

Nanyang Technological University  
National Institute of Education  
1 Nanyang Walk  
Singapore 637616  
Republic of Singapore  
Telephone: 67903888  
Fax: 68969274

NTU Reg. No. 200604393R

Dec 2013

## **ENQUIRIES**

For enquiries on admission to initial teacher preparation (ITP) programmes offered by NIE, please email to:

[nieadmtp@nie.edu.sg](mailto:nieadmtp@nie.edu.sg)

You may wish to visit the following NIE homepage for information on the ITP programmes:

<http://www.nie.edu.sg>

Because of the large number of candidates seeking admission, we regret that no telephone or personal enquiries will be entertained.

# CONTENTS

	Page
<b>General Information</b>	
• <a href="#">Introduction</a>	2
• <a href="#">Applications</a>	6
• <a href="#">Matriculation &amp; Registration</a>	7
• <a href="#">Examinations and Assessment of Coursework</a>	8
<b>Academic Structure of B Ed Programme</b>	
• <a href="#">The Academic Unit System</a>	15
• <a href="#">Curriculum Structure</a>	19
• <a href="#">Education Studies</a>	26
• <a href="#">Pedagogical Content Knowledge and/or Inclusive Education</a>	29
• <a href="#">Essential Courses</a>	47
• <a href="#">Language Enhancement and Academic Discourse Skills</a>	50

## INTRODUCTION

The National Institute of Education (NIE) was established on 1 July 1991 as an institute of the Nanyang Technological University (NTU).

### **NIE's Vision**

To be an Institute of Distinction

### **NIE's Mission**

To excel in teacher education and educational research

### **Degree Programmes offered**

Student teachers in the bachelor's degree programmes are registered as undergraduates of the Nanyang Technological University.

The University offers the following degree programmes at the National Institute of Education:

- Bachelor of Arts (Education)  
[B A (Ed)] (full-time)
- Bachelor of Science (Education)  
[B Sc (Ed)] (full-time)
- Bachelor of Education  
[B Ed] (part-time)

All these programmes are administered by the Office of Teacher Education which is committed to developing educational professionals ready to be leaders in the service of learners.

All student teachers come under the purview of the Dean, Teacher Education.

### **Aims of B Ed Programme**

The B Ed (part-time) programme is specially designed for non-graduate primary school teachers in Singapore, taking into consideration programme components that will greatly benefit a candidate who already has some classroom teaching experience. This is ensured through the curriculum structure and content of the programme which aims to establish clear links between pedagogical theory and actual classroom practice.

### **Duration of Programme**

The minimum period of study required for the degree of B Ed (part-time) is 3½ years. This includes a full-time semester which is essential in order to fulfil the residency requirements of the B Ed degree. No student teacher is permitted to take more than 6 years to obtain the degree. Non-graduate teachers may be awarded honours degree based on excellent overall performance in the four year programme.

### **The Academic Unit System**

The University adopts the Academic Unit System, that is, academic units are used to measure academic workload per semester and per academic year. The academic year is currently divided into two semesters.

The Academic Unit (AU) provides a consistent measure of the student teacher's academic workload related to both class attendance and independent preparation. Used to weight

courses in a subject taught for the duration of one semester of 13 teaching weeks, each Academic Unit represents an average workload equivalent to one hour per week in the form of lecture/tutorial classes, or three hours per week in the form of laboratory/field work sessions. For example, a course with one lecture hour per week and one tutorial hour per week carries 2 AUs. Academic Units are calculated on a course basis, that is, subjects are made up of courses, and each course carries a certain number of AUs. It is not uncommon in the age of multimodal delivery that some face-to-face lectures and tutorials might be replaced by online and/or other independent modes of learning depending on the discretion of the course instructor.

## Academic Calendar

The academic year is made up of two semesters as follows:

### Academic Year 2011-2012

Programme	Dates of Orientation (O+) Teaching Weeks (TW) / Recess (R) / Vacation (V)	Dates of Revision / Examination
B Ed Year 2	<b>Semester 1</b> TW: 08 Aug 2011 – 02 Dec 2011 R : 24 Sep 2011 – 02 Oct 2011 V : 03 Dec 2011 – 08 Jan 2012  <b>Semester 2</b> TW: 09 Jan 2012 – 04 May 2012 R : 25 Feb 2012 – 04 Mar 2012 V : 05 May 2012 – 05 Aug 2012	12 Nov 2011 – 02 Dec 2011   14 Apr 2012 – 04 May 2012
B Ed Year 3	<b>Semester 1</b> TW: 08 Aug 2011 – 02 Dec 2011 R : 24 Sep 2011 – 02 Oct 2011 V : 03 Dec 2011 – 08 Jan 2012  <b>Semester 2</b> TW: 09 Jan 2012 – 04 May 2012 R : 25 Feb 2012 – 04 Mar 2012 V : 05 May 2012 – 05 Aug 2012**	12 Nov 2011 – 02 Dec 2011   14 Apr 2012 – 04 May 2012
B Ed Year 4	<b>Semester 1</b> TW: 08 Aug 2011 – 02 Dec 2011 R : 24 Sep 2011 – 02 Oct 2011 V : 03 Dec 2011 – 08 Jan 2012  <b>Semester 2</b> TW: 09 Jan 2012 – 18 May 2012 R : 10 Mar 2012 – 18 Mar 2012	12 Nov 2011 – 02 Dec 2011   14 Apr 2012 – 04 May 2012

+ Orientation includes Registration of Courses

## APPLICATIONS

### 1 Entry Requirements for B Ed Programme

Applicants seeking admission must be primary school teachers employed by the Ministry of Education who have at least two years of teaching experience and have a Grade C or above for annual appraisal. They must also meet the following entry requirements:

- (a) Have obtained a Certificate in Education or Diploma in Education and have done well in the programme;
- (b) Have good GCE 'A' Level or Polytechnic diploma qualifications; and
- (c) Have a letter of recommendation from the current school Principal.

Those who have performed well in further professional programmes like the Advanced Diploma, Diploma in Departmental Management and Management & Leadership in Schools may also be considered for admission.



## **MATRICULATION AND REGISTRATION**

Matriculation will take place two weeks before Semester I. Registration for courses to be offered in Semesters I and II will normally take place at least one week before each semester.

Student teachers can register for or drop a course offered in the semester within the first week of that semester. A course that is dropped within the first week of a semester will not appear in the student teacher's official transcript.

A student teacher who drops a course after the deadline, that is the end of the first week of a semester, will be deemed to have sat and failed in the course. 'F' will appear on the official transcript and will be used in the computation of Cumulative Grade Point Average (CGPA).

### **Enrolment**

Although student teachers usually get to read the subject/courses of their own choice, the final choice of subjects/courses sometimes has to be determined by the Dean, Teacher Education/Heads/Co-ordinators of subjects concerned. Student teachers are responsible for ensuring that the courses they select do not clash on the class time-table and the examination time-table both of which are prepared before the registration exercise.

