

# Four-Year Study Plan of Food Science and Technology Programme (2023 cohort)

Rev 2023/1/06

Rev 2023/1/10

| Course Code                                      | Course Title                                                                                                                                                                                          | Year One |       | Year Two       |       | Year Three |       | Year Four      |                |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|-------|------------|-------|----------------|----------------|
|                                                  |                                                                                                                                                                                                       | Sem 1    | Sem 2 | Sem 1          | Sem 2 | Sem 1      | Sem 2 | Sem 1          | Sem 2          |
| I. Major Required Courses (61 Units)             |                                                                                                                                                                                                       |          |       |                |       |            |       |                |                |
| FOOD1033                                         | Introduction to Food Science                                                                                                                                                                          | 3        |       |                |       |            |       |                |                |
| SCIT1023                                         | Laboratory Safety                                                                                                                                                                                     | 1        |       |                |       |            |       |                |                |
| BIOL2003                                         | General Biology                                                                                                                                                                                       |          | 3     |                |       |            |       |                |                |
| CHEM2003                                         | General Chemistry                                                                                                                                                                                     |          | 3     |                |       |            |       |                |                |
| MATH1123                                         | Calculus for Science and Engineering                                                                                                                                                                  |          | 3     |                |       |            |       |                |                |
| BIOL2063                                         | Biochemistry                                                                                                                                                                                          |          |       | 3              |       |            |       |                |                |
| BIOL2073                                         | Physiology                                                                                                                                                                                            |          |       | 3              |       |            |       |                |                |
| STAT1013                                         | Introduction to Probability and Statistics                                                                                                                                                            |          |       | 3              |       |            |       |                |                |
| BIOL2013                                         | General Biology and Chemistry Laboratory                                                                                                                                                              |          |       |                | 3     |            |       |                |                |
| BIOL2033                                         | Food Microbiology                                                                                                                                                                                     |          |       |                | 3     |            |       |                |                |
| FOOD2013                                         | Food Chemistry                                                                                                                                                                                        |          |       |                | 3     |            |       |                |                |
| MATH1003                                         | Linear Algebra                                                                                                                                                                                        |          |       |                | 3     |            |       |                |                |
| CHEM2033                                         | Analytical Chemistry                                                                                                                                                                                  |          |       |                |       | 3          |       |                |                |
| FOOD3003                                         | Food Analysis                                                                                                                                                                                         |          |       |                |       | 3          |       |                |                |
| FOOD3013                                         | Nutrition                                                                                                                                                                                             |          |       |                |       | 3          |       |                |                |
| FOOD3033                                         | Chemical and Food Analysis Laboratory                                                                                                                                                                 |          |       |                |       | 3          |       |                |                |
| FOOD3023                                         | Food Toxicology                                                                                                                                                                                       |          |       |                |       |            | 3     |                |                |
| FOOD3053                                         | Food Materials Science                                                                                                                                                                                |          |       |                |       |            | 3     |                |                |
| FOOD3063                                         | Food Process Engineering                                                                                                                                                                              |          |       |                |       |            | 3     |                |                |
| FOOD3073                                         | Food Science Laboratory                                                                                                                                                                               |          |       |                |       |            | 3     |                |                |
| FOOD4004                                         | Final Year Project I (FOOD)                                                                                                                                                                           |          |       |                |       |            |       | 3              |                |
| II. Major Elective Courses (18 Units)            |                                                                                                                                                                                                       |          |       |                |       |            |       |                |                |
