

## Four-Year Study Plan of Food Science and Technology Programme (2026 cohort)

Rev 20260723

Rev 2020/7/23

| Course Code                                      | Course Title                                                                                                                                                                                    | Year One |        |       | Year Two       |       |        | Year Three |       | Year Four      |                |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|-------|----------------|-------|--------|------------|-------|----------------|----------------|
|                                                  |                                                                                                                                                                                                 | Sem 1    | Winter | Sem 2 | Sem 1          | Sem 2 | Summer | 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              |
| III. University Core Courses (37 Units)          |                                                                                                                                                                                                 |          |        |       |                |       |        |            |       |                |                |
| UCLC1003                                         | University Chinese                                                                                                                                                                              |          |        | 3     |                |       |        |            |       |                |                |
| UCLC1013                                         | English for Academic Purposes I                                                                                                                                                                 | 3        |        |       |                |       |        |            |       |                |                |
| UCLC1023                                         | English for Academic Purposes II                                                                                                                                                                |          |        | 3     |                |       |        |            |       |                |                |
| UCAI1003                                         | Introduction to AI Literacy                                                                                                                                                                     | 3        |        |       |                |       |        |            |       |                |                |
| CHI1103                                          | Introduction to Modern Social Theories                                                                                                                                                          |          |        |       | 3              |       |        |            |       |                |                |
| CHI1203                                          | Morality and Foundations of Law                                                                                                                                                                 |          |        | 3     |                |       |        |            |       |                |                |
| CHI1063                                          | Chinese Culture and Modern China                                                                                                                                                                |          |        |       |                | 3     |        |            |       |                |                |
| CHI1073                                          | Contemporary Chinese Society and Thought I                                                                                                                                                      | 3        |        |       |                |       |        |            |       |                |                |
| CHI1253                                          | Contemporary Chinese Society and Thought II                                                                                                                                                     |          |        |       |                | 3     |        |            |       |                |                |
| CHI1193                                          | 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                                          | History and Civilization <sup>②</sup>                                                                                                                                                           |          |        |       | 3              |       |        |            |       |                |                |
| Foundational Courses                             | Quantitative Reasoning <sup>②</sup>                                                                                                                                                             | 3        |        |       |                |       |        |            |       |                |                |
|                                                  | Values and the Meaning of Life <sup>②</sup>                                                                                                                                                     |          |        | 3     |                |       |        |            |       |                |                |
| Level 2<br>Interdisciplinary<br>Thematic Courses | Culture, Creativity and Innovation <sup>③</sup> , or Science, Technology and Society <sup>③</sup> , or Sustainable Communities <sup>③</sup>                                                     |          |        |       | 3 <sup>③</sup> |       |        | 3          |       |                |                |
| Level 3<br>GE Capstone<br>Courses                | Service-Learning Course <sup>④</sup> , or Service Leadership Education Course <sup>④</sup> , or Experiential Learning Course <sup>④</sup> , or Interdisciplinary Independent Study <sup>④</sup> |          |        |       |                |       |        |            |       |                | 3 <sup>④</sup> |
| V. Free Elective Courses (18 Units)              |                                                                                                                                                                                                 |          |        |       |                |       |        |            |       |                |                |
| FE01 FE02 FE03 FE04 FE05 FE06                    |                                                                                                                                                                                                 |          |        |       |                |       |        | 3          | 3     | 6              | 6              |
| Total Units: 152                                 |                                                                                                                                                                                                 | 17       | 2      | 23    | 19             | 20    | 2      | 21         | 21    | 15             | 12             |

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

②This 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.

③Students 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.

④Students 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.

⑤Students are required to choose one course from GTSC2093 IT for Success in Everyday Life and Work, or GTSC2053 Telling a Story with Data.

⑥Students are required to take GCAP3203 Selected Topics in Food and Nutritional Science.