## **EXAMINATIONS AND ASSESSMENT OF COURSEWORK**

Various modes of assessment including Continuous Assessment (CA) have been built into coursework. These include tests/practical tests, essay assignments, project work, progress ratings and examinations. Examinations will be held at the end of each semester. There are no supplementary examinations. No special examination will be held for student teachers who are unable to take any paper because of illness or other special reason. Such student teachers and those who fail will be allowed to take the examination in that course on the next occasion when it is conducted.

Student teachers must successfully complete all the prescribed academic unit requirements as set out by the programme curriculum and earn a minimum Cumulative Grade Point Average (CGPA) of 2.00 at the end of the final semester of study before qualifying for the award of the degree of the Bachelor of Education. Student teachers are responsible for ensuring that they register for all the courses and examinations necessary to fulfil the requirements of their programme of study.

Student teachers are not allowed to re-take an examination in order to improve on the grades of courses they have passed. The grades for a course taken by any student teachers in all attempts are reflected on the official transcript. The degree classification will be based on the CGPA student teachers obtain throughout their programme of study. Credits earned in other approved institutions will be excluded from CGPA computation.

**The period of candidature for the programme is as follows:**

Programme	Period of candidature (Years)		
	Normal	Minimum	Maximum
B Ed (part-time) Admitted in Year 2	-	3½	6

Non-graduate teachers will take the B Ed on a part-time basis, with the exception of the one semester which will be completed on a full time basis to fulfil the residency requirements of the B Ed degree.

**Grade Point Average (GPA) System**

The Institute adopts the Grade Point Average (GPA) system with effect from the academic year 2005-2006.

1 Grade and grade points are assigned as follows:

Letter-Grade	Grade Point	Academic Unit (AU)
A+	5.00	AU is earned
A	5.00	
A-	4.50	
B+	4.00	
B	3.50	
B-	3.00	
C+	2.50	
C	2.00	
D+	1.50	
D	1.00	
F	0.00	No AU is earned

- 2 The following non-letter grades and notations are also used, but will not be counted in computation of CGPA.

*	-	Courses with Pass/Fail grading only
IP	-	In-Progress
ABS	-	Leave of absence granted
TC	-	Transfer Credit

- 3 The Cumulative Grade Point Average (CGPA) represents the grade average of all courses (including failed courses) attempted by a student teacher.

The computation of CGPA is as follows:

$$\frac{[\text{Grade Point} \times \text{AU for course 1}] + [\text{Grade Point} \times \text{AU for course X}] + \dots}{[\text{Total AU attempted in all the semesters so far}]}$$

- 4 The CGPA will be reflected on student teachers' transcripts.
- 5 An 'F' grade obtained in a course, and a new grade attained for the subsequent repeat, will be both reflected in the transcript. Both grades will also be counted in the computation of CGPA. No AU is earned for courses with 'F' grade.
- 6 Student teachers are not allowed to repeat any courses taken except those with 'F' grade.
- 7 **The requirements for graduation are as follows:**
- Successful completion of the prescribed academic unit requirement as set out by the programme curriculum.
  - A minimum CGPA of 2.00 is required at the end of the final semester of study.

**8 The criteria for satisfactory academic standing in any given semester are:**

- a) Maintaining a minimum CGPA of 2.00
- b) Completing at least 75% of the normal AU workload

**9 Student teachers with poor standing will be subjected to the following performance review:**

- a) Academic Warning – if the CGPA falls below 2.00 for any given semester.
- b) Academic Probation – if the CGPA falls below 2.00 for the following semester.
- c) Academic Termination – if the CGPA falls below 2.00 for the 3<sup>rd</sup> consecutive semester, or at the end of the final semester of study. A letter of termination will be issued.

Appeal against termination on the grounds of extenuating circumstances may be made, subject to the following rules:

- the appeal must be submitted to NIE by the end of the 1<sup>st</sup> week of the semester following the termination
- normally only one appeal is allowed per candidature.

**10 A minimum CGPA of 2.00 must be maintained at the end of each semester to qualify for the overloading of courses.**

**11 Credits for courses taken from approved student exchange programmes will be excluded from the CGPA computation. But they will be counted toward the academic unit requirement for graduation, and reflected on the transcript.**

12 The cut-off for B Ed classification is as follows:

Class of Award	CGPA Range
First Class Honours	4.50 – 5.00
Second Class Upper Honours	4.00 – 4.49
Second Class Lower Honours	3.50 – 3.99
Third Class Honours	3.00 – 3.49
Pass	2.00 – 2.99

### Classification of Student Teachers

Student teachers are classified as Year 1, Year 2, Year 3 and Year 4 student teachers according to the number of academic units earned as shown below:

#### B Ed (Primary)

Programme	Number of Academic Units Earned			
	Year 1	Year 2	Year 3	Year 4
Education	0 – 26	27 – 64	65 – 97	98 & above

## **Talks, Seminars, Workshops and Other Activities**

During the period of training, student teachers are expected to study diligently and participate actively in talks, seminars, workshops and other activities organised for them, if any.

## **Plagiarism and Copyright**

The Institute advises all student teachers to respect all copyrighted works and encourages the purchase of original textbooks and/or other copyrighted materials that are required for your programmes. Student teachers should not plagiarize or pass off as one's own, the writing or ideas of another, without acknowledging or crediting the source from which the ideas are taken.

The Institute takes a serious view of any form of plagiarism and infringement of copyright by student teachers. A contravention of the provisions of the Copyright Act is deemed to be a breach of the Institute's rules and regulations, which could result in disciplinary action. Cheating, plagiarism and other forms of academic dishonesty are considered serious offences for which disciplinary penalties will be imposed.

**ACADEMIC STRUCTURE OF  
B ED PROGRAMME**



## THE ACADEMIC UNIT SYSTEM

### Core Courses and Prescribed Electives

There are two categories of subject courses in the B Ed programme:

*Core Courses* : Compulsory courses that must be passed to fulfil degree programme requirements (inclusive of THREE essential courses for the B Ed programme);

*Prescribed Electives:* Electives that form a certain field of specialisation in a particular subject. They add to the depth and/or breadth of knowledge and skills to be acquired by student teachers.

Each course is assigned academic units. Minimum academic unit requirements for completing the degree programme are shown in Table 1.

**Table 1: Academic Unit Requirements of B Ed Programme**

This table shows the various possible PCK combinations that student teachers can take and the breakdown of AUs by year of study for these different combinations. The AUs total up to 138 at the end of four years of study.

