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BLA Programme Handbook AY 2023/2024 Department of Architecture College of Design & Engineering

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https://www.facebook.com/nus.larch/

### DIRECTOR'S MESSAGE

LIN SHENGWEI ERVINE
BLA Programme Director

A warm welcome to our growing Bachelor of Landscape Architecture (BLA) family at NUS!

In 2023 we have two important achievements to celebrate together. The first being the graduation of our very first batch of BLA students who matriculated back in 2020, and the second being the largest BLA intake we've had thus far!

Our pioneering batch of students graduating this year marks a key milestone in the landscape architecture cluster's long running desire to train our own local talents who will serve as the nation's landscape designers as we strive towards nurturing a "City in Nature".

We are also heartened by the marked increase in student admissions into the BLA programme this year, with a total of about 40 students entering BLA year 1, double that of our pioneering batch! This serves as a clear indicator that there is a desire for our students to pursue a career which seeks to integrate nature into the built environment.

While the numbers are encouraging, it is no secret that the construction industry (and thus the landscape industry) is facing some of its biggest challenges in the past decades and there is concern about the future job prospects for our graduates. This is precisely why the university has shifted towards a more flexible approach in "building your own degree" to allow students who wish to side step into neighbouring industries to do so by leveraging off unrestricted electives not only related to but also outside of the study of landscape architecture itself.

Students are given the opportunity to pursue specialisations, minors or second majors to further bolster their learning journey and to prepare them for potential job opportunities within landscape architecture or beyond via the neighbouring pool of design and/or green industries.

Despite the varied options being made available, we hope that the BLA programme will become a strong foundation for you to start your journey towards a career that takes pride in design while engaging in pressing matters of urbanisation, socio-ecological challenges which are guided by sound technological and scientific rigour.

This handbook was meant to provide incoming BLA students information on curricular matters, courses, grade regulations and collates useful links to scholarships, student exchange, internships and so on. We hope that you find the information useful to begin to chart their journey over the coming years here in NUS towards a fulfilling career, leading the industry in designing, planning and developing landscapes around the world in the near future.

The core emphasis of NUS LANDSCAPE ARCHITECTURE is excellence in design—We imbue our students with a deep understanding of the dual nature of design as both a process and a product. As a process, we prioritize landscape design to be creative, but one which is grounded in socio-cultural sensitivities, ecological knowledge, and grasp of conventional and emergent technologies and techniques. Design as a process benefits from synergistic knowledge exchange among multiple disciplines in NUS as one of the top research intensive universities in Asia and the world. As a product, landscape design expressed through various visual and digital media, must be inspiring, move the heart, and above all, instigate meaningful and impactful landscape changes in real life.

NUS LANDSCAPE ARCHITECTURE is distinctively Asian and pantropical in its geographic attention and urban in its emphasis. With our central location in one of the most dynamic, diverse and rapidly urbanizing regions of the world, we aim to provide a landscape architecture education that is sensitive to the myriad challenges facing Asian cities, as well as opportunities provided by the sheer richness of heritage and cultural, socioeconomic and ecological elements of the region. Our location in Singapore, with its diversity of culture and cosmopolitan outlook, and where greening and ecology of the built environment is a cornerstone of its urban development approach, also provides an enriching backdrop to our training of landscape architects.

As we move into the Ecological Age, where the environment and nature increasingly become prioritized in land-use developments, landscape architects are well-poised to play a critical role in shaping an environment that affects the large majority of the world's population. To that end, we train our students to design, build, and manage design projects of different scales and context.

Our graduates are expected to navigate the demands of the profession, and the dynamism and challenges the environment presents, and to be leaders and stewards in shaping a liveable, sustainable and resilient environment.

#### ACADEMIC CALENDAR 2023-24:

SEMESTER 1	7 AUG-9 DEC 2023	18 WEEKS
Orientation Week	7–12 Aug 2023	1 week
Instructional Period		
Week 1—Week 6	14 Aug—22 Sep 2023	6 weeks
Recess Week	23 Sep-1 Oct 2023	1 week
Week 7—Week 13	2 Oct-17 Nov 2023	7 weeks
Reading Week (Final Reviews)	18 Nov-24 Nov 2023	1 week
Examination	25 Nov-9 Dec 2023	2 weeks
Vacation	10 Dec—14 Jan 2024	5 weeks

SEMESTER 2	15 JAN-11 MAY 2024	17 WEEKS
Instructional Period		
Week 1—Week 6	15 Jan—23 Feb 2024	6 weeks
Recess Week	24 Feb-3 Mar 2024	1 week
Week 7—Week 13	4 Mar—19 Apr 2024	7 weeks
Reading Week (Final Reviews)	20 Apr–26 Apr 2024	1 week
Examination	27 Apr—11 May 2024	2 weeks
Vacation	12 May-4 Aug 2024	12 weeks

For an up-to-date academic calender, please refer to the following link from NUS Registrar's Office:

https://nus.edu.sg/registrar/docs/info/calendar/ay2023-2024.pdf

The following dates will be observed as University holidays during the academic year:

(a) National Day - 9 Aug 2023 (Wed)

(b) NUS Well-Being Day - 10 Nov 2023 (Fri)

(c) Deepavali - 12 Nov 2023 (Sun)\* & 13 Nov 2023 (Mon)

(d) Christmas Day - 25 Dec 2023 (Mon)

(e) New Year's Day - 1 Jan 2024 (Mon)

(f) Chinese New Year - (to be confirmed)

(g) Good Friday - (to be confirmed)

(h) Labour Day - 1 May 2024 (Wed)

(i) Vesak Day - (to be confirmed)

(j) Hari Raya Puasa - (to be confirmed)

Please note that the official end time for classes on Chinese New Year eve (Mon-Fri) is 2pm. There will be no classes on public holidays.

For an up-to-date listing of public holidays in Singapore, please check the Ministry of Manpower website.

<sup>\*</sup>The following Monday will be a public holiday.

The BLA is a four-year Honours degree programme that provides core foundation training in skills and knowledge preparing students for professional practice or entry into advanced Master degree programmes.

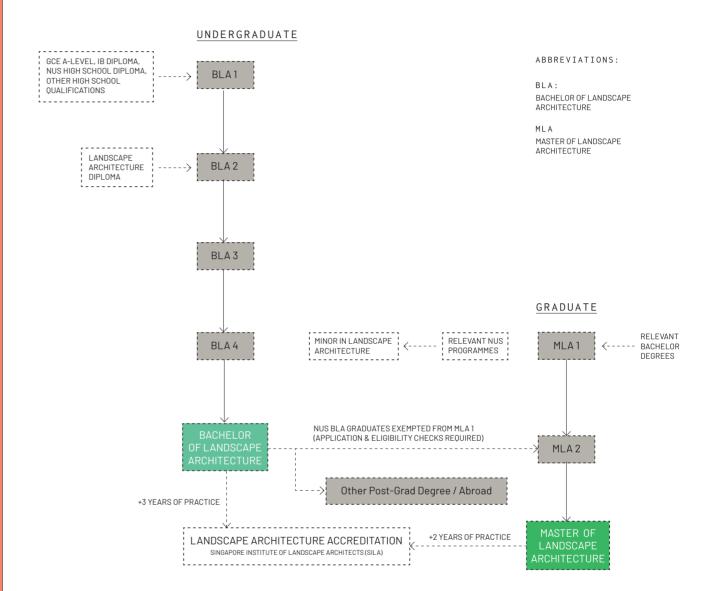
In the first year, students are introduced to foundational concepts in design: ways of sensing, reading, understanding, and interpreting fundamental landscape elements in forms, structures, materiality, and functions. A basic grounding in the first year includes introduction of landscape architecture, history and theory, and essential landscape representation techniques.

In the second and third years, students progress to acquire more advanced skills in site representation, site analysis, design representation specialized software, and spatial analytical tools. Students begin to synthesize landscape forms, structures, processes and functions

with more specialized knowledge in planting design, landscape engineering, and advanced water sensitive urban design.

In the fourth year, students decide how to utilise their unrestricted elective space. Those who stick with landscape architecture offered a choice of two specialisations, one in Landscape Studies and another in Landscape Practice. Both of which further enrich and deepen a students knowledge in the field and to prepare them to enter the workforce.

Upon completion of the four-year programme, students will receive the Bachelor of Landscape Architecture (BLA) and are eligible to apply for the MLA programme with direct admission into the second year of MLA if they fulfil the necessary criteria for advanced placement credits (APCs).



## CURRICULUM AY 2023/2024

### CURRICULUM OVERVIEW

### REQUIRED UNITS

For BLA Students without APCs.



