## Curriculum Structure for Bachelor of Science in an Academic Discipline and in Education (Primary) (General) Programmes

Student teachers enrolled in the Bachelor of Science in an Academic Discipline and in Education (Primary) (General) programmes will follow the curriculum structure shown in Table 5 below:

Table 5: Curriculum Structure for Bachelor of Science in an Academic Discipline and in Education (Primary) (General) Programmes

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC DISCI	PLINE MAJ	OR (Select 1 subject area*)	
ACADEMIC DISCI	PLINE		
AD Major		Science Subject *	12
<b>EDUCATION MAJ</b>	OR		
EDUCATION STU	DIES		
	AED00C	Professional Practice and Inquiry	1
	AED10A	Educational Psychology: Theories and Applications for Learning and Teaching	2
	AED10G#	Character and Citizenship Education in the Singapore Context	2
CURRICULUM ST	UDIES (Sel	ect any 2 Curriculum Studies areas)	
Music	ACI10C	Music and Movement in the Inclusive Classroom	3
PRACTICUM			
	APR10A	School Experience	0
INTER-MAJOR			
	ALS10A	Academic Discourse Skills	3
INTERDISCIPLINA	ARY COLLA	BORATIVE CORE	
	ALK10B	Communication Skills for Teachers	2
	AED10B	Group Endeavours in Service Learning	1
	CC0006	Sustainability: Society, Economy and Environment	3
	HY0003	Ethics and Social Contexts of Education	2

Category/	Course	Title	No. of
Subject	Code	ritie	AUs

BROADENING & DEEPENING ELECTIVES				
PRIMARY LEVEL	SUBJECTS	(Aligned with Curriculum Studies Subjects)		
Art	ASA10B	Twenty-First Century Learning through Theatre and Drama	3	
English Language	ASE10A	Grammar	2	
Mathanatica	ASM10C	Number Topics	2	
Mathematics	ASM10D	Geometry Topics	2	
Science (For non-PES Major student teachers)	ASK10B	Topics in Physical Science for Primary Science Teaching	3	
Social Studies	ASL10A	Disciplinary Foundations in Primary Social Studies: Geography	3	
	ASL10B	Disciplinary Foundations in Primary Social Studies: History	3	

<sup>\*</sup> AD Major: Select 1 from the following list of Science Subjects:
Biology, Chemistry, Mathematics & Computational Thinking, Physics & Energy Studies.

Note: In addition to the core courses and the required number of prescribed electives, student teachers doing English Language as a Curriculum Studies (CS) subject but not reading English Language & Linguistics as an Academic Discipline Major are required by Ministry of Education to undertake a compulsory Certificate in English Language Studies (CELS).

<sup>\*</sup> Applicable for student teachers from July 2021 intake onwards. For student teachers from earlier intakes, the equivalent course is AED10E The Social Context of Education of Singapore.

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC DISCIP	LINE MAJ	OR (Select 1 subject area*)	
ACADEMIC DISCIP	LINE		
AD Major		Science Subject *	18
EDUCATION MAJO	)R		
<b>EDUCATION STUD</b>	IES		
	AED20A	Teaching and Managing Learners at the Primary Level	2
	AED20C	Technologies for Meaningful Learning	2
	AED20D	Assessing Learning and Performance	1
<b>CURRICULUM STU</b>	IDIES (Sele	ect any 2 Curriculum Studies areas)	
Art	ACA20A	Concepts and Practices in Art Education	3
English Language	ACE20B	Teaching Reading and Writing in a Multilingual Context (Lower Primary)	3
Mathematics	ACM20A	The Teaching and Learning of Primary Mathematics I	3
Music	ACI20C	Popular Music Pedagogies	3
Science	ACS20A	Curriculum and Practices for Primary Science	3
Social Studies	ACL20A	Teaching Social Studies in the Primary Classroom	3
PRACTICUM	•	•	
	APR20A	Teaching Assistantship	3
INTERDISCIPLINA	RY COLLA	BORATIVE CORE	
	AMX20A	Multicultural Studies: Appreciating & Valuing Differences	3
Select 1 digital literacy prescribed elective +^	AED23 L/M/K	Digital and Media Literacy / Computer Literacy through Coding and Applications / Digital Literacy for Net Generation	3
<b>BROADENING &amp; D</b>	<b>EEPENING</b>	ELECTIVES	
PRIMARY LEVEL S	UBJECTS	(Aligned with Curriculum Studies subjects)	
English Language	ASE20A	Exploring Language in Texts	2

- \* AD Major: Select 1 from the following list of Science Subjects:
  Biology, Chemistry, Mathematics & Computational Thinking, Physics & Energy Studies.
- Select 1 course from the following choices: AED23L or AED23M or AED23K
- Student teachers reading a Minor in Mathematics & Computational Thinking <u>must</u> take AED23M Computer Literacy through Coding and Applications.

