# BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

## Special UPLB UC Meeting 05 / 21-22 / 18; President's Approval 08/28/19

| First Semester | | Units | Second Semester | | Units |
|---|---|---|---|---|---|
| | | | FIRST YEAR | | |
| MATH 27 | Analytic Geometry and Calculus II | 3 | MATH 28 | Analytic Geometry and Calculus III | 3 |
| PHYS 71 | University Physics I | 4 | PHYS 72 | University Physics II | 4 |
| PHYS 71.1 | University Physics I Laboratory | 1 | PHYS 72.1 | University Physics II Laboratory | 1 |
| EE 30 | Introduction to Electrical Engineering | 1 | ENSC 10.1 | Engineering Graphics Laboratory | 2 |
| PI 10 | Life and Works of Jose Rizal | 3 | ENSC 11 | Statics of Rigid Bodies | 3 |
| ARTS 1 | Critical Perspectives in the Arts | 3 | GE Elective | | 3 |
| ETHICS 1 | Ethics and Moral Reasoning in Everyday Life | 3 | GE Elective | | 3 |
| HK 11 | Wellness and Basic Injury Management | (2) | HK 12 | Human Kinetics Activities | (2) |
| NSTP 1 | National Service Training Program I | (3) | NSTP 2 | National Service Training Program II | (3) |
| | Total | 18 | | Total | 19 |
| | | | SECOND YEAR | | |
| EE 40 | Fundamentals of Electrical Engineering I | 4 | EE 50 | Fundamentals of Electrical Engineering II | 4 |
| EE 45 | Fundamentals of Engineering Electromagnetics | 3 | EE 51 | Electromechanical Energy Conversion for DC | 3 |
| ENSC 12 | Dynamics of Rigid Bodies | 3 | EE 55 | Semiconductor Devices | 3 |
| ENSC 14a | Engineering Thermodynamics and Heat Transfer | 5 | ENSC 26 | Computer Applications in Engineering | 3 |
| ENSC 21 | Mathematical Methods in Engineering | 3 | HIST1/KAS1 | Philippine History / Kasaysayan ng Pilipinas | 3 |
| STS 1 | Science, Technology, and Society | 3 | GE Elective | Elective | 3 |
| HK 12/13 | Human / Advanced Human Kinetics Activities | (2) | HK 12/13 | Human / Advanced Human Kinetics Activities | (2) |
| | Total | 21 | | Total | 19 |
| | | | MIDYEAR | | |
| | | | EE 198 Internship | | 3 |
| | | | | | 3 |
| | | | THIRD YEAR | | |
| EE 60 | Signals and Systems | 3 | EE 70 | Instrumentation Engineering | 4 |
| EE 65 | Electronic Circuits | 4 | EE 75 | Digital Electronics | 4 |
| EE 61 | Electromechanical Energy Conversion for AC | 4 | EE 71 | Analysis of Power Systems | 3 |
| EE 62 | Principles of Power Systems | 3 | EE 79 | Electrical Engineering Law, Ethics, and Contracts | 1 |
| EE 66 | Signals and Noise in Electrical Engineering Networks | 3 | FPPS 183 | Engineering Economic Analysis | 3 |
| ENG 10 | Writing of Scientific Papers | 3 | IE 184 | Project Development and Management | 3 |
| | | | EE 199 | Undergraduate Seminar | 1 |
| | Total | 20 | | Total | 19 |
| | | | FOURTH YEAR | | |
| EE 85 | Industrial Electronics | 3 | EE 200<br>EE 200b<br>EE 200c | Thesis or Innovationeering or Engineering Industry Research | 3 |
| EE 80 | Control Systems Analysis | 3 | SPEC | Specialization Course | 3 |
| EE 86 | Electronic Communication Systems I | 3 | SPEC | Specialization Course | 3 |
| EE 81 | Maintenance of Electrical Equipment and Devices | 3 | Elective | Elective | 3 |
| COMM 10 | Critical Perspectives in Communication | 3 | Elective | Elective | 3 |
| EE 200<br>EE 200b<br>EE 200c | Thesis or Innovationeering or Engineering Industry Research | 3 | EE 91 | Electrical System Design, Planning, and Estimation | 4 |
| SPEC | Specialization | 3 | | Total | 19 |
| | Total | 21 | | | |

**TOTAL NUMBER OF UNITS.....159**

**FOUR-YEAR CURRICULUM LEADING TO THE DEGREE OF**
**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**

Effective A.Y. 2018-2019