For Students from Singapore or Ngee Ann Polytechnic with a Diploma in Landscape Architecture/Landscape Design & Horticulture



For Students from Temasek Polytechnic with a Diploma in Environment Design



For Students from Nanyang Academy of Fine Arts with Diploma Specialised in Landscape & Architecture



For Students with Diplomas in Spatial Design (e.g. Architecture, Interior, Spatial Design)



For Students from Polytechnics with unrelated Diplomas



- All NUS students need to fulfil a minimum total of 160 Units in order to graduate with the 160 Units divided into 4
  categories, Essential Courses (specific to the programme), Common Courses (common between all CDE students),
  General Education Courses (for all NUS students) and Unrestricted Electives (specific courses chosen by the
  student).
- 2. Students with different polytechnic diplomas have different APCs, please refer to following page on APCs.
- 3. The Unrestricted Elective (UE) space can be towards obtaining specialisations, minors and/or a second major.

ACRONYMS: EC: Essential Course

CC: Common Course

GE: General Education Course
UE: Unrestricted Elective

APC: Advanced Placement Credit

### ADVANCED PLACEMENT CREDITS (APCS)

Diplomas		Diplomas	
Singapore Polytechnic Landscape Architecture  Ngee Ann Polytechnic Landscape Design & Horticulture	LAD1001 Design 1 (4 Units)      LAD1005 Design 2 (8 Units)      LAD2003 Landscape     Construction I (4 Units)      LAD2004 Planting Design     and Horticulture (4 Units)      CDE2000 Creating     Narratives (4 Units)      DTK1234A Design Thinking     (4 Units)      3 Unrestricted Electives (12 Units)  Total: 40 Units	Nanyang Academy of Fine Arts Design (Specialisation in Landscape & Architecture)	LAD1001 Design 1 (4 Units)      LAD1005 Design 2 (8 Units)      CDE2000 Creating     Narratives (4 Units)      DTK1234A Design Thinking     (4 Units)      5 Unrestricted Electives     (20 Units)  Total: 40 Units
Temasek Polytechnic Environment Design  Course CATEGORY:	LAD1001 Design 1 (4 Units)      LAD1005 Design 2 (8     Units)      CDE2000 Creating     Narratives (4 Units)      DTK1234A Design     Thinking (4 Units)      EG1311 Design and Make     (4 Units)      4 Unrestricted Electives     (16 Units)	Singapore Polytechnic Architecture Architectural Technology Interior Design  Temasek Polytechnic Retail and Hospitality Design Interior Architecture & Design  Nanyang Polytechnic Space and Interior Design Architecture Spatial Design	LAD1001 Design 1 (4 Units)     CDE2000 Creating     Narratives (4 Units)      EG1311 Design and Make     (4 Units)      DTK1234A Design Thinking     (4 Units)      5 Unrestricted Electives     (20 Units)  Total: 36 Units
EC: Essential Course CC: Common Course GE: General Education UE: Unrestricted Elective	Total: 40 MC	Holders of other Polytechnic Diplomas admitted into BLA Programme:	• 5 Unrestricted Electives (20 Units)  Total: 20 Units

### REQUIRED COURSES FOR GRADUATION

Of the 160 Units required to graduate, the following list of courses are specifically required.

Students with APCs (see left) are exempted from taking selected courses based on their respective diplomas held.



### Essential Courses (EC)

- LAD1001 Design 1 (4 Units)
- LAD1005 Design 2 (8 Units)
- LAD1003 Introduction to Landscape Architecture (4 Units)
- LAD1004 History & Theory of Landscape Architecture (4 Units)
- LAD2003 Landscape Construction 1(4 Units)
- LAD2004 Planting Design & Horticulture (4 Units)
- LAD2005 Introduction to GIS for Landscape Architecture (4 Units)
- LAD2006 Design 3 (8 Units)
- LAD2007 Design 4 (8 Units)
- LAD3001 Design 7 (8 Units)
- LA/BLA Recognised Elective (4 Units)

Total: 60 Units

### Common Curriculum Courses (CC)

- CDE2000 Creating Narratives (4 Units)
- CDE2212 Al for Design (4 Units)
- DTK1234A Design Thinking (4 Units)
- EG1311 Design and Make (4 Units)
- CDE2501 Liveable Cities (4 Units)
- IE2141 Systems Thinking and Dynamics (4 Units)
- PF1101 Fundamentals of Project Management (4 Units)
- LAD3002 Design 6 Integrated Project/Studio (8 Units)

Total: 36 Units

### General Education Courses (GE)

- AR2524 Spatial Computational Thinking (4 Units)
- GEA1000 Quantitative Reasoning with Data (4 Units)
- 4 x Other GEs (12 Units)

Total: 24 Units

### Unrestricted Electives (UE)

• 10 x UEs (40 Units)

Total: 40 Units

### ESSENTIAL COURSES

In the first three years, design studios introduce students to six ways of design – sensing, interpreting, retrofitting, envisioning, digitalising, and transforming. Three related emphases will guide each studio with accumulative and augmented learning outcomes. Together with design studios, essential lecture courses are conducted in unison in order to equip our students with the necessary knowledge for a career in the landscape architecture profession.

In the fourth year of the programme, all courses offered by landscape architecture become "optional" unrestricted electives which students can choose to take up landscape specific specialisations (see next page) or otherwise.

	BLA Y	EAR1	BLA YEAR 2		BLA YEAR 3		BLA YEAR 4	
STUDIO	DESIGN 1 SENSING LANDSCAPES	DESIGN 2 INTERPRETING SPACES	DESIGN 3  RETROFITTING SITES	DESIGN 4 ENVISIONING EVERYDAY LIFE	DESIGN 5  DIGITALISING LANDSCAPES	DESIGN 6 TRANSFORMING INFRASTRUCTURE	DESIGN 7  COMMON SPECIALISTION	DESIGN 8  LANDSCAPE PRACTICE SPECIALISATION
LECTURE	INTRODUCTION TO LANDSCAPE ARCHITECTURE	HISTORY AND THEORY OF LANDSCAPE ARCHITECTURE	PLANTING DESIGN INTRODUCTORY GIS FOR LA	LANDSCAPE CONSTRUCTION I	BASICS OF ECOLOGY or INTERNSHIP (LA Elective)		GEODESIGN  DIGITAL TECHNIQUES IN LA POLITICAL ECOLOGY AND LANDSCAPES  URBAN ECOLOGY & DESIGN	LANDSCAPE CONSTRUCTION II URBAN GREENING: TECHNOLOGIES AND TECHNIQUES SPECIAL TOPICS IN LA

### COMMON COURSES AND GENERAL EDUCATION COURSES

As part of the new undergraduate curriculum structure for students enrolled in the academic year starting in August 2021, students are required to read an equivalent of 15 courses outside of their main discipline. They comprise of six General Education courses (GE) imparting interdisciplinary skills and eight Common courses (CM) which enhance the students' learning experience across the University. One of the Common courses comprises of an integrated studio which is equivalent to two courses.

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Design Thinking
Design and Make
Systems Thinking and Dynamics
Al for the Design of the Built Environment
Liveable Cities
Creating Narratives
Fundamentals of Project Management
Integrated Studio (8 Units)
GENERAL EDUCATION COURSES (GE)
GENERAL EDUCATION COURSES (GE)
Quantitative Reasoning with Data
Spatial Computational Thinking
4 x GEs

CUMMUN CULIBRES (CC)

### SPECIALISATIONS USING UNRESTRICTED ELECTIVES

The BLA programme offers a broad range of topics to meet the diverse demands of the landscape architectural profession. However, through the two offered specialisations tracks in the fourth year of the BLA programme, it also encourages students to develop an expertise in particular areas of landscape architecture by utilising their Unrestricted Elective space.

The Landscape Practice Specialisation is specific for students who wish to enter the practice of landscape architecture. Students seeking to obtain this specialisation are required to take both design studios in year 4 along with Landscape Construction II in order to bolster their understanding on how to design and build actual landscape projects upon graduation

In comparison, the Landscape Studies specialisation seeks to deepen and broaden our student's understanding of more advanced topics in landscape architecture beyond just practice. As such, other than the Design 7 which serves as a common course across both specialisations, students can choose 3 out of 6 unrestricted electives which interests them to fulfil the requirements for this specialisation.

