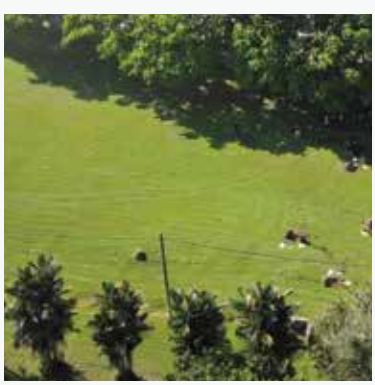
UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

FAKULTI REKABENTUK DAN SENIBINA
FACULTY OF DESIGN AND ARCHITECTURE
فاكولتي ريک بنتوق دان سني بينا

FRSB PROSPECTUS 2023



UNDERGRADUATE AND POSTGRADUATE PROGRAMMES

FACULTY OF DESIGN AND ARCHITECTURE,
UNIVERSITI PUTRA MALAYSIA

TABLE OF CONTENTS

ABOUT UNIVERSITI PUTRA MALAYSIA

UPM, a leading research university in Malaysia, is located in Serdang, next to Malaysia's administrative capital city, Putrajaya. Founded in 1931 as the School of Agriculture, the University combines impressive modern facilities and a dynamic approach to teaching and research with its proud heritage of quality services and achievements.

As a premier institution of learning, widely recognised for research and innovation leadership, UPM strives for excellence. To motivate the entire university community towards achieving excellence, it ensures that all the members, both students and members of staff, share the responsibility of strictly adhering to the demands of the University's vision, mission and goals.

VISION:

- **To become a university of international repute.**

MISSION:

- **To make meaningful contributions to the creation of prosperity and development of the nation and the well-being of all human beings through the exploration and dissemination of knowledge**

EDUCATIONAL GOAL:

- **Produce superior graduates who are holistic, ihsan, patriotic and resilient**

VALUES:

- **Ihsan, Diversity, Sustainability**

UPM is an internationally acclaimed university with 91 years of excellence in higher education and is recognized as one of the top research universities in the region. In collaboration with some of the best institutions of higher learning, UPM offers a diverse range of academic programs.

As one of Malaysia's largest and premier universities, UPM has a long-standing reputation for teaching and research excellence and has, over the years, become a favourite choice for students worldwide.

UNIVERSITY RANKING
(as of December 2022)

- **Ranked 123rd in QS World University 2023**
- **Ranked 27th Best Asian University in QS Asia University Ranking 2023**
- **14 Subjects Top 200 Universities in the World**

Student Information

(as of December 2022)

Our approximately 29,000 student population comprises local and international students from more than **72 countries** worldwide, offering a unique and culturally diverse ethnic community that offers an enriching and exciting experience for all.

Total Undergraduate: 16,797

Local: 14,707 International: 2,090

Total Postgraduate: 12,263

Local: 7,062 International: 5,201

Total Student Population: 29,060

Local: 21,769 International: 7,291

Staff Information
(as of December 2022)

Our distinguished, internationally acclaimed academics are committed to helping our students achieve their dreams and nurture their minds and intellect. Our academics are world-class multidisciplinary researchers whose research culture integrates knowledge and innovation in guiding our students to achieve academic excellence.

Total Academic Staff: 1,759
Total Academic Staff with PhD: 1,661
Total Non-Academic Staff: 4,809

Faculties, Schools and Institutes

UPM offers various academic disciplines through 15 faculties, 11 institutes and two schools.

Diploma: 9 programmes
Bachelor: 81 programmes
Master Programmes by Coursework: 70 programmes
Programmes by Research: Master of Arts (M.A.), Master of Science (M.S.), Master of Veterinary Science (M.V.Sc.),
Doctor of Philosophy (PhD), and Doctor of Engineering (DEng).

15 Faculties

1. Faculty of Agriculture
2. Faculty of Forestry and Environment
3. Faculty of Veterinary Medicine
4. Faculty of Engineering
5. Faculty of Educational Studies
6. Faculty of Science
7. Faculty of Food Science and Technology
8. Faculty of Human Ecology
9. Faculty of Modern Languages and Communication
10. Faculty of Design and Architecture
11. Faculty of Medicine and Health Sciences
12. Faculty of Computer Science and Information Technology
13. Faculty of Biotechnology and Biomolecular Sciences
14. Faculty of Agricultural Sciences and Forestry (UPM Bintulu Campus)
15. Faculty of Humanities, Management and Science (UPM Bintulu Campus)

11 Institutes

1. Institute of Bioscience (IBS)
2. institute of Nanoscience and Nanotechnology (ION2)
3. Relation Research Institute of Ageing (MyAgeing)
4. Institute of Mathematical Research (INSPEM)
5. Halal Products Research Institute (IPPH)
6. Institute of social science studies (IPSAS)
7. Institute of Tropical Agriculture and Food Security (ITAFoS)
8. Institute of Tropical Forestry and Forest Products (INTROP)
9. Institute of Plantation Studies (IKP)
10. International Institute of Aquaculture and Aquatic Sciences (I-AQUAS)
11. Institute of Ecosystem Science Borneo (UPM Bintulu Campus)

2 Schools

1. School of Graduate Studies
2. School of Business and Economics

Undergraduate

www.akademik.upm.edu.my

Postgraduate

www.sgs.upm.edu.my

PART 1: UNDERGRADUATE PROGRAMMES

1. Compulsory University Courses

Besides courses offered under a specific programme, UPM undergraduate students must also take 20 credits of university courses to graduate. Students are also required to take additional English Communication courses offered each semester.