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC DISCI	PLINE MAJOR (	Select 1 subject area*)	
ACADEMIC DISCI	PLINE		
AD Major		Science Subject *	9
EDUCATION MAJ	OR		
<b>EDUCATION STUI</b>	DIES		
	AED30D	Supporting Diversity at the Primary Level	1
	AED30E	Pedagogical Practices	1
CURRICULUM ST	UDIES (Further s	studies in selected Curriculum Studies su	ıbjects)
Art	ACA30A	Children and Adolescent's Artistic Development and its Implications for Teaching	3
English Language	ACE30B	Teaching Reading and Writing in a Multilingual Context (Upper Primary)	3
Mathematics	ACM30A	The Teaching and Learning of Primary Mathematics II	3
Music	ACI30C	Instrumental and Singing Skills for the Music Classroom	3
Science	ACS30A	Pedagogies for Primary Science	3
Social Studies	ACL30A	Inquiry in Primary Social Studies	3
PRACTICUM			
	APR30A	Teaching Practice 1	5
INTER-MAJOR			
	AED40A	Educational Research **	3
	AED430	Research Project **	3
BROADENING & D	DEEPENING ELE	ECTIVES	
PRIMARY LEVEL	SUBJECTS (Alig	gned with Curriculum Studies subjects)	
Art	ASA30B	Pedagogical Practices in Art Classroom	3
<b>GENERAL ELECT</b>	IVES@		
			6

<sup>\*</sup> AD Major: Select 1 from the following list of Science Subjects:
Biology, Chemistry, Mathematics & Computational Thinking, Physics & Energy Studies.

<sup>\*</sup> Student teachers are required to read AED40A, except those in the NTU-NIE Teaching Scholars Programme (TSP) who will read AED430 instead.

<sup>^</sup> AED40A and AED430 span two semesters.

<sup>&</sup>lt;sup>®</sup> Student teachers are required to read 2 General Electives worth 6 AUs.

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC DISC	IPLINE MAJ	OR (Select 1 subject area*)	
ACADEMIC DISC	IPLINE		
AD Major		Science Subject *	9
<b>EDUCATION MA</b>	JOR		
CURRICULUM S	TUDIES (Fur	ther studies in selected Curriculum Studies sub	jects)
Art	ACA40A	Teaching of Art in the Classroom	3
AIL	ACA40B⁺	Curriculum and Assessment in Art	3
English	ACE40C	Teaching Speaking and Listening in a Multilingual Context (Lower and Upper Primary)	3
Language	ACE40D⁺	Approaches to Teaching English in a Multilingual Context	3
Mathematics	ACM40A	The Teaching and Learning of Primary Mathematics III	3
Mathematics	ACM40B <sup>+</sup>	Assessment Literacy for The Primary Mathematics Classrooms	3
Science	ACS40A	Innovations in Design and Practices for Primary Science	3
	ACS40B⁺	Meeting Learners' Needs in Primary Science	3
Social Studies	ACL40A	Managing Diversity in the Social Studies Classroom	3
	ACL40B <sup>+</sup>	Curriculum Leadership in Primary Social Studies	3
INTER-MAJOR ACADEMIC EXE	RCISE		
		Academic Exercise (aligned with AD Major*)	6
PRACTICUM	•		
	APR40A	Teaching Practice 2	10
<b>BROADENING &amp;</b>	DEEPENING	ELECTIVES	
PRIMARY LEVEL	SUBJECTS	(Aligned with Curriculum Studies Subjects)	
English Language	ASE40B	Current Trends in English Language Education in the Primary School	2
Mathematics	ASM40A	Further Mathematics Topics	2
Music	ASI40A	Composing	3
Music	ASI40B	Ethnomusicology	3
Science (For non-Biology Major student teachers)	ASK40B	Topics in Biological Science for Primary Science Teaching	3

<sup>\*</sup> AD Major: Select 1 from the following list of Science Subjects:
Biology, Chemistry, Mathematics & Computational Thinking, Physics & Energy Studies.