# Four-Year Study Plan of Intelligent Science and Technology Plus Food Science and Technology Programme (2026 cohort)

Rev 20260723

| Rev 202607/23                                    |                                                                                                                                                                                                       |                  |        |       |                  |       |        |            |       |                |                  |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|-------|------------------|-------|--------|------------|-------|----------------|------------------|
| Course Code                                      | Course Title                                                                                                                                                                                          | Year One         |        |       | Year Two         |       |        | Year Three |       | Year Four      |                  |
|                                                  |                                                                                                                                                                                                       | Sem 1            | Winter | Sem 2 | Sem 1            | Sem 2 | Summer | Sem 1      | Sem 2 | Sem 1          | Sem 2            |
| I. Major Required Courses (61 Units)             |                                                                                                                                                                                                       |                  |        |       |                  |       |        |            |       |                |                  |
| FOOD1033                                         | Introduction to Food Science                                                                                                                                                                          | 3                |        |       |                  |       |        |            |       |                |                  |
| MATH1123 <sup>⓪</sup> *                          | Calculus for Science and Engineering                                                                                                                                                                  | 3                |        |       |                  |       |        |            |       |                |                  |
| SCIT1023                                         | Laboratory Safety                                                                                                                                                                                     | 1                |        |       |                  |       |        |            |       |                |                  |
| AI2033 <sup>⓪</sup> *                            | Probability and Statistics                                                                                                                                                                            |                  |        | 3     |                  |       |        |            |       |                |                  |
| BIOL2003                                         | General Biology                                                                                                                                                                                       |                  |        | 3     |                  |       |        |            |       |                |                  |
| CHEM2003                                         | General Chemistry                                                                                                                                                                                     |                  |        | 3     |                  |       |        |            |       |                |                  |
| BIOL2063                                         | Biochemistry                                                                                                                                                                                          |                  |        |       | 3                |       |        |            |       |                |                  |
| BIOL2073                                         | Physiology                                                                                                                                                                                            |                  |        |       | 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>⓪</sup> | 3                |
| III. University Core Courses (37 Units)          |                                                                                                                                                                                                       |                  |        |       |                  |       |        |            |       |                |                  |
| UCLC1003                                         | University Chinese                                                                                                                                                                                    |                  |        | 3     |                  |       |        |            |       |                |                  |
| UCLC1013                                         | English for Academic Purposes I                                                                                                                                                                       | 3                |        |       |                  |       |        |            |       |                |                  |
| UCLC1023                                         | English for Academic Purposes II                                                                                                                                                                      |                  |        | 3     |                  |       |        |            |       |                |                  |
| UCAI1003                                         | Introduction to AI Literacy                                                                                                                                                                           | 3                |        |       |                  |       |        |            |       |                |                  |
| CHII1103                                         | Introduction to Modern Social Theories                                                                                                                                                                |                  |        |       | 3                |       |        |            |       |                |                  |
| CHII203                                          | Morality and Foundations of Law                                                                                                                                                                       |                  |        | 3     |                  |       |        |            |       |                |                  |
| CHII063                                          | Chinese Culture and Modern China                                                                                                                                                                      |                  |        |       |                  | 3     |        |            |       |                |                  |
| CHII073                                          | Contemporary Chinese Society and Thought I                                                                                                                                                            | 3                |        |       |                  |       |        |            |       |                |                  |
| CHII253                                          | Contemporary Chinese Society and Thought II                                                                                                                                                           |                  |        |       |                  | 3     |        |            |       |                |                  |
| CHII193                                          | 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>②</sup>                                                                                                                                                           |                  |        | 3     |                  |       |        |            |       |                |                  |
| Level 2<br>Interdisciplinary<br>Thematic Courses | Culture, Creativity and Innovation <sup>②</sup> , or Science,<br>Technology and Society <sup>②</sup> , or Sustainable Communities <sup>②</sup>                                                        |                  |        |       | 3 <sup>⓪</sup>   |       |        | 3          |       |                |                  |
| Level 3<br>GE Capstone<br>Courses                | Service-Learning Course <sup>②</sup> , or Service Leadership<br>Education Course <sup>②</sup> , or Experiential Learning Course <sup>②</sup> , or<br>Interdisciplinary Independent Study <sup>②</sup> |                  |        |       |                  |       |        |            |       |                | 3 <sup>⓪</sup>   |
| V. Free Elective Courses (18 Units)              |                                                                                                                                                                                                       |                  |        |       |                  |       |        |            |       |                |                  |
| FE01 FE02 FE03 FE04 FE05 FE06                    |                                                                                                                                                                                                       | 3 <sup>⓪</sup> * |        |       | 3 <sup>⓪</sup> * |       |        |            | 3     | 3              | 6 <sup>⓪</sup> * |
| Total Units: 152                                 |                                                                                                                                                                                                       | 17               | 2      | 23    | 19               | 20    | 2      | 21         | 21    | 15             | 12               |

⓪ This 2-unit course requires student to attend at least 10 lectures within his/her first two years of study.

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⓪ 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.

⓪ 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.

⓪ Students are required to choose one course from GTSC2093 IT for Success in Everyday Life and Work, or GTSC2053 Telling a Story with Data.

⓪ Students are required to take GCAP3203 Selected Topics in Food and Nutritional Science.

\* **Common Core Course (Required) - CCR**

⑦ Students are required to take MATH1123 Calculus for Science and Engineering under MR.

⓪ Students are required to take AI2033 Probability and Statistics under MR, equivalent to STAT1013 Introduction to Probability and Statistics.

⓪ Students are required to take AI1003 Python Programming under FE.

⓪ Students are required to take AI2013 Introduction to Artificial Intelligence under FE.

⓪ Students are required to take FOOD4005 Final Year Project II (FOOD) under FE.

# **Common Core Course (Elective) - CCE:**

The CCE courses listed below are strongly recommended for students of the Intelligent Science and Technology plus Food Science and Technology Programme.

|        |                                         |    |
|--------|-----------------------------------------|----|
| AI1013 | Object-Oriented Programming             | FE |
| AI1023 | Database Management Systems             | FE |
| AI2023 | Artificial Intelligence Workshop        | FE |
| AI2053 | Introduction to Cognitive Science       | FE |
| AI3013 | Machine Learning                        | FE |
| AI3063 | Neuroscience in Artificial Intelligence | FE |
| AI3073 | Introduction to Bioinformatics          | FE |

**ME Course List of FS (2026 cohort)**

Rev 20260723

| 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     |
| 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     |
| 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     |
| FOOD4163                                            | Advanced Food Engineering                    | 3     |
| FOOD4173                                            | Flavor and Sensory Sciences                  | 3     |
| FOOD4183                                            | Food Colloids and Component Science          | 3     |
| FOOD4193                                            | Nutritional Biochemistry                     | 3     |
| GH2003                                              | Principles of Global Health                  | 3     |
| GH2013                                              | Lifestyle in Health and Disease              | 3     |
| 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     |