

Tsuyama College		Year	2021		Course Title	Regulations on Electrical Facilities
Course Information						
Course Code	0072		Course Category	Specialized / Compulsory		
Class Format	Lecture		Credits	School Credit: 1		
Department	Department of Integrated Science and Technology Electrical and Electronic Systems Program		Student Grade	4th		
Term	First Semester		Classes per Week	2		
Textbook and/or Teaching Materials	Textbooks :Shouji Takeno, "Denkihouki to Denkisetsukanri" (Tokyou Denki Daigaku Shuppankyoku)					
Instructor	UETSUKI Tadao					
Course Objectives						
Learning purposes : Understand the necessity for and meaning of the regulations on electrical facilities and acquire the knowledge to deal with possible future issues.						
Course Objectives : 1. To understand the necessity and meaning of the regulations on electrical facilities 2. To understand the outline of the regulations on electrical facilities as to the supply of electric power, the construction of electric facilities, the production of electric equipment, and the consumption of the large amounts of electric energy.						
Rubric						
	Excellent	Good	Acceptable	Not acceptable		
Achievement 1	The student understands and can describe the necessity for and the meaning of the regulations on electric facilities in detail.	The student can roughly understand and describe the necessity and the meaning of the regulations on electric facilities roughly.	The student cannot describe the necessity and the meaning of the regulations on electric facilities well, but he understands them.	The student cannot describe the necessity and the meaning of the regulations on electrical facilities at all, because they are not understood.		
Achievement 2	The student can understand and accurately describe the outline and the kinds of the regulations on electric facilities in detail, which are necessary for supply of electric power, the construction of electric facilities, the production of electric equipment, and the consumption of large amounts of electrical energy.	The student can roughly describe the outline and the kinds of the regulations on electric facilities, which are necessary for supply of electric power, the construction of electric al facilities, the production of electrical equipment, and the consumption of large amount of electrical energy, by understanding them.	The student cannot describe the outline and the kinds of the regulations on electrical facilities well, which are necessary for the supply of electric power, the construction of electrical facilities, the production of electrical equipment, and the consumption of large amount of electrical energy. However the principles are understood..	The student cannot describe the outline and the kinds of the regulations on electrical facilities at all, which are necessary for supply of electrical power, the construction of electrical facilities, the production of electrical equipment, and the consumption of large amount of electric energy. This is because the principle are not understood.		
Assigned Department Objectives						
Teaching Method						
Outline	General or Specialized : Specialized Field of learning : Electrical and Electronic Required, Elective, etc. : Must complete subjects Foundational academic disciplines : Engineering / Electrical and electronic/ Electrical Power Engineering, Conversion of Electrical power, Electrical Apparatus  Relationship with Educational Objectives : This class is equivalent to "(3) Acquire deep foundation knowledge of the major subject area".  Relationship with JABEE programs : The main goals of learning / education in this class are "(A),(A-2)".  Course outline : To understand the kinds of regulations on electrical facilities, and the object of each regulation. At the same time, to study the safety regulations and technical standards for electrical facilities concretely. The way of advancing this lecture uses group discussions to understand the contents of this course more deeply.					
Style	Course method : This course is held in the second semester (16 weeks), and each lecture is 90 minutes a week. The lecture is advanced in line with the text book, and uses group discussion among the students to understand the contents more deeply.  Grade evaluation method : There are assignments that must be submitted. Exams (70%)+ Portfolio (30%). Examinations will be conducted 2 times, and the evaluation ratios will be the same. The textbook may sometimes be brought into the examination, but detailed instructions will be given beforehand each time. Re-examination may be possible depending on the situation of the students who have failed the initial examination.					

Notice	<p>Precautions on the enrollment : Students must take this class (no more than one-third of the required number of class hours missed) in order to complete the 4th year course.</p> <p>Course advice : Read the textbooks and read aloud before class to see if there are any parts you do not understand.</p> <p>Foundational subjects : Electric Circuit I , II (3rd year, 4th), Electromagnetism I , II (3rd, 4th), Electrical Apparatus I , II (2nd, 3rd)</p> <p>Related subjects : Engineering of Electric Power Generation (4th year), Electric Power Transmission and Distribution (4th), High Voltage Engineering I (4th)</p> <p>Attendance advice : This course is necessary for the electrical engineer. If you need the qualification of a Chief Electrical Engineer in your job in future, you will be exempted from the "Regulations on Electrical Facilities" examination. If you are late, you will be treated as absent 25 minutes after the class starts.</p>
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#### Characteristics of Class / Division in Learning

<input type="checkbox"/> Active Learning	<input type="checkbox"/> Aided by ICT	<input type="checkbox"/> Applicable to Remote Class	<input type="checkbox"/> Instructor Professionally Experienced
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#### Course Plan

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1st Semester	1st Quarter	1st	Guidance and system of regulations	Understand the system of regulations
		2nd	Purpose of the Electricity Business Act and the business regulations	Understand the purpose of the Electricity Business Act
		3rd	Way of thinking about the electric security and the organization on the electric security as to the Electricity Business Act	Understand Way of thinking about the electric security
		4th	Category and kinds of the electric facilities, and security to the electric facilities for the Electricity Business Act	Understand Category and kinds of the electric facilities
		5th	Acquisition of the qualification of a Chief Electrical Engineer	Understand the duty of a Chief Electrical Engineer
		6th	Security organization for the general electric facilities	Understand the security organization for the general electric facilities
		7th	The Electrical Engineers Act and the Electrical Appliance and Material Safety Act	Understand the Electrical Engineers Act and the Electrical Appliance and Material Safety Act
		8th	1st semester mid-term exam	
	2nd Quarter	9th	Return and commentary of exam answers, and the technical standards as to the insulation	Understand the insulation
		10th	The technical standards as to the cable way	Understand the cable way
		11th	The technical standards as to the laying cable	Understand the laying cable
		12th	The technical standards the technical collaboration as to the electric power system	Understand the technical collaboration as to the electric power system
		13th	The electrical standard	Understand the necessity of the electrical standard
		14th	The maintenance of the electric plant	Understand the maintenance of the electric plant
		15th	(1st semester final exam)	
		16th	Return and commentary of exam answers	

#### Evaluation Method and Weight (%)

	Examination	Presentation	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	70	0	0	0	30	0	100
Basic Proficiency	0	0	0	0	15	0	15
Specialized Proficiency	70	0	0	0	15	0	85
Cross Area Proficiency	0	0	0	0	0	0	0