REGULATIONS FOR THE DOUBLE DEGREE OF BACHELOR OF EDUCATION (BEd) AND BACHELOR OF SCIENCE (BSc)

These regulations apply to students admitted to the Bachelor of Education and Bachelor of Science (BEd&BSc) double degree curriculum in the academic year 2019-20 and thereafter. See also General Regulations and Regulations for First Degree Curricula.

The degrees of Bachelor of Education and Bachelor of Science (BEd&BSc) are awarded for the satisfactory completion, on a full-time basis, of prescribed programmes.

ESC1 Admission to the degrees

To be eligible for admission to the degrees of Bachelor of Education and Bachelor of Science, candidates shall

- (a) comply with the General Regulations;
- (b) comply with the Regulations for First Degree Curricula; and
- (c) satisfy all the requirements of the curriculum in accordance with these regulations and the syllabuses.

ESC2 Length of curriculum

The curriculum for the degrees of Bachelor of Education and Bachelor of Science shall normally require ten semesters of full-time study, extending over not fewer than five academic years, and shall include any assessment to be held during and/or at the end of each semester. Candidates shall not in any case be permitted to extend their studies beyond the maximum period of registration of eight academic years, unless otherwise permitted or required by the Board of Studies in Bachelor of Education and Bachelor of Science.

ESC3 Selection of courses

- (a) Candidates shall select their courses in accordance with these regulations and the guidelines specified in the syllabuses before the beginning of each semester. Changes to the selection of courses may be made only during the add/drop period of the semester in which the course begins, and such changes shall not be recorded on the transcript of the candidate. Requests for changes after the designated add/drop period of the semester shall not normally be considered.
- (b) Withdrawal from courses beyond the designated add/drop period will not be permitted, except for medical reasons approved by the Board of Studies.

ESC4 Curriculum requirements

(a) To complete the curriculum, candidates shall follow instruction in the syllabuses prescribed and

- (i) satisfy the requirements prescribed in UG5 of the Regulations for First Degree Curricula;
- (ii) complete successfully not fewer than 300 credits in the manner specified in these regulations and the syllabuses, comprising:
 - 96 credits in one of the approved Science Majors,
 - 120 credits in Professional Core (Science Education), including 24 credits in capstone experience¹,

¹ This integrated capstone experience fulfills the requirements for both BEd and BSc degree curricula.

- 18 credits in language enhancement courses, including 6 credits in Core University English¹, 6 credits in English in the Discipline and 6 credits in Chinese language enhancement²,
- 24 credits of courses in the Common Core Curriculum, including one course from each Area of Inquiry, and
- 42 credits in electives.
- (b) Candidates shall normally be required to take not fewer than 24 credits nor more than 30 credits in any one semester (except the summer semester) unless otherwise permitted or required by the Board of Studies, or except in the last semester of study when the number of outstanding credits required to complete the curriculum requirements may be fewer than 24 credits.
- (c) Candidates may, of their own volition, take additional credits not exceeding 6 credits in each semester, and/or further credits during the summer semester, accumulating up to a maximum of 72 credits in one academic year. With the special permission of the Board of Studies, candidates may exceed the annual study load of 72 credits in a given academic year provided that the total number of credits taken does not exceed the maximum curriculum study load of 360 credits for the normative period of study specified in the curriculum regulations, save as provided for under ESC4(d).
- (d) Where candidates are required to make up for failed credits, the Board of Studies may give permission for candidates to exceed the annual study load of 72 credits provided that the total number of credits taken does not exceed the maximum curriculum study load of 576 credits for the maximum period of registration specified in these regulations.

ESC5 Advanced standing and credit transfer

- (a) Advanced standing may be granted to candidates in recognition of studies completed successfully in an approved institution of higher education elsewhere in accordance with UG2 of the Regulations for First Degree Curricula. Credits granted for advanced standing shall not be included in the calculation of the GPA but will be recorded on the transcript of the candidate.
- (b) Candidates may, with the approval of the Board of Studies, transfer credits for courses completed at other institutions at any time during their candidature. The number of transferred credits will be recorded on the transcript of the candidate, but the results of courses completed at other institutions shall not be included in the calculation of the GPA. The number of credits to be transferred shall not exceed half of the total credits normally required under the degree curricula of the candidates during their candidature at the University.

ESC6 Assessment and grades

(a) Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any combination of coursework, written examinations and/or other assessable activities. Only passed courses will earn credits. Grades shall be awarded in accordance with UG8 of the Regulations for First Degree Curricula.

¹ Candidates who have achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement, and Core University English is optional. Those who do not take this course should take an elective course in lieu, see Regulation UG 6.

² Candidates who have not studied the Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take CEDU9007 may apply for exemption and take a creditbearing Cantonese or Putonghua language course offered by the School of Chinese (especially for international and exchange students) or take an elective in lieu. Candidates from the Mainland shall take CUND9002 Practical Chinese and Hong Kong Society or CUND9003 Cantonese for Non-Cantonese Speaking Students.

- (b) Courses in which candidates are given an F grade shall be recorded on the transcript of the candidate, together with the new grade if the candidate is re-examined as a second attempt or retakes the failed course. All failed grades shall be included in calculating the GPA and shall be taken into account for the purposes of determining eligibility for award of the BEd and BSc degrees, honours classification and whether a candidate is discontinued from studies.
- (c) Candidates shall not be permitted to repeat a course for which they have received a D grade or above for the purpose of upgrading.
- (d) There shall be no appeal against the results of examinations and all other forms of assessment.

ESC7 Absence from examination

Candidates who are unable, because of illness or other acceptable reason, to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held before the beginning of the First Semester of the following academic year. Any such application shall be made within two weeks of the first day of the candidate's absence from any examination. Any such supplementary examination shall be part of that academic year's examinations, and the provisions made in these regulations for failure at the first attempt shall apply accordingly.