Faculty of Human Ecology

Course Code	Course Name	Credit
SKP2101*	Malaysian Nationhood	3
SKP3112*	Philosophy and Current Issues	2
SKP3113**	Philosophy and Current Issues in Civil Society	3
SKP3122*	Internalization of Ethics and Civilization	2
SKP3123**	Internalization of Ethics and Civilization in Malaysia	3
FEM2401**	Malaysia Politics and Society	2

Faculty of Agriculture

Course Code	Course Name	Credit
PRT2009	Agriculture and Life	2

Center for the Advancement of Language Competence (CALC)

Course Code	Course Name	Credit
KOM3403	Public Oration	3
LPE2403	Academic Interaction and Presentation	3
LPE2503	Academic Writing	3
LPM2100**	Malay Language Communication	2

School of Business and Economics

Course Code	Course Name	Credit
MGM3180	Entrepreneurship	3

** For local students only*
*** For international students only*

2. University General Admission Requirements

STPM Candidates

Passed Sijil Pelajaran Malaysia **(SPM)** with credit in Bahasa Malaysia / Bahasa Melayu subject and passed History subject starting in 2013. A credit in Bahasa Malaysia / Bahasa Melayu July paper is taken into account;

AND

Passed Sijil Tinggi Persekolahan Malaysia **(STPM)** with at least a Cumulative Grade Point Average **(CGPA) of 2.00** and **Grade C** in **three (3)** subjects, including General Studies;

AND

Obtained at least **Band 1.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 1** for examination until year 2020 **according to the validity period on the application date.**

Matriculation/Foundation Candidates

Passed Sijil Pelajaran Malaysia **(SPM)** with credit in Bahasa Malaysia / Bahasa Melayu subject and passed History subject starting in 2013. A credit in Bahasa Malaysia / Bahasa Melayu July paper is taken into account;

AND

Passed **Foundation Studies for Agricultural Science UPM / MOE Matriculation / UM Science Foundation / UKM Foundation / UiTM Foundation** with at least a **CGPA of 2.00;**

AND

Obtained at least **Band 1.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 1** for examination until year 2020 **according to the validity period on the application date.**

Diploma/Equivalent Candidates

Passed Sijil Pelajaran Malaysia **(SPM)** with credit in Bahasa Malaysia / Bahasa Melayu subject and passed History subject starting in 2013. A credit in Bahasa Malaysia / Bahasa Melayu July paper is taken into account;

AND

Have a **Diploma** from **a Public University / Polytechnic / Private Higher Educational Institution,** Malaysia Skills Diploma **(DKM),** Malaysia Advanced Skills Diploma **(DLKM)** or other qualifications recognised as equivalent by the Malaysian Government and approved by the University Senate;

OR

Passed the **STPM year 2021 and before** with at least **Grade C (NGMP 2.00)** for **three (3)** subjects, including General Studies;

OR

Passed **Matriculation / Foundation year 2021** dan before with at least a **CGPA of 2.00;**

OR

Passed **Pre-U Malaysia Sports School / GCE A-Level / International Baccalaureate Diploma / Australian Matriculation (AUSMAT)** or other qualifications recognized as equivalent by the Malaysian Government and approved by the University Senate;

AND

Obtained at least **Band 1.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 1** for examination until year 2020 **according to the validity period on the application date.**

3. Bachelor of Landscape Architecture with Honours

3.1 Overview

The Bachelor of Landscape Architecture with Honours programme has been offered by the Department of Landscape Architecture, Faculty of Design and Architecture, UPM, since July 1996. The programme takes 4 years (8 semesters) or 129 credit hours to graduate. It is offered as a full-time programme.

The programme aims to produce landscape architects who are knowledgeable, skilled, creative and innovative in assessing, planning, designing, implementing and managing landscapes. The curriculum has comprehensively been designed to develop students to be versatile landscape architects to lead the landscape architectural practices in the 21st century. Graduates will also be ethical, integrity and professional in providing service to the community and being sensitive and attentive to the country's environment and development needs.