| ME01 ME02 ME03 ME04 ME05 ME06                    |                                                                                                                                                                                                       |          |       |                |       | 3          | 6     | 6 <sup>③</sup> | 3 <sup>④</sup> |
| III. University Core Courses (37Units)           |                                                                                                                                                                                                       |          |       |                |       |            |       |                |                |
| UCLC1003                                         | University Chinese                                                                                                                                                                                    | 3        |       |                |       |            |       |                |                |
| UCLC1013                                         | English for Academic Purposes I                                                                                                                                                                       | 3        |       |                |       |            |       |                |                |
| UCLC1023                                         | English for Academic Purposes II                                                                                                                                                                      |          | 3     |                |       |            |       |                |                |
| UCLC1033                                         | English for Academic Purposes III                                                                                                                                                                     |          |       |                | 3     |            |       |                |                |
| CH11103                                          | Introduction to Modern Social Theories                                                                                                                                                                | 3        |       |                |       |            |       |                |                |
| CH11203                                          | Morality and Foundations of Law                                                                                                                                                                       |          |       | 3              |       |            |       |                |                |
| CH11063                                          | Chinese Culture and Modern China                                                                                                                                                                      |          |       |                | 3     |            |       |                |                |
| CH11073                                          | Contemporary Chinese Society and Thought I                                                                                                                                                            |          | 3     |                |       |            |       |                |                |
| CH11253                                          | Contemporary Chinese Society and Thought II                                                                                                                                                           |          | 3     |                |       |            |       |                |                |
| CH11193                                          | Contemporary World and China <sup>①</sup>                                                                                                                                                             |          |       |                | 2     |            |       |                |                |
| MT1003                                           | Military Training                                                                                                                                                                                     | 2        |       |                |       |            |       |                |                |
| WPEX1013                                         | Emotional Intelligence                                                                                                                                                                                |          | 1     |                |       |            |       |                |                |
| WPEX2013                                         | Experiential Arts <sup>②</sup>                                                                                                                                                                        |          |       |                | 1     |            |       |                |                |
| WPEX2023/<br>WPEX2033                            | Voluntary Service <sup>②</sup> , or Environmental Awareness <sup>②</sup>                                                                                                                              |          |       | 1              |       |            |       |                |                |
| UCHL1XX3                                         | Healthy Lifestyle <sup>②</sup>                                                                                                                                                                        | 1        | 1     |                | 1     |            |       |                |                |
| IV. General Education Courses (18 Units)         |                                                                                                                                                                                                       |          |       |                |       |            |       |                |                |
| Level 1<br>Foundational<br>Courses               | History and Civilization <sup>②</sup>                                                                                                                                                                 |          |       | 3              |       |            |       |                |                |
|                                                  | Quantitative Reasoning <sup>②</sup>                                                                                                                                                                   | 3        |       |                |       |            |       |                |                |
|                                                  | Values and the Meaning of Life <sup>③</sup>                                                                                                                                                           |          | 3     |                |       |            |       |                |                |
| Level 2<br>Interdisciplinary<br>Thematic Courses | Culture, Creativity and Innovation <sup>④</sup> , or Science,<br>Technology and Society <sup>④</sup> , or Sustainable Communities <sup>④</sup>                                                        |          |       | 3 <sup>④</sup> |       | 3          |       |                |                |
| Level 3<br>GE Capstone<br>Courses                | Service-Learning Course <sup>⑤</sup> , or Service Leadership<br>Education Course <sup>⑤</sup> , or Experiential Learning Course <sup>⑤</sup> , or<br>Interdisciplinary Independent Study <sup>⑤</sup> |          |       |                |       |            |       |                | 3 <sup>⑤</sup> |
| V. Free Elective Courses (18 Units)              |                                                                                                                                                                                                       |          |       |                |       |            |       |                |                |
| FE01 FE02 FE03 FE04 FE05 FE06                    |                                                                                                                                                                                                       | 3        |       |                |       | 3          | 3     | 6              | 3              |
| Total Units: 152                                 |                                                                                                                                                                                                       | 22       | 23    | 19             | 22    | 21         | 21    | 15             | 9              |