+ Offered to CS1 student teachers.
CS2 student teachers may approach the course coordinator if they wish to sit in for the course.

## AUs overview for Bachelor of Science in an Academic Discipline and in Education (Primary) (General)

Group of Courses	No. of AUs
ACADEMIC DISCIPLINE MAJOR	
Academic Discipline	48
EDUCATION MAJOR	
Education Studies	12
Curriculum Studies	
• CS1	12
• CS2	9
Practicum	
School Experience	0
Teaching Assistantship	3
Teaching Practice 1	5
INTER-MAJOR	
Academic Exercise	6
Academic Discourse Skills	3
Education Research (Regulars and Upgraders) /	3
Research Project (TSP)	
Practicum	
Teaching Practice 2	10
INTERDISCIPLINARY COLLABORATIVE CORE	_
Communication Skills for Teachers	2
Digital Literacy	3
Ethics and Social Contexts of Education	2
Group Endeavors in Service Learning	1
Multicultural Studies	3
Sustainability: Society, Economy and Environment	3
BROADENING & DEEPENING ELECTIVES	
Primary Level Subject (aligned with Curriculum Studies)	_
• PLS1	9
• PLS2	6
General Electives	
Regulars and Upgraders; or	6 /
TSP	18

# Curriculum Structure for Bachelor of Science in an Academic Discipline and in Education (Secondary) (General) Programmes

Student teachers enrolled in the Bachelor of Science in an Academic Discipline and in Education (Secondary) (General) programmes will follow the curriculum structure shown in Table 7 below:

Table 7: Curriculum Structure for Bachelor of Science in an Academic Discipline and in Education (Secondary) (General) Programmes

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC I	DISCIPLINE	MAJOR	
ACADEMIC I	DISCIPLINE		
AD Major		Science Subject *	12
EDUCATION	MAJOR		
EDUCATION	STUDIES		
	AED02C	Professional Practice and Inquiry	1
	AED10A	Educational Psychology: Theories and Applications for Learning and Teaching	2
	AED10G#	Character and Citizenship Education in the Singapore Context	2
PRACTICUM			
	APR10A	School Experience	0
INTER-MAJO	)R		
	ALS10A	Academic Discourse Skills	3
INTERDISCI	PLINARY CO	LLABORATIVE CORE	
	ALK10B	Communication Skills for Teachers	2
	AED10B	Group Endeavours in Service Learning	1
	CC0006	Sustainability: Society, Economy and Environment	3
	HY0003	Ethics and Social Contexts of Education	2
BROADENIN	IG & DEEPE	NING ELECTIVES	
MINOR			
AD Minor		Arts or Science Subject @	12

<sup>\*</sup> Applicable for student teachers from July 2021 intake onwards. For student teachers from earlier intakes, the equivalent course is AED10E The Social Context of Education of Singapore.

\* AD Major: Select one from the following list of Science Subjects:

Biology, Chemistry, Food & Consumer Sciences, Mathematics &

Computational Thinking, Physics & Energy Studies.

@ AD Minor: Select one from the following list:

Art, Biology, Chemistry, Drama, English Language & Linguistics, English Literature, Geography, History, Mathematics & Computational Thinking, Music,

Physics & Energy Studies.

Category/ Subject	Course Code	Title	No. of AUs
ACADEMIC DISCIPL	INE MAJOR		
ACADEMIC DISCIPL	INES		
AD Major		Science Subject *	18
<b>EDUCATION MAJOR</b>	₹		
<b>EDUCATION STUDIE</b>	ES		
	AED22A	Teaching and Managing Learners at Secondary Level (Part 1)	2
	AED20C	Technologies for Meaningful Learning	2
	AED20D	Assessing Learning and Performance	1
CURRICULUM STUD	DIES (CS1 ali	gn with AD Major, CS2 align with AD Minor	)
Art	ACA22A	Concepts and Practices in Art Education	3
Biology	ACB22A	Curriculum and Scientific Practices in Biology Education	3
Chemistry	ACY22B	Pedagogies in Chemistry Education	3
Drama	ACU22A	Theatre and Drama Education	3
English Language	ACE22B	Teaching of English at the Secondary Level: Reading and Viewing	3
Frankisk Litaustrus**	ACR32A	Teaching Prose	3
English Literature**	ACR32B	Teaching Poetry	3
Food & Consumer Sciences	ACQ22A	Family and Consumer Sciences Curriculum	3
Geography	ACG22A	Planning for Geography Teaching	3
History	ACH22A	Introduction to the Teaching and Learning of Secondary History	3
Mathematics	ACM22A	Teaching and Learning Mathematics I	3
Music	ACI22C	Popular Music Pedagogies	3
Physics	ACP22A	Understanding the Physics Curriculum	3
Social Studies	ACL22B	Social Studies Education in the Secondary School Classroom	3
PRACTICUM			
INTERDISCIPLINAR	APR20A Y COLLABO	Teaching Assistantship RATIVE CORE	3