3.2 Programme Recognition

This professional program is recognized by the Institute of Landscape Architects Malaysia (ILAM) and is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

Institute of Landscape Architects Malaysia
MALAYSIA (ILAM)

3.3 Career Prospects

Graduates of this program get career opportunities in government agencies such as the National Landscape Department and local authorities, landscape architecture consulting firms, landscape contractors and real estate developers.

3.4 Programme Educational Objectives

To produce landscape architects

- engaged in the practice of landscape architecture and related fields.
- who constantly improve knowledge and lifelong skills suitable for career, industry and academia.
- who are able to make decisions at a level relevant to the development of the landscape industry.

3.5 Special Programme Admission Requirements

Besides meeting the University General Admission Requirements (see section 2), candidates must meet the following Special Programme Admission Requirements:

STPM Candidates

Obtained at least **Grade B- (NGMP 2.67)** at STPM level in **one (1)** subject not including General Studies subject;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Landscape Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who took Visual Arts subject at the STPM level.

Matriculation/ Foundation Candidates

Obtained at least **Grade B- (NGMP 2.67)** at Matriculation / Foundation level in **one (1)** subject;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Landscape Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

Diploma/ Equivalent Candidates

Have a **Diploma** in Landscape Architecture or other related fields from University, Polytechnic or public institution recognised by the UPM Senate;

OR

Have **one (1)** Diploma from any of the following institutions approved by the UPM Senate:

- Diploma Pengurusan Landskap, Diploma Pertanian, Diploma Sains Pertanian or Diploma in the related field from Kolej Universiti Agrosains Malaysia;
- Diploma in Landscape Architecture, Diploma in Architecture, Diploma in Interior Design, or Diploma in the related field from Kolej Universiti Geomatika;
- Diploma Senibina, Diploma Rekabentuk Dalaman, Diploma Seni Reka Grafik or Diploma in the related field from Kolej Universiti Metropolitan Kuala Lumpur.

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Landscape Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

3.6 Study Scheme

Total Credits to Graduate: 129 credit hours
Study Duration: 8 semesters (4 years)

Year 1, Semester 1

Course Code	Course Name	Credit
LAN3005	Basic Design Studio	5
LAN3200	Introduction to Landscape Architecture	2
LAN3300	Landscape Plant Science	3
XXX	University courses	5
	Total	15

Year 1, Semester 2

Course Code	Course Name	Credit
LAN3006	Basic Landscape Design Studio	5
LAN3201	History of Landscape Architecture	2
LAN3500	Technical Drawing	2
XXX	University courses	6
SST3005	Fundamental of Soil Science	3
	Total	18

Year 2, Semester 1

Course Code	Course Name	Credit
LAN3007	Landscape Site Design Studio	5
LAN3402	Landscape Ecology	3
LAN3503	Construction Material	3
LAN3104	Graphic Computer in Landscape Design	3
XXX	University Courses	3
	Total	17

Year 2, Semester 2

Course Code	Course Name	Credit
LAN3008	Landscape Site Planning Studio	6
LAN3302	Landscape Operation and Implementation	3
LAN3505	Survey and Site Engineering	3
LAN4704	Landscape Resource Assessment Techniques	3
XXX	University Course	3
	Total	18

Year 3, Semester 1

Course Code	Course Name	Credit
LAN3009	Landscape Planning Studio	6
LAN3202	Landscape Architecture Philosophy and Theory	2
LAN4303	Landscape Planting Design and Estimation	3
LAN3506	Landscape Construction and Engineering	3
LAN4800	Professional Practice and Landscape Legislation	3
	Total	17

Year 3, Semester 2

Course Code	Course Name	Credit
LAN4602	Urban Design Studio	6
LAN4304	Landscape Management and Maintenance	3
LAN4507	Landscape Construction Project Documentation	3
LAN3903	Seminar on Landscape Architecture Research	3
XXX	Elective Course	3
	Total	18

Year 4, Semester 1

Course Code	Course Name	Credit
LAN4901	Internship Industrial Training	12
	Total	12

Year 4, Semester 2

Course Code	Course Name	Credit
LAN4949	Bachelor Project	8
XXX	Elective	3
	Total	11

3.7 Synopsis of Core Courses

LAN3005: Basic Design Studio (5 credits)

This course covers basic techniques in producing 2D and 3D visual objects by using graphic medium and drawing elements. Emphasis is given on the application of design principles, idea formation and idea development strategy towards fundamental design concept in producing a particular design.

LAN3006 Landscape Design Studio (5 credits)

This course covers basic landscape architectural design process which includes the principles of inventory and analysis, design idea generation and adaptation of idea for a landscape space. Aspects in producing design proposal for a simple small landscape space or hypothetical space are emphasised.

LAN3007 Landscape Site Design Studio (5 credits)

This course covers landscape site design process which includes the application of techniques in site inventory and analysis, design idea generation as well as adaptation of idea for a landscape site. Landscape design proposal for a small scale landscape site is produced.