Programme	Pedagogical Content Knowledge (PCK)	Year of Study	No. of Academic Units (AUs)	Total
Bachelor of Education (Primary)	Eng, Maths and Sc	1	36	138
	Or Eng, Sc and SS	2	39	
	Or Eng, Sc and SN	3	31	
	Or Eng, Sc and GTE	4	32	
	Or Maths, Sc and SS			
	Or Maths, Sc and SN			
	Or Maths, Sc and GTE			
	Eng, Maths and SS	1	35	138
	Or Eng, Maths and SN	2	39	
	Or Eng, Maths and GTE	3	33	
	4	31		

Legend:

- Eng : English Language
- Maths : Mathematics
- Sc : Science
- SS : Social Studies
- SN : Special Needs
- GTE : Gifted & Talent Education

## B ED PROGRAMME

### STRUCTURE OF B ED PROGRAMME

The courses are divided into the following areas of study:

- (a) **Education Studies (Level 1)\* (ES)**: This area of study will acquaint student teachers with the key concepts and principles in education that are necessary for effective instruction and reflective practice in primary schools.
- (b) **Education Studies (Level 2) (ES)**: This core set of courses will build on the Education Studies level 1 courses and will encourage student teachers to review and critique contemporary and sociological theories of learning, the principles of curriculum development as well as new technologies in education.
- (c) **Curriculum Studies\* (CS)**: This area of study is designed to give student teachers the pedagogical skills in teaching specific subjects in Singapore schools.
- (d) **Subject Knowledge\* (SK)**: This group of courses helps to reinforce subject content mastery for primary school teaching.
- (e) **Pedagogical Content Knowledge Subject Areas and/or Inclusive Education (PCK)**: In this area of study, student teachers are to offer English, Math and Science but can opt to exchange one of these subjects with Social Studies, Special Needs, and Gifted & Talent Education.
- (f) **Essential Courses (EC)**: The 3 essential courses are
  - (a) Integrated Arts Approach which aims to introduce the key concepts in an integrated art, music and drama approach with primary school children;
  - (b) Education Research Methodology which serves to prepare student teachers to conduct education research; and

(c) There are two Prescribed Electives of which student teachers will have to select one:

(1) Action Research Project which prepares the student teachers to continue to develop as reflective practitioners and to investigate issues in their teaching;

(2) Inter-disciplinary Approach which looks at how student teachers can teach a subject matter in an integrated fashion across different subjects.

- (g) **Language Enhancement and Academic Discourse Skills (LEADS):** The courses in this component equip student teachers with the basic language and voice skills that they require for teaching as well as for successfully engaging in academic writing for assignments and theses.
- (h) **Practicum\*:** Practicum provides student teachers with the opportunity to develop teaching competencies in a variety of instructional contexts and at different levels, under the guidance and supervision of cooperating teachers and university lecturers. During the Practicum, student teachers will be able to use the knowledge and skills acquired in the subjects they read at the university and have opportunities to integrate theory and practice in schools.

The total number of Academic Units (AUs) for the B Ed is 138 AUs.

Non-graduate teachers holding a Dip Ed (or its equivalent certification) will need to fulfil 69 AUs based on relevant exemptions granted from their Dip Ed or Cert Ed qualifications.

Special Note \* - Part-time B Ed student teachers are exempted from these areas of study.

## CURRICULUM STRUCTURE FOR B ED (PRIMARY) PROGRAMME

The part-time B Ed programme is based on the following curriculum structure shown in Table 2. However, exemptions are granted based on student teacher's qualifications obtained and years of teaching experience. The exempted courses are highlighted in grey.

**Table 2: Curriculum Structure for B Ed (Primary) (General) Programme**

Category/Subject	Course Code	Title	No. of AUs	Pre-requisites
<b>EDUCATION STUDIES (LEVEL 1)</b>				
	AED106	Educational Psychology: Theories and Applications for Learning and Teaching	3	-
	AED107	ICT for Meaningful Learning	2	-
	AED201	The Social Context of Teaching and Learning	2	-
	AED303	Teaching and Managing Learners at the Primary Level	3	-
<b>EDUCATION STUDIES (LEVEL 2)</b>				
	AED231	Diversity, Inclusivity and Reflective Practice	3	-
	AED233	Critical Reasoning Skills for Effective Teaching	2	-
	AED235	Introduction to Curriculum Development and Design	3	-
	AED237	ICT-based Cognitive Tools for Meaningful Learning	2	-
	AED238	Critical and Creative Thinking	2	-
<b>CURRICULUM STUDIES (Select any 3)</b>				
English Language	ACE201	Teaching Reading and Writing 1	3	-
	ACE301	Teaching Reading and Writing 2	3	-
	ACE401	Teaching Oral Communication	2	-
Mathematics	ACM201	The Teaching and Learning of Primary Mathematics I	3	-
	ACM301	The Teaching and Learning of Primary Mathematics II	3	-
	ACM401	The Teaching and Learning of Primary Mathematics III	2	-
Science	ACS201	Curriculum and Pedagogy for Primary Science	3	-
	ACS301	Assessment Modes and Resource Management in Primary Science	3	-
	ACS401	Innovations in Design and Practices for Primary Science	2	-
Social Studies	ACL201	Teaching Social Studies in the Primary Classroom I	3	-
	ACL301	Teaching Social Studies in the Primary Classroom II	3	-
	ACL401	Managing Diversity in the Social Studies	2	-

		Classroom		
<b>SUBJECT KNOWLEDGE (Aligned to 3 selected Curriculum Studies subjects)</b>				
English Language	ASE201	Grammar	2	-
	ASE302	Exploring Language in Texts	2	-
Mathematics	ASM201	Number Topics	2	-
	ASM301	Geometry Topics	2	-
Science	ASK201	Topics in Physical Science for Primary Science Teaching	2	-
	ASK301	Topics in Biological Science for Primary Science Teaching	2	-
Social Studies	ASL201	History for Social Studies	2	-
	ASL302	Singapore: Challenges and Responses	2	-
<b>PEDAGOGICAL CONTENT KNOWLEDGE and/or INCLUSIVE EDUCATION (Aligned to the selected Curriculum Studies subjects)**</b>				
English Language#	AKE101	Children's Literature in the Primary School Classroom	3	CS - English Language
	AKE201	Principles and Practices of Language Teaching	3	
	AKE301	The Study of Language Acquisition and Development	3	
	AKE302	Selecting Resources for the Primary English Classroom	3	
	AKE401	Current Trends in Language Education for Primary Schools	3	
Mathematics#	AKM101	Current Initiatives in the Primary Maths Curriculum	3	CS- Maths
	AKM201	Mathematics Curriculum Development	3	
	AKM301	Assessing Teaching and Learning of Mathematics	3	
	AKM302	Pedagogical Content Knowledge for Numbers and Data	3	
	AKM401	Pedagogical Content Knowledge for Measurement and Geometry	3	
Science#	AKS101	Inquiry Approach to Primary Science (Diversity and Cycles)	4	CS- Science
	AKS201	Inquiry Approach to Primary Science (Systems)	3	
	AKS301	Inquiry Approach to Primary Science (Interaction and Energy)	4	
	AKS401	Current Trends, Issues and Challenges in Primary Science	4	
Social Studies#	AKL101	Re-visioning the Social Studies Curriculum	3	CS- Social Studies
	AKL201	Society and Change	3	
	AKL301	Culture in Society	3	
	AKL302	Environment and Society	3	
	AKL401	Implementing and Evaluating the Social Studies Curriculum	3	
Special Needs	AKN101	Introduction to Special Education	3	-
	AKN201	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs I	3	
	AKN301	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs II	3	
	AKN302	Curriculum Adaptation	3	

