# Programme Requirements for Bachelor of Science with Honours in Analytical Testing Science

## 1. Programme Requirement - Year 1 Entry

1.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Analytical Testing Science through Year 1 Entry, a student shall:

1.1.1 obtain 120 credit-units as prescribed below, of which no more than 30 credit-units shall be at 1000-level, at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

1.1.1.1 84 credit-units of core courses applicable to Year 1 Entry as listed in Table 1;

1.1.1.2 12 credit-units of elective courses (Group 1) from Table 2;

1.1.1.3 3 credit-units of elective courses (Group 1 or 2) from Table 2 or 3;

1.1.1.4 9 credits-units of University Core courses in Table 4;

1.1.1.5 6 credit-units of University English courses in Table 5;

1.1.1.6 6 credit-units of General Education (GE) courses (see *www.hkmu.edu.hk/FT_GE* for the updated list of GE courses)

and

1.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

## 2. Programme Requirement – Year 2 Entry

2.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Analytical Testing Science through Year 2 Entry, a student shall:

2.1.1 obtain 90 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

2.1.1.1 66 credit-units of core courses applicable to Year 2 Entry as listed in Table 1;

2.1.1.2 12 credit-units of elective courses (Group 1) from Table 2;

2.1.1.3 3 credit-units of elective courses (Group 1 or 2) from Table 2 or 3;

2.1.1.4 9 credits-units of University Core courses in Table 4

and

2.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

## 3. Programme Requirement – Year 3 Entry

3.1 To be eligible for the award of the degree of Bachelor of Science with Honours in Analytical Testing Sciencethrough Year 3 Entry, a student shall:

3.1.1 obtain 66 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:

3.1.1.1 42 credit-units of core courses applicable to Year 3 Entry as listed in Table 1;

3.1.1.2 12 credit-units of elective courses (Group 1) from Table 2;

3.1.1.3 3 credit-units of elective courses (Group 1 or 2) from Table 2 or 3;

3.1.1.4 9 credit-units of University Core courses in Table 4

and

3.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

**Table 1: Core Courses**

| Course Code | Course Title | Credit-units | Year Entry | | |
|---|---|---|---|---|---|
| | | | 1 | 2 | 3 |
| BIOL 1003SEF | Essential Biology | 3 | ✓ | | |
| BIOL 2035SEF | Biochemistry & Microbiology | 3 | ✓ | ✓ | |
| BIOL 2036SEF | Cellular & Molecular Biology | 3 | ✓ | ✓ | |
| CHEM 1002SEF | Essential Chemistry | 3 | ✓ | | |
| CHEM 3006SEF | Advanced Environmental Analysis | 3 | ✓ | ✓ | ✓ |
| CHEM 3050SEF | Analytical Chemistry | 3 | ✓ | ✓ | |
| SCI 1010SEF | Laboratory Safety & Good Laboratory Practice | 3 | ✓ | | |
| SCI 1100SEF | General Chemistry Laboratory Training | 3 | ✓ | | |
| SCI 1101SEF | General Biology Laboratory Training | 3 | ✓ | | |
| SCI 2006SEF | Pharmacology & Toxicology | 3 | ✓ | ✓ | |
| SCI 2100SEF | Microbiology Laboratory Training I | 3 | ✓ | ✓ | |
| SCI 2101SEF | Chemical Analysis Laboratory Training I | 3 | ✓ | ✓ | |
| SCI 2102SEF | DNA & Biochemical Analysis Laboratory Training I | 3 | ✓ | ✓ | |
| SCI 3030SEF | Scientific Research Methods | 3 | ✓ | ✓ | ✓ |
| SCI 3031SEF | Biostatistics | 3 | ✓ | ✓ | ✓ |
| SCI 3090SEF | Professional Training & Workplace Attachment | 3 | ✓ | ✓ | ✓ |
| SCI 3100SEF | Microbiology Laboratory Training II | 3 | ✓ | ✓ | ✓ |
| SCI 3101SEF | Chemical Analysis Laboratory Training II | 3 | ✓ | ✓ | ✓ |
| SCI 3102SEF | DNA & Biochemical Analysis Laboratory Training II | 3 | ✓ | ✓ | ✓ |
| STAT 2610SEF | Data Analytics with Applications | 3 | ✓ | | |
| TC 2020SEF | Metrology & Calibration | 3 | ✓ | ✓ | |
| TC 3015SEF | Management Systems for Testing, Inspection & Certification Bodies | 6 | ✓ | ✓ | ✓ |
| TC 3020SEF | Measurement Uncertainty & Test Method Development | 3 | ✓ | ✓ | ✓ |
| TC 4019SEF | Quality Management for Science & Technology | 3 | ✓ | ✓ | ✓ |
| TC 4020SEF | Professional Practice & Ethics | 3 | ✓ | ✓ | ✓ |
| TC 4093SEF | Testing & Analytical Science Project | 6 | ✓ | ✓ | ✓ |

**Table 2: Elective Courses (Group 1)**

| Course Code | Course Title | Credit-units |
|---|---|---|
| MLS 4001SEF | Molecular Diagnosis of Human Diseases | 3 |
| MLS 4002SEF | Frontiers in Medical Laboratory Techniques & Instrumentation | 3 |
| TC 4011SEF | Conformity Assessment & Medical Laboratory Accreditation | 3 |

| Course Code | Course Title | Credit-units |
|---|---|---|
| TC 4026SEF | Audit, Inspection & Certification | 3 |
| TC 4062SEF | Food Safety Management System: Audit & Certification | 3 |
| TC 4075SEF | Greenhouse Gas Validation & Certification | 3 |

**Table 3: Elective Courses (Group 2)**

| Course Code | Course Title | Credit-units |
|---|---|---|
| BIOL 3056SEF | Biochemical & DNA Technologies | 3 |
| ENVR 3074SEF | Green Environmental Monitoring in Practice | 3 |
| SCI 3065SEF | Food Analysis | 3 |

**Table 4: University Core Courses**

| Course Code | Course Title | Credit-units |
|---|---|---|
| UNI 1002ABW | University Core Values | 2 |
| UNI 1012ABW | Social Responsibilities | 1 |
| UNI 2002BEW | Effective Communication and Teamwork | 3 |
| UNI 3002BEW | Entrepreneurial Mindset and Leadership for Sustainability | 3 |

**Table 5: University English Courses**

| Course Code | Course Title | Credit-units |
|---|---|---|
| ENGL 1101AEF | University English: Reading and Writing | 3 |
| ENGL 1202EEF | University English: Listening and Speaking | 3 |

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