Double degree programme

SCIENCE MASTER CLASS

6688 Bachelor of Science (BSc) & Master of Research (MRes)

Learn from the Best Minds • Be Inspired by Our Science Masters
To complete the BSc&MRes curriculum, students have to pass not fewer than a total of **303 credits** consisting

- **not fewer than 240 credits** for the Bachelor of Science (BSc) degree and
- **63 credits** for the Master of Research (MRes) degree integrated into the BSc curriculum from Year 2 onwards

Students are required to complete one Science major out of the 7 intensive Science majors as their primary major for the BSc degree:

- Biological Sciences (Intensive)
- Chemistry (Intensive)
- Ecology & Biodiversity (Intensive)
- Geology (Intensive)
- Mathematics (Intensive)
- Molecular Biology & Biotechnology (Intensive)
- Physics (Intensive)
• Students are expected to have 1-year abroad experience in a university for exchange/visiting study and/or conducting research project (e.g. Summer Research Fellowship, Overseas Research Fellowship) in either Year 2 or 3.

• Students have to achieve a **CGPA of 3.6 or above at the end of Year 2** to remain enrolled in this dual degree programme, or else they have to switch to the 6901 BSc programme.
The BSc Degree (240 credits)
• Students have to pass at least 240 credits, equivalent to 40 6-credit courses, which comprises:

(i) UG5:
  ➢ 2 English courses and 1 Chinese course for university language requirements (18 credits)
  ➢ 4 common core courses, including one course from each Area of Inquiry (24 credits)
  ➢ any other non-credit bearing courses as required (0 credit)

(ii) Intensive Science major:
  ➢ 24 - 25 courses for the intensive Science major including 2 Science Foundation courses, Disciplinary courses and capstone course(s) (144 - 150 credits)
  ➢ A choice of 8 - 9 courses as elective courses, or to fulfil the requirements of a minor (36-48 credits)
The MRes Degree (63 credits)

- Students must complete at least 63 credits, including one compulsory course on research ethics, i.e. INRE6033 Research Ethics for Graduate Students (Faculty of Science) (3 credits), 18 credits of Faculty-offered Research Postgraduate courses, and 42 credits of a research project, i.e. INRE7999 Research Project.

- The project report of the research project will be in the form of a literature review paper and an original research paper in the relevant field.

- Students are expected to take INRE6033 in Year 2 and the other postgraduate courses of the MRes component starting from the Semester 1 of Year 3.
Sample study path for BSc&MRes students

STUDY PATH

University Education
(36 credits - non-credit bearing requirement)

7 Intensive Majors

- Biological Sciences (96 credits)
- Chemistry (96 credits)
- Geology (96 credits)
- Economics & Biodiversity (96 credits)
- Physics (96 credits)

Elective Courses
(54 - 60 credits)

Year 1
72 credits

Year 2
72 credits

Year 3
60 credits

Year 4
36 credits

Year 4 Summer Semester
Year 5 Summer Semester

Miscellaneous
(63 credits)

Total no. of credits: 383

Research Ethics course (2 credits)
Special tutorials by Grand Masters exclusive for this programme
All opportunities available in our flagship Young Scientist Scheme (YSS) including:

- Entrance Scholarship
- Cambridge "Trac" 
- Summer Research Fellowship
- Overseas Research Fellowship
- Research project (24 credits)
- Research postgraduate course (18 credits)

- International exchange studies

*Students are usually expected to spend the summersemester in Year 4 or the first semester in Year 5 to complete the research project for MRes.
## Sample Study Plans for BSc&MRes Students

### Sample A
For studying within the normative study period

**A. Sample study plan for studying within the normative study period**

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
<th></th>
<th>YEAR 2</th>
<th></th>
<th>YEAR 3</th>
<th></th>
<th>YEAR 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td>MRes</td>
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<tr>
<td>Semester 1</td>
<td>36</td>
<td>0</td>
<td>36</td>
<td>3</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Semester 2</td>
<td>36</td>
<td>0</td>
<td>36 (optional exchange study^)</td>
<td>0</td>
<td>30 (optional visiting study^)</td>
<td>0</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Summer Semester</td>
<td>0 (optional SRF^)</td>
<td>0 (optional ORF^)</td>
<td>0</td>
<td>12 (optional overseas summer study^)</td>
<td>0</td>
<td>0</td>
<td></td>
<td>42 (research project)</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>0</td>
<td>72</td>
<td>3</td>
<td>60</td>
<td>18</td>
<td>36</td>
<td>42</td>
</tr>
</tbody>
</table>

**Total**

|                |        |          |        |          | 72     | 75       | 78     | 78       |
**Sample Study Plans for BSc&MRes Students**

**Sample B**

For top performing BSc students who opt for BSc&MRes in Year 3

| B. *Sample study plan for top performing BSc students who opt for the BSc&MRes programme in Year 3* |
|---|---|---|---|---|
| **YEAR 1** | **YEAR 2** | **YEAR 3** | **YEAR 4** |
| BSc | BSc | BSc | MRes | BSc | MRes |
| **Semester 1** | | | | |
| 36 | 36 | 12 | 21 | 18 | 42 (research project) |
| **Semester 2** | | | | |
| 36 | 36 (optional exchange study^) | 36 (optional visiting study^) | 0 | 18 |
| **Summer Semester** | | | | |
| 0 | 0 (optional SRF/ORF^) | 12 (optional overseas summer study^) | 0 | 0 |
| **Total** | 72 | 72 | 60 | 21 | 36 | 42 |
| 81 | 78 |

