

## B.Eng (Hons) Double Major (Electrical Power Engineering and Industrial Computer Systems Engineering)

For students commencing in Semester 1 2020 at the South Street, Murdoch Campus

This sample study plan is based on the 2019 course structure and offerings. It is the responsibility of students to ensure the correct availability of units in each semester of each academic year.

|        |  | Semester 1 |   | Semester 2 |  |
|--------|--|------------|---|------------|--|
| Year 1 | BEN100 Transitioning into Engineering          | 3pts       | ENG109 Engineering Computing Systems                | 3pts       |  |
|        | BEN150 Design Concepts in Engineering          | 3pts       | MAS161 Calculus and Matrix Algebra                  | 3pts       |  |
|        | Engineering Elective                           | 3pts       | ENG192 Energy, Mass Flow                            | 3pts       |  |
|        | MAS182 Applied Mathematics                     | 3pts       | Engineering Elective                                | 3pts       |  |
|        |  | 12pts      |   | 12pts      |  |
| Year 2 | ENG298 Principles of Process Engineering       | 3pts       | ENG294 Discrete Time Systems                        | 3pts       |  |
|        | ENG225 Circuits and Systems I                  | 3pts       | ENG207 Principles of Electronic Instrumentation     | 3pts       |  |
|        | Engineering Elective                           | 3pts       | MAS221 Mathematical Modelling                       | 3pts       |  |
|        | ENG299 Control Systems and Process Dynamics    | 3pts       | ENG297 Circuits and Systems II                      | 3pts       |  |
|        |  | 12pts      |   | 12pts      |  |
| Year 3 | ENG311 PLC Systems                             | 3pts       | ENG336 Engineering Finance and Law                  | 3pts       |  |
|        | ENG317 Electromechanical Energy Conversion     | 3pts       | ENG319 Real Time and Embedded Systems               | 3pts       |  |
|        | ENG318 Power Electronic Converters and Systems | 3pts       | ENG321 Instrument and Communication System          | 3pts       |  |
|        | BEN300 Innovation and Ethics in Engineering    | 3pts       | ENG323 Power Transmission and Distribution Networks | 3pts       |  |
|        |  | 12pts      |   | 12pts      |  |
| Year 4 | ENG448 SCADA and Systems Architecture          | 3pts       | ENG447 Industrial Computer Systems Design           | 3pts       |  |
|        | ENG449 Electrical Power Systems Design         | 3pts       | ENG451 Power Systems Protection and Control         | 3pts       |  |
|        | ENG470 Honours Thesis (6pt)                    | 6pts       | ENG470 Honours Thesis (6pt)                         | 6pts       |  |
|        |  | 12pts      |   | 12pts      |  |