ESC8 Retaking / re-examination of failed course(s)

(a) Candidates who have failed to satisfy the examiners in course(s), but have

- completed successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where candidates are not required to take such a number of credits in the two given semesters; and
- achieved an average Semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester),

shall be required, as specified by the relevant Boards of Examiners:

- (i) to undergo re-assessment(s)/re-examination(s) in the failed course(s) to be held no later than the end of the following semester (not including the summer semester); or
- (ii) to re-submit failed coursework, without having to repeat the same course of instruction; or
- (iii) to repeat the failed course(s) by undergoing instruction and satisfying the assessments; or
- (iv) for elective course(s), to take another course in lieu and to satisfy the assessment requirements.
- (b) Candidates shall not be permitted to retake a failed course or present themselves for reexamination as a second attempt if they have otherwise satisfied all the requirements stipulated in these regulations for the award of the BEd and BSc degrees.

ESC9 Failure in re-examination

- (a) Candidates who have failed to satisfy the examiners at re-assessment(s)/re-examination(s), granted under Regulation ESC8, of Professional Core (Science Education) course(s) offered by the Faculty of Education shall:
 - (i) if these courses total *not more* than 12 credits, normally be permitted to progress to the following year of study and to present themselves for re-examination, in any prescribed form of examination; or
 - (ii) if these courses total *more* than 12 credits, be recommended for discontinuation of their studies as stipulated under Regulation ESC10(d).

(b) Candidates who have failed to satisfy the examiners at a supplementary examination, granted under Regulation ESC7, shall be permitted to present themselves for re-assessment, in accordance with Regulation ESC8, as directed by the Boards of Examiners.

ESC10 Discontinuation

Unless otherwise permitted by the Board of Studies, candidates shall be recommended for discontinuation of their studies, if they have:

- (a) failed to complete successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where candidates are not required to take such a number of credits in the two given semesters; or
- (b) failed to achieve an average Semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester); or
- (c) failed in Professional Practicum in any year; or
- (d) failed to satisfy the examiners at re-assessment(s)/re-examination(s) of Professional Core (Science Education) course(s) offered by the Faculty of Education, granted under Regulation ESC8, of more than 12 credits; or
- (e) exceeded the maximum period of registration specified in Regulation ESC2.

ESC11 Award of degrees and honours classifications

- (a) To be eligible for the award of the degrees of Bachelor of Education and Bachelor of Science, candidates shall have successfully completed the curriculum as stipulated under Regulation ESC4.
- (b) Honours classifications for the degrees of Bachelor of Education and Bachelor of Science shall be awarded in five divisions: First Class Honours, Second Class Honours Division One, Second Class Honours Division Two, Third Class Honours, and Pass. The classification of honours shall be determined by the Boards of Examiners for the degrees in accordance with the following Graduation GPA scores (GGPA) stipulated in UG9(a) of Regulations for First Degree Curricula, with all courses taken (including failed courses, but not including courses approved by the Senate graded as 'Pass', 'Fail' or 'Distinction') carrying weightings which are proportionate to their credit values⁸:

<u>Class of honours</u>	<u>GGPA range</u>
First Class Honours	3.60 - 4.30
Second Class Honours	(2.40 - 3.59)
Division One	3.00 - 3.59
Division Two	2.40 - 2.99
Third Class Honours	1.70 - 2.39
Pass	1.00 - 1.69

- (c) Honours classification may not be determined solely on the basis of a candidate's Graduation GPA and the Boards of Examiners for the degrees may, at their absolute discretion and with justification, award a higher class of honours to a candidate deemed to have demonstrated meritorious academic achievement but whose Graduation GPA falls below the range stipulated above of the higher classification by not more than 0.1 Grade Point.
- (d) A list of candidates who have successfully completed all degree requirements shall be posted on Faculty notice boards.

SYLLABUSES FOR THE DOUBLE DEGREE OF BACHELOR OF EDUCATION AND BACHELOR OF SCIENCE

Candidates are required to complete courses totaling not fewer than 300 credits comprising:

- 96 credits in one of the approved Science Majors,
- 120 credits in Professional Core (Science Education), including 24 credits in capstone experience,
- 18 credits in language enhancement courses, including 6 credits in Core University English¹, 6 credits in English in the Discipline and 6 credits in Chinese language course²,
- 24 credits of courses in the Common Core Curriculum, including one course from each Areas of Inquiry, and
- 42 credits in electives.

FIRST YEAR

Candidates shall normally take 60 credits, comprising:

- 30 credits in one of the approved Science Majors
- 12 credits in Professional Core (Science Education)
- A 6-credit Core University English course
- 12 credits of courses in the Common Core Curriculum, including not more than one course from the same Area of Inquiry

SECOND YEAR

Candidates shall normally take 60 credits, comprising:

- 24 credits in one of the approved Science Majors
- 12 credits in Professional Core (Science Education)
- A 6-credit English in the Discipline course
- 12 credits of courses in the Common Core Curriculum, including not more than one course from the same Area of Inquiry

THIRD YEAR

Candidates shall normally take 60 credits, comprising:

- 24 credits in Science Major courses
- 30 credits in Professional Core (Science Education)³, including 6 credits in Community-based Professional Practicum

¹ Candidates who have achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement, and Core University English is optional. Those who do not take this course should take an elective course in lieu, see Regulation UG 6.

² Candidates who have not studied the Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take CEDU9007 may apply for exemption and take a credit-bearing Cantonese or Putonghua language course offered by the School of Chinese (especially for international and exchange students) or take an elective in lieu. Candidates from the Mainland shall take CUND9002 Practical Chinese and Hong Kong Society or CUND9003 Cantonese for Non-Cantonese Speaking Students.

³ At least 96 credits should be taken for Professional Core from year 3 to 5, among which 18 credits must come from Pedagogy and Pedagogical Content Knowledge courses related to a major discipline (Physics/Chemistry/Biology).

FOURTH YEAR

Candidates shall normally take 60 credits, comprising:

- 12 credits in Science Major courses
- 30 credits in Professional Core (Science Education) courses³, including 12 credits in Professional Practicum⁴
- A 6-credit Chinese language course²

FIFTH YEAR

Candidates shall normally take 60 credits, comprising:

- 6 credits in Science Major courses
- 36 credits in Professional Core (Science Education) courses³, including 12 credits in Professional Practicum⁴

The 42 credits of electives can be taken in Years 2 to 5.

