

**Course Regulations for Dual Master Degree Program between
Department of Materials Science and Engineering (MSE),
National Chung Hsing University (NCHU), Taiwan
and
Department of Advanced Science and Technology (AST),
Toyota Technological Institute (TTI), Japan**

1. Students must earn totally 12 credits for courses and 6 credits for Master thesis from NCHU and TTI respectively. For NCHU's students, 6 credits for Master thesis from TTI won't be counted in the NCHU graduate credits.
2. Excluding Master thesis, required courses for the two institutions are listed, respectively, in the follows.
in MSE of NCHU

(1) Student should choose at least two of the following core course : (6 credits)

- (I) Fundamental of Diffraction (3 credits)
- (II) Electrode Kinetics (3 credits)
- (III) Thermodynamics of Solids (3 credits)
- (IV) Principles of Electron Microscopy (3 credits)
- (V) Interfaces in Materials (3 credits)
- (VI) Advanced Diffusion in Solids (3 credits)
- (VII) Defects in Materials (3 credits)
- (VIII) Solid State Physics (I) (3 credits)

(2) Colloquium (I) is a required course. (1 credit)

in AST of TTI

(1) Fundamental courses (Select 1 course, total 2 credits)

- (I) Continuum Mechanics (2 credits)
- (II) Discrete Mathematical Structure 1 (2 credits)
- (III) Information Environmental Engineering (2 credits)
- (IV) Robust Control Theory (2 credits)
- (V) Quantum Mechanics of Matter 1 (2 credits)
- (VI) Light and Electromagnetic Wave Engineering (2 credits)

(2) English course : Technological English (2 credits)