*B Ed Curriculum Structure*

	AKN401	Collaboration and Consultation in the School and Community	3	
Gifted & Talent Education	AKT101	Understanding Gifts, Talents & Exceptionalities	3	-
	AKT201	Curriculum Differentiation for Highly-able Learners	3	
	AKT301	Talent Development & Programming	3	
	AKT302	Nurturing Creative and Talented Learners	3	
	AKT401	Building Research, Inquiry & Creative Capacities	3	
<b>ESSENTIAL COURSES</b>				
	AMX101	Integrated Arts Approach	3	-
	AMX201	Education Research Methodology	3	-
<b>Select 1 elective course</b>				
	AMX331	Action Research Project	3	AMX201
	AMX332	Inter-disciplinary Approach	3	AMX201
<b>LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS</b>				
	ALS101	Academic Discourse Skills	3	-
	ALK201	Communication Skills for Teachers	2	-
<b>PRACTICUM</b>				
	APR102	School Experience	0	-
	APR202	Teaching Assistantship	3	SE
	APR302	Teaching Practice 1	6	TA
	APR402	Teaching Practice 2	12	TP 1
<b>TOTAL</b>				<b>138</b>

Notes:

\*\* Student teachers are to offer English Language, Mathematics and Science. They may replace one of the subjects with Social Studies or Special Needs or Gifted & Talent Education. Pre-requisites for English Language, Mathematics, Science and Social Studies PCK courses apply.

# The PCK courses for English Language, Mathematics, Science and Social Studies are only offered to student teachers who have done the same Curriculum Studies subjects.

Table 3 shows the course offerings by year of study

**Table 3: Full-Time Curriculum Structure with course offerings by year of study**

Category/Subjects	Year 1	Year 2	Year 3	Year 4
<b>Education Studies</b>				
	AED106 AED231	AED107 AED201 AED237	AED303	AED233 AED235 AED238
<b>Curriculum Studies (Select any 3)</b>				
English Language	ACE201	ACE301	ACE401	
Mathematics	ACM201	ACM301	ACM401	
Science	ACS201	ACS301	ACS401	
Social Studies	ACL201	ACL301	ACL401	
<b>Subject Knowledge (Aligned to 3 selected Curriculum Studies subjects)</b>				
English Language	ASE201	ASE302		
Mathematics	ASM201	ASM301		
Science	ASK201	ASK301		
Social Studies	ASL201	ASL302		
<b>Pedagogical Content Knowledge and/or Inclusive Education (Aligned to the selected Curriculum Studies Subjects)**</b>				
English Language #	AKE101	AKE201	AKE301 AKE302	AKE401
Mathematics #	AKM101	AKM201	AKM301 AKM302	AKM401
Science #	AKS101	AKS201	AKS301	AKS401
Social Studies #	AKL101	AKL201	AKL301 AKL302	AKL401
Special Needs	AKN101	AKN201	AKN301 AKN302	AKN401
Gifted & Talent Ed	AKT101	AKT201	AKT301 AKT302	AKT401
<b>Essential Courses</b>				
	AMX101	AMX201		AMX331 or AMX332
<b>LEADS</b>				
	ALK201	ALS101		
<b>Practicum</b>				
	APR102	APR202	APR302	APR402

\*\* Student teachers are to offer English Language, Mathematics and Science. They may replace one of the subjects with Social Studies or Special Needs or Gifted & Talent Education. Pre-requisites for English Language, Mathematics, Science and Social Studies PCK courses (as stated in #) apply.

# The PCK courses for English Language, Mathematics, Science and Social Studies are only offered to student teachers who have done the same Curriculum Studies subjects.

+ Exempted courses are highlighted in grey.



Table 4 shows the curriculum structure for the B Ed Primary part-time programme with all exempted courses removed

**Table 4: Curriculum Structure for B Ed (Primary) (General)(Part-Time) Programme**

Category/Subject	Course Code	Title	No. of AUs	Pre-requisites
<b>EDUCATION STUDIES (LEVEL 2)</b>				
	AED231	Diversity, Inclusivity and Reflective Practices	3	-
	AED233	Critical Reasoning Skills for Effective Teaching	2	-
	AED235	Introduction to Curriculum Development and Design	3	-
	AED237	ICT-based Cognitive Tools for Meaningful Learning	2	-
	AED238	Critical and Creative Thinking	2	-
<b>PEDAGOGICAL CONTENT KNOWLEDGE and/or INCLUSIVE EDUCATION (Aligned to the selected Curriculum Studies subjects)**</b>				
English Language#	AKE101	Children's Literature in the Primary School Classroom	3	CS-English Language
	AKE201	Principles and Practices of Language Teaching	3	
	AKE301	The Study of Language Acquisition and Development	3	
	AKE302	Selecting Resources for the Primary English Classroom	3	
	AKE401	Current Trends in Language Education for Primary Schools	3	
Mathematics#	AKM101	Current Initiatives in the Primary Maths Curriculum	3	CS-Maths
	AKM201	Mathematics Curriculum Development	3	
	AKM301	Assessing Teaching and Learning of Mathematics	3	
	AKM302	Pedagogical Content Knowledge for Numbers and Data	3	
	AKM401	Pedagogical Content Knowledge for Measurement and Geometry	3	
Science#	AKS101	Inquiry Approach to Primary Science (Diversity and Cycles)	4	CS-Science
	AKS201	Inquiry Approach to Primary Science (Systems)	3	
	AKS301	Inquiry Approach to Primary Science (Interaction and Energy)	4	
	AKS401	Current Trends, Issues and Challenges in Primary Science	4	
Social Studies#	AKL101	Re-visioning the Social Studies Curriculum	3	CS-Social Studies
	AKL201	Society and Change	3	
	AKL301	Culture in Society	3	
	AKL302	Environment and Society	3	
	AKL401	Implementing and Evaluating the Social Studies Curriculum	3	

*B Ed Curriculum Structure*

Special Needs	AKN101	Introduction to Special Education	3	-
	AKN201	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs I	3	
	AKN301	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs II	3	
	AKN302	Curriculum Adaptation	3	
	AKN401	Collaboration and Consultation in the School and Community	3	
Gifted & Talent Education	AKT101	Understanding Gifts, Talents & Exceptionalities	3	-
	AKT201	Curriculum Differentiation for Highly-able Learners	3	
	AKT301	Talent Development & Programming	3	
	AKT302	Nurturing Creative and Talented Learners	3	
	AKT401	Building Research, Inquiry & Creative Capacities	3	
<b>ESSENTIAL COURSES</b>				
	AMX101	Integrated Arts Approach	3	-
	AMX201	Education Research Methodology	3	-
<b>Select 1 elective course</b>				
	AMX331	Action Research Project	3	AMX201
	AMX332	Inter-disciplinary Approach	3	AMX201
<b>LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS</b>				
	ALS101	Academic Discourse Skills	3	-
TOTAL				69

\*\* Student teachers are to offer English Language, Mathematics and Science. They may replace one of the subjects with Social Studies or Special Needs or Gifted & Talent Education. Pre-requisites for English Language, Mathematics, Science and Social Studies PCK courses apply.