SCIENCE MAJOR (96 credits)

Candidates are required to complete not fewer than 96 credits of courses in any one of the Science Major programmes, including 12 credits in Faculty of Science foundation courses. The Science Major programmes available for candidates admitted to this curriculum include the following:

- 1. Biochemistry
- 2. Biological Sciences
- 3. Chemistry
- 4. Earth System Science
- 5. Ecology & Biodiversity
- 6. Environmental Science
- 7. Food & Nutritional Science
- 8. Geology
- 9. Molecular Biology & Biotechnology
- 10. Physics

Candidate shall follow the syllabuses of the Bachelor of Science and the Major programmes that they have selected.

PROFESSIONAL CORE (SCIENCE EDUCATION) (120 credits)

The Professional Core (Science Education) aims at providing the double degree students with a solid professional training to prepare them as critically aware, responsive and responsible teachers who are both grounded in the theoretical foundations of education and curriculum and well-versed in the practical skills and strategies of teaching professionals in the Science subjects. All through the

⁴ Candidates are required to undertake professional practicum that spans over the second semester in fourth and fifth years, and hence, will not normally be allowed to enroll on non-Education campus-based courses during that period.

curriculum, a strong emphasis is placed on enabling students to make connections between theory and practice, and between classroom issues and the larger social, cultural, economic and political contexts in which classroom practice is situated.

Candidates are required to complete a total of 120 credits in the manner specified below.

Integrated Courses (24 credits)

Becoming a Teaching Professional

Becoming a Teaching Professional is a two-year, broad-based, foundational component aims at developing and building students' identities and capacities as teaching professionals. There are two parts in the component entitled, *Education in a Globalised Society*, and *Understanding Teaching and Learning*. These courses integrate sociological, psychological and pedagogical perspectives on education to explore a range of educational issues and concepts and core pedagogical theories and practices in their major subject area. During the two-year course, students will critically explore these educational issues, concepts and practices through their own experiences and contextualized scenarios, which have been designed to foster reflection, discussion and collaborative problem solving. To engage students in a wider educational community of practice, students will learn both with peers from their major and with students from other subject majors. These courses provide the groundwork for the Years 3-5 pedagogy and educational studies courses.

Year 1

BBED1101. Becoming a Teaching Professional: Education in a Globalized Society 1 (6 credits) BBED1102. Becoming a Teaching Professional: Education in a Globalized Society 2 (6 credits)

These courses aim to enable students to reflect on their personal motivation to become a teacher and examine their understandings and beliefs about teaching and learning as well as teachers and learners in ever-changing multileveled contexts that range from the classroom to the global level. These courses also seek to develop students' ability to engage in critical discussion of issues and concerns arising from teaching and learning in such multileveled contexts. These issues and concerns include common ones that confront all teachers across the school curriculum as well as specific ones that challenge teachers of a particular disciplinary major. Students will be introduced to and engage with philosophical, historical and sociological theories and perspectives on schooling and society, and pedagogical theories and approaches in students' disciplinary major. These courses include experiential and contextualized learning opportunities for students through observational visits to schools and classrooms.

100% continuous assessment by coursework: there will be a variety of assessment tasks, including presentations, online critiques, response papers, group project reports.

Year 2

BBED2101. Becoming a Teaching Professional: Understanding Learning and Teaching 1 (6 credits)

BBED2102. Becoming a Teaching Professional: Understanding Learning and Teaching 2 (6 credits)

These courses build on the understandings and awareness of educational and pedagogical issues and concerns gained in the Year 1 integrated courses and extend and links these to psychological theories and practices of learning, teaching, and child development. These theories are then further linked to

the pedagogical realms of teaching and learning, with particular reference to students' disciplinary major and classroom pedagogy. The interconnections amongst the philosophical, sociological, psychological and pedagogical realms are brought to light and critically explored through problemsolving tasks, field experiences, and critical case studies. The course aims to nurture the development of critically-aware, responsive and responsible educators for Hong Kong schools.

100% continuous assessment by coursework: there will be a variety of assessment tasks, including presentations, online critiques, response papers, group project reports.

Pedagogy and Pedagogical Content Knowledge Courses (42 credits)

Year 3

BBED3261. Teaching and Learning of Science I (6 credits)

This course recapitulates Education Professional Core courses through examining how those courses are relevant to the teaching and learning of school science. Various instructional strategies that promote active and meaningful learning of science among school students in Hong Kong context will be explored. While the course aims to develop students' capability in planning science lessons with the use of teachers' questioning, teachers' modelling, group works *etc.*, it will also highlight the need to consider school students' prior conceptions and alternative conceptions in the planning and implementation of learning and teaching activities. The emphasis of the course is how to facilitate and bring about learning based on the existing knowledge and interest of school students. 100% continuous assessment by coursework.

Year 3 to Year 5

Candidates are required to take 18 credits from the courses of a major discipline (Physics/Chemistry/Biology) from year 3 to year 5 studies. Candidates may take courses of another major discipline as elective in year 3 and year 4 studies.

Biology Discipline

BBED3271. Teaching and Learning Science II – Biology (6 credits)

This course builds upon 'Teaching and Learning of Science I', and extends the discussion to teaching and learning of Biology. It examines issues such as pupils' conceptual development, and those specific to teaching and learning of the subject.

100% continuous assessment by coursework.

BBED3371. Practical Work and Scientific Inquiry – Biology (6 credits)

This course aims at developing students' competence in making use of practical work and scientific inquiry in teaching Biology. The nature and different types of practical activities will be explored. The course also scrutinizes the practical activities commonly used in teaching the subject at schools. At the end of the course, students are expected to be able to make good use of practical activities in enhancing pupils' conceptual understanding in science, their inquiry skills and attitudes towards inquiry.

100% continuous assessment by coursework.

BBED3374. Curriculum and Assessment – Biology (6 credits)

This course builds upon curriculum and assessment issues discussed in the Education Professional Core courses. It aims at further enhancing students' understanding of the relevant issues, and developing their competence in school-based curriculum development by taking into consideration the nature of pupils, continuity and coherence between primary and secondary levels of studies, and between other subjects such as Mathematics and English. International comparative studies of pupils' achievement in science will also be examined to shed light on curriculum development and assessment reforms.

100% continuous assessment by coursework.

Chemistry Discipline

BBED3272. Teaching and Learning Science II – Chemistry (6 credits)

This course builds upon 'Teaching and Learning of Science I', and extends the discussion to teaching and learning of Chemistry. It examines issues such as pupils' conceptual development, and those specific to teaching and learning of the subject.

100% continuous assessment by coursework.