Category/ Subject	Course Code	Title	No. of AUs
	AMX20A	Multicultural Studies: Appreciating & Valuing Differences	3
Select 1 digital literacy prescribed elective +^	AED23 L/M/K	Digital and Media Literacy / Computer Literacy through Coding and Applications / Digital Literacy for Net Generation	3
<b>BROADENING &amp; DE</b>	EPENING EL	ECTIVES	
GENERAL ELECTIVI	ES @		
			3

- \* AD Major: Select one from the following list of Science Subjects:

   Biology, Chemistry, Food & Consumer Sciences, Mathematics & Computational Thinking, Physics & Energy Studies.
- \*\* ACR32A, ACR32B can be taken at Year 2 or Year 3.
- Select 1 course from the following choices: AED23L or AED23M or AED23K
- ^ Student teachers reading a Minor in Mathematics & Computational Thinking <u>must</u> take AED23M Computer Literacy through Coding and Applications.
- Student teachers are required to read a total of 2 General Electives worth 6 AUs.

Category/ Subject	Course Code	Title	No. of AUs	
ACADEMIC DISCIP	PLINE MAJO	R		
ACADEMIC DISCIP	PLINE *			
AD Major		Science Subject *	9	
<b>EDUCATION MAJO</b>	DR			
EDUCATION STUD	DIES			
	AED32B	Teaching and Managing Learners at Secondary Level (Part 2)	1	
	AED30E	Pedagogical Practices	1	
CURRICULUM STU	CURRICULUM STUDIES (CS1 align with AD Major, CS2 align with AD Minor)			
Art	ACA32A	Children and Adolescent's Artistic Development and its Implications for Teaching	3	
Biology	ACB32A	Pedagogies in Biology Education	3	
Chemistry	ACY32B	Chemistry Planning and Instruction	3	
Drama	ACU32A	Planning and Facilitating Theatre and Drama Education	3	
English Language	ACE32B	Teaching of English at the Secondary Level: Writing and Representing	3	
English Literature	ACR32A	Teaching Prose	3	
**	ACR32B	Teaching Poetry	3	

Category/ Subject	Course Code	Title	No. of AUs	
Food & Consumer Sciences	ACQ32A	Introduction to Family and Consumer Sciences Teaching	3	
Geography	ACG32A	Classroom-based Teaching Strategies	3	
History	ACH32A	Teaching and Learning of Secondary History and Social Studies I	3	
Mathematics	ACM32A	Teaching and Learning Mathematics II	3	
Music	ACI32C	Instrumental and Singing Skills for the Music Classroom	3	
Physics	ACP32A	Physics Instruction & Microteaching	3	
Social Studies	ACL32B	Inquiry-Based Learning Approach Towards the Teaching of Social Studies	3	
PRACTICUM				
	APR30A	Teaching Practice 1	5	
INTER-MAJOR				
	AED40A	Educational Research #^	3	
	AED430	Research Project #^	3	
BROADENING & D	EEPENING	ELECTIVES		
GENERAL ELECTIVES @				
			6	

- \* AD Major: Select one from the following list of Science Subjects:
  Biology, Chemistry, Food and Consumer Sciences, Mathematics & Computational Thinking, Physics & Energy Studies.
- ® Student teachers are required to read a total of 2 General Electives worth 6 AUs.
- \* Student teachers are required to read AED40A, except those in the NTU-NIE Teaching Scholars (TSP) Programme who will read AED430 instead.
- ^ AED40A and AED430 span two semesters.
- \*\* ACR32A, ACR32B can be taken at Year 2 or Year 3.

