

## 2020 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)+62 (Core courses) +38 (Elective courses)

<b>Basic general education courses:10 credits</b>		
Freshman	Physical Education(I) (0) All-out Defense Education Military Training-International Situations (0) Freshman English(I) (2)	Physical Education( II )(0) All-out Defense Education Military Training-Defense Technology (0) Freshman English(II)(2)
Sophomore	Physical Education(III )(0) Sophomore English(I) (1)	Physical Education(IV)(0) Sophomore English( II ) (1)
Junior	Implementation Measures of Students' Graduation Requirements of English Proficiency(0)	
Senior	(none)	(none)

### Elective general education courses:22 credits

<b>Core courses:62 credits</b>		
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) Special Topic Practice (I)(2)
Senior	Special Topic Practice( II )(2)	(none)

<b>Elective courses (students are required to take at least 38-credits elective courses from Department of E.E ) ★The courses must be selected</b>		
Freshman	Engineering English (2) Basic Mathematics(2)	Project Design(I) (1) ★
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)	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)

\*For 38 Elective credits of graduation requirement, every student must pass 9 cross-department credits. The Elective general education, Physical Education and All-out Defense Education Military Training-International Situations courses are excluded.