BBED3372. Practical Work and Scientific Inquiry – Chemistry (6 credits)

This course aims at developing students' competence in making use of practical work and scientific inquiry in teaching Chemistry. The nature and different types of practical activities will be explored. The course also scrutinizes the practical activities commonly used in teaching the subject at schools. At the end of the course, students are expected to be able to make good use of practical activities in enhancing pupils' conceptual understanding in science, their inquiry skills and attitudes towards inquiry.

100% continuous assessment by coursework.

BBED3375. Curriculum and Assessment – Chemistry (6 credits)

This course builds upon curriculum and assessment issues discussed in the Education Professional Core courses. It aims at further enhancing students' understanding of the relevant issues, and developing their competence in school-based curriculum development by taking into consideration the nature of pupils, continuity and coherence between primary and secondary levels of studies, and between other subjects such as Mathematics and English. International comparative studies of pupils' achievement in science will also be examined to shed light on curriculum development and assessment reforms.

100% continuous assessment by coursework.

Physics Discipline

BBED3273. Teaching and Learning Science II – Physics (6 credits)

This course builds upon "Teaching and Learning of Science I", and extends the discussion to teaching and learning of Physics. It examines issues such as pupils' conceptual development, and those specific to teaching and learning of the subject.

100% continuous assessment by coursework.

BBED3373. Practical Work and Scientific Inquiry – Physics (6 credits)

This course aims at developing students' competence in making use of practical work and scientific inquiry in teaching Physics. The nature and different types of practical activities will be explored. The course also scrutinizes the practical activities commonly used in teaching the subject at schools. At the end of the course, students are expected to be able to make good use of practical activities in enhancing pupils' conceptual understanding in science, their inquiry skills and attitudes towards inquiry.

100% continuous assessment by coursework.

BBED3376. Curriculum and Assessment – Physics (6 credits)

This course builds upon curriculum and assessment issues discussed in the Education Professional Core courses. It aims at further enhancing students' understanding of the relevant issues, and developing their competence in school-based curriculum development by taking into consideration the nature of pupils, continuity and coherence between primary and secondary levels of studies, and between other subjects such as Mathematics and English. International comparative studies of pupils' achievement in science will also be examined to shed light on curriculum development and assessment reforms.

100% continuous assessment by coursework.

Year 5

BBED5263. Nature of Science and Socioscientific Issues (6 credits)

This course aims to promote student's understanding of the nature of science and technology. Traditional views of science will be compared with the ideas of Popper, Lakatos and Kuhn. Historical and contemporary development of science will be used as cases through which such an understanding is developed. In relation to the recent development of science, the nature and controversies of socioscientific issues will be explored. At the end of this course, students are expected to be able to draw upon and integrate epistemological, historical and socio-cultural aspects of science in the teaching of subject knowledge and the handling of controversial socioscientific issues in the classroom.

100% continuous assessment by coursework.

BBED5264. Language and Science Learning (6 credits)

This course will examine the role of language in authentic scientific practice, in the construction of science, in science communication/journalism and in the teaching & learning of school science. Scientific language as a genre and challenges school students face in learning science through language will be explored. A specific challenge Hong Kong students face is that they, as English Language Learners (ELL), may learn science in English. At the end of the course, students are expected to be able to devise some strategies in relation to reading, writing and talking that facilitate school students' learning of science, learning about science and doing science. 100% continuous assessment by coursework.

BBED5363. Becoming a Scholarly Teacher (6 credits)

This course develops students' knowledge and skills in conducting classroom research. It will address the relationship between educational research and teacher professional development. Paradigms of educational research, research methodologies and research ethical issues will be examined. At the end of the course, students should be able to design and conduct a small-scale classroom research study that fosters their professional development. 100% continuous assessment by coursework.

Educational Studies Core Courses (18 credits)

Year 3

BBED3002. Learning Support 1 - Catering for Diverse Learning Needs (6 credits)

While there are numerous benefits, inclusive schools face many challenges in educating students with diverse learning needs. This focus on inclusive education is an international concern and one that the Hong Kong government has embraced since 1997. Particular emphasis is given to supporting students with different types of disabilities, such as specific learning difficulties, intellectual disabilities, autism spectrum disorder, and ADHD. The impact of disability on learning will also be examined, and attention will be given to teachers' pedagogical knowledge and classroom management skills in response to students' diverse learning needs in the classroom. Collaborative teamwork with other professionals will be emphasized as these could contribute to successful student outcomes. Current issues and trends in special education within both international and Hong Kong contexts will be explored.

100% continuous assessment by coursework: assessment tasks will include issue-based problemsolving exercises and a reflective essay on each student's topic of interest.

Year 4

BBED4001. Social and Philosophical Foundations of Education (6 credits)

This course examines educational problems from the perspectives of classic and contemporary figures in sociology and philosophy. These two disciplines play complementary roles in clarifying both the conceptual foundations and the empirical assumptions that serve as the foundation of much debate over the means and ends of education. Students will engage deeply with major texts in these two fields and apply them to problems currently facing educators in Hong Kong and the rest of the world. 100% continuous assessment by coursework: the course would employ a range of teaching and learning activities, and assessment tasks. They include analysis of selected issues, student presentation, and/or discussion in class and e-forum.

BBED4003. Learning Support 2 - Understanding and Guiding Whole-Person Development (6 credits)

This course reviews major theories, concepts and research on child and adolescent development and behaviour, and examines ways of guiding, counselling and supporting them in their whole-person development in school settings. The course will explore: (i) major theories of child and adolescent development; (ii) the interdependency of different aspects of development, i.e., physical, cognitive, social-emotional, and peer relationships; (iii) basic concepts and strategies in developmental, preventive and remedial guidance; (iv) the roles of teachers in guidance and counselling; (v)

knowledge and strategies in supporting students with mental health issues; and (vi) guiding students on career and life planning.

100% continuous assessment by coursework. The assessment tasks will include issue-based problemsolving exercises and a reflective essay on a self-selected topic which is relevant to the course.

Educational Studies Elective Courses (6 credits)

Year 5

Candidates are required to complete not fewer than 6 credits from the courses listed below in Year five. Some of the courses listed below may not be offered every year.

