved is to know how much further you need to go. Make a habit of periodically evaluating your learning progress from a third person's viewpoint. By reflecting on what you have learned and how you did it, you will come to realize your strengths and weaknesses, which in turn should help you plan your studies going forward. To accurately evaluate your achievements, sometimes with the help of people around you, you should always keep your goals and learning methods in mind, and if necessary, revise them. Learn to self-evaluate your progress.

Tokyo Tech professors will consider proposals from you, and your ideas may be taken into account when they think of making improvements to their lectures. The Institute's educational system is replete with ways to record your progress, such as the learning portfolio system.

### **5. Manage Your Time Effectively**

Learning does not begin in the classroom when the lecture starts. For classes where preparatory work is involved, what you do before class should be regarded as the most important. If you are taking more than one course, you need to manage a lot of preparatory work and may be pressed for time. Use your time wisely, and develop efficient learning methods. By doing so, you will be able to better review after class and also have some spare time for extra-curricular activities.

Tokyo Tech professors will present a syllabus to facilitate your preparatory and review work, specifying what you need to do. They may improvise during class based on the response of the students. The Institute's system is designed to aid you in your preparatory work and review studies.

## 6. Reach for the Stars

Expect great things from yourself. By studying, you will grow to heights you have never imagined possible. It is important to keep in mind the goals you have set when entering Tokyo Tech. However, be flexible and do not be afraid to revise them. There are infinite opportunities for self-development at the Institute. How quickly one grows varies from person to person, and there is no need to compare the speed of your progress with others.

Tokyo Tech professors expect you to discover possibilities of development of which you may not yet be aware. They will first show you what you can achieve as a stepping-stone to your academic and personal development, which we support via constant review of its systems and organizations.

## 7. Cherish Diverse Talent and Ways of Learning

Prejudice tends to hinder your activities and free way of thinking. Students, faculty and staff members on campus have diverse views and values. What each student learns and through what methods they learn it will vary from one person to another. It is important that each student accepts one another's personalities with open minds. New discoveries and wider perspectives will come with mutual respect for each other. By appreciating such diversity, you will be able to think in ways you could not before.

Tokyo Tech professors communicate the importance of diversity. They know that transcultural and transgenerational understanding enhances effective learning, which is why we put great emphasis on providing a barrier-free, open space for you.

The "Seven Tokyo Tech Principles for Good Practice in Learning: Competency for Self-Directed, Lifelong Learning for Students" were inspired by the most famous method of undergraduate education in the US – "Seven Principles for Good Practice in Undergraduate Education" by Arthur W. Chickering and Zelda F. Gamson.

The original text runs as follows:

Good practice in undergraduate education

1. Encourages contact between students and faculty
2. Develops reciprocity and cooperation among students
3. Encourages active learning
4. Gives prompt feedback
5. Emphasizes time on task
6. Communicates high expectations
7. Respects diverse talents and ways of learning.

Reference:

Chickering, A. and Gamson, Z. (1987) Seven Principles for Good Practice in Undergraduate Education, American Association for Higher Education, AAHE bulletin, 3:3-7.