Category/ Subject	Course Code	Title					
ACADEMIC DISCIPLINE MAJOR							
ACADEMIC DISCIPLINE							
AD Major		Science Subject *	9				
EDUCATION I							
CURRICULUM	STUDIES (	CS1 align with AD Major, CS2 align with AD Minor)					
Art	ACA42A⁺	Curriculum and Assessment in Art (Teaching of Art 3)	3				
	ACA42B	Teaching of Art in the Classroom (Teaching of Art 4)					
Biology	ACB42A	Assessment in Biology					
ыоюду	ACB42B	Innovative Biology Teaching					
Chemistry	ACY42A	Assessment and laboratory issues in Chemistry	3				
Chemistry	ACY42C⁺	Trends and Issues in Chemistry Education	3				
Dromo	ACU42A⁺	Critical Pedagogies for Theatre and Drama Education	3				
Drama	ACU42B	Curriculum and Assessment for Theatre and Drama Education					
English	ACE42A	Teaching of English at the Secondary Level: Listening and Speaking					
Language	ACE42B <sup>+</sup>	Teaching Grammar at the Secondary Level	3				
English	ACR42A⁺	Designing Literature Curriculum and Assessment					
Literature	ACR42B	Teaching Drama					
Food & Consumer Sciences	ACQ42A	Evaluation in Family and Consumer Sciences Teaching					
	ACQ42B	Trends in Family and Consumer Sciences Education					
	ACG42A⁺	Advanced Teaching Strategies in Geography					
Geography	ACG42B	Field-Based Teaching Strategies and Assessment in Teaching Geography					
History	ACH42A⁺	Inquiry-based Experiential Learning: Fieldtrip Design for Secondary History					
	ACH42B	Assessment and Evaluation in Secondary History					
	ACM42A	Teaching and Learning Mathematics III					
Mathematics	ACM42B <sup>+</sup>	Specialised Areas in Teaching and Learning of Mathematics					
Music	ACI42D	Teaching Music as an Examination Subject at O- and N(T)-level					
	ACI42E⁺	Creativity in Music Education					
Dhysics	ACP42A	Assessment in Physics Education					
Physics	ACP42B⁺	Reflective Teaching and Inquiry in Physics					
Social Studies	ACL42B	Assessing Learning in Social Studies					

Category/ Subject	Course Code	Title	No. of AUs				
INTER-MAJOR	INTER-MAJOR						
ACADEMIC EXERCISE							
		Academic Exercise (aligned with AD Major*)	6				
PRACTICUM							
	APR40A	Teaching Practice 2	10				

<sup>\*</sup> AD Major: Select one from the following list of Science Subjects:
Biology, Chemistry, Food & Consumer Sciences, Mathematics & Computational Thinking, Physics & Energy Studies.

### AUs overview for Bachelor of Science in an Academic Discipline and in Education (Secondary) (General)

Group of Courses	No. of AUs
ACADEMIC DISCIPLINE MAJOR	
Academic Discipline	
AD Major	48
EDUCATION MAJOR	
Education Studies	12
Curriculum Studies	
• CS1	12
• CS2	9
Practicum	
School Experience	0
<ul> <li>Teaching Assistantship</li> </ul>	3
<ul> <li>Teaching Practice 1</li> </ul>	5
INTER-MAJOR	
Academic Exercise	6
Academic Discourse Skills	3
<ul> <li>Education Research (Regulars and Upgraders) /</li> </ul>	3
Research Project (TSP)	
Practicum	
Teaching Practice 2	10
INTERDISCIPLINARY COLLABORATIVE CORE	
<ul> <li>Communication Skills for Teachers</li> </ul>	2
Digital Literacy	3 2
<ul> <li>Ethics and Social Contexts of Education</li> </ul>	
<ul> <li>Group Endeavors in Service Learning</li> </ul>	1
Multicultural Studies	3
<ul> <li>Sustainability: Society, Economy and Environment</li> </ul>	3
BROADENING & DEEPENING ELECTIVES	
Minor	
AD Minor	15
General Electives	
<ul> <li>Regulars and Upgraders; or</li> </ul>	6 /
• TSP	18

<sup>&</sup>lt;sup>+</sup> Offered to CS1 student teachers. CS2 student teachers may approach the course coordinator if they wish to sit in for the course.