BBED5021. Professional Ethics in Teaching (6 credits)

This elective will enable participants to explore a range of ethical issues which confront them as teachers in teaching, assessment, and evaluation practice. It will draw on ethical theories and professional codes of conduct to enable them to develop an understanding of their professional responsibilities as teachers and identify effective strategies for dealing appropriately with commonly occurring ethical dilemmas.

100% continuous assessment by coursework: the course would employ a range of teaching and learning activities, and assessment tasks. They include analysis of selected issues, student presentation, and/or discussion in class and e-forum.

BBED5025. Policy, Improvement, and Leadership in Schools (6 credits)

This course will investigate the themes of policy, improvement, and leadership in schools (PILS). Students will examine the roles of teachers and administrators in leadership and in the interpretation and enactment of school reform and school improvement policies. Students will also examine the school- and system-level factors necessary for improvement to take place. The course will utilize cases, theory, and empirical research that take on these themes, within and beyond in Hong Kong. With a focus on underserved student populations, PILS equips teachers with a deep understanding of how teachers and teaching are situated in broader aims of improving educational opportunity.

100% continuous assessment by coursework.

BBED5026 Diversity, Culture, and Justice in Education (6 credits)

This course introduces students to asset and equity based frameworks for teaching with social justice as an aim. Students will reflect on their beliefs regarding diversity and culture, and explore their identifications and experiences in relation to categories including gender, socio-economic status, ethnicity, ability/disability, and LGBTI status. Theoretical frameworks that challenge deficit views of minoritized and marginalized communities will be explored, so that students can instead see diversity and culture as resources for reshaping the following: curriculum and pedagogy, interactions with students and families, and teachers' identities. Possible challenges and dilemmas in adopting such frameworks will be discussed.

100% continuous assessment by coursework

BBED5027 Education for Sustainable Development: Schools as Community Centers (6 credits)

Drawing inspiration from UN Sustainable Development Goals, this course will examine the role of schools to achieve sustainability in local contexts: Education for Sustainable Development (ESD). Students will re-evaluate the current model of development, while envisioning new models of development that sustain not only economy but also cultural diversity, social equality, and natural environment. Students will be invited to examine the relationship between schools and communities. Attention will then be paid on how schools could introduce and implement programmes and projects that cultivate the knowledge, skills and values essential for realizing the goal of sustainable community development. Students will also deliberate on how the vision of ESD could be integrated into their professional identity.

100% continuous assessment by coursework

Community-based Professional Practicum (6 credits)

Recognising that learning and experience are inextricably connected, all incoming double degree UG students from 2019-20 are required to successfully fulfill the requirements of at least one Experiential Learning activity through a Community-based Professional Practicum (CPP) project before the start of their fourth year. CPP is based on the premise that teaching and learning cannot only be restricted to classroom settings and teachers-to-be need to critically engage with social and global issues that impact on education including inequality, culture, history, and civic mindedness. All the CPP projects offered each year are aimed at enhancing student teachers' understanding of real-world environments, expanding their capacity to integrate theory and practice and broadening their local and global outlook.

The settings for our CPP projects may be local (Hong Kong), overseas and on the Mainland. All are aimed at pushing our students out of their comfort zones and enabling them to foster skills and values that are relevant to a career in education. These include transferrable skills like creativity, innovation, time management, communication and collaboration, problem solving, critical thinking and leadership. Nearly all our CPP projects include carefully organized input sessions and are taught by colleagues from across the Faculty. Each contains an important reflective component as reflective practice is at the heart of good teaching and learning. Most CPP projects are open to students from different disciplines to foster cross-disciplinary collaboration.

Students are required to undertake 6 credits from a list of education related experiential learning courses (or CPP projects) offered by the Faculty of Education before the start of Year 4. The courses listed below may not necessarily be offered every year, and the number and nature of courses in this pool may change. Other community-based learning opportunities may be disseminated throughout the year by the Faculty Experiential Learning team.

BBED6742 An Experiential Approach to Learning and Teaching in a Regional Educational Institution (6 credits)

BBED6747. Developing the Competence in STEM Education (6 credits)

BBED6787 Ocean Park Experiential Learning Project (6 credits)

BBED6790 Developing Resilient Student Teachers by Nurturing Resilience in Vulnerable Groups in Cambodia (6 credits)
BBED6792 Sustainable Development in Tibet (6 credits)
BBED6794 Fostering 4Cs (Creativity, Complex Problem-Solving Skills, Communication and Collaboration skills) through Engaging STEM/STEAM-related Experiential Learning Activities (6 credits)
BBED6795 Exploring the Past, Present, and Future of Myanmar (6 credits)
BBED6796 Cultural Heritage and Information in the Field (6 credits)
BBED6797 Youth Mentoring for Social Justice and Inclusion
BBED6798 Design Thinking in Action (6 credits)

BBED6742 An Experiential Approach to Learning and Teaching in a Regional Educational Institute (6 credits)

This course will develop the participants' knowledge, skills and beliefs of learning and teaching in an overseas context (Thailand). It will enhance students' understanding of the social, cultural and political factors affecting education, and facilitate reflections on their skills and beliefs about teaching and learning in multileveled contexts that range from the classroom to the global level. Students will be encouraged to work in pairs or in small groups to: (a) analyse issues related to science education in the contexts of Hong Kong and Thailand, (b) collaborate on the development of curriculum materials for teaching and cultural exchanges in Thailand, (c) respond to challenges brought by the socio-cultural differences in the two contexts. All participants will be supported by the course tutors, their peers and the collaborating institution in Thailand.

100% continuous assessment by coursework.

BBED6747. Developing the Competence in STEM Education (6 credits)

This course will provide students structured learning experience in becoming STEM educators. The multiple-track approach will allow students to participate in activities they find a role to play in STEM education. Students will be able to: (a) select a track to work with specific community partner(s); (b) better understand the meanings of STEM and STEM education through interactive seminars/workshops/site visits; and (c) develop and try out the materials that would be useful for sustainable STEM education in local schools or in non-academic settings. 100% continuous assessment by coursework and participation.