# The PCK courses for English Language, Mathematics, Science and Social Studies are only offered to student teachers who have done the same Curriculum Studies subjects.

Table 5 shows courses offered under B Ed Primary (part-time) Programme listed by semester for ease of reference

**Table 5: Courses offering by semester**

	1st Year of Study		2 <sup>nd</sup> Year of Study		3 <sup>rd</sup> Year of Study		4 <sup>th</sup> Year of Study
	Jul sem	Jan sem	Jul sem	Jan sem	Jul sem	Jan sem	Jul sem (full-time)
<b>Education Studies (Level 2)</b>							
		AED231		AED237			AED233 AED235 AED238
<b>Pedagogical Content Knowledge and/or Inclusive Education (Aligned to the selected Curriculum Studies subjects)**</b>							
English #	AKE101		AKE201		AKE301	AKE302	AKE401
Mathematics#	AKM101		AKM201		AKM301	AKM302	AKM401
Science #		AKS101		AKS201		AKS301	AKS401
Social Studies #		AKL101		AKL201	AKL301	AKL302	AKL401
Special Needs		AKN101		AKN201	AKN301	AKN302	AKN401
Gifted & Talent Education		AKT101		AKT201	AKT301	AKT302	AKT401
<b>Essential Courses</b>							
		AMX101		AMX201		AMX331 or AMX332	
<b>LEADS</b>							
			ALS101				

\*\* Student teachers are to offer English Language, Mathematics and Science. They may replace one of the subjects with Social Studies or Special Needs or Gifted & Talent Education. Pre-requisites for English Language, Mathematics, Science and Social Studies PCK courses apply.

# The PCK courses English Language, Mathematics, Science and Social Studies are only offered to student teachers who have done the same Curriculum Studies subjects.

In the course descriptions that follow, only courses which the student teachers enrolled in the B Ed (part-time) programme have to take, are reflected. For descriptions of courses for which student teachers have been granted exemptions, they are advised to refer to the BA/ BSc (Ed) programme handbook.

## EDUCATION STUDIES

**Education Studies (Level 2) (ES):** This core set of courses will build on the Education Studies level 1 courses and will encourage student teachers to review and critique contemporary and sociological theories of learning, the principles of curriculum development as well as new technologies in education.

### Education Studies (Level 2)

Course Code	Title	Course Category	No. of AUs	Pre-requisites
AED231	Diversity, Inclusivity and Reflective Practices	Core	3	-
AED233	Critical Reasoning Skills for Effective Teaching	Core	2	-
AED235	Introduction to Curriculum Development and Design	Core	3	-
AED237	ICT-based Cognitive Tools for Meaningful Learning	Core	2	-
AED238	Critical and Creative Thinking	Core	2	-

### **AED231 Diversity, Inclusivity and Reflective Practices**

This course situates student teachers within the realities of their classrooms and the lives of their pupils in contemporary Singaporean society where diversity is increasingly recognized as the norm. The emphasis in the course is on student teachers learning the knowledge and skills to build classroom communities that are inclusive of and responsive to pupils of diverse needs and abilities. Student teachers will have the opportunity to become reflective practitioners in understanding and engaging with their own experiences in working with their pupils for the purpose of regenerating themselves and their classroom communities.

### **AED233 Critical Reasoning Skills for Effective Teaching**

The course will equip student teachers with a broad range of critical reasoning skills to develop the thinking and analytical abilities of their pupils in schools. Critical reasoning is based in part on mastery of basic rules of elementary logic, as well as practical reasoning skills. These skills are used for the analysis and evaluation of situations and arguments, as well as the formulation and articulation of good arguments and judgments. By learning how to formulate and articulate good arguments, student teachers will acquire an appreciation of how these critical thinking skills can be used to facilitate multi- and inter-disciplinary learning in their teaching. Working in groups, they will design innovative lesson plans that would help to stimulate interest in critical thinking and problem solving among their pupils.

### **AED235 Introduction to Curriculum Development and Design**

This course provides an overview of curriculum development and design models and presents the theory and practice of curriculum planning and design. The nature of the designing process, principal forms of curriculum design in schools and educational systems, concept of instructional alignment, process of aligning learning intention with curriculum, teaching and assessment, resources to support learning will be explored and discussed.

### **AED237 ICT- based Cognitive Tools for Meaningful Learning**

The participants will be introduced the concepts and applications of cognitive tools with emphasis for use in local context. When ICT tools are used as

cognitive tools, they help to provide meaningful learning by extending the human cognition for learning and engendering conducive learning conditions. The experience and exposure gained in this course will help participants integrate technologies appropriately with learning activities. The participants are expected to work in pairs or groups on activities that employ cognitive tools. The participants are also expected to contribute actively to class discussion and group works. The course assessment includes individual and group assignments.

### **AED238 Critical and Creative Thinking**

The course enables teachers to understand the phenomenon of thinking from simple to complex, from concrete to abstract, and from logical to intuitive. Teachers would learn to develop thinking and pedagogical skills and curriculum materials and to help student to think critically and creatively at a more advanced level. In addition, the course hopes to develop depth in analytical and imaginative thinking skills to solve more sophisticated real-life classroom problems, and to link theories to practice of educational concepts in the affective domain.

## **PEDAGOGICAL CONTENT KNOWLEDGE AND/ OR INCLUSIVE EDUCATION**

Pedagogical content knowledge refers to the intersection between content and pedagogy. Broadly speaking, it comprises three different bases of knowledge:

- (i) subject matter knowledge
- (ii) pedagogical knowledge and
- (iii) knowledge of context

The inclusion of the Pedagogical Content Knowledge (PCK) courses is aimed at strengthening the subject knowledge and teaching capacities of the student teachers enrolled in the B Ed (part-time) programme.

In this area of study, student teachers can offer English, Math and Science but can opt to exchange one of these subjects for Social Studies, Special Needs, and Gifted & Talent Education.