LAN3008 Landscape Site Planning Studio (6 credits)

This course covers landscape site planning process which includes site inventory and analysis, idea development and adaptation of idea for a particular landscape area. Emphasis is given on the aspects of developing proposal for multi-use medium scale landscape design and its detailings.

LAN3009 Landscape Planning Studio (6 credits)

This course covers the aspects of landscape resource planning that includes the landscape resource inventory and analysis studies as well as idea development for land use planning. The process of developing a complex and large scale landscape planning master plan is emphasised together with its detailings.

LAN3104 Graphic Computer in Landscape Design (3 credits)

This course covers the use of computer software in graphic design, multimedia, desktop publishing and 3D visual landscape modelling. Emphasis is given towards creation of visual products by using image processing, computer aided design and relevant current 3D softwares.

LAN3200 Introduction to Landscape Architecture (2 credits)

This course covers the aspects and scope of landscape architecture field and its relation to the current development and needs. Clarification of landscape architecture issue, career and prospect is highlighted.

LAN3201 History of Landscape Architecture (2 credits)

This course covers the historical development of landscape architecture in past civilisation which includes the aspect of evolution of history, landscape design styles as well as the influence of environment and local culture on landscape during the respective period.

LAN3202 Landscape Architecture Philosophy and Theory (2 credits)

This course covers the role of philosophy and theory in influencing the worldviews, life styles as well as landscape architectural practices in different eras. Several main theories in landscape architecture and other related fields are discussed.

LAN3300 Landscape Plant Science (3 credits)

This course encompasses the aspects of plant taxonomy, morphology and physiology as well as factors that influence their growth. Emphasis is given on the identification of various landscape plants species according to the plants' group category.

LAN3302 Landscape Operation and Implementation (3 credits)

This course encompasses the aspects of landscape plant production and nursery management practice. Technical exposure on planting techniques and operations as well as technology in softscape implementation is given attention.

LAN3402 Landscape Ecology (3 credits)

This course covers the basic theories in ecology and its relationship with climate and topography that influence the diversity of ecosystems. Other factors that affect the local landscape changes are discussed.

LAN3500 Lukisan Teknik / Technical Drawing (2 credits)

This course encompasses the basic principles in producing landscape technical drawings including design details and measured drawings. The emphasis is given on the technical aspects, graphics and composition of drawing components.

LAN3503 Construction Material (3 credits)

This course encompasses the study on construction materials found in landscape construction industry and their suitability to be used in landscape design. Technical aspects of producing basic landscape construction detail drawings for construction documentation are emphasised.

LAN3505 Survey and Site Engineering (3 credits)

This course encompasses the aspects of land survey and site engineering which includes the methods of measuring distance, direction and elevation. Study on the contours and site grading, site drainage system and fundamental of low speed road design are also highlighted.

LAN3506 Landscape Construction and Engineering (3 credits)

This course encompasses the aspects of landscape construction and engineering technology specifically on civil, structural as well as mechanical and electrical works in landscape project. Technical approach and practicality in producing detail design and construction details are emphasised.

LAN3903 Seminar on Landscape Architecture Research (3 credits)

This course encompasses the landscape architecture research methods. It consists of preparing research proposal, research works, data analysis and interpretation as well as research output write up and presented in a seminar organised by students.

LAN4303 Planting Design and Estimation (3 credits)

This course encompasses the study on design characteristic of plants and their suitability in landscape. Emphasis is given on the planting design process which includes site analysis, selection of plant species, planting details and specifications, irrigation system as well as cost estimation for softscape project implementation.

LAN4304 Landscape Management and Maintenance (3 credits)

This course encompasses the effective landscape management principles and practices including landscape maintenance technology and its application in landscape management. Study on the landscape management plan and maintenance programme is conducted.

LAN4507 Landscape Construction Project Documentation (3 credits)

This course encompasses the landscape construction project management practices including contract and construction site management. Approach on the technique of producing comprehensive construction drawings, preparation of contract documents and cost estimation for a landscape project are highlighted.

LAN4602 Urban Design Studio (6 credits)

This course covers the urban design principles and processes in solving the issues of urban design and its community. Methods in developing urban design master plan and design details are emphasised with consideration of local community participation.

LAN4704 Landscape Resource Assessment Techniques (3 credits)

This course encompasses theories, processes and techniques in conducting analysis and assessment of landscape resources as well as their suitability for landscape development studies at different areas. Emphasis is given on the use of Geographical Information System application.

LAN4800 Landscape Architecture Legislation and Professional Practice (3 credits)

This course covers the aspects of landscape architecture professional practice and business knowledge in landscape architecture industry which consists of organisation management, design management and professional ethics. The legislation system in relation to landscape architecture practice in Malaysia is discussed.

LAN4901 Industrial Training (12 credits)

This course exposes students to real working environment in industries and organisations. A 24-week training programme includes application of the theoretical and practical aspects that have been studied with current practices at the workplace. Problem solving and communication skills are also emphasised.