	LANDSCAPE PRACTICE	LANDSCAPE STUDIES
SPECIALISATION COURSES	LAD4010 DESIGN 8 (8 UNITS)  +  LAD4003 LANDSCAPE CONSTRUCTION II (4 UNITS)	CHOOSE 3 FROM BELOW  LAD4004 GEO DESIGN (4 UNITS)  LAD4006 DIGITAL TECHNIQUES IN LANDSCAPE ARCHITECTURE (4 UNITS)  LAD4007 POLITICAL ECOLOGY AND LANDSCAPES (4 UNITS)  LAD4012 URBAN GREENING: TECHNOLOGY & TECHNIQUES (4 UNITS)  LA5222 URBAN ECOLOGY & DESIGN (4 UNITS)  LA5901 SPECIAL TOPICS IN LANDSCAPE ARCHITECTURE (4 UNITS)
COMMON SPECIALISTION COURSE (COUNTS TO BOTH SPECIALISATIONS)	LAD4008 DES	IGN 7 (8 UNITS)
TOTAL Units	20 Units	20 Units

Note that while specialisations are optional for graduation, it is highly encouraged that students who are keen on pursuing a career in the landscape architectural profession take up at least one of these specialisations if not both.

# SUGGESTED COURSE ROADMAP FOR STUDENTS WITHOUT ADVANCED PLACEMENT CREDITS TO OBTAIN BOTH SPECIALISATIONS

Course	CATEGORY:

EC: Essential Course

CC: Common Course

GE: General Education

UE: Unrestricted Elective

YEAR 4 - SEM 1

YEAR 4 - SEM 2

YEAR 1 - SEM 1	YEAR 1 - SEM 2	YEAR 2 - SEM 1	YEAR 2 - SEM 2
LAD1003 <b>INTRO. TO LA</b> (4 Units)	LAD1005 DESIGN 2	LAD2006 DESIGN 3	LAD2007 DESIGN 4
LAD1001 <b>DESIGN 1</b> (4 Units)	(8 Units)	(8 Units)	(8 Units)
DTK1234A <b>DESIGN THINKING</b> (4 Units)	LAD1004 <b>HISTORY &amp; THEORY OF LA</b> (4 Units)	LAD2004 <b>PLANTING DESIGN &amp; HORTI.</b> (4 Units)	LAD2003 LANDSCAPE CONSTRUCTION I (4 Units)
EG1311 <b>DESIGN AND MAKE</b> (4 Units)	CDE2000 CREATING NARRATIVES (4 Units)	LAD2005 INTRO TO GIS FOR LA (4 Units)	IE2141 SYS. THINKING & DYNAMICS (4 Units)
GEA1000 QUANTITATIVE REASONING (4 Units)	AR2524 SPATIAL COMP. THINKING (4 Units)	CDE2212 AI FOR DESIGN (4 Units)	<b>GE</b> (4 Units)
8 EC	12 EC		12 EC
+	+	16 EC	+
8 CC	4 CC	+	4 C C
+	+	4 C C	+
4 GE	4 GE		4 GE

LAD3001 <b>DESIGN 5</b> (8 Units)	LAD3002 <b>DESIGN 6³</b> (8 Units)	LAD4008 DESIGN 7 (8 Units)  LAD4006 DIGITAL TECH IN LA (4 Units)	LAD4010 <b>DESIGN 8</b> (8 Units)
LA ELECTIVE¹ (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP²)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)	LAD4007 POLITICAL ECOLOGY (4 Units)	LAD4003 LANDSCAPE CONSTRUCTION II (4 Units)
CDE2501 LIVEABLE CITIES (4 Units)	<b>GE</b> (4 Units)	LAD4004 <b>GEODESIGN</b> (4 Units)	LAD4012 URBAN GREENING: TECH (4 Units)
<b>GE</b> (4 Units)	<b>GE</b> (4 Units)	LA5222 URBAN ECOLOGY & DESIGN (4 Units)	LA5901 <b>Special Topics in LA</b> (4 Units)
12 EC + 4 CC + 4 GE	12 CC + 8 GE	20 UE (Choose 3 of 4 Electives)	20 UE

YEAR 3 - SEM 2



YEAR 3 - SEM 1



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme.
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information.
- ${\tt 3.}\quad {\tt Design\,6\,studio\,is\,considered\,an\,integrated\,studio\,under\,the\,Common\,Curriculum\,structure.}$

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SUGGESTED COURSE ROADMAP FOR STUDENTS FROM SINGAPORE/NGEE ANN POLYTECHNIC WITH A LANDSCAPE DIPLOMA TO OBTAIN SPECIALISATION IN EITHER LANDSCAPE PRACTICE OR LANDSCAPE STUDIES<sup>4</sup>

LAD2006	LAD2007
<b>DESIGN 3</b>	<b>DESIGN 4</b>
(8 Units)	(8 Units)
LAD1003	LAD1004
INTRO. TO LA	HISTORY & THEORY OF LA
(4 Units)	(4 Units)
LAD2005	IE2141
INTRO. TO GIS FOR LA	SYS. THINKING & DYNAMICS
(4 Units)	(4 Units)
GEA1000	AR2524

YEAR 2 - SEM 2

YEAR 2 - SEM 1

	12 EC
16 EC	+
+	4 C C
4 GE	+
	4 GE

YEAR 3 - SEM 1	YEAR 3 - SEM 2
LAD3001 <b>DESIGN 5</b> (8 Units)	LAD3002 <b>DESIGN 6</b> <sup>3</sup> (8 Units)
LA ELECTIVE <sup>1</sup> (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP <sup>2</sup> )	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)
CDE2501 LIVEABLE CITIES (4 Units)	<b>GE</b> (4 Units)
EG1311 DESIGN AND MAKE (4 Units)	GE (4 Units)
	·

LA ELECTIVE <sup>1</sup> (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP <sup>2</sup> )	PF1101 FUNDAMENTALS OF PRJ. MGM (4 Units)
CDE2501 LIVEABLE CITIES (4 Units)	GE (4 Units)
EG1311 DESIGN AND MAKE (4 Units)	GE (4 Units)
12 EC	12 CC
+	+

8 GE

8 C C

### Course CATEGORY:

EC: Essential Course

CC: Common Course

GE: General Education UE: Unrestricted Elective

### LANDSCAPE STUDIES<sup>5</sup>

### LANDSCAPE PRACTICE

YEAR 4 - SEM 1	YEAR 4 - SEM 2		YEAR 4 - SEM 1	YEAR 4 - SEM 2
LAD4008 <b>DESIGN 7</b>	LAD4012 URBAN GREENING: TECH (4 Units)		LAD4008 <b>DESIGN 7</b> (8 Units)	LAD4010 DESIGN 8
(8 Units)				(8 Units)
LAD4006 <b>Digital tech in la</b> (4 Units)	<b>UE</b> (4 Units)	OR	<b>UE</b> (4 Units)	LAD4003 LANDSCAPE CONSTRUCTION II (4 Units)
LA5222 URBAN ECOLOGY & DESIGN (4 Units)	<b>GE</b> (4 Units)		<b>UE</b> (4 Units)	<b>GE</b> (4 Units)
CDE2212 <b>AI FOR DESIGN</b> (4 Units)	<b>GE</b> (4 Units)		AR2525 AI FOR DESIGN OF BUILT ENV. (4 Units)	<b>GE</b> (4 Units)
16 UE	12 UE		16 UE	12 UE
+	+		+	+
4 C C	8 GE		4 C C	8 GE

For Students from Singapore or Ngee Ann Polytechnic with a Diploma in Landscape Architecture/Landscape Design & Horticulture



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information
- 3. Design 6 studio is considered an integrated studio under the Common Curriculum structure.
- 4. It is possible to obtain both specialisations but it requires the student to overload by 1 course.
- 5. UE courses shown are an example of 3 possible choices amongst 6 electives to fulfil the specialisation in Landscape Studies

SUGGESTED COURSE ROADMAP FOR STUDENTS
FROM TEMASEK POLYTECHNIC ENVIRONMENT DESIGN DIPLOMA
TO OBTAIN SPECIALISATION IN EITHER
LANDSCAPE PRACTICE OR LANDSCAPE STUDIES4

YEAR 2 - SEM 2

YEAR 2 - SEM 1

LAD2006 <b>DESIGN 3</b> (8 Units)	LAD2007 <b>DESIGN 4</b> (8 Units)	LAD3001 <b>DESIGN 5</b> (8 Units)	LAD3002 <b>DESIGN 6<sup>3</sup></b> (8 Units)
LAD1003 <b>INTRO. TO LA</b> (4 Units)	LAD1004 HISTORY & THEORY OF LA (4 Units)	LAD2004 PLANTING DESIGN & HORTI. (4 Units)	IE2141 SYS. THINKING & DYNAMICS (4 Units)
GEA1000 <b>QUANTITATIVE REASONING</b> (4 Units)	AR2524 SPATIAL COMP. THINKING (4 Units)	LAD2005 INTRO. TO GIS FOR LA (4 Units)	LAD2003 LANDSCAPE CONSTRUCTION (4 Units)
<b>GE</b> (4 Units)	<b>GE</b> (4 Units)	CDE2212 AI FOR DESIGN (4 Units)	<b>GE</b> (4 Units)
			12 CC
12 EC	12 EC	16 EC	+
+	+	+	4 EC
8 GE	8 GE	4 C C	+
			4 GE

