## 2019 Academic Four-Year Curriculum of Electrical Engineering Department, CHU

*The minimum requirement for graduation with a B. S. degree: $\mathbf{1 2 8}$ credits
$* 128$ credits $=10$ (Basic general education courses) +18 (Elective general education courses) +62 (Core courses) +38 (Elective courses)

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

## Elective general education courses: 18 credits

| Core courses:62 credits |  |  |
| :--- | :--- | :--- |
| Freshman | Physics(II(3) <br> Calculus(I)(3) <br> Logic Design(I)(3) <br> Programming Design(I)(3) | Physics( II )(3) <br> Calculus( II (3) <br> Logic Design( II )(3) <br> Programming Design( II )(3) <br> Linear Algebra(3) |
| Sophomore | Circuit Theory(I)(3) <br> Electronics (I)(3) <br> Electronic Lab(I)(1) <br> Engineering Mathematics(I)(3) | Circuit Theory( II )(3) <br> Electronics (II) (3) Electronic <br> Lab (II) (1) Engineering <br> Mathematics (II) (3) <br> Signals and Systems(3) |
| Junior | Electromagnetics(I)(3) <br> Microprocessor(I)(3) <br> Electronic Lab(III)(1) | Electrical Capstone Design Course (1) <br> Special Topic Practice (I)(2) |
| Senior | Special Topic Practice( II)(2) | (none) |


| Elective courses (students are required to take at least 38-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) * |
| Sophomore | Innovative Project Design (2) $\star$ | Project Design ( II) (1) ᄎ |
| Junior | Communication Systems(3) <br> Probability and Statistics(3) <br> Electronics (III) (3) <br> Automatic Control (3) <br> Electromagnetic Wave(3) <br> Advanced Engineering Mathematics(3) <br> Introduction to Telecommunication Engineering(3) <br> Optoelectronics(3) <br> Engineering Application Software(3) <br> Data structures(3) | Electromagnetics (II) (3) <br> Microprocessor (II) (3) <br> Modern Physics(3) <br> Electrical Machinery(3) <br> Digital Control Numerical (3) <br> Analysis Complex (3) <br> Variables Communication (3) <br> Electronics Radio (3) <br> Principle of Digital Communications(3) <br> Digital Integrated Circuits(3) <br> Mobile Application Development(3) <br> Windows Programming(3) <br> Optoelectronics Devices(3) |
| Senior | Optoelectronic Display Technology(3) <br> Digital Signal Processing(3) <br> Digital Singal Processing Simulation(3) <br> Introduction to Optical Fiber Communication (3) <br> Semiconductor Devices (3) <br> Digital Integrated Circuit Design(3) <br> Internship Course(9) | Application of Digital Integrated Circuits (3) System and Application of Optical Fiber(3) Communication(3) <br> Application of Laser(3) <br> Semiconductor Technology(3) <br> Automatic Systems(3) <br> Computer Architecture(3) <br> Internship Course(9) |

*In 36 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 is excluded。