LAN4949 Bachelor Project (8 credits)

This course covers the aspect of planning and executing design process for a landscape project. These include topic selection, conducting precedent study, collecting and analysing site information, suggesting solutions for specific problem through design as well as documenting and presenting design project output.

3.8 Fee Structure

Average cost per student per year: RM 25,207

Annual tuition fees: Approx. RM 4,400

Government subsidy to student per year: Approx. RM 20,700

3.9 Contact Us

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4. Bachelor of Science in Architecture with Honours

4.1 Overview

The Department of Architecture has offered the Bachelor of Science in Architecture with Honours programme, Faculty of Design and Architecture, UPM, since May 2000. It is a professional degree programme equivalent to the professional qualification of the Board of Architects Malaysia (LAM) Part I. The programme takes 3 ½ years (7 semesters) or 125 credit hours to graduate and is offered as a full-time programme.

This programme provides an integrated curriculum to produce semi-professional human resources in architecture to support the development of the nation's construction industry. Studio teaching is a key component of the curriculum. Students can integrate various skills and knowledge from other courses into their architectural designs through studio-based learning.

4.2 Programme Recognition

This professional program is accredited by the Majlis Akreditasi dan Pendidikan Senibina (MAPS) Malaysia, also known as the Council of Architectural Accreditation and Education Malaysia (CAAEM) under the Board of Architects Malaysia (LAM Part I). The program is also listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

LEMBAGA ARKITEK MALAYSIA

BOARD OF ARCHITECTS MALAYSIA
LEMBAGA ARKITEK MALAYSIA

4.3 Career Prospects

Graduates of this program get career opportunities as assistant architects in government agencies (e.g.local authorities), private architectural consulting firms, construction companies and real estate developers. Many graduates continue their studies to the Master of Architecture programme (see Section 6) to qualify themselves as Graduate Architects (LAM Part 2) or other related postgraduate programmes. Graduates also have the opportunities to venture into interior design, writing, graphic design, and model-making, to name a few.

4.4 Programme Educational Objectives

To produce assistant architects who are:

- highly knowledgeable in theoretical and practical aspects and competitive to support the architecture field of the nation
- creative, critical thinking and innovative in designing sustainable buildings;
- ethical, integrity and professional in handling architectural projects and able to work in a team; and
- skilled and knowledgeable to continue studies to the Master of Architecture level (LAM Part 2).

4.5 Special Programme Admission Requirements

Besides meeting the University General Admission Requirements (see section 2), candidates must meet the following Special Programme Admission Requirements:

STPM Candidates

Obtained at least **Grade B- (NGMP 2.67)** at STPM level in **one (1)** subject not including General Studies subject;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who took Visual Arts subject at the STPM level.

Matriculation / Foundation Candidates

Obtained at least **Grade B- (NGMP 2.67)** at Matriculation / Foundation level in **one (1)** subject;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

Diploma/Equivalent Candidates

Have a **Diploma** in Architecture or other related fields from University, Polytechnic or public institution recognised by the UPM Senate;

OR

Have **one (1)** Diploma from any of the following institutions approved by the UPM Senate:

- Diploma in Architecture from Kolej Kemahiran Tinggi MARA (KKTM);
- Diploma in Architecture from Kolej Universiti Geomatika.

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

4.6 Study Scheme

Total Credits to Graduate: 125 credit hours
Study Duration: 7 semesters (3 ½ years)

Year 1, Semester 1

Course Code	Course Name	Credit
ARC3000	Architectural Studio 1	5
ARC3103	Architectural Graphics	3
ARC3110	Architectural Communications	2
ARC3211	Early Civilisation Architecture	3
ARC3321	Material and Building Construction	3
XXX	University Courses	4
	Total	20

Year 1, Semester 2

Course Code	Course Name	Credit
ARC3001	Architectural Studio 2	5
ARC3121	Computer-Aided Drawing	3
ARC3421	Construction Structural Concept	3
ARC3600	Environmental Physics 1	2
XXX	University Courses	5
XXX	Elective 1	2
	Total	20

Year 2, Semester 1

Course Code	Course Name	Credit
ARC3013	Architectural Studio 3	6
ARC3212	Modern Architecture	3
ARC3322	Material and Building Construction Technology	3
ARC3601	Environmental Physics 2	2
XXX	University Courses	6
	Total	20

Year 2, Semester 2

Course Code	Course Name	Credit
ARC3014	Architectural Studio 4	6
ARC3422	Construction Structural System	3
ARC3521	Building Services	3
XXX	University Course	3
XXX	Electives 2 & 3	5
	Total	20

Year 3, Semester 1

Course Code	Course Name	Credit
ARC4901	Industrial Training	12
	Total	12

Year 3, Semester 2

Course Code	Course Name	Credit
ARC3015	Architectural Studio 5	6
ARC3522	Advanced Building Services	3
ARC4702	Theory of Urban Planning	3
ARC3811	Architectural Practice	3
ARC4640	Humanitarian Architecture	2
	Total	17

Year 4, Semester 1

Course Code	Course Name	Credit
ARC3016	Architectural Studio 6	6
ARC4902	Topical Study	2
ARC4903	Integrated Design	2
XXX	Electives 4 & 5	6
	Total	16

4.7 Synopsis of Core Courses

ARC3000: Architectural Studio 1 (5 credits)

This course covers the introduction and application of basic design elements and principles for two- and three-dimensional objects as well as basic issues related to sustainability in design process. Verbal and visual communication skills are emphasised.