BBED6787 Ocean Park Experiential Learning Project (6 credits)

The course will offer students the chance to undertake experiential learning through extended collaboration with Ocean Park's Education and Discovery Team, Hong Kong. By engaging in this project, students will expand their understanding and practice as future education professionals beyond the formal classroom and school context. Students will be assigned to work in pairs/groups to a) identify and analyse real-life educational needs of Ocean Park, b), carry out an observation of guests' interests through needs analysis c) design pop-up narration offerings for visitors to the Park with a goal of enhancing the in-park guests' experience The final exhibits may be placed on display for visitors and may be used by Ocean Park staff after the course finishes. Students will have the chance to work closely with Ocean Park staff and to contribute their knowledge to the Park's focus on promoting conservation and awareness about endangered species to local school children and visitors (from HK as well as overseas and China). All students who select this course will be mentored by the Ocean Park's Education team and closely supervised under the guidance of faculty members. Students' performance in the course will be evaluated through a variety of means including reports from Ocean Park staff, online reflections, and a multi-media presentation at the end of the project. 100% continuous assessment by coursework. Students from all disciplines and programmes may

apply but must be able to commit all meetings and classes.

BBED6790 Developing Resilient Student Teachers by Nurturing Resilience in Vulnerable Groups in Cambodia (6 credits)

The course sets out to develop a sustainable relationship with a rural school in Cambodia which houses children impacted by trafficking and poverty. The focus will be on co-constructing a curriculum on resilience for the children there with the teachers and school volunteers by adopting a 'train the trainers' model of development. It is found that teachers' resilience enhances their job satisfaction and teaching effectiveness, and at the same time, allows teachers to nurture resilience in their own students to cope with the challenges of the 21st century. The current program highlights one of the key approaches that contextualizes the knowledge of teachers' resilience in working with the vulnerable group and carefully incorporates Kolb's (2015) learning cycle into the program. Student teachers learn to integrate academic theories and actively experiment through continuous observation, trial-and-error and reflection.

Students will attend classes in the second semester and work in teams to design a curriculum on resilience and implement it during summer in Cambodia. 100% continuous assessment by coursework. Students are expected to attend all sessions and be able to commit to the on-site work in Cambodia in summer.

BBED6792 Sustainable Development in Tibet (6 credits)

Tibet has developed rocketing economic growth in the past two decades at the expenses of the ecosystem and environment. Set against this backdrop, this programme aims to bridge this gap by creating a platform for our student educators to learn about the socio-economic landscapes of Tibet and to analyze some of the challenges involved in turning around and sustaining its development. Our student educators will first learn about the theoretical understanding of sustainable development and its relationship to the socio-economic landscapes of Tibet. Then they will work in cross-disciplinary teams to conduct research and put their knowledge into practice – putting forward their ideas of raising social awareness on specific topics (e.g. sustainable tourism, environmental education, health and hygiene) and calling for behavioral changes with the consideration of local culture and limitations in the format of 'TED talk' videos and workshops to school. Through the learning process of knowing about the culture, self and others, students will develop an increased intercultural sensitivity as local and global citizens.

The course together with all input sessions will be organized between June to July and students are required to have full attendance throughout the course. 100% continuous assessment by coursework.

BBED6794 Fostering 4Cs (Creativity, Complex Problem-Solving Skills, Communication and Collaboration Skills) through Engaging STEM/STEAM-related Experiential Learning Activities (6 credits)

The course will develop not only the participants' knowledge, skills and beliefs of learning and teaching of STEM/STEAM-related context (both in Hong Kong and USA), but also enhance their understanding and mastery of the 21st century (4C) skills, that is Creativity, Complex problem solving, Communication and Collaboration skills, in order to succeed in the information age.

Besides attending HKU lectures, students will be guided to work in pairs or in small groups to: (a) analyse the STEM/STEAM-related curriculum in the contexts of Hong Kong and USA, (b) shadow in the Odyssey of the Mind Hong Kong regional tournament in March, (c) collaborate on the development of the 4Cs curriculum materials for teaching to Hong Kong winning school teams who will participate in the Odyssey of the Mind world Finals competition in the Iowa State University in

April, (d) curate booth to promote the unique culture of Hong Kong in USA in May. All participants will be supported by the course tutors, their peers and both regional and international collaborators in the Odyssey of the Mind program.

100% continuous assessment by coursework.

BBED6795 Exploring the Past, Present and Future of Myanmar (6 credits)

Myanmar is a changing country, situated between India and China, with a complex and interesting past. Through a partnership with the China Exploration & Research Society (CERS), this course sets out to introduce students to the past, present, and future of Myanmar through direct engagement with its landscapes, cultural heritage, and people. Students will learn the basics of how archaeological theories and methods enable the study of past societies, and they will gain hands-on experience with digital humanities techniques for documenting ancient remains. This allows us to investigate past uses of spaces and objects in the organization and performance of law and politics, a perspective that can help contextualize the present. Students will also observe and participate in traditional crafts production to learn about daily life and economics in the villages of Myanmar. This experience foregrounds a rights-based comparison of labor conditions and gender dynamics in the present with the past, which we investigate through the objects of the archaeological record. Throughout this interdisciplinary class, students will engage with and interview community members, community leaders, and other stakeholders. Students will consider the role of the law in preserving culture, protecting the environment, and supporting economic opportunities in the community. The class will explore two very different environmental zones of the country that highlight the relationships between landscape and society: the flood plain of the Irrawaddy River, explored while living on a boat, and the resource-rich highlands around Inle Lake. The class culminates with an analysis of the ethics surrounding the roles tourism plays within the modern state of Myanmar and Myanmar's role within the international law framework.

100% continuous assessment by coursework.

BBED6796 Cultural Heritage and Information in the Field (6 credits)

Archaeologists study past cultures through the careful recording of the surveyed or excavated remains of ancient architecture and artifacts. In this class, students will travel to Armenia to participate in summer fieldwork, where they will be exposed to archaeological theories and methods, the digital humanities, and information management in the field. Students will help with digital data collection and experiment with cutting-edge technology such as drones, 3d scanning, cloud computing, and high-precision GPS. This work is contextualized by a critical evaluation of current issues and ethics in cultural heritage and data sharing. Discussion will also focus on teaching the past and engaging the public in cultural heritage and tourism. Several fieldtrips to local sites will provide broad familiarity with the past in Armenia and the Near East. Pre-trip meetings prepare students for the field and a flexible summer program should enable students with varied schedules to attend.

100% continuous assessment by coursework.

