

# BACHELOR OF SCIENCE IN APPLIED ELECTRICAL ENGINEERING, THURAYA COLLEGE

## FIRST YEAR (FRESHMAN)

| COURSE |     | TITLE                 | LT | LB | CR | COURSE |     | TITLE                | LT | LB | CR |
|--------|-----|-----------------------|----|----|----|--------|-----|----------------------|----|----|----|
| CHEM   | 1xx | General Chemistry     | 3  | 3  | 4  | MATH   | 1xx | Calculus II          | 4  | 0  | 4  |
| PHYS   | 1xx | Physics I             | 3  | 3  | 4  | PHYS   | 1xx | Physics II           | 3  | 3  | 4  |
| MATH   | 1xx | Calculus I            | 4  | 0  | 4  | ICS    | 1xx | Computer Programming | 2  | 3  | 3  |
| ENGL   | 1xx | English Composition I | 3  | 0  | 3  | EE     | 1xx | Intro to Elec. Eng.  | 2  | 0  | 2  |
| IAS    | 1xx | Objective Writing     | 2  | 0  | 2  | PE     | 1xx | Phys. Education II   | 1  | 0  | 1  |
| PE     | 1xx | Phys. Education I     | 1  | 0  | 1  | ENGL   | 1xx | English Comp. II     | 3  | 0  | 3  |
|        |     |                       | 16 | 6  | 18 |        |     |                      | 15 | 6  | 17 |

## SECOND YEAR (SOPHOMORE)

| COURSE |     | TITLE                | LT | LB | CR | COURSE |     | TITLE                 | LT | LB | CR |
|--------|-----|----------------------|----|----|----|--------|-----|-----------------------|----|----|----|
| ENGL   | 2xx | Tech. Report Writing | 3  | 0  | 3  | EE     | 2xx | Electric Circuits II  | 3  | 0  | 3  |
| MATH   | 2xx | Calculus III         | 3  | 0  | 3  | EE     | 2xx | Electronics I         | 3  | 3  | 4  |
| EE     | 2xx | Electric Circuits I  | 3  | 3  | 4  | MATH   | 2xx | Elem. Diff. Equations | 3  | 0  | 3  |
| EE     | 2xx | Digital Logic Design | 3  | 3  | 4  | IAS    | 3xx | Human Rights in Islam | 2  | 0  | 2  |
| IAS    | 2xx | Tech. Arabic Writing | 2  | 0  | 2  | EE     | 2xx | Elec. & Mag. Fields   | 3  | 0  | 3  |
| EE     | 2xx | Thermodynamics       | 3  | 0  | 3  | ECON   | 2xx | Engineering Economics | 3  | 0  | 3  |
|        |     |                      | 17 | 6  | 19 |        |     |                       | 17 | 3  | 18 |

## THIRD YEAR (JUNIOR)

| COURSE |     | TITLE                | LT | LB | CR | COURSE |     | TITLE                | LT | LB | CR |
|--------|-----|----------------------|----|----|----|--------|-----|----------------------|----|----|----|
| EE     | 3xx | Electronics II       | 3  | 3  | 4  | EE     | 3xx | Prob. & Stat for EE  | 3  | 0  | 3  |
| EE     | 3xx | Control Engineering  | 3  | 3  | 4  | EE     | 3xx | Digital Systems Eng. | 3  | 3  | 4  |
| MATH   | 3xx | Applied Math for Eng | 3  | 0  | 3  | EE     | 3xx | Communicating Eng.   | 3  | 3  | 4  |
| EE     | 3xx | Signal and Systems   | 3  | 3  | 4  | IAS    | 3xx | Ethics in Islam      | 2  | 0  | 2  |
| EE     | 2xx | Energy Conversion    | 3  | 0  | 3  | ENG    | 3xx | Engineering Elective | 3  | 0  | 3  |
|        |     |                      |    |    |    | EE     | 3xx | Intro. to EE Design  | 2  | 0  | 2  |
|        |     |                      | 15 | 9  | 18 |        |     |                      | 16 | 6  | 18 |

## FOURTH YEAR (SENIOR)

| COURSE |     | TITLE         | LT | LB | CR | COURSE |     | TITLE              | LT | LB | CR |
|--------|-----|---------------|----|----|----|--------|-----|--------------------|----|----|----|
| EE     | 4xx | Co-op Program | 0  | 0  | 6  | EE     | 4xx | Senior Design      | 3  | 0  | 3  |
|        |     |               |    |    |    | EE     | 4xx | EE Elective I      | 3  | 0  | 3  |
|        |     |               |    |    |    | EE     | 4xx | EE Elective II     | 3  | 0  | 3  |
|        |     |               |    |    |    | EE     | 4xx | EE Elective III    | 3  | 0  | 3  |
|        |     |               |    |    |    | XX     | Xxx | Technical Elective | 3  | 0  | 3  |
|        |     |               |    |    |    | CIM    | 4xx | Elective for CIM   | 3  | 0  | 3  |
|        |     |               | 0  | 0  | 6  |        |     |                    | 18 | 0  | 18 |

**TOTAL CREDITS: 132 CHRS**

**EE ELECTIVES INCLUDE: COMMUNICATIONS, ELECTRONICS, MICROPROCESSORS, SIGNAL PROCESSING, CONTROL, ANTENNAS, FIELDS, POWER, ETC..**