ARC3001: Architectural Studio 2 (5 credits)

This course covers the application of basic design process in architecture, ergonomic studies and spatial arrangements of interior and exterior space. Sun shading, daylighting and natural ventilation aspects in design process are emphasised.

ARC3013: Architectural Studio 3 (6 credits)

This course covers the design process of a two storey residential building and a semi-public small-scaled building as well as the consideration of basic structure, building materials, construction, solar shading and natural ventilation. Communication skill is also emphasised.)

ARC3014: Architectural Studio 4 (6 credits)

This course covers designing buildings with specific use, with multiple spaces which incorporate building technologies, site planning and planning for formal and informal public spaces. Environmental factors such as passive design strategies, daylighting design and noise control are emphasised.

ARC3015: Architectural Studio 5 (6 credits)

This course covers the application of environmental issues, which influence the building design process with emphasis on passive design strategy. Emphasis is on the design of an urban and suburban context.

ARC3016: Architectural Studio 6 (6 credits)

This course covers the design of a building which integrates energy-efficient design strategy within a socio-cultural context and disabled-friendly design. Conforming to building codes related to building technology through a comprehensive design project is emphasised.

ARC3103: Architectural Graphics (3 credits)

This course covers the basic knowledge of architectural drawing skills and presentation, which include drawings of building forms, landscapes, and architectural objects. The use of various drawing media and techniques is emphasised.

ARC3110: Architectural Communications (2 credits)

This course covers the presentation techniques in architectural projects through verbal and visual communication either individually or in groups with graphics, models and audio-visual aids.

ARC3121: Computer-Aided Drawing (3 credits)

This course covers skills in documenting two- and three-dimensional technical drawings through manual drawings technique and using computer graphics software. Managing technical drawings and preparation of portfolio is also emphasised.

ARC3211: Early Civilization Architecture (3 credits)

This course covers the history, expression and theory of architecture in the Middle East, Western Europe and Asia from 3200BC to the18th century. The evolution of architectural thoughts and style in the context of its social, political, economic and cultural environment is emphasised. History, function, owners, architects, style, siting, materials, construction and contextual environment of buildings are discussed.

ARC3212: Modern Architecture (3 credits)

This course covers the history and theory of Western and South East Asian architecture from mid-18th to 20th century that laid the foundations of modern architecture. Design analysis which uses a specific language based on the principles and elements of architecture and interior design is emphasised. Skills in critical analysis and the preparation of short analytical texts are developed.

ARC3321: Material and Building Construction (3 credits)

This course covers aspects in building construction system including structures, building envelopes, materials and methods of construction. Emphasis is given on wood, masonry, concrete and glass.

ARC3322: Material and Building Construction Technology (3 credits)

This course covers various new construction materials and construction methods from conventional system to the latest high technology industrialised building system. Emphasis is given to new materials including steel, composite materials, plastic and fabrics.

ARC3421: Construction Structural Concept (3 credits)

This course covers the basic structural principles, types of loads, tensile analysis, structural system, types of structural building materials and structural forms used in building design. Analysis and assessment of the structural system behaviour are emphasised.)

ARC3422: Construction Structural System (3 credits)

This course covers analysis of structural behavior and sizing calculation of structure for reinforced concrete and steel used for a construction. Application and design of buiding structure is emphasised.

ARC3521: Building Services (3 credits)

This course covers basic concepts of water supply, drainage, sanitation, sewerage, disposal and fire fighting system in designing a building. Compliance with Uniform Building By-Law in designing a building is emphasised.