BBED6797 Youth Mentoring for Social Justice and Inclusion (6 credits)

This course develops the knowledge, skills, beliefs and awareness needed to be an effective youth mentor and advocate of disadvantaged youth, with the aim of addressing social and educational inequality. The course will enhance students' understandings of the social, economic, cultural and political forces influencing the educational experiences of youth. It will also develop their self-efficacy as an agent of social change through an exploration of critical, inclusive pedagogies. The course integrates regular university-based interactive seminars with an experiential learning component in which each participant mentors a secondary learner, supporting and advocating for the learner academically and socially on a regular basis across two semesters. The course readings include literary, popular and academic texts to enable youth mentors' reflection upon their mentoring relationships and processes, their own social and ideological positions, and their developing identities

as community youth mentors. Participants will receive continuous support and guidance from the course tutor and from peers.

100% continuous assessment by coursework.

BBED6798 Design Thinking in Action (6 credits)

65% of children studying primary schools today will ultimately work in jobs that currently have not yet existed (WEF report 2016). The complex and unpredictable future has created challenges for nurturing student educators for the 21st century. Collaborate with the PolyU Jockey Club 'Operation SoInno', this course aims to nurture social innovative and reflective student educators who can find solutions to real-world problems and generate innovative ideas to create a better future. Our student educators will first learn about the theoretical underpinnings of design thinking and the reflective learning cycles in experiential education. Then they will work in cross-disciplinary teams to put their knowledge into practice – facilitating secondary school students' learning process in subject-based design thinking and helping them to reflect upon themselves as active learners. Student educators will integrate social innovation and humanity through the lens of design thinking and develop important 21st century skills.

100% continuous assessment by coursework.

Professional Practicum (24 credits)

Professional Practicum is a professional requirement that enables students to develop professional teaching competencies within the school environment. Students are required to integrate theory and practice in four domains: Learning and Teaching, Student Development, School Development and Professional Community. Through two years of *Professional Practicum*, students commit themselves to six core professional values: belief that all students can learn, care for students, respect for diversity, commitment and dedication to the profession, collaboration, sharing and team spirit, passion for continuous learning and excellence.

Because this component is conducted in schools and involves direct learning relationships with school students, the student-teachers must comply with the following professional requirements: Student teachers shall conduct themselves professionally during their studies and towards staff and students in schools or other institutions. Student-teachers who exhibit behaviour deemed by the Faculty of Education to be threatening or harmful to school children, teachers, fellow students, or to schools and other institutions participating in the programme, may not be permitted to take, or may be withdrawn from the *Professional Practicum* courses, and hence will not be able to satisfy the programme's professional requirements.

The core aspects of student-teachers' performance in the practicum that will be assessed include but are not limited to the following:

- planning for effective teaching and learning
- knowledge of the target language and its acquisition
- teaching strategies which foster and motivate student learning and meet diverse student needs
- managing learning and interaction in the classroom
- professional orientation

Year 4

BBED4463. Professional Practicum I – Science (12 credits) (Capstone Experience)

Students spend ten weeks in a secondary school carrying out supervised teaching duties in Year 4. 100% continuous assessment by coursework: students will be assessed on the planning and implementation of observed lessons together with their verbal and written reflections on the observed lessons. The development of a teaching and learning portfolio is also a hurdle requirement.

Year 5

BBED5464. Professional Practicum II - Science (12 credits) (Capstone Experience)

Students spend ten weeks in a secondary school carrying out supervised teaching duties in Year 5. 100% continuous assessment by coursework: students will be assessed on the planning and implementation of observed lessons together with their verbal and written reflections on the observed lessons. The development of a teaching and learning portfolio is also a hurdle requirement.

ENGLISH LANGUAGE ENHANCEMENT COURSES (12 credits)

CAES1000. Core University English (6 credits)

(Candidates who have achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement, and Core University English is optional. Those who do not take this course should take an elective course in lieu, see Regulation UG 6.)

The Core University English (CUE) course aims to enhance first-year students' academic English language proficiency in the university context. CUE focuses on developing students' academic English language skills for the Common Core Curriculum. These include the language skills needed to understand and produce spoken and written academic texts, express academic ideas and concepts clearly and in a well-structured manner and search for and use academic sources of information in their writing and speaking. Four online-learning modules through the Moodle platform on academic speaking, academic grammar, academic vocabulary, citation and referencing skills and avoiding plagiarism will be offered to students to support their English learning. This course will help students to participate more effectively in their first-year university studies in English, thereby enriching their first-year experience.

Assessment: 100% continuous assessment

English in the Discipline Course (6 credits)

CAES9423. Academic English for Education Students (6 credits)

This one-semester, 6-credit course will provide the opportunity for Education students to develop their critical reading skills, report writing skills and oral presentation skills for disciplinary studies and academic purposes. Students are required to identify an issue relevant to the discipline of Education and undertake a small scale research project to investigate the problem issue and communicate an argument to an academic audience in writing with appropriate organizational and rhetorical skills. During the process, students need to gather data by means of an interview, perform analysis on any information they obtain, and present their findings orally and in formal report writing. This course will also teach a portfolio of language functions and skills, progressing from descriptive explanatory language to more argumentative language strategies and functions. The course will allow students to practice and apply relevant English skills in the discipline of Education. 100% continuous assessment by coursework: written report, oral presentation and reflective writing.

CHINESE LANGUAGE ENHANCEMENT COURSE (6 credits)

CEDU9007. Practical Chinese for BEd&BSc Students (6 credits)

This course aims to hone the students' Chinese skills for effective professional communication. It introduces the students to techniques of writing different types of practical writings. In addition, topics addressing the style and techniques of reader-based writings and PowerPoint presentations are included to heighten the students' linguistic sensitivity. Drilling practices are also put in place to familiarize the students with the simplified Chinese characters frequently used in the workplace. Assessment: 50% coursework and 50% examination.

CUND9002. Practical Chinese and Hong Kong Society (6 credits)

(for students from the Mainland, and the medium of instruction is Putonghua)

This course is specifically designed for the students from the Mainland. With Putonghua as the medium of instruction, it aims to underscore the characteristic styles and formats of practical Chinese writings in the workplace context in Hong Kong. Topics addressing the rhetorical strategies for reader-oriented professional writings are included to strengthen the students' command of the language. In the "Chinese Characters" component, drilling practices provide ample opportunity for the students to learn to convert simplified characters into their traditional forms. The evolution of Cantonese and the lexical and phonetic systems of this dialect will be explored. The local history and culture of Hong Kong will also be considered. On-site visits are organized to deepen the students' understanding of local traditions and, more importantly, to enhance their ability to appreciate and accept cultural and regional differences.