## English Language

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKE101	Children's Literature in the Primary School Classroom	Core	3	CS - English Language
2	AKE201	Principles and Practices of Language Teaching	Core	3	
3	AKE301	The Study of Language Acquisition and Development	Core	3	
3	AKE302	Selecting Resources for the Primary English Classroom	Core	3	
4	AKE401	Current Trends in Language Education for Primary Schools	Core	3	

### **AKE101 Children's Literature in the Primary School Classroom**

During this course, student teachers will be introduced to selections of folk and contemporary literature written for children, both from the west and from the region. The course will cover genres such as picture books, poetry and rhyme, novels and non fiction, as well as e-literature. There will also be a focus on multicultural literature, and on canonical texts. Student teachers will learn how to appreciate, analyse and critique children's literature, in the areas of formal literary structures and rich literary language.

### **AKE201 Principles and Practices of Language Teaching**

This course provides an historical overview of approaches to English language and literacy teaching and gives an introduction to the theoretical justifications for the different approaches. This course introduces student teachers to historical controversies in language education and how those have shaped the teaching approaches currently used in Singapore schools. This knowledge is crucial to student teachers' understanding not only of what has been proposed in the past, but also for understanding



approaches that are currently proposed and for informing their pedagogical decisions as teachers.

### **AKE301 The Study of Language Acquisition and Development**

This course examines theories and issues of language acquisition and development from both psycholinguistic and sociolinguistic perspectives. Student teachers will be introduced to important concepts in psycholinguistics about first language, second language and bilingual acquisition. They will also examine the roles that individuals and the society play in maintaining languages in multilingual contexts.

### **AKE302 Selecting Resources for the Primary English Classroom**

The course will provide a structured framework for you to reflect critically on your current practices in relation to teaching-learning materials and explore alternatives. You will be encouraged to think about course planning, your attitude to materials and your role in evaluating and adapting materials produced by others. You will source, analyse and consider how to exploit supplementary materials that fulfil curricular objectives. You will be guided to develop your own materials. You will also engage on a practical level with such concepts as differentiation and learner involvement in materials selection and creation.

## **AKE401 Current Trends in Language Education for Primary Schools**

This course will focus on current Ministry of Education initiatives and how they are being implemented in Singapore primary schools. It will consider current moves in language education towards curriculum integration, multiliteracies and multimodalities. Student teachers will be given the opportunity to implement innovative strategies which foster current trends in language teaching in order to enhance language learning and experience in the primary classroom. The course also aims to help student teachers evaluate current trends in terms of the language development and profile of pupils in primary schools in Singapore.

## Mathematics

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKM101	Current Initiatives in the Primary Maths Curriculum	Core	3	CS - Mathematics
2	AKM201	Mathematics Curriculum Development	Core	3	
3	AKM301	Assessing Teaching and Learning of Mathematics	Core	3	
3	AKM302	Pedagogical Content Knowledge for Numbers and Data	Core	3	
4	AKM401	Pedagogical Content Knowledge for Measurement and Geometry	Core	3	

### AKM101 Current Initiatives in the Primary Maths Curriculum

The philosophy of current and future national curriculum initiatives (such as “Thinking School Learning Nation”, SEED, National Education, Innovation & Enterprise, “Teach Less Learn More” and so on) is examined in the context of the primary mathematics curriculum. In this course, student teachers will be provided with the opportunity to critique the impact of these initiatives in relation to customized curriculum design, selected pedagogical approaches, applied learning theories, and school-based implementation for the learning of primary mathematics topics.

### AKM201 Mathematics Curriculum Development

This course will introduce student teachers to both the components and processes of mathematics curriculum development, including types of curricula, models of curriculum development, the realization of the curriculum through instruction, as well as evaluating instruction and the curriculum. Examples will be drawn from both past and present Singapore Mathematics curricula and well-known international

mathematics curricula, allowing the student teachers to make sense of the current problem-solving curriculum in relation to global trends in the mathematics curriculum. The role of classroom assessment as a way to evaluate instruction will also be discussed in relation to the process of curriculum evaluation.

### **AKM301 Assessing Teaching and Learning of Mathematics**

In this course, student teachers will be introduced to the wide range of assessment strategies and techniques in mathematics. The course will cover both traditional and alternative assessment in mathematics. There will also be a focus on issues on mathematics assessment. Student teachers will learn how to address certain issues in the development and use of classroom assessment tools. They will also examine the roles that different assessment strategies play in informing their pedagogical decisions as teachers.

### **AKM302 Pedagogical Content Knowledge for Numbers and Data**

This course aims to provide student teachers with further pedagogical content knowledge in the teaching and learning of numbers and data in primary mathematics. Student teachers are expected to apply this knowledge to anticipate, prevent, identify and remediate error patterns, and to design appropriate learning tasks for students of different achievement levels. For numbers, topics include the historical perspective of the development of the number system, reasoning and proofs, and selected problems to include concepts of counting, logarithms and infinity. For data, topics include concepts of

discrete and continuous variables, sampling, data representation and measures of central tendency and spread.

### **AKM401 Pedagogical Content Knowledge for Measurement and Geometry**

This course seeks to equip student teachers further with the pedagogical content knowledge in the teaching and learning of measurement and geometry in primary mathematics. The pedagogical content knowledge intends to help student teachers prevent, identify and remediate error patterns, and design appropriate learning activities to cater for the pupils with different mathematical ability. For measurement, topics include the historical perspective of measurement, basic measurement concepts, derivation of formulae and applications in conjunction with geometry. For geometry, events in the history of geometry and processes such as mathematical induction and deduction will be highlighted. Topics include basic elements of geometry as study of space in 2 and 3 dimensions, properties associated with lines and geometrical figures, similarity and congruency, constructions and proofs, transformation and tessellation.

## Science

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKS101	Inquiry Approach to Primary Science (Diversity and Cycles)	Core	4	CS - Science
2	AKS201	Inquiry Approach to Primary Science (Systems)	Core	3	
3	AKS301	Inquiry Approach to Primary Science (Interaction and Energy)	Core	4	
4	AKS401	Current Trends, Issues and Challenges in Primary Science	Core	4	

### AKS101 Inquiry Approach to Primary Science (Diversity and Cycles)

This course seeks to empower student teachers to be leaders of inquiry in the teaching and learning of “Diversity” & “Cycles”, 2 of the 5 themes in the new Primary Science (2008) Syllabus. Student teachers will be equipped with the essential understanding of what is inquiry, what are the essential features of Science as inquiry, a suitable learning cycle for use as an inquiry teaching and learning instructional model and the rationale behind the inquiry approach method. Under the theme of “Diversity, through the use of innovative inquiry-based activities on the topics of diversity of materials, living and non-living things, student teachers will gain valuable insights on how content and process skills are integrated in the learning of science through the inquiry approach. Under the theme of “Cycles”, besides providing student teachers with engaging hands-on and minds-on activities on the topics of cycles in plants, animals, matter and water, a special 18-hour on-line learning activity has been customised. This on-line learning seeks to foster the spirit of self-directed learning and the notion that the learning of science goes beyond the confines of the laboratory.