ARC3522: Advanced Building Services (3 credits)

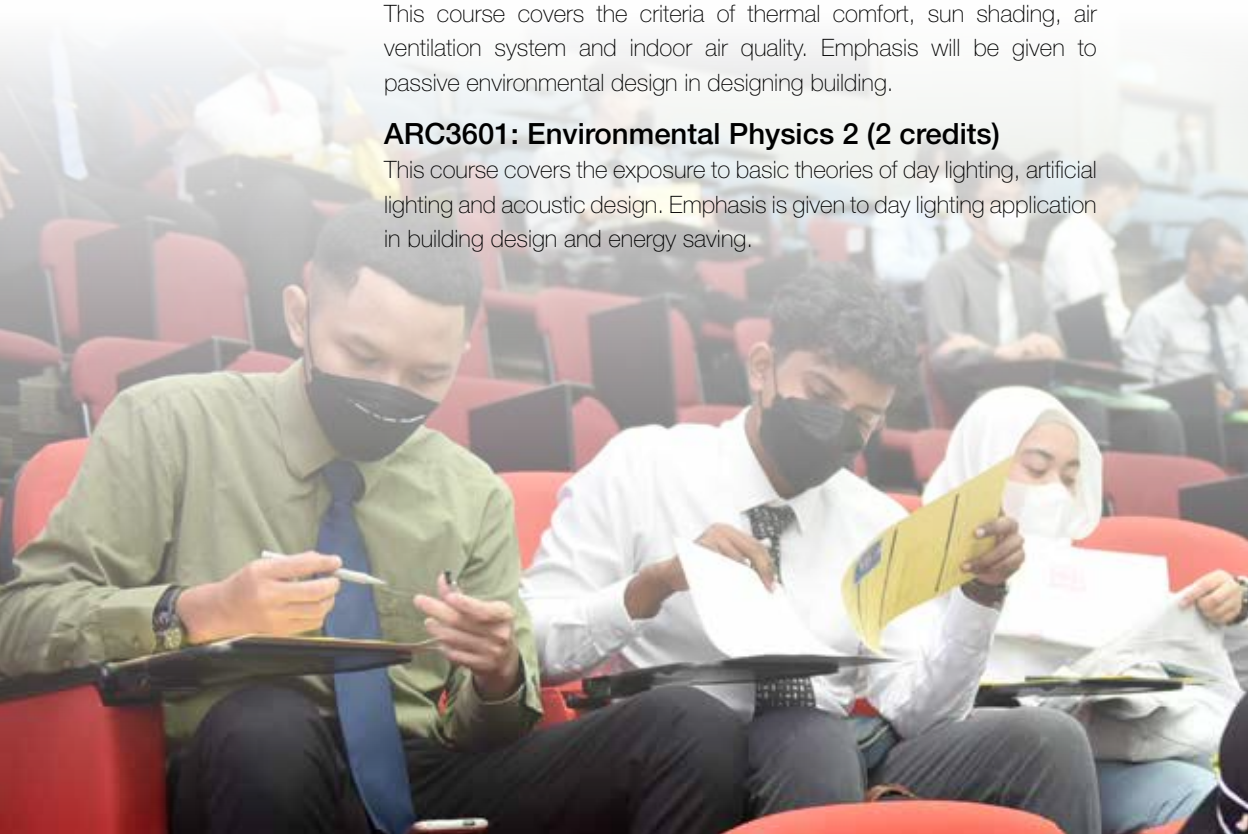
This course covers basic concepts of electrical supply system and telecommunication, air conditioning and ventilation, and vertical and horizontal transportation systems in designing a building. Compliance with Uniform Building By-Law is emphasised.

ARC3600: Environmental Physics 1 (2 credits)

This course covers the criteria of thermal comfort, sun shading, air ventilation system and indoor air quality. Emphasis will be given to passive environmental design in designing building.

ARC3601: Environmental Physics 2 (2 credits)

This course covers the exposure to basic theories of day lighting, artificial lighting and acoustic design. Emphasis is given to day lighting application in building design and energy saving.



ARC3811: Architectural Practice (3 credits)

This course covers the function, role, responsibilities and ethics of a professional architect based on the Architects Act 1967. It covers the relationship between professional architects with other related professionals in the construction industry and business operation for an architectural firm.

ARC4640: Humanitarian Architecture (2 credits)

This course covers analysis of diverse issues in humanitarian architecture such as emergency, recycling, war, education etc. to build for a more resilient community. Solutions through case study and the application of humanitarian related assistance in architecture are explored.

ARC4702: Theory of Urban Planning (3 credits)

This course covers the evolution, theories, aspects and process of urban planning. It also emphasises the impact of planning on human beings, townscape and environment. Planning and sustainable urban development theories and issues are also discussed.

ARC4901: Industrial Training (12 credits)

This course provides exposure to real working environment in industries/ organisations. Training includes application of theoretical and practical aspects that have been studied with current practices in the workplace. Problem solving and communication skills are also emphasised.

ARC4902: Topical Study (2 credits)

This course covers analysis of selected issues in architectural design. It includes the evaluation of working documents and discussions with professionals involved.

ARC4903: Integrated Design (2 credits)

This course covers the integration of architectural design, structure and building services. Emphasis is given on the procedure and process in preparing a comprehensive report of the architecture studio project.