Assessment: 50% coursework and 50% examination.

CUND9003. Cantonese for Non-Cantonese Speaking Students (6 credits)

(for students from the Mainland, and the medium of instruction is Putonghua)

Through a comparative analysis of Putonghua and Cantonese, this course enables students to learn the characteristics of Hong Kong Chinese, to discover the differences in vocabulary and expression between the Cantonese dialect and Mandarin, to strengthen their communication skills in everyday life, and to have a proper understanding of the culture, traditions and people in Hong Kong. Assessment: 60% coursework and 40% examination.

COMMON CORE CURRICULUM (24 credits)

Candidates are required to complete 24 credits of courses in the Common Core Curriculum, including one course from each Area of Inquiry.

ELECTIVES (42 credits)

Candidates are required to complete 42 credits in electives.

The following are some of the elective courses offered by the Faculty. Not all courses listed below will be offered every year.

BBED6726 Teaching Literature and Language Arts (6 credits)

This course aims to develop an awareness and appreciation of the role of literature in the English Language/Language Arts curriculum and the issues related to using literary texts and other creative texts in the language classroom. It aims to provide students with knowledge of different literary genres and literary techniques and basic methodological strategies for teaching both literature and language through literature. Topics covered include the following: Why teach literature? Why use literature and experience; teaching poetry and using poetry with language learners; teaching and using prose texts; teaching film and how to use film in the classroom; using comics and fairy stories creatively, and the use of popular culture in the language classroom. The course aims at highlighting the relevance of literature and language arts in everyday life and to promote interest in the different aspects covered on the course.

100% continuous assessment by coursework: a range of teaching and learning activities and assessment tasks will be used. These may include in-class group presentations of teaching resources, formative literary portfolios and a lesson planning assignment.

BBED6741. Teaching of General Studies in Primary Schools (6 credits)

This course aims at helping teachers to develop skills in teaching critical thinking through the broad based subject, General Studies, in an integrated and conceptual manner. By introducing the use of different teaching aids, such as ICT and graphic organizer, this course also encourages teachers to become reflective practitioners. In the first part of this course, we will explore some basic skills in classroom practice of teaching and learning in General Studies and its curriculum. In the second part, the class will examine more closely the General Studies curriculum in relation to critical and creative thinking, and the role of General Studies in preparing young adolescents for their further studies. 100% continuous assessment by coursework.

BBED6743. Effective Mathematics Teaching (6 credits)

This course aims to introduce essential concepts and skills in mathematics pedagogy. Students will develop techniques in classroom teaching while making sense of theories and resources in various aspects of mathematics pedagogy, such as explanation and questioning, assessment for learning, dealing with misconceptions and catering for learner diversity. 100% continuous assessment by coursework.

BBED6744. Mathematical Inquiry (6 credits)

In this course, mathematical inquiry will be introduced as a means of learning as well as teaching of mathematics. Students will experience inquiry in different areas of mathematics, within secondary level and beyond, through activities such as problem posing and solving, conjecturing and proving, tinkering with models and representations. While doing so, they will also learn about use of digital and physical tools or resources, and their potential in teaching and learning. 100% continuous assessment by coursework.

BBED6745. Teaching Mathematics Across the Curriculum (6 credits)

In this course, students will explore possibilities of mathematics teaching and learning through its integration with experiences in other curricular areas. Emphasis is put on understanding mathematics in social and scientific contexts. Pedagogical understanding is developed through experiences in cross-curricular activities such as modelling, data-driven explorations, decision making and communication with quantitative information. While doing so, students will also critically evaluate current states and trends in mathematics curriculum development.

100% continuous assessment by coursework.

BBED6746. Developing Concepts and Thinking in Mathematics (6 credits)

This course aims to help students to explore the nature of mathematical concepts and thinking. Students will reflect on their experience as a learner in the process of sensing making, reasoning and co-constructing knowledge in mathematics. By examining origins and development of mathematical ideas in historical-cultural context and individual minds, students will understand means and issues in supporting mathematics learning.

100% continuous assessment by coursework.

BBED6748. STEM Education – Implementing Maker Education at Schools (6 credits)

This course will develop students' knowledge of constructionism and *making* in local STEM education. It will enhance students' understanding of the theory and practice of constructionism and *making* in STEM education, and facilitate reflections on their knowledge and skills about teaching and learning in different school contexts. Students will be encouraged to work in small groups to: (a) analyse issues related to STEM education in local context and (b) collaborate on the implementation of STEM curriculum materials for teaching in local schools. Students' performance in the course will be evaluated through a variety of means including reports from schools, continuous assessment and online reflections as well as an end-of-course multimedia presentation. The course will also invite guest speakers to classes to help students prepare for their projects. 100% continuous assessment by coursework and participation.

Year 5

BBED6782. Dissertation (12 credits)

Research is central to developing knowledge and impacting upon practice in the field of education. This elective enables Education students to undertake prolonged engagement with an approved research topic in education under the supervision of a staff member from the Faculty of Education. The elective aims to develop a rich and interactive research community amongst Education majors and Faculty. The course explores the intersections between research, teaching and learning, and introduces students to research methods and strategies including identifying issues and puzzles in education, synthesising and critiquing literature, research design, data collection, data analysis, and research writing.

The elective is held across three semesters: Semester 2 of the fourth year of study (Year 4), and Semesters 1 and 2 of the fifth year of study (Year 5). In Semester 2 of Year 4, students will participate in a series of interactive workshops that engage students in a research topic of their own choosing and interest, and explores various research objectives, methods and strategies relevant to their topic. Students will receive hands on practice in collecting and analyzing data. At the end of the semester, students will develop and present their research proposal. In Year 5, students will work

closely with their supervisor in refining their proposal, collecting and analyzing data, and writing the research report (dissertation). Students will receive additional ongoing support from course teachers. Students will present their project findings at an undergraduate research conference at the end of Semester Two.

100% continuous assessment by coursework: including research proposal, presentations, and final dissertation.