YEAR 3 - SEM 1

Course CATEGORY:

EC: Essential Course

CC: Common Course

GE: General Education

UE: Unrestricted Elective

### LANDSCAPE STUDIES<sup>5</sup>

### LANDSCAPE PRACTICE

YEAR 4 - SEM 1	YEAR 4 - SEM 2		YEAR 4 - SEM 1	YEAR 4 - SEM 2
LAD4008 DESIGN 7	LAD4012 URBAN GREENING: TECH (4 Units)		LAD4008 <b>DESIGN 7</b>	LAD4010 DESIGN 8
(8 Units)	LA5901 <b>Special Topics in LA</b> (4 Units)		(8 Units)	(8 Units)
LAD4004 <b>GEODESIGN</b> (4 Units)	<b>UE</b> (4 Units)	OR	<b>UE</b> (4 Units)	LAD4003 LANDSCAPE CONSTRUCTION II (4 Units)
LA ELECTIVE¹ (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP²)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)		LA ELECTIVE¹ (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP²)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)
CDE2501 <b>LIVEABLE CITIES</b> (4 Units)	<b>GE</b> (4 Units)		EG2501 LIVEABLE CITIES (4 Units)	<b>GE</b> (4 Units)
12 UE	12 UE		12 UE	12 UE
+	+		+	+
4 EC	4 C C		4 EC	4 C C
+	+		+	+
4 C C	4 GE		4 C C	4 GE

For Students from Temasek Polytechnic with a Diploma in Environment Design



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information
- ${\tt 3.}\quad {\tt Design}\, {\tt 6}\, {\tt studio}\, {\tt is}\, {\tt considered}\, {\tt an}\, {\tt integrated}\, {\tt studio}\, {\tt under}\, {\tt the}\, {\tt Common}\, {\tt Curriculum}\, {\tt structure}.$
- 4. It is possible to obtain both specialisations but it requires the student to overload substantially.
- 5. UE courses shown are an example of 3 possible choices amongst 6 electives to fulfil the specialisation in Landscape Studies

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YEAR 3 - SEM 2

SUGGESTED COURSE ROADMAP FOR STUDENTS
FROM NAFA WITH SPECIALISATION IN LA DIPLOMA
TO OBTAIN SPECIALISATION IN EITHER
LANDSCAPE PRACTICE OR LANDSCAPE STUDIES<sup>4</sup>

YEAR 2 - SEM 1	YEAR 2 - SEM 2	Υ	EAR 3 - SEM 1	YEAR 3 - SEM 2
LAD2006 <b>DESIGN 3</b> (8 Units)	LAD2007 <b>DESIGN 4</b> (8 Units)		LAD3001 <b>DESIGN 5</b> (8 Units)	LAD3002 <b>DESIGN 6</b> 3 (8 Units)
LAD1003 <b>INTRO. TO LA</b> (4 Units)	LAD1004 HISTORY & THEORY OF LA (4 Units)	PLAN	LAD2004 NTING DESIGN & HORTI. (4 Units)	IE2141 SYS. THINKING & DYNAMICS (4 Units)
GEA1000 QUANTITATIVE REASONING (4 Units)	AR2524 SPATIAL COMP. THINKING (4 Units)	IN	LAD2005 ITRO. TO GIS FOR LA (4 Units)	LAD2003 LANDSCAPE CONSTRUCTION I (4 Units)
<b>GE</b> (4 Units)	GE (4 Units)		CDE2212 AI FOR DESIGN (4 Units)	<b>GE</b> (4 Units)
12 EC	12 EC		16 EC	12 CC +
+	12 EU		10 EC	4 EC
8 GE	8 GE		4 C C	+
				4 GE

Course CATEGORY:

EC: Essential Course

CC: Common Course

GE: General Education

UE: Unrestricted Elective

### LANDSCAPE STUDIES<sup>5</sup>

### LANDSCAPE PRACTICE

YEAR 4 - SEM 1	YEAR 4 - SEM 2		YEAR 4 - SEM 1	YEAR 4 - SEM 2
LAD4008 <b>DESIGN 7</b> (8 Units)	LAD4012 URBAN GREENING: TECH (4 Units)  LA5901 Special Topics in LA (4 Units)		LAD4008 <b>DESIGN 7</b> (8 Units)	LAD4010 <b>DESIGN 8</b> (8 Units)
LAD4007 POLITICAL ECOLOGY (4 Units)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)	OR	LA ELECTIVE <sup>1</sup> (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP <sup>2</sup> )	LAD4003 LANDSCAPE CONSTRUCTION II (4 Units)
LA ELECTIVE <sup>1</sup> (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP <sup>2</sup> )	<b>GE</b> (4 Units)		EG1311 <b>DESIGN AND MAKE</b> (4 Units)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)
EG1311 <b>DESIGN AND MAKE</b> (4 Units)			EG2501 LIVEABLE CITIES (4 Units)	<b>GE</b> (4 Units)
CDE2501 <b>LIVEABLE CITIES</b> (4 Units)				
12 UE	0.115		8 UE	10 115
	8 UE		0 0 L	12 UE
+	8 UE +		+	12 UE +
+ 4 EC				
	+		+	+

For Students from Nanyang Academy of Fine Arts with Diploma Specialised in Landscape & Architecture



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information
- ${\tt 3.}\quad {\tt Design}\, {\tt 6}\, {\tt studio}\, {\tt is}\, {\tt considered}\, {\tt an}\, {\tt integrated}\, {\tt studio}\, {\tt under}\, {\tt the}\, {\tt Common}\, {\tt Curriculum}\, {\tt structure}.$
- 4. It is possible to obtain both specialisations but it requires the student to overload substantially.
- 5. UE courses shown are an example of 3 possible choices amongst 6 electives to fulfil the specialisation in Landscape Studies

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SUGGESTED COURSE ROADMAP FOR STUDENTS FROM SPATIAL DESIGN RELATED DIPLOMAS TO OBTAIN SPECIALISATION IN EITHER LANDSCAPE PRACTICE OR LANDSCAPE STUDIES<sup>4</sup>

YEAR 1 - SEM 1	YEAR 1 - SEM 2
LAD1003 INTRO. TO LA (4 Units)	LAD1005
LAD2004 PLANTING DESIGN & HORTI. (4 Units)	<b>DESIGN 2</b> (8 Units)
<b>GE</b> (4 Units)	LAD1004 HISTORY & THEORY OF LA (4 Units)
<b>GE</b> (4 Units)	IE2141 SYS. THINKING & DYNAMICS (4 Units)
GEA1000 QUANTITATIVE REASONING (4 Units)	AR2524 SPATIAL COMP. THINKING (4 Units)
	12 EC

4 CC

+ 4 GE

8 EC

12 GE

LAD2006 <b>DESIGN 3</b> (8 Units)	LAD2007 <b>DESIGN 4</b> (8 Units)
LAD2005 INTRO TO GIS FOR LA (4 Units)	LAD2003 LANDSCAPE CONSTRUCTION I (4 Units)
CDE2212 <b>AI FOR DESIGN</b> (4 Units)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)
GE (4 Units)	
12 EC	'
+	12 EC

YEAR 2 - SEM 2

YEAR 2 - SEM 1

4 GE

(4 Units)	(4 Units)
<b>GE</b> (4 Units)	
12 EC	
+	12 EC
4 CC	+
+	4 C C

Course CATEGORY:

EC: Essential Course

CC: Common Course

GE: General Education

**UE: Unrestricted Elective** 





LANDSCAPE PRACTICE

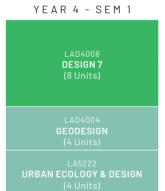


12 EC 8 C C 4 C C 4 GE

12 UE 8 UE

### LANDSCAPE STUDIES<sup>5</sup>

YEAR 3 - SEM 1	YEAR 3 - SEM 2
LAD3001	LAD3002
<b>DESIGN 5</b>	<b>DESIGN 6<sup>3</sup></b>
(8 Units)	(8 Units)
LA ELECTIVE¹ (4 Units)	LAD4012
(e.g. LAD3006 BASICS OF ECOLOGY	URBAN GREENING: TECH
or LAD3005 LA INTERNSHIP²)	(4 Units)
CDE2501 LIVEABLE CITIES (4 Units)	GE (4 Units)



	8 C C
12 EC	+
+	4 UE
4 C C	+
	4 GE

16 UE

For Students with Diplomas in Spatial Design (e.g. Architecture, Interior, Spatial Design)



