

Tsuyama College		Year	2021		Course Title	Electronic Circuits II
Course Information						
Course Code	0071		Course Category	Specialized / Elective		
Class Format	Lecture		Credits	Academic Credit: 2		
Department	Department of Integrated Science and Technology Communication and Informations System Program		Student Grade	4th		
Term	First Semester		Classes per Week	2		
Textbook and/or Teaching Materials	Textbooks : "Yoku waku Denshikairo no Kiso" (Denki Shoin)					
Instructor	MAEHARA Kenji					
Course Objectives						
Learning purposes : Feed analysis and design ability by learning the general knowledge of the electronic circuit which will become a stepping-stone to applied circuitry.						
Course Objectives : 1. To explain the purpose and use of an oscillation circuit, a modulation circuit and a demodulation circuit. 2. To explain the characteristics and the theory of the oscillation circuit. 3. To explain the characteristics and the theory of the modulation circuit and the demodulation circuit. 4. To understand the contents of the overall electronic circuit, and can analyze it.						
Rubric						
	Excellent	Good	Acceptable	Not acceptable		
Achievement 1	The student can explain the purpose and use of an oscillation circuit, a modulation circuit and a demodulation circuit in detail.	The student can explain the purpose and use of an oscillation circuit, a modulation circuit and a demodulation circuit quite well.	The student can explain the main points of the purpose and use of an oscillation circuit, a modulation circuit and a demodulation circuit.	The student cannot explain the purpose and use of an oscillation circuit, a modulation circuit and a demodulation circuit.		
Achievement 2	The student can explain the characteristics and the theory of the oscillation circuit in detail.	The student can explain the characteristics and the theory of the oscillation circuit quite well.	The student can explain the main points of the characteristics and the theory of the oscillation circuit.	The student cannot explain the characteristics and the theory of the oscillation circuit.		
Achievement 3	The student can explain the characteristics and the theory of the modulation circuit and the demodulation circuit in detail.	The student can explain the characteristics and the theory of the modulation circuit and the demodulation circuit quite well.	The student can explain the main points of the characteristics and the theory of the modulation circuit and the demodulation circuit.	The student cannot explain the characteristics and the theory of the modulation circuit and the demodulation circuit..		
Achievement 4	The student understands the overall electronic circuit and can analyze it in detail.	The student understands the overall electronic circuit and can analyze it quite well.	The student understands the main points of the electronic circuit and can analyze it.	The student cannot understand the overall electronic circuit and analyze it.		
Assigned Department Objectives						
Teaching Method						
Outline	General or Specialized : Specialized Field of learning : Electrical and Electronic Foundational academic disciplines : Engineering/Electricity and Electronics/Electronic devices, Electronic equipment 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 goal of learning / education in this class is "(A), A-2". Course outline : Various electronic circuits are used in the devices and facilities of many fields, with the examples of information and communication technology, but also including the automation of machine tools, the examination of products, and for measurement. In this class, the student will learn about the oscillation circuit as the basic element that realize the concrete function of the electronic application field. Modulation and demodulation circuits will also be covered in class. In addition, the student will develop analytical ability by practicing problem-solving on the overall electronic circuit learned so far.					
Style	Course method : This course is opened in the second semester for 2 credit hours(90 minutes) in a week. Class proceeds using the blackboard, while organaizing important items in electronic circuit theory, including examples. In addition, practices and reports are assigned so that understanding deepens. Grade evaluation method : Regular exams (70%) + Practice (30%). Examinations will be conducted a total of 2 times, and the evaluation ratios will be the same. Students with poor results may be retested. The limit of the score after retest is 60 points.					

Notice	<p>Precautions on the enrollment : Students must take this class (no more than one-third of the required number of class hours may be missed) in order to complete the 4th year course. This is a class that requires study outside of class hours. A total of 45 hours of study is required per credit, including both class time and study outside class time. Follow the instructions of the instructor regarding study outside of class hours.</p> <p>Course advice : In this subject, it is important to develop the ability to analyse circuits by practice as well as to gain knowledge and understanding of the circuit theory. It is necessary to review and make careful preparations for lessons, and to work on problems actively.</p> <p>Foundational subjects : Electrical and Electronic Circuits(2nd year), Electric Circuits I (3rd), Electronic Circuits I (3rd) Related subjects : Communication Engineering(5th year), Advanced Communication Engineering(5th)</p> <p>Attendance advice : If you are late for the start time, you will be treated as absent after 10 minutes. Understanding a class of every time steadily, asking about an ignorance point.</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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E l e c t i v e m u s t c o m p l e t e s u b j e c t s

Course Plan

			Theme	Goals
1st Semester	1st Quarter	1st	Not open	
		2nd		
		3rd		
		4th		
		5th		
		6th		
		7th		
		8th		
	2nd Quarter	9th		
		10th		
		11th		
		12th		
		13th		
		14th		
		15th		
		16th		

Evaluation Method and Weight (%)

	Examination	Practice	Total
Subtotal	70	30	100
Basic Proficiency	0	0	0
Specialized Proficiency	70	30	100
Cross Area Proficiency	0	0	0