## **AKS201 Inquiry Approach to Primary Science (Systems)**

With the important background understanding of the nature, conduct and rationale of scientific inquiry taught under Course 1, this course seeks to equip student teachers further with the pedagogical content knowledge to be leaders of inquiry in the teaching and learning of “Systems”, one of the 5 themes in the new Primary Science (2008) Syllabus. For this course which involves the teaching of the important concept that a system is a whole consisting of parts that work together to form a function, a repertoire of powerful inquiry-based activities will be used to equip student teachers with the knowledge, skills and attitudes of inquiry in the teaching and learning of science. Examples include the student-centred experimental kit set (AMATRIX) for electrical system, colourful and interactive models of plant and animal systems and a specially designed 8-hour on-line learning to extend learning beyond the laboratory.

## **AKS301 Inquiry Approach to Primary Science (Interaction and Energy)**

This course seeks to equip student teachers further with the pedagogical content knowledge to be leaders of inquiry in the teaching and learning of “Interaction” and “Energy”, 2 of the 5 themes in the new Primary Science (2008) Syllabus. For the topics in interaction of forces and interaction within the environment, student teachers will be given guided-inquiry activities to gain deeper understanding into the world of forces and their interactions. Of special focus will be the planning of scientific investigations to hone their process (thinking and practical skills). In addition, there is also a specially designed 12-hour on-line learning activity to foster the spirit of self-directed learning and the notion that the learning of

science goes beyond the confines of the laboratory. For the topics of energy forms, uses and conversions, a wide repertoire of powerful inquiry-based activities (including the use dataloggers and a 2-hour specially designed on-line learning) will be used. Besides equipping the student teachers with important science process skills, these inquiry-based activities also seek to enthuse the student teachers to appreciate the nature and importance of energy in our daily lives.

### **AKS401 Current Trends, Issues and Challenges in Primary Science**

This course will focus in greater depth on current trends, issues and challenges in Primary Science. An attempt will be made to balance both international and local trends, issues and challenges. The emphasis in this course will be on the roles of a student teacher as an action researcher and as a life-long learner. Discussion will focus on trends, issues and challenges involving innovations in practices on curriculum, instruction and assessment. Among the issues examined will be the issue of traditional vis-à-vis authentic assessment, and misconceptions held by teachers and students. The course will also include procedures for standard assessment, such as drawing up of table of test specifications as well as crafting, vetting, administering, marking and analyzing of paper-pencil tests. Knowledge and skills on the use of various techniques for assessment of pupil learning (i.e. summative assessment techniques) as well as techniques of assessment for pupil learning (i.e. formative assessment techniques) will be covered. Among the assessment techniques that will be addressed are science journaling, performance assessments and portfolio assessment.



## Social Studies

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKL101	Re-visioning the Social Studies Curriculum	Core	3	CS - Social Studies
2	AKL201	Society and Change	Core	3	
3	AKL301	Culture in Society	Core	3	
3	AKL302	Environment and Society	Core	3	
4	AKL401	Implementing and Evaluating the Social Studies Curriculum	Core	3	

### AKL101 Re-visioning the Social Studies Curriculum

This course explores the nature and purpose of Social Studies and examines it as both citizenship and humanities education. It will revisit the development of the Social Studies curriculum in Singapore and critically assess the impact of various education policy initiatives on Social Studies. Student teachers will also be introduced to different approaches to curriculum design.

### AKL201 Society and Change

This course will explore concepts of change and continuity through a study of Singapore's political, social and economic development. Inquiry skills, perspective taking and the use of oral histories will be emphasized.

### AKL301 Culture in Society

This course focuses on the evolution of culture, identity and community in Singapore. Issues such as nation building, creation of a national identity, and the impact of social and cultural policies will be examined through various strategies which include Socratic Discourse and Academic Controversies.

### **AKL 302 Environment and Society**

This course provides an in-depth understanding of key geographic and economic concepts and explores societal-environmental relationships using strategies such as Group Investigation and Experiential Learning. The course will also examine issues related to the management of limited resources in the context of a small island state.

### **AKL401 Implementing and Evaluating the Social Studies Curriculum**

This course prepares student teachers to be implementers, evaluators and researchers of Social Studies. It will focus on meaningful teaching and learning of Social Studies through disciplinary and interdisciplinary approaches. It will also include strategies to implement a dynamic and meaningful programme at the school level.

## Special Needs

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKN101	Introduction to Special Education	Core	3	-
2	AKN201	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs I	Core	3	
3	AKN301	Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs II	Core	3	
3	AKN302	Curriculum Adaptation	Core	3	
4	AKN401	Collaboration and Consultation in the School and Community	Core	3	

### **AKN101 Introduction to Special Education**

This course is designed to provide a comprehensive overview of content and instructional methods to support students with special needs and diverse learners. Course content will include information specific to characteristics of students with special needs, learning strategies, and classroom organization and management validated to support diverse learners. Information specific to historical background and legislation supporting disabilities will also be provided. In addition, course content will include an overview of categorical disabilities. The overall goal for this class is to assist each student in becoming a skilled teacher with the knowledge to ensure positive educational outcomes for learners with diverse needs.

### **AKN201 Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs I**

This course is designed to introduce participants to educational assessment for school-aged children. During this course, participants will acquire competencies associated with the assessment

process namely, planning, administration, and analysis of results. Developing an understanding of assessments and its role in instructional decision-making is an important skill set for teachers. With data obtained from several formal and informal assessments, teachers can identify students' strengths and needs and design interventions across a full range of academic and social behaviours.

### **AKN301 Assessment, Planning, Implementing and Evaluating Interventions for Students with Special Needs II**

This course builds upon the linked approach to special needs support involving assessment, planning, implementation, and evaluation introduced in the first course. Student teachers will learn to develop classroom behaviour management strategies and the school-wide management of these students.

### **AKN302 Curriculum Adaptation**

This course aims to help student teachers to plan curriculum for students with special needs by adapting, accommodating, and modifying the mainstream curriculum to the unique learning needs of the individual students. The student teachers will also be introduced to support students with special needs in the areas of adaptive physical education, creative arts, and adaptive skills of daily living.

### **AKN401 Collaboration and Consultation in the School and Community**

This course examines the various ways in which student teachers can involve people from the larger school and community context in supporting students

with special needs. Student teachers will be introduced to collaboration and consultation skills for use with parents, pupils, and colleagues. They will also be introduced to strategies for effective transitional planning.

