## 2021 Academic Four-Year Curriculum of Electrical Engineering Department, CHU

## \*The minimum requirement for graduation with a B. S. degree: 128 credits

\*128 credits =6(Basic general education courses)+22(Elective general education courses)+60 (Core courses)+40 (Elective courses)

Basic general education courses:10 credits			
Freshman	Physical Education(I) (0)	Physical Education( II )(0)	
	Freshman English(I) (2)	Freshman English(II)(2)	
Sophomore	Sophomore English(I) (1)	Sophomore English( $\Pi$ ) (1)	
Junior	Implementation Measures of Students' Graduation Requirements of English Proficiency(0)		
Senior	(none)	(none)	

## Elective general education courses:22 credits

Core courses:60 credits			
Freshman	Physics(I)(3) Calculus(I)(3) Logic Design(I)(3) Programming Design(I)(3)	Physics(II)(3) Calculus(II)(3) Logic Design(II)(3) Programming Design(II)(3) Linear Algebra(3)	
Sophomore	Circuit Theory(I)(3) Electronics (I)(3) Electronic Lab(I)(1) Engineering Mathematics(I)(3)	Circuit Theory(II) (3) Electronics(II) (3) Electronic Lab(II)(1) Engineering Mathematics(II) (3) Signals and Systems(3)	
Junior	Electromagnetics(I)(3) Microprocessor(I)(3) Electronic Lab(III) (1)	Electrical Capstone Design Course (1) Project Practice (I)(1)	
Senior	Project Practice (II) (1)	(none)	

Elective cou	rses (students are required to take at least 40	)-credits elective courses from		
Department of E.E.) $\star$ The courses must be selected				
Freshman	Engineering English (2) Basic Mathematics(2)	Project $Design(I)(1) \bigstar$		
Sophomore	Innovative Project Design (2) ★	Project Design (II) (1) ★		
Junior	Communication Systems(3) ★ Probability and Statistics(3) ★ Electronics(III)(3) Servo Control (3) Electromagnetic Wave(3) Advanced Engineering Mathematics(3) Introduction to Telecommunication Engineering(3) Optoelectronics(3) Engineering Application Software(3) Data structures(3)	Electromagnetics(II)(3) ★ Microprocessor(II)(3) ★ Modern Physics(3) ★ Electrical Machinery(3) ★ Digital Control (3) Numerical Analysis (3) Complex Variables (3) Communication Electronics (3) Radio Engineering (3) Principle of Digital Communications(3) Digital Integrated Circuits(3) Mobile Application Development(3) Windows Programming(3) Optoelectronics Devices(3)		
Senior	Optoelectronic Display Technology(3) Digital Signal Processing(3) Digital Singal Processing Simulation(3) Introduction to Optical Fiber Communication (3) Semiconductor Devices (3) Digital Integrated Circuit Design(3) Internship Course(9) Manufacturing Practice(3) Employment Ethics(3) Internships(3)	Application of Digital Integrated Circuits (3) System and Application of Optical Fiber Communication(3) Application of Laser(3) Semiconductor Technology(3) Automatic Systems(3) Computer Architecture(3) Internship Course(9) Work Ethics(3) Business Experience(3) Factory Practice(3)		

\*For 40 Elective credits of graduation requirement, every student must pass 9 cross-department credits.