| Tsuyama College | Year | 2021 | Course Title | Mechanical System |
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## Course Information

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| Course Code | 0169 | Course Category | Specialized / Compulsory |
| Class Format | Lecture | Credits | Academic Credit: 2 |
| Department | Department of Integrated Science and Technology Communication and Informations System 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 |
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| 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

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| Outline | General or Specialized : Specialized<br>Field of learning : Interdisciplinary subjects<br><br>Foundational academic disciplines : Literature, Engineering / Mechanical engineering<br>Relationship with Educational Objectives :<br>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".<br><br>Relationship with JABEE programs :<br>The main goal of learning / education in this class are "(A), A-1", also "(D, D-3)"are involved.<br><br>Course outline :<br>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 :<br>Drawing machine parts using 3D CAD.<br><br>Grade evaluation method :<br>Portfolio (100%). If even one submission is not submitted, grade evaluation will not be possible. |
| Notice | Precautions on the enrollment :<br>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.<br>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.<br><br>Course advice :<br>As a preparatory study, the students are required to review the contents of introduction to CAD.<br>This course is a fusion course. It is indispensable to tackle issues voluntarily and positively.<br><br>Foundational subjects : Introduction to Science and Engineering (1st year), Trans Exercise of All Program Ⅰ (3rd), ,Trans Exercise of All Program Ⅱ (4th)<br><br>Related subjects : Advanced Science (5th year), Electrical and Electronic Systems (5th), Communication and Information Systems(5th), Graduation Thesis(5th)<br><br>Attendance advice :<br>If you are late for the start time, you will be treated as absent after 25 minutes. |

## Characteristics of Class / Division in Learning

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

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## Course Plan

| | | | Theme | Goals |
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| 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. |

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| | | 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 |