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information
- 3. Design 6 studio is considered an integrated studio under the Common Curriculum structure.
- 4. It is possible to obtain both specialisations but it requires the student to overload substantially.
- 5. UE courses shown are an example of 3 possible choices amongst 6 electives to fulfil the specialisation in Landscape Studies

# SUGGESTED COURSE ROADMAP FOR STUDENTS FROM POLYTECHNICS WITH UNRELATED DIPLOMAS TO OBTAIN SPECIALISATION IN EITHER LANDSCAPE PRACTICE<sup>4</sup>

4 GE

YEAR 1 - SEM 1	YEAR 1 - SEM 2	YEAR 2 - SEM 1	YEAR 2 - SEM 2
LAD1003 INTRO. TO LA (4 Units)  LAD1001 DESIGN 1 (4 Units)	LAD1005 <b>DESIGN 2</b> (8 Units)	LAD2006 <b>DESIGN 3</b> (8 Units)	LAD2007 <b>DESIGN 4</b> (8 Units)
DTK1234A <b>DESIGN THINKING</b> (4 Units)	LAD1004 <b>HISTORY &amp; THEORY OF LA</b> (4 Units)	LAD2004  PLANTING DESIGN & HORTI.  (4 Units)	LAD2003  LANDSCAPE CONSTRUCTION (4 Units)
EG1311 <b>DESIGN AND MAKE</b> (4 Units)	CDE2000 CREATING NARRATIVES (4 Units)	LAD2005 INTRO TO GIS FOR LA (4 Units)	IE2141 SYS. THINKING & DYNAMICS (4 Units)
GEA1000 QUANTITATIVE REASONING (4 Units)	AR2524 SPATIAL COMP. THINKING (4 Units)	CDE2212 <b>AI FOR DESIGN</b> (4 Units)	<b>GE</b> (4 Units)
8 EC	12 EC		12 EC
+	+	16 EC	+
8 CC	4 C C	+	4 C C
+	+	4 C C	+

4 GE

YEAR 3 - SEM 1	YEAR 3 - SEM 2	YEAR 4 - SEM 1	YEAR 4 - SEM
LAD3001 <b>DESIGN 5</b> (8 Units)	LAD3002 <b>DESIGN 6</b> 3 (8 Units)	LAD4008 <b>DESIGN 7</b> (8 Units)	LAD4010 <b>DESIGN 8</b> (8 Units)
LA ELECTIVE¹ (4 Units) (e.g. LAD3006 BASICS OF ECOLOGY or LAD3005 LA INTERNSHIP²)	PF1101 FUNDAMENTALS OF PRJ. MGMT. (4 Units)		LAD4003 LANDSCAPE CONSTRUC
CDE2501 LIVEABLE CITIES (4 Units)	<b>GE</b> (4 Units)		
<b>GE</b> (4 Units)	<b>GE</b> (4 Units)		
12 EC			
+	12 CC		
4 C C	+	8 UE	12 UE
+	8 GE		
4 GE			

Course CATEGORY:

EC: Essential Course
CC: Common Course

GE: General Education
UE: Unrestricted Elective

For Students from Polytechnics with unrelated Diplomas



- 1. To choose from a list of pre-approved LA electives (see LA Electives page) but are highly encouraged to take LAD3006 Basics of Ecology or LAD3005 Landscape Architecture Internship Programme
- 2. The Landscape Architecture Internship Programme should be taken during the May-July semester break between BLA years 3 and 4. Refer to Landscape Architecture Internship Programme page for more information
- 3. Design 6 studio is considered an integrated studio under the Common Curriculum structure.
- 4. It is possible to obtain both specialisations but it requires the student to overload substantially or to obtain a specialisation in landscape studies instead.

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4 GE

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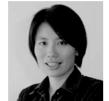
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### BLA YEAR 1 SEM 2

### LAD1001 DESIGN 1 (4 Units) with DTK1234A Design Thinking (4 Units)

### SENSING LANDSCAPES

ELEMENTS, SENSIBILITY, MANIPULATION

The first core studio aims to familiarize landscape architectural elements with design sensibility. It introduces the primary design language used in landscape architecture — forms, functions and processes. Through a set of design operations with fieldworks, drawings, and model makings, students will learn to observe, document and interpret natural phenomena as a design motive for creating an imaginary space where collectives of natural and artificial landscape elements coexist and work coherently together.

#### LEARNING OBJECTIVES

- Develop a critical eye to observe, describe and analyse landscape elements
- Understand forms, functions, processes of landscape elements.
- Navigate the design thinking process that responds to landscape architectural approaches.
- Develop design creativity through drawings and modelmaking with multi-media forms of representation.
- Present design process and outcomes with explicit narratives and effective oral presentations.

### LAD1003 INTRODUCTION TO LANDSCAPE ARCHITECTURE (4 Units)

This course introduces landscape architecture as a professional discipline. It presents a survey of the development of the profession and how the profession responds to societal needs in providing services to various public and private clients. Emphasis is placed on understanding the significance of environmental, social and cultural, physical and visual, and aesthetic factors in developing intervention strategies and designs. Contemporary landscape architectural issues, leading practitioners and their works are presented. Lectures and in-class discussion will be supplemented with field trips that involve a variety of exploratory activities including walking, observing, sketching, photographing, and writing.



### LAD1005 DESIGN 2 (8 Units)

### INTERPRETING SPACES PRECEDENT, SCALES, EXPERIENCES

This course is the second of two core studios introducing students to basic design principles critical to the discipline. It focuses on the interface between people and nature to examine compositions, functions, and systems of landscape elements through precedent analyses and site observations. The course will foster student's critical eye on identifying issues in our surrounding built environments and explain how these can be mitigated by landscape architectural design interventions using an interdisciplinary lens. The course will also expand on the development of graphical communication skills, including model making.

### LEARNING OBJECTIVES

- Understand architectural terms and drawing conventions - plans, sections, and scale
- Explore morphological and topographical analyses, and understand their relationship to human perception and experiences
- Expand design ideas by viewing them through the lenses of geographic, cultural, ecological, and historical contexts
- Develop a critical eye for observing sites and identifying issues
- Develop spatial visualization skills through 3D modelling and various drawing techniques

### LAD1004 HISTORY AND THEORY OF LANDSCAPE ARCHITECTURE (4 Units)

This course explores the underpinnings of landscape architecture exposing students to ideas that have moulded our understanding between the dichotomies of nature versus naturalistic, aesthetics versus economics, mimicry versus authenticity, and, how unravelling these can enrich their reading of the landscape. The course is organized around prevailing themes which have persisted over time as well as contemporary ones which have scant historical precedence. The goal is not to produce historians capable of identifying the nuances between landscape styles, but rather designers who are critical of landscapes that they see and experience, but more importantly design and build.

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### BLA YEAR 2 SEM 2

#### LAD2006 DESIGN 3 (8 Units)

### LANDSCAPE AS SITE CONTEXT, USAGE, PROCESS

This design studio will focus on key approaches to landscape architecture design, with an emphasis on site matters. The underlying theme of "Landscape as site" seeks to uncover human-nature relations in complex built environments, curated through proper site analysis and inventory. The key learning objectives include an appreciation of morphological and ambient components in the design palette, such as building configurations, threshold between indoors and outdoors, flora and fauna, the microclimate, etc. Students will be exposed to landscape design skills such as basic topographic manipulation and responses to existing or proposed buildings. In addition to landscape-driven learning objectives, the studio will place an emphasis on effective communication of design intention through drawings, virtual and physical models.

### LEARNING OBJECTIVES

- Understand the fundamental design process through deliverables in three phases: 1) site analysis 2) design strategies 3) translation of ideas into visual forms
- Explore design ideas that respond to the tropical context within a small scale landscape setting
- Employ GIS mappings, deep sections, axonometric drawings, infographics/diagrams as tools for design
- Use advanced graphics and visual communication skills
- to deliver design outcomes successfully
- Present ideas in concise and considered verbal, written and visual forms and engage effectively in studio and review discussions

#### LAD2004 PLANTING DESIGN AND HORTICULTURE (4 Units)

This course focuses on designing with plants through (1) understanding unique growing urban conditions, covering aspects such as urban temperatures, water, nutrients, light, and soil; (2) design of planting areas to satisfy growth needs; (3) understanding the large diversity of plants suitable for different urban conditions; (4) planting design to ensure plants can thrive in urban areas.

### LAD2005 INTRODUCTORY GIS FOR LANDSCAPE ARCHITECTURE (4 Units)

This course provides an understanding of the basic concepts and uses of Geographic Information Systems (GIS) technology and spatial analysis. By linking data to maps, GIS reveals relationships not apparent with traditional item-referenced information systems and database management products, and by displaying information in a graphic form, it unpacks complex spatial patterns. The course emphasizes the concepts needed to use GIS correctly and effectively for manipulating, querying, analyzing, and visualizing spatial data. The course includes tutorials and lab exercises that coincide with the studio site.



