

Curriculum 2017 V.1 Approved  
 Programme: MTEMP006 Master of Engineering  
 Major: Major: T299 ME Biosystems & Food Engineering FT  
 Programme Coordinator: Dr Pat Grace

| Semester 1, Year 1                 |  |         | Semester 2, Year 1                |   |         |
|------------------------------------|--|---------|-----------------------------------|---|---------|
|                                    |  | Credits |                                   |   | Credits |
| BSEN30230                          | Unit Operations in Bioprocess Eng              | 5       | BSEN40230                         | ME Professional Work Experience or Equivalent | 30      |
|                                    | Credits from the module lists below:           | 25      |                                   |   |         |
| SEMESTER CREDIT TOTALS             |  | 30      | SEMESTER CREDIT TOTALS            |   | 30      |
| Semester 1, Year 2                 |  |         | Semester 2, Year 2                |   |         |
|                                    |  | Credits |                                   |   | Credits |
| BSEN40220                          | ME Biosystems Engineering Thesis (part 1)*     | 10      | BSEN40220                         | ME Biosystems Engineering Thesis (part 2)*    | 10      |
| BSEN40410                          | Food Chain Integrity                           | 5       | MEEN40430                         | Professional Engineering (Management)         | 5       |
| MEEN40560                          | Research Skills and Techniques                 | 5       | BSEN30320                         | Food Process Engineering                      | 5       |
|                                    | Approx 10 credits from the module lists below* | 10      | BSEN30060                         | Quantitative Risk Assessment                  | 5       |
| SEMESTER CREDIT TOTALS             |  | 30      | SEMESTER CREDIT TOTALS            |   | 30      |
| <b>Core Modules</b>                |  |         | <b>Core Module (if not taken)</b> |   |         |
| BSEN40440                          | Food Refrigeration Engineering                 | 5       | MEEN30140                         | Professional Engineering (Finance)            | 5       |
| <b>Core Modules (if not taken)</b> |  |         | <b>Optional Modules</b>           |   |         |
| BSEN30010                          | Bioprocess Engineering Principles              | 5       | BSEN30030                         | Air Pollution                                 | 5       |
| BSEN30190                          | Power and Machinery Systems I                  | 5       | BSEN30220                         | Soil Engineering                              | 5       |
| MEEN30100                          | Engineering Thermodynamics II                  | 5       | BSEN30310                         | The Bioeconomy                                | 5       |
| <b>Optional Modules</b>            |  |         | BSEN30020                         | Buildings and Environment                     | 5       |
| BSEN30170                          | Agricultural Power and Machinery               | 5       | BSEN40400                         | LCA Applications                              | 5       |
| BSEN30240                          | Waste Management                               | 5       | BSEN40210                         | Green Technology Project                      | 5       |
| BSEN30280                          | Environmental Engineering                      | 5       | BSEN40250                         | Global Cold Chain Safety                      | 5       |
| BSEN30360                          | Life Cycle Assessment                          | 5       | BSEN40460                         | Research and Teaching Methods                 | 5       |
| BSEN40320                          | Waste to Energy Processes                      | 10      |                                   |   |         |
| CVEN40390                          | Innovation Leadership                          | 5       |                                   |   |         |
| CVEN30040                          | Design of Structures                           | 5       |                                   |   |         |

\* Students may wish to split up the thesis workload and the options workload differently over the semesters.