## Study Plan for Communication and Computer Department

### Year 1 – Semester 1 (16 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| 806119 | Ethics and social responsibility | 3 | 3 | | |
| 802101 | English Language Skills(1) | 3 | 3 | | |
| S53101 | Differentiation and Integration (1) | 3 | 3 | | |
| S72111 | General Chemistry (1) | 3 | 3 | | |
| S71112 | General Physics (1) | 3 | 3 | | |
| S71113 | General Physics Laboratory | 1 | | 1 | General Physics (1) |

### Year 1 – Semester 2 (15 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| 811111 | Language skills of expression and communication | 3 | 3 | | |
| S71111 | Programming Language (1) For engineering students | 3 | 3 | | |
| S53102 | Differentiation and Integration (2) | 3 | 3 | | Differentiation and Integration (1) |
| S70111 | Introduction to engineering | 2 | 2 | | |
| S70112 | Workshop work engineering | 1 | | 1 | |
| S53241 | Linear Algebra (1) | 3 | 3 | | Differentiation and Integration (1) |

### Year 2 – Semester 1 (16 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| 806110 | Military science | 3 | 3 | | |
| CCE221 | Programming for engineers | 3 | 3 | | Programming (1) for engineering students |
| 806 113 | Water, environment and energy | 3 | 3 | | |
| 811110 | Skills in the Arabic language | 3 | 3 | | |
| CCE321 | Electrical circuits (1) | 3 | 3 | | General Physics(1) |
| CCE322 | Electrical Circuits Lab | 1 | | 1 | |

### Year 2 – Semester 2 (15 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| S70212 | Engineering economics | 2 | 2 | | Differentiation and Integration (1) |
| CCE324 | Electronics (1) | 3 | 3 | | Electrical Circuits (1) |
| CCE421 | Computer organization and design | 3 | 3 | | Introduction to Communication and Computer Engineering |
| CCE332 | Electronics Lab | 1 | | 1 | Electrical Circuits (1) |
| 806110 | Military science | 3 | 3 | | |
| CCE431 | Object-oriented programming - for engineering students | 2 | 2 | | Programming for engineers |
| CCE432 | Object-Oriented Programming Lab - for engineering students | 1 | | 1 | Programming for engineers |

### Year 3 – Semester 1 (16 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE311 | Data structures and algorithms | 3 | 3 | | Object-oriented programming - for engineering students |
| CCE323 | Electrical circuits (2) | 3 | 3 | | Electrical Circuits (1) |
| CCE331 | Electronics (2) | 3 | 3 | | Electronics(1) |
| CCE422 | Computer Organization and Design Lab | 1 | | 1 | Computer organization and design |
| 851109 | The electronic world and the Internet | 3 | 3 | | |
| CVE217 | Statistics and engineering probabilities | 3 | 3 | | Calculus(2) |

**Year 3 – Semester 2** (17 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE214 | Professional and ethical issues in engineering | 2 | 2 | | Engineering mathematics |
| S70311 | Engineering mathematics | 3 | 3 | | Calculus(2) |
| CVE216 | Numerical analysis for engineering students | 3 | 3 | | Calculus(2) |
| CCE341 | Computer architecture | 3 | 3 | | Computer architecture, data structures and algorithms |
| S51471 | Operating Systems | 3 | 3 | | Digital logic design for engineering students, computer organization and design |
| CCE333 | Signals and systems | 3 | 3 | | Electronics (2), statistics and probabilities |

**Year 4 – Semester 1** (16 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE431 | Digital logic design for engineering students | 3 | 3 | | Calculus(1) |
| CCE432 | A digital logic design lab for engineering students | 1 | | 1 | Digital logic design for engineering students |
| CCE343 | Electromagnetism | 3 | 3 | | Electronics(1) |
| CCE442 | Microprocessor | 3 | 3 | | Computer organization and design |
| CCE445 | computer networks | 3 | 3 | | Computer organization and design |
| CCE433 | Analogue communications | 3 | 3 | | Signals and systems |
| S70211 | Communication and report writing skills<br><br>Technical engineering students | 1 | 1 | | |

**Year 4 – Semester 2** (15 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE434 | Digital communication | 3 | 3 | | Analogue communications |
| CCE435 | Digital and Analogue Communication Lab | 1 | | 1 | Digital logic design for engineering students |
| CCE443 | Embedded systems | 3 | 3 | | Microprocessor |
| CCE444 | Embedded Systems & Microprocessor Lab | 1 | | 1 | Microprocessor |

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE441 | Digital electronics | 3 | 3 | | Electronics(1) |
| CCE446 | Wireless computer networks | 3 | 3 | | computer networks |

## Year 4 – Semester 3 (3 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE571 | Training (Communication and Computer Engineering) | 3 | | 280 hours | After 130 credit hours |

## Year 5 – Semester 1 (15 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| 806111 | Islam and contemporary issues | 3 | 3 | | |
| 813104 | Writing skills in the English language | 3 | 3 | 1 | |
| CCE564 | Mobile communication systems | 3 | 3 | | computer networks |
| CCE565 | Modern communication systems | 3 | 3 | 1 | Computer architecture |
| | Free article | 2 | 2 | | |
| CCE561 | Graduation Project-1 (Communication and Computer Engineering) | 1 | 1 | | |

## Year 5 – Semester 2 (15 Credit Hours)

| Course Code | Course Name | Credit | Lec | Lab/Tot | Prerequisite |
|---|---|---|---|---|---|
| CCE542 | Digital signal processing | 3 | 3 | | Digital communication |
| CCE543 | Wireless communication networks and protocols | 3 | 3 | 1 | Digital communication |
| CCE553 | Computer and Network Security -Engineering students | 3 | 3 | | Computer networking protocols |
| CCE563 | Software applications in cellular communications | 3 | 3 | 1 | Object-oriented programming - for engineering students, wireless communication networks and protocols |
| CCE562 | Graduation Project- 2 (Communication and Computer Engineering) | 3 | 3 | | Graduation Project-1 (Communication and Computer Engineering) |