### LAD2007 DESIGN 4 (8 Units)

### **ENVISIONING EVERYDAY LIFE**

PROTOTYPING, MULTI-FUNCTIONALITY, ENGAGEMENT

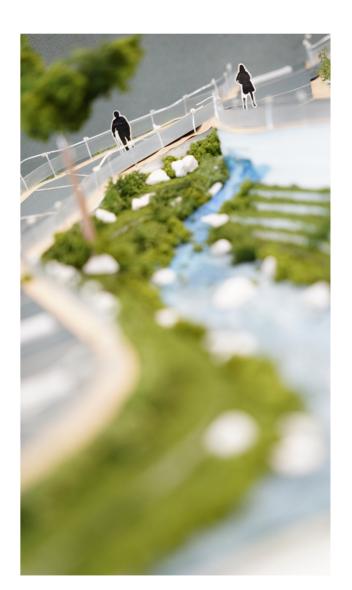
This course develops competence in design and critical thinking by increasing the scale and complexity of the design task. Students will be challenged to investigate how high-density neighborhood landscape design can be reimaged to be catered to various user groups. They are asked to identify strategies to maximize ecosystem benefits while considering livability of local residents, and the project's long-term sustainability. Through interactions and participatory workshops with the community members, students will develop an understanding of competing landscape interests and how they can be managed. They will also work across a range of representational modes, including technical diagrams and three-dimensonal physical/digital modelling, to develop confidence in communicating their design proposal's functional and aesthetic metrics to a broad audience.

### LEARNING OBJECTIVES

- Synthesize fundamental design principles and approaches through a residential landscape project that contains a high level of complexity of the urban landscape
- Understand technical regulations, needs of local stakeholders, such as community members, business people, and agency representatives
- Explore spatial design strategies for the interaction of residents and ecological systems
- Understand and apply ecological principles, scenarios, and phasing in the design thinking process
- Present ideas in concise and considered verbal, written, and performative presentation and to engage critically in studio and review discussion by utilizing a wide range of representation techniques beyond conventional drawings

### LAD2003 LANDSCAPE CONSTRUCTION I (4 Units)

The field of landscape architecture requires a series of detailed steps to achieve successful design projects. This course develops students' technical ability to effectively analyze and design a space with practical site engineering knowledge, legitimate / safety standards, and ideas on natural resource management. Landscape architects hold stewardship of the land as a key responsibility of the profession. Understanding design implementation process will enhance spatial sensitivity in students' design responses along with a greater literacy in detailing.



### LAD3001 DESIGN 5 (8 Units)

### DIGITIZING LANDSCAPES FORM, SYSTEM, REPRESENTATION

This course continues to hone the level of competence in design skills by leveraging off knowledge that was gained in previous studios and appending it with digitally driven landscape architectural tools and techniques. The specific focus of this design studio course is to provide the necessary exposure to state-of-the-art technologies and techniques including digitally driven site data acquisition and analysis, form making as well as visual representations and is organized into a series of workshops which expose students to a range of innovative and potentially paradigm shifting digital tools and techniques. Underlying this digital focus is the idea of using play as a driver in landscape design or "playscapes". Here we are not confining ourselves to any particular demographic (e.g. children) but rather looking at designed landscapes as a public amenity designed for the enjoyment of its users. It also looks at how play driven landscapes can potentially activate spaces, bring about a higher level of attachment and serve to create connections between people and the landscapes they play

#### LEARNING OBJECTIVES

- A familiarization with parametric modelling ideas and tools
- Confidence to evolve away from 2-dimensional thinking to embrace design and thinking in full 3D
- The ability to create and leverage off alternative digital visualization methods to showcase their design intentions
- To understand how play can be a driver for landscape design
- The ability to begin tackling landscape design at a larger scale

### LAD3006 BASICS OF ECOLOGY - LA ELECTIVE (4 Units)

This course will introduce students to basic ecological principles which underlie the practice of ecological landscape design. It will provide students with a fundamental understanding of the composition, structure, and dynamics of ecological systems such as forests, lakes, streams, wetlands, and cities. It will also provide students with a working knowledge of several ecological concepts such as stability, complexity, diversity, equilibrium, conservation, restoration, sustainability, and resilience. A mixture of lectures, reading materials, field trips, and discussions will assist students in providing insights on how to fill the knowledge gaps between the science of ecology and the practice of landscape architecture.



### LAD3002 DESIGN 6 (8 Units)

### TRANSFORMING INFRASTRUCTURE PLACE, FLOW, INTEGRATION

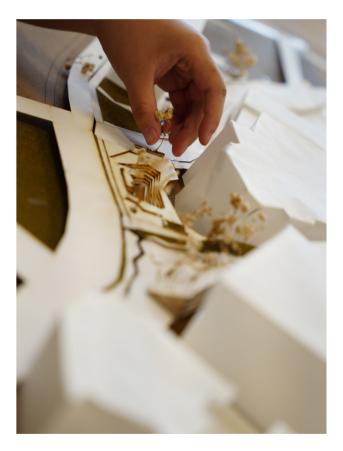
This course continues to develop a level of competence in design skills and critical thinking through a design task that increases the scale and complexity of considerations. Focusing on a high-density urban context, students will be asked to transform existing monofunctional infrastructure by layering cultural, ecological, and biophysical functions to enhance surrounding natural ecosystems and redirect human and natural flows. The project asks students to consider how to create a sense of place, integrate passive and active recreational programmes, visualize visible and invisible flows of people and nature, and phase development over time. The course will also introduce a problem-solving approach in landscape design that will guide students toward logical and comprehensive design solutions.

### LEARNING OBJECTIVES

- Understand the role of infrastructure as interconnected and complex urban ecosystems
- Understand first-hand the scale and complexity of fitting all the requirements into high density urban zones
- Identify opportunities and challenges in designing infrastructure
- Understand how Policy, Planning, Engineering, and Finance dominate the decision-making process
- Understand the Landscape Architect's role in Multi-Discipline Teams for forward planning and design for mitigating the scale and impact of all components
- Connect analysis-to-synthesis-to-design with GIS, maps, diagrams, data, 3-D graphics, and models

### LAD3005 LA INTERNSHIP - LA ELECTIVE (4 Units) (More details on Page 41)

The internship programme aims to provide opportunities for third year students to work in landscape architectural firms or allied organisations with a design-centric focus to gain exposure and experience, and apply the knowledge learnt in school in the professional setting. Students are required to perform a structured and supervised internship in a firm/organisation for a minimum of 12 weeks. Weekly logbook as well as internship reports will be used for the evaluation of their internship experience.



### LAD4008 DESIGN 7 (8 Units)

COMMON SPECIALISATION COURSE

This studio-based course develops higher level skills in landscape design and marks the first of four subsequent master-level core studios in landscape design. Projects of city quarter scale are undertaken to explore issues of context, programme and socio-economic considerations. Projects will cover sites with different functions, e.g. residential, commercial, industrial, educational, health and recreation. Civic spaces like roadsides, highways, plazas, parks and city squares will also be tackled. There is an emphasis on sustainability and tropical design

### LAD4004 GEODESIGN (4 Units) SPECIALISATION IN LANDSCAPE STUDIES COURSE

The course focuses on developing the knowledge and techniques of site analysis and planning, which are essential for sustainable landscape architecture. Geodesign is a design and planning method which tightly couples the creation of design proposals with impact simulations informed by the geographic context. The course emphasizes on the systematic thinking of site and site alternatives in a broad context, in which the analysis is supported by contemporary theories and methodologies in landscape and urban ecology. Geographic Information System (GIS) software is used as the platform for the development of advanced techniques in analyzing, evaluating, managing, and modelling.

### LAD4006 DIGITAL TECHNIQUES IN LANDSCAPE ARCHITECTURE (4 Units)

SPECIALISATION IN LANDSCAPE STUDIES COURSE

From the invention of the axe to surveying tools like the graphometre, technological advancements have always influenced how we document, understand, design and modify our landscapes. Perhaps the most influential was Geographic Information System (GIS) technology which allowed the convergence of topological, ecological and even social data into the discourse of landscape architecture. However, unlike the two dimensional nature of GIS, landscapes are inherently three dimensional. The course thus explores the various advances that allow landscape architects to operate within a 3D environment with data collected from reality, studied and modified through computational thinking, enriched through information modelling and tested through simulations.