① This 2-unit course requires student to attend at least 10 lectures within his/her first two years of study.

② This denotes a course category in which a list of courses may be developed for students' selection. Students are expected to refer to the Online Course Selection System for courses available under each category.

③ Students are required to take one among the four courses: ACCT2043 Principles of Accounting I, ECON2003 Principles of Macroeconomics, ECON2013 Principles of Microeconomics, and MHR3003 Human Resource Management.

④ Students who would like to continue with the final year project in the second semester of Year 4 should register FOOD4005 Final Year Project II (FOOD) as a major elective during the Online Course Selection (or Course Add/Drop) period.

⑤ Students are required to take GFVM1033 Ethics in An Era of Artificial Intelligence and Robotics or GFVM1043 Ethics in Daily Life and Life Sciences under this category.

⑥ Students are required to choose one course from GTSC2093 IT for Success in Everyday Life and Work, or GTSC2053 Telling a Story with Data.

⑦ Students are required to take GCAP3203 Selected Topics in Food and Nutritional Science.

**ME Course List of FS (2023 cohort)**

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| Course Code                                         | Course Title                                                      | Units        |
|-----------------------------------------------------|-------------------------------------------------------------------|--------------|
| <b><i>ME Courses on Science and Technology</i></b>  |                                                                   |              |
| BIOL3043                                            | Molecular Biology                                                 | 3            |
| CHEM2043                                            | Physical Chemistry                                                | 3            |
| CHEM2063                                            | Organic Chemistry                                                 | 3            |
| ENGI2003                                            | Mechanical Engineering and Practice                               | 3            |
| ENGI2013                                            | Engineering Drawing and AutoCAD Practice                          | 3            |
| FOOD3043                                            | Life Cycle Nutrition                                              | 3            |
| FOOD3083                                            | Research Methods in Food Science                                  | 3            |
| FOOD3093                                            | Community Nutrition                                               | 3            |
| FOOD4003                                            | Food Safety and Quality Management System                         | 3            |
| <del>FOOD4005</del>                                 | <del>Final Year Project II (FOOD)</del>                           | <del>3</del> |
| FOOD4013                                            | Meat and Dairy Science                                            | 3            |
| FOOD4023                                            | Functional Foods                                                  | 3            |
| FOOD4033                                            | Grain and Cereal Science                                          | 3            |
| FOOD4043                                            | Food Biotechnology                                                | 3            |
| FOOD4053                                            | Food Waste Management                                             | 3            |
| FOOD4073                                            | Fruit and Vegetable Science                                       | 3            |
| <del>FOOD4083</del>                                 | <del>Introduction to Human Pathophysiology and Pharmacology</del> | <del>3</del> |
| <del>FOOD4093</del>                                 | <del>Nutrition and Disease Prevention</del>                       | <del>3</del> |
| FOOD4103                                            | Nutrition in Medical Therapy                                      | 3            |
| FOOD4113                                            | Food Microbiology and Food Safety Laboratory                      | 3            |
| FOOD4123                                            | Food Packaging                                                    | 3            |
| FOOD4133                                            | Wine and Cheese Science                                           | 3            |
| FOOD4143                                            | Nutrition in Practice                                             | 3            |
| FOOD4153                                            | Food Product Development and Practice                             | 3            |
| <del>FOOD4163</del>                                 | <del>Advanced Food Engineering</del>                              | <del>3</del> |
| <del>FOOD4173</del>                                 | <del>Flavor and Sensory Sciences</del>                            | <del>3</del> |
| <del>FOOD4183</del>                                 | <del>Food Colloids and Component Science</del>                    | <del>3</del> |
| <del>FOOD4193</del>                                 | <del>Nutritional Biochemistry</del>                               | <del>3</del> |
| GH2003                                              | Principles of Global Health                                       | 3            |
| GH2013                                              | Lifestyle in Health and Disease                                   | 3            |
| <del>GH2023</del>                                   | <del>Environmental and Occupational Health Sciences</del>         | <del>3</del> |
| GH3003                                              | Globalization and Health                                          | 3            |
| GH4003                                              | Health System, Policy and Management                              | 3            |
| PHYS2003                                            | Principles of Physics                                             | 3            |
| <b><i>ME Courses on Business and Management</i></b> |                                                                   |              |
| ACCT2043                                            | Principles of Accounting I                                        | 3            |
| ECON2003                                            | Principles of Macroeconomics                                      | 3            |
| ECON2013                                            | Principles of Microeconomics                                      | 3            |
| MHR3003                                             | Human Resource Management                                         | 3            |