## Gifted & Talent Education

Year	Course Code	Title	Course Category	No. of AUs	Pre-requisites
1	AKT101	Understanding Gifts, Talents & Exceptionalities	Core	3	-
2	AKT201	Curriculum Differentiation for Highly-able Learners	Core	3	
3	AKT301	Talent Development & Programming	Core	3	
3	AKT302	Nurturing Creative and Talented Learners	Core	3	
4	AKT401	Building Research, Inquiry & Creative Capacities	Core	3	

### AKT101 Understanding Gifts, Talents & Exceptionalities

This course espouses the conceptions of giftedness and revisits the personality attributes of gifted and talented persons before it examines the confusing phenomenon of learners who exhibit exceptional intellectual ability in one or more areas while simultaneously showing significant weaknesses in others. For these pupils, giftedness coexists with a learning challenge which may be a learning disability, attention deficit disorder, autism or others. The learning challenge may depress the exceptional intellectual ability to an extent that the giftedness goes unnoticed. Diagnostic testing and observation skills for preliminary identification of this group of gifted learners will equip student teachers to initiate further professional and educational strategies for them.

### AKT201 Curriculum Differentiation for Highly-able Learners

Principles in curriculum design and instructional differentiation, cognitive acceleration and a variety of strategies appropriate for enriching and challenging the intellectually advanced students predicated upon brain-based research on learning, learning styles, multiple intelligences and authentic assessment are

highlighted. Student teachers will also be empowered to plan and conduct lessons and learning units for the highly-able learners with useful and practical hands-on resources and experiences. Curriculum methods to challenge students across content areas and to develop high potential from primary to secondary, will be discussed. Multimedia learning will accompany the design of differentiated learning for the highly-able learners who may exhibit a spectrum of academic strengths and weaknesses or be achieving excellent performance in all areas.

### **AKT301 Talent Development & Programming**

This course focuses on cultivating the awareness and intention to develop the gifts and talents, capabilities and capacities of the students by teachers and parents. Student teachers will be exposed to the various conceptions of intelligences, theories and models in gifted education. In addition, techniques to nurture the individual including cognitive coaching, individualized instruction, mentoring, pull-out programs, Olympiads and other out-of-school enrichment activities and programming efforts will be discussed. Principles in program design, implementation and evaluation will be discussed. Talent development programs worldwide will be compared and analyzed. Talent development models used in various countries will be studied. Student teachers will be given opportunities at proposing and designing new and creative programs suited to the needs of their students and the school.

## **AKT302 Nurturing Creative and Talented Learners**

While creative and talented students may have exceptional cognitive and other abilities, they are in need of moral, emotional and social support from those around them. This course will expound on how to nurture the creative and talented students. These include motivational strategies for parents and teachers, how to help develop gifted students to build resilience, how to deal with rebellion or non-conforming attitudes and emotional tantrums, how to help gifted students who are withdrawn, how to help those who are underachieving, how to help those with potential leadership abilities, how to deal with those who exhibit perfectionism and how to empower the talented students with personal and interpersonal skills. Finally, guidance and counselling skills for the creative and talented learners will be discussed.

## **AKT401 Building Research, Inquiry & Creative Capacities**

The course equips student teachers with knowledge and skills to guide highly-able pupils to undertake independent research studies in areas of their interests. The identification of a problem or topic for research, the writing of questions related to the problem, literature review, the setting up of the study, the selection of methods and procedures, the types of analyses possible, the writing up of the findings of a study and other issues will be shared. Other practical concerns: like how to facilitate creative writing; how to avoid dampening children's enthusiasm and the creative spirit; how to allow youths to experience the creative works of others, design creative projects; and finally how to inspire highly-able children towards creative productions will be discussed.



## ESSENTIAL COURSES

**There are THREE essential courses in the B Ed programme (two Core Courses and one Prescribed Elective):**

(1) Integrated Arts Approach which aims to introduce the key concepts in an integrated art, music and drama approach with primary school children;

(2) Education Research Methodology which serves to prepare student teachers to conduct education research; and

(3) There are 2 Prescribed Electives for student teachers to choose from after completing Education Research Methodology:

Either

(a) Action Research Project which prepares the student teachers to continue to develop as reflective practitioners and to investigate issues in their teaching;

Or

(b) Inter-disciplinary Approach which looks at how student teachers can teach a subject matter in an integrated fashion across different subjects.

Course Code	Title	Course Category	No. of AUs	Pre-requisites
AMX101	Integrated Arts Approach	Core	3	-
AMX201	Education Research Methodology	Core	3	-
AMX331	Action Research Project	Prescribed	3	AMX201
AMX332	Inter-Disciplinary Approach	Prescribed	3	AMX201

### **AMX101 Integrated Arts Approach**

This course considers the role and value of the arts in education. Students can learn *about* the arts, learn *with* the arts, and learn *through* the arts. The arts represent unique ways of knowing. The arts are indeed powerful tools for motivating students to apply their knowledge, work cooperatively, and make connections across content areas; and arts integration can become a natural tool for everyday learning. As a teaching methodology, learning with and through the arts encourages imaginative, metaphoric and creative thinking.

### **AMX201 Education Research Methodology**

This course provides an introduction to the essential features of research methodologies commonly used in the field of education. Students will learn about and engage with research through interactive pedagogies which require them to read, analyse, interpret and evaluate research and further develop their understanding of how research can be applied to practice.

### **AMX331 Action Research Project**

Developing an action- based project that is integrated, responsive to pupils needs, and aligned with school's curriculum and assessment frameworks. The project will involve collecting, analyzing and interpreting data on teaching and learning through action-based research in the classroom. Teachers will work independently with the guidance of a facilitator.

## **AMX332 Inter-Disciplinary Approach**

An interdisciplinary approach in the classroom provides a unified constructivist view of learning as pupils develop understanding of relationships among subjects. Interdisciplinary teaching also has the potential to foster learning where pupils from diverse cultures and background engage in collaborative inquiry and decision-making. This course provides the skills and knowledge needed to support an integrated and interdisciplinary learning environment.

## LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS

### Language Enhancement & Academic Discourse Skills

The courses in this component equip student teachers with the basic language and voice skills that they require for teaching as well as for successfully engaging in academic writing for assignments and theses.

Course Code	Title	Course Category	No. of AUs	Pre-requisites
ALS101	Academic Discourse Skills	Core	3	-

#### **ALS101 Academic Discourse Skills**

This course will introduce student teachers to academic reading materials and teach them how to produce academic discourse of their own with regard to researching and writing assignments in their chosen areas of academic specialisation. The course will introduce student teachers to the conventions of academic writing, including citation and documentation procedures, and provide them with a level of expertise in primary and secondary data-gathering. They will learn how to generate and develop an argument, support it with evidence, and present it in a coherent manner. In addition, they will gain some experience in other activities related to academic writing such as time-management, group collaboration, and liaising with a research supervisor.