### LAD4007 POLITICAL ECOLOGY AND LANDSCAPES (4 Units) SPECIALISATION IN LANDSCAPE STUDIES COURSE

Landscape architecture is not shaped just by environmental and aesthetic considerations, but also by the process of social engagement, social hierarchies, and power structures in society. This course introduces students to key concepts and frameworks of political ecology, which is a broad field of study and research that focuses on socio-environmental conflicts and their origins. Through a variety of teaching and learning modes, students examine landscape case studies representing different contexts, scales, and histories to uncover diverse human-environment interactions. There is an emphasis on applying different tools and methods to conduct and communicate political ecology research.

### LA5222 URBAN ECOLOGY & DESIGN (4 Units) SPECIALISATION IN LANDSCAPE STUDIES COURSE

Urban ecology is the study of ecosystems that include humans living in cities and urbanising landscapes. It is an emerging, interdisciplinary field that aims to understand how human and ecological processes can coexist in human-dominated systems and help societies with their efforts to become more sustainable. It has deep roots in many disciplines including sociology, geography, urban planning, landscape architecture, engineering, economics, anthropology, climatology, public health, and ecology which will be described in this class. The course is designed to introduce students to the fundamental principles of urban ecology so they can better integrate ecological principles in their future designs.



### BLA YEAR 4 SEM 2

### LAD4010 DESIGN 8 (8 Units) SPECIALISATION IN LANDSCAPE PRACTICE COURSE

The studio aims to develop novel design typologies that will enhance the ecological resilience and sustainability of urban and peri-urban landscapes. Students are asked to place landscapes within the larger geopolitical and socioeconomic forces that shape them and characterize the socio-ecological functions of sites at multiple scales. Application of various quantitative and qualitative methods through interdisciplinary approaches will contribute to determining the configuration, sizing, and functions of design projects.

### LA5901 SPECIAL TOPICS IN LANDSCAPE ARCHITECTURE - TROPICAL FOREST ECOLOGY

SPECIALISATION IN LANDSCAPE STUDIES COURSE

The practice of landscape architecture requires a working knowledge of ecology. The distribution of plants and animals is dependent on environmental conditions of a site, land use history, local and regional habitat and species distribution, and a number of other factors. As building and design can transform landscapes and the habitats and wildlife that live on them, holistic practice involves understanding ecological characteristics of a site prior to development. In addition, the ability to make realistic assessments of potential outcomes on site ecology after development and designing toward desired ecological outcomes are indispensable skills for the successful landscape architect. The ecological understanding of practitioners is particularly challenging in the tropics, which feature some of the world's most diverse and complex ecosystems. This course aims to equip students with the foundational knowledge (ecological principles; vegetation types; habitats) and basic skills (plant identification, literature reviews) to recognise habitat types, interpret ecological properties of a site, and to be able to design and critique landscapes from an ecological perspective.

### LAD4003 LANDSCAPE CONSTRUCTION II (4 Units) SPECIALISATION IN LANDSCAPE PRACTICE COURSE

This course has two parts – application of water sensitive urban design (WSUD) in landscape design and professional landscape practice. It has three main areas; 1) Fundamental skills in landscape engineering knowledge for design of WSUD elements; 2) Socioecological considerations in application of WSUD in landscape design; 3) Professional and practical considerations in landscape architecture practice. Areas covered can include coordination with other practices in a development project, applicable codes of practices, ethical considerations in practice, etc.

### LAD4012 URBAN GREENING: TECHNOLOGIES AND TECHNIOUES (4 Units)

SPECIALISATION IN LANDSCAPE STUDIES COURSE

This course introduces students to contemporary and emerging technologies and techniques that have become essential components of urban greening design and practices. It traces the origins of such technologies and techniques as responses to challenges and opportunities in creating a green and ecologically balanced urban environment, explains their scientific underpinnings, and illustrates with examples of real-life applications.



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### LANDSCAPE ARCHITECTURE

LAD3006 Basics of Ecology
LAD3005 Landscape Architecture Internship Programme
LAD4005 Topics in Landscape Architecture

#### DEPARTMENT OF ARCHITECTURE

AR3233 Introduction to Urbanism

### CDE DEAN'S OFFICE

CDE2502 Cities for All CDE2503 Cities in Nature

#### DEPARTMENT OF GEOGRAPHY

GE2101 Methods and Practices in Geography

GE2102 Politics, Economies And Space

GE2103 Our Planet: an Earth Systems Science Perspective

GE2215 Introduction to GIS

GE2231 Living Space: Introducing Social and Cultural Geography

GE3204 Cities and Regions: Planning for Change

GE3206 Gender, Space and Place

GE3226 Tourism Development

GE3230A Field Studies in Geography: Southeast Asia

GE3235 Geographies of Development

GE3236 Transport and Communications

GE3238 GIS Design and Practices

GE3240 Geographical Research: Developing Ideas

GE3241 Geographies of Social Life

GE3249 Geographies of Life and Death

GE3250 Nature and Society

GE3252 Cartography and Geovisualization

GE3253 Weather and Climate

GE3254 Energy Futures: Environment and Sustainability

GE3255 Aquatic, Riparian and Coastal Systems

GE3256 Earth Surface Processes, Landforms and Ecosystems

### **DEPARTMENT OF BIOLOGICAL SCIENCES**

LSM2251 Ecology and Environment

LSM2252 Biodiversity

LSM3254 Ecology of Aquatic Environments

LSM3255 Ecology of Terrestrial Environments

LSM3256 Tropical Horticulture

LSM3258 Comparative Botany

LSM4262 Tropical Conservation Biology

### DEPARTMENT OF REAL ESTATE

RE1701 Urban Land Use and Development

RE1901 Real Estate Wealth Management

RE2701 Urban Planning

RE3903 GIS for Real Estate

### SCHOOL OF BUSINESS

BSN3703 Entrepreneurial Strategy

TR3008 Technological Innovation

MNO3715 Leading Groups and Teams

### LANDSCAPE ARCHITECTURE INTERNSHIP PROGRAMME

The Landscape Architecture internship programme (LAIP) is an elective course to complement landscape architectural education. BLA students will be given the option to undergo this program under the guidance of the Department of Architecture as part of the BLA Elective course.

### **DURATION & QUALITY OF INTERNSHIP**

Students are generally advised to seek an internship in the same office for the full required period. The commencement of the LAIP can take effect only after the student has successfully passed the examinations of Semester 1 of BLA Year 3.

There will be an internship period from beginning of May to July spanning 12 weeks. A period of less than 12 continuous weeks in one firm is not acceptable for the purpose of the LAIP. Students can decide to intern for a longer period. Students will need to obtain approval from the Department if they wish to change their firm during their internship period.

The Department is concerned with the quality of experience and the variety of work-scope. Students should aim to use each task as an educational exercise to improve and advance their design knowledge and critical thinking.

### MODULAR CREDITS

The 12 Week internship carries 4 modular credits.

### **ALLOWANCE**

The Department recommends a fixed allowance of SGD1000 per month payable to students successfully completing each month of internship.

### PLACEMENT

LAIP students are to seek their own placement in landscape architecture firms or other approved organisations, either though the NUS Talent Connect portal or direct contacts. They should consider the suitability for their intended internship experience upon selecting. The Course coordinator may give advice and counsel their students on various aspects of the internship programme before they venture to seek placement for their internship.

Placement must satisfy one of the following categories:

- Singapore-based landscape architecture firm registered as Recognised Practices by Singapore Institute of Landscape Architects (SILA).
- Allied professional offices, e.g., government authority/statutory board, or related design consultancy firms with a SILA accredited landscape architect working as a full-time member to be appointed as student's supervisor.
- 3. Any other company not in the above categories are subjected to approval by the Department.

#### OFFICE INTERNSHIP SUPERVISOR

It is recommended that every firm committed to accept a student under this internship programme assigns a SILA accredited landscape architect to be the Office Internship Supervisor (OIS). Students should take the initiative to approach their OIS or other experienced colleagues in the office should they require assistance in carrying out their duties. Each student will report to his/her OIS after the first 6 weeks and at the end of the internship period. The dates will be determined in consultation with their OIS.

### RECORD OF INTERNSHIP & SUBMISSION OF WORK

Students must keep a record of the weekly internship logbook duly signed by their OIS at the middle and the end of the internship period.

By week 12 of the internship, students are required to submit the following items with the OIS's endorsement:

- Weekly internship logbook (format to be provided)
- Student's report outlining the learnings from their internship experience (with both text and graphics)
- OIS's assessment of the student's performance

All materials will confirm students' completion or non-completion of this course.

An introductory briefing on the LAIP will be provided to students at the beginning of academic year. Detailed process on firm searching, evaluation criteria, etc. will be shared then.

The various scholarships are open to BLA undergraduates:

### Gardens by the Bay Scholarship

Offered to candidates who are passionate about Horticulture and possess a keen interest in pursuing a long-term career in this field. The Gardens will support our Scholars in embarking on their tertiary journey, with challenging and rewarding career paths and job rotations.

