Tsuyama College	Year	2021	Course Title	Mechanical System

Course Information

Course Code	0173	Course Category	Specialized / Compulsory
Class Format	Lecture	Credits	Academic Credit: 2
Department	Department of Integrated Science and Technology Advanced Science Program	Student Grade	5th
Term	Second Semester	Classes per Week	2
Textbook and/or Teaching Materials	Textbooks : Distribute the handouts		
Instructor	INOUE Hiroyuki,SHIOTA Hirohisa,CHO Feifei		

Course Objectives

Learning purposes :
The goal is to acquire basic and applied technologies in the field of mechanical systems and to develop cross-sectoral fusion capabilities.
Course Objectives :
1. To Understand and use the role and basic functions of CAD systems. The goal is to acquire basic and applied technologies in the field of mechanical systems and to develop cross-sectoral fusion capabilities.
2. To create drawings of basic machine element parts.
3. To draw the main parts of a unique subject.

Rubric

	Excellent	Good	Acceptable	Not acceptable
Achievement 1	To understand the role and basis of CAD system and to use this function well.	To understand the role and basis of CAD system and to use this function.	To understand the role and basis of CAD system and to use this function using the tutorial.	Not reached the left.
Achievement 2	To drawing of basic machine element parts quickly.	To drawing of basic machine element parts.	To drawing of basic machine element parts using the tutorial.	Not reached the left.
Achievement 3	To drawing of all parts of unique parts.	To drawing of main parts of unique parts.	To drawing of basic parts of unique parts.	Not reached the left.

Assigned Department Objectives

Teaching Method

Outline	General or Specialized : Specialized Field of learning : Interdisciplinary subjects Foundational academic disciplines : Literature, Engineering / Mechanical engineering Relationship with Educational Objectives : This class is equivalent to " (4) Develop multi-disciplinary ability", "(5) Attain a global perspective and understanding of social development", and "(6) Develop problem solving ability". Relationship with JABEE programs : The main goal of learning / education in this class are "(A), A-1", also "(D, D-3)"are involved. Course outline : By experiencing a series of work related to CAD drawing, students will acquire basic and applied technologies in the field of mechanical systems and develop cross-sectoral fusion capabilities.
Style	Course method : Drawing machine parts using 3D CAD. Grade evaluation method : Portfolio (100%). If even one submission is not submitted, grade evaluation will not be possible.
Notice	Precautions on the enrollment : Students must take this class (no more than one-third of the required number of class hours missed) and earn the credit in order to complete the 5th year course. This is a "class that requires study outside of class hours". Classes are offered for 15 hours per credit, but 15 credit hours are required in addition to this. Follow the instructions of your instructor for these studies. Course advice : As a preparatory study, the students are required to review the contents of introduction to CAD. This course is a fusion course. It is indispensable to tackle issues voluntarily and positively. Foundational subjects : Introduction to Science and Engineering (1st year), Trans Exercise of All Program Ⅰ (3rd), ,Trans Exercise of All Program Ⅱ (4th) Related subjects : Advanced Science (5th year), Electrical and Electronic Systems (5th), Communication and Information Systems(5th), Graduation Thesis(5th) Attendance advice : If you are late for the start time, you will be treated as absent after 25 minutes.

Characteristics of Class / Division in Learning

☐ Active Learning	☐ Aided by ICT	☐ Applicable to Remote Class	☐ Instructor Professionally Experienced

Required subjects

Course Plan

			Theme	Goals
2nd Semester	3rd Quarter	1st	Guidance	Understand a role and the basic function of the CAD system and use.
		2nd	Drawing	Make the drawing of basic machine element parts.
		3rd	Drawing	Make the drawing of basic machine element parts.

		4th	Drawing	Make the drawing of basic machine element parts.
		5th	Drawing	Make the drawing of basic machine element parts.
		6th	Drawing	Make the drawing of basic machine element parts.
		7th	Drawing	Make the drawing of basic machine element parts.
		8th	Drawing	Make the drawing of basic machine element parts.
	4th Quarter	9th	Drawing	Make the drawing of basic machine element parts.
		10th	Drawing	Make the drawing of basic machine element parts.
		11th	Drawing	Make the drawing of main machine element parts of unique parts.
		12th	Drawing	Make the drawing of main machine element parts of unique parts.
		13th	Drawing	Make the drawing of main machine element parts of unique parts.
		14th	Drawing	Make the drawing of main machine element parts of unique parts.
		15th	Drawing	Make the drawing of main machine element parts of unique parts.
		16th	Drawing	Make the drawing of main machine element parts of unique parts.

Evaluation Method and Weight (%)

	Examination	Presentation	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	0	0	0	0	100	0	100
Basic Proficiency	0	0	0	0	0	0	0
Specialized Proficiency	0	0	0	0	100	0	100
Cross Area Proficiency	0	0	0	0	0	0	0