Note: A small number of top-performing BSc students in the 6901 BSc programme will have the opportunity to join this integrated programme under stringent criteria. Eligible BSc students can apply for opt in at the end of their Year 2 study. Eligibility includes having completed 144 credits, and achieved **CGPA of 4.0** or above at the end of Year 2.
## Sample Study Plans for BSc&MRes Students

### Sample C
For studying beyond normative study period (completion in 4.5 years)

*Sample study plan for students who study beyond the normative study period (completion of study in 4.5 years)*

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
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<tbody>
<tr>
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<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
</tr>
<tr>
<td>Semester 1</td>
<td>36</td>
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<td>30</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Semester 2</td>
<td>30</td>
<td>0</td>
<td>36</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
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<td></td>
<td>66</td>
<td>69</td>
<td>66</td>
<td>66</td>
<td>66</td>
</tr>
</tbody>
</table>

*where:*
- BSc: Bachelor of Science
- MRes: Master of Research
- SRF^: (optional) SRF
- ORF^: (optional) ORF
- (research project)

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*Note:* The plan assumes a completion period of 4.5 years.
# Sample Study Plans for BSc&MRes Students

## Sample D

For studying beyond normative study period (completion in 5 years)

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
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<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
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<td>BSc</td>
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<td>BSc</td>
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<td></td>
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<tr>
<td>1</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>0</td>
<td>30 (optional exchange study^)</td>
<td>0</td>
<td>30 (optional visiting study^)</td>
</tr>
<tr>
<td>Summer Semester</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 (optional SRF^)</td>
<td>0</td>
<td>0</td>
<td>0 (optional ORF^)</td>
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</tr>
<tr>
<td>Total</td>
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<td>0</td>
<td>60</td>
<td>3</td>
<td>54</td>
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<p>| | | | | | |</p>
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<td>60</td>
<td>63</td>
<td>60</td>
<td>60</td>
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</tbody>
</table>
## Sample Study Plans for BSc&MRes Students

### Sample E
For students who switch back to BSc in Year 3 and graduate in 3.5 years

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
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<th>YEAR 2</th>
<th></th>
<th>YEAR 3</th>
<th></th>
<th>YEAR 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td>MRes</td>
<td>BSc</td>
<td></td>
<td>BSc</td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>36</td>
<td>0</td>
<td>36</td>
<td>3</td>
<td>36</td>
<td></td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Semester 2</td>
<td>36</td>
<td>0</td>
<td>36 (optional exchange study(^\wedge))</td>
<td>0</td>
<td>30 (optional visiting study(^\wedge))</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Semester</td>
<td>0 (optional SRF(^\wedge))</td>
<td>0</td>
<td>0 (optional ORF(^\wedge))</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
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<td>72</td>
<td>3</td>
<td>66</td>
<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

\(^\wedge\) indicates optional modules.
Sample Study Plans for BSc&MRes Students

Notes to the sample study plans:

* The sample study plans are for reference only. Students can take different number of credits in each semester as long as they can fulfill the minimum total number of credits required upon their graduation.

^ Summer Research Fellowship, Overseas Research Fellowship, exchange study and visiting study are optional overseas opportunities that students can participate. The semester and the number of credits shown are for reference only.
BSc&MRes Graduation Requirements
(For students admitted in 2021-22 and thereafter)

• Pass not fewer than a total of 303 credits, consisting of not fewer than 240 credits for the BSc degree and 63 credits for the MRes degree, in the manner specified in these regulations and the syllabuses.

• For the completion of the BSc degree, students shall:
  ➢ satisfy the requirements prescribed in UG5 of the Regulations for First Degree Curricula, except that in the case of the Common Core Curriculum, only 24 credits shall be required, with one course from each Area of Inquiry; and
  ➢ take and pass not fewer than 240 credits, comprising 144 credits (or a higher credit requirement by the accredited bodies) of Science courses including all required courses in the intensive major programme of the BSc degree curriculum.
# UG5 specifies that students have to successfully complete:

• **12 credits in English language enhancement**, including 6 credits in Core University English [i.e. CAES1000 (taken in Year 1)] and 6 credits in an English in the Discipline course [i.e. CAES9820 Academic English for Science Students OR CAES9821 Professional and Technical Communication for Mathematical Sciences (taken in Year 2)];

• **6 credits in Chinese language enhancement** [i.e. CSCI9001 Practical Chinese for Science Students (taken in Year 3)];

• **24 credits of courses in the Common Core Curriculum**, with one course from each Area of Inquiry (Note: Common Core courses shall be completed normally within the first three years of the BSc study and cannot be extra taken as free electives); and

• a **capstone experience** as specified in the syllabuses of the degree curriculum; and

• any other **non-credit bearing courses** as required.

• For the completion of the MRes degree, students shall:
  - satisfy the requirements prescribed in TPG6 of the Regulations for Taught Postgraduate Curricula;
  - take and pass not fewer than 63 credits, including 21 credits of Research postgraduate courses and 42 credits of research project as prescribed in the syllabus;
  - satisfy the examiners in the courses by continuous assessments and/or by written examinations; and
  - complete and presented a satisfactory research report on an approved research project. The examiners may also prescribe an oral examination.
Meet our Grand Masters

Prof. Chi Ming CHE
Zhou Guangzhao Professor in Natural Sciences, Head and Chair Professor of Chemistry

Prof. Vivian YAM
Philip Wong Wilson Wong Professor in Chemistry and Energy, and Chair Professor of Chemistry

Prof. Wang YAO
Chair Professor of Physics

Prof. Ngai Ming MOK
Edmund and Peggy Tse Professor of Mathematics, Director of Institute of Mathematical Research, and Chair Professor of Mathematics

Prof. Guochun ZHAO
Chair Professor of Earth Sciences

Prof. Alice WONG
Associate Vice-President (Research), and Professor of School of Biological Sciences