### Design Singapore Scholarship

Design Singapore Scholarship is for individuals with creativity, drive and passion for design. The scholarship will groom designers to become designer leaders who will use strategy and innovation to make things better by design.

### NParks Scholarship

NParks Scholarship is for individuals who look forward to an exciting and challenging career, with opportunities to be exposed to various professional portfolios in NParks.

### NParks Prize

This cash prize of \$1,000 is awarded in each academic year to the top graduate with the highest Grade Point Average (GPA) in the BLA programme.

### NParks Peter Lim Awards

Philanthropist, entrepreneur, and investor, Mr Peter Lim in partnership with NParks has pledged \$10 million to enable deserving youths from less privileged backgrounds to pursue their interest, support their skills development and build capability in the landscaping, horticulture, ecology, veterinary and animal science sectors.

Refer to website below for more details.

https://cde.nus.edu.sg/arch/programmes/ bachelor-of-landscape-architecture/ scholarships-and-grants/

Our extensive student exchange programme allows our students to enhance their academic experience and cultural exposure with leading architecture and landscape architecture schools, preparing our graduates to engage in the global practice of design through student exchanges. School/Department Level Exchanges are established with the following Universities<sup>1</sup>:

Cornell Univ Coll of Agriculture & Life Sciences Nanjing University Pennsylvania State University Purdue University Technion-Israel Institute of Technology Texas A & M University, College Station, Texas The University of Auckland The University of British Columbia The University of Edinburgh The University of Hong Kong The University of Melbourne The University of New South Wales The University of Sheffield Tongji University Tsinghua University University of California University of Connecticut University of Hawaii, Manoa University of Illinois, Urbana-Champaign University of Toronto

University of Virginia

Waseda University

**Zhejiang University** 

Victoria University of Wellington

All students share the responsibility to uphold the academic standards and reputation of the National University of Singapore. Academic honesty is a prerequisite condition in the pursuit and acquisition of knowledge. Academic dishonesty is any misrepresentation with the intent to deceive or failure to acknowledge the source or falsification of information or inaccuracy of statements or cheating at examinations/ tests or inappropriate use of resources.

There are many forms of academic dishonesty; plagiarism is one of them. Plagiarism is generally defined as 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary and how it was used in the particular assignment should of English). The University does not condone plagiarism.

Students should adopt this rule:

You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work.

Any student found to have committed or aided and abetted the offence of plagiarism may be subject to disciplinary actions in accordance with the Section 1(I) of Statute 12 (Discipline) of the National University of Singapore. In addition, the student may receive no mark/ grade for the relevant academic assignment, project, or thesis; and he/ she may fail or be denied a grade for the relevant subject or course.

### More information at:

http://cit.nus.edu.sg/plagiarism-prevention/

In general, it is considered improper to use any available Artificial Intelligence (AI) tool to produce work and pass it off as your own work or idea. These tools include but are not limited to text generators and paraphrasing tools (e.g. ChatGPT, QuillBot AI, etc) or image generating tools (e.g. Midjourney, Stable Diffusion, etc).

However, the university is open to an ethical and proper use of Al when it is allowed. Please check with your individual instructor to understand if the use of an Al tool is acceptable for each specific assignment. In cases where an Al tool is indeed used, a clear acknowledgement of the tool, the prompts/inputs used be clearly stated.

#### More information at:

https://libguides.nus.edu.sg/new2nus/acadintegrity

### RETENTION OF STUDENT WORKS

All students should note that, pursuant to NUS Statutes, any work prescribed to be done by a candidate in the course of his or her study for the Bachelor of Landscape Architecture may be deemed as the property of the University. Since the Department may be required to retain selected student work for exhibition, archiving and other reasons, students should make their own copies or records of their work for job interviews, competition entries, and other purposes.



<sup>\*</sup> List of host universities is subjected to change. Refer to SEP related communications from the Department nearer to application date.

<sup>1.</sup> Placement in exchange programme requires successful application and acceptance by host universities.

Students' performance will be assessed through various modes of continuous assessment. All work done within the studio courses will be assessed based on degree and quality of contextual understanding, critical thinking, creative design process and communication. Detailed evaluation criteria and grading weightage can be found in the brief of each course. The DOA Board of Examiners will govern all assessments.

### **Grade and Grade Point Equivalent**

Assessment can be based on tutorials, laboratories, projects, reports, as well as midterm and final examinations. A student's final grade in a course will be based on absolute and relative performance. Accordingly, there may not be direct correspondence between particular marks in continuous assessment and the overall course grade.

Grades released to students will be in the form of letter grades: A+, A, A-, B+, B, B-, C+, C, D+, D, F.

The grade and grade point equivalent shall be in accordance with the University regulations as follows:

GRADE	GRADE POINT	DESCRIPTION	
A+ A	5.0 5.0	EXCELLENT	
A- B+	4.5 4.0	VERY GOOD	
B B-	3.5 3.0	GOOD	
C+ C	2.5 2.0	SATISFACTORY	
D+ D	1.5 1.0	PROBATIONARY GRADE	
F	0	FAIL	

GPA = SUM (Course GRADE POINT X Units ASSIGNED TO Course)

SUM (Units ASSIGNED TO ALL Courses

#### Grade Point Average (GPA)

Academic progress is tracked by the GPA, which is the weighted average grade point of all courses taken by the student. Therefore, a student's GPA is the sum of the course grade points multiplied by the number of course credits (Units) for the corresponding course, divided by the total number of Units.

Courses with no assigned grade points and associated Units are excluded from the calculation of GPA.

An online GPA calculator is available at:

https://inetapps.nus.edu.sg/capcalc/cap\_calculator.

The GPA simulation is based on the entries made by you for individual course grades. As such, NUS will not be held responsible for any misuse, mistakes or wrong decisions made arising from the use of this Online GPA Calculator.

#### Continuation and graduation requirements

- Students have to obtain a minimum of "C" or "S"\*\*
  grade for courses Design 1-8. The prerequisite for
  progression to the next level is a "C" or "S" grade for
  Design. Students who do not achieve a minimum
  of "C" or "S" grade would be required to retake the
  Design course(s) before they can proceed to the next
  level of study.
  - \*\* APPLICABLE TO DESIGN 1 AND DESIGN 2 IF STUDENTS

    DECLARE S/U FOR THE COURSE(S) UNDER THE S/U POLICY

    (FOR 2016/17 COHORT ONWARDS)
- 2. To graduate, students must complete 160 Units with minimum "C" grade for Design courses, and a minimum GPA of 2.0.

### USEFUL LINKS

#### SINGAPORE RELATED INFORMATION

### https://www.nparks.gov.sg/florafaunaweb/

An online information portal featuring plants and animals found in Singapore.

### https://www.nas.gov.sg/archivesonline/

Historical research, large repository of old maps and photos

### LANDSCAPE ARCHITECTURE RELATED INFORMATION

#### https://www.asla.org/

A professional association for landscape architects in the United States. The website includes recent projects and awards

### https://www.landscapeinstitute.org/

The Landscape Institute (LI) is the chartered body for the landscape profession in UK. The website includes recent projects and awards.

### https://iflaapr.org/

IFLA Asia Pacific Region (IFLA APR) is a sub-group of the International Federation of Landscape Architects (IFLA) organization. The website includes recent news and awards.

### https://www.toposmagazine.com/\_

Landscape Architecture Magazine for an international and interdisciplinary review for landscape architecture, urban design and urban development.

#### SILA / ACCREDITATION RELATED

### https://www.sila.org.sg\_

Professional association for landscape architects in Singapore - Singapore Institute of Landscape Architects (SILA), website includes updates on Industry events and CPD courses

### https://www.sila.org.sg/la-future

Webpage of LA Future, a community of SILA Graduates and Student members, for mentoring of young professionals.

#### https://www.la-accreditation.org.sg

Information on accreditation process and requirement

#### SOFTWARE/DATABASE/TOOLS

### https://academy.archistar.ai/login

An online library of tutorials on digital design skills. Learn all the different software needed in this course in your own time.<sup>1</sup>

### https://ugl.sg

An online resource of useful data and information, equipment and tools consolidated and updated by Senior Lecturer, Terrence Tan.

Computer programmes that are useful to know include 2D modelling programmes (e.g. AutoCad), 3D modelling programmes (e.g. SketchUp, Rhino, etc.), Building Information Modelling (BIM) (e.g. Revit, ArchiCad, Vectorworks Landmark etc.), geographical information systems (e.g. ArcGIS), graphic design software (e.g. Photoshop, Illustrator, InDesign, After Effects etc.), research (R-studio), reference management software (e.g. Endnote).