4.8 Fee Structure

Average cost per student per year: RM 25,207

Annual tuition fees: Approx. RM 4,400

Government subsidy to student per year: Approx. RM 20,700

4.9 Contact Us

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5. Bachelor in Industrial Design with Honours

5.1 Overview

The Department of Industrial Design has offered the Bachelor of Industrial Design with Honours programme, Faculty of Design and Architecture, UPM, since July 2002. The programme takes 4 years (8 semesters) or 120 credit hours to graduate. It is offered as a full-time programme.

This programme aligns with the vision of UPM and the Malaysian Ministry of Education, which aims to offer courses that meet the needs of the industry and produce graduates who are competitive in the current job market. It focuses on a highly user-centred approach to designing and creating aesthetic and technically viable products. The programme's structure combines theoretical knowledge and practical skills appropriate to contemporary design practice and industry needs. We aim to develop students with confidence in professional design practice, creativity, and innovative capabilities to prepare them for a successful career.

5.2 Programme Recognition

This program is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

5.3 Career Prospects

Graduates work as designers for products and manufacturing companies; in the consultancy, furniture design, CAD/CAM, education, cultural and services sectors, and for research institutions. Cross-disciplinary designers work in emerging fields of design practice; others start and run their design or product-producing businesses.

5.4 Programme Educational Objectives

To produce designers who

- engage in the practice of industrial design and related creative fields.
- engage in the pursuit of lifelong knowledge and multidisciplinary learning suitable for industrial and academic careers.
- hold positions at the management level for increased leadership in the field of design and the chosen field.

5.5 Special Programme Admission Requirements

STPM Candidates

Obtained at least **Grade B- (NGMP 2.67)** at STPM level in **one (1)** subject not including General Studies subject;

AND

No visual impairment/colour blindness;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Industrial Design, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who took Visual Arts subject at the STPM level.

Matriculation / Foundation Candidates

Obtained at least **Grade B- (NGMP 2.67)** at Matriculation / Foundation level in **one (1)** subject;

AND

No visual impairment / colour blindness;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Industrial Design, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

Diploma/ Equivalent Candidates

Have a **Diploma** in Industrial Design or other related fields from University, Polytechnic or public institution recognised by the UPM Senate;

OR

Have **one (1)** Diploma from any of the following institutions approved by the UPM Senate:

- Diploma Kemahiran Malaysia **(DKM)** / Diploma Lanjutan Kemahiran Malaysia (DLKM), recognised as equivalent by the Malaysian Government;
- Diploma in Product Design, Diploma in Graphic Design Technology and Diploma in Interior Design from Lim Kok Wing University;
- Diploma in Product Design from Linton University College, Negeri Sembilan;
- Diploma in Interior Design and Diploma in Graphic Design from SEGI University.

OR

Have at least **five (5)** years of working experience in the field of Industrial Design;

AND

No visual impairment / colour blindness;

AND

Obtained at least **Band 2.0** in Malaysian University English Test **(MUET)** for examination starting Session 1 year 2021 or **Band 2** for examination until the year 2020;

AND

Passed the interview conducted by the Department of Architecture, Faculty of Design and Architecture, UPM.

* Priority is given to candidates who passed *Pendidikan Seni Visual* or *Reka Cipta* at the SPM level.

5.6 Study Scheme

Total Credits to Graduate: 120 credit hours
Study Duration: 8 semesters (4 years)

Year 1, Semester 1

Course Code	Course Name	Credit
IND3000	Design Fundamentals	4
IND3300	Design History and Appreciation	2
IND3602	Industrial Design Fabrication Technology	2
XXX	University Courses	7
	Total	15

Year 1, Semester 2

Course Code	Course Name	Credit
IND3800	Plan and Completion Technology	3
IND3604	Industrial Design Model Making Technique	3
IND3100	Ergonomic Data Studio	3
IND3001	Industrial Design in Communication	3
XXX	University Courses	5
	Total	17

Year 2, Semester 1

Course Code	Course Name	Credit
IND3003	Industrial Design Presentation Technique	3
IND3200	Design and Basic Technology	3
IND3400	2D Computer Aided Design	3
XXX	University Course	2
XXX	Elective	3
	Total	14

Year 2, Semester 2

Course Code	Course Name	Credit
IND3101	Creative Design Studio	3
IND3201	Design and Realisation Laboratory	3
IND3801	Fundamental of Material and Manufacturing Technology	3
IND3401	3D Computer Aided Design	3
XXX	University Course	3
	Total	15

Year 3, Semester 1

Course Code	Course Name	Credit
IND3102	Creative Design Studio II	3
IND3202	Creative Design Studio II	3
IND3402	Advanced Computer Aided Design	3
IND3802	Advanced Material and Manufacturing Technology	3
IND4800	Advanced Product Design	3
	Total	15

Year 3, Semester 2

Course Code	Course Name	Credit
IND3205	Design and Manufacturing Laboratory	3
IND3103	Design Technology Studio	3
IND3501	Professional Practice	3
IND4700	Sustainable Product Design Development	3
IND3902	Research Design	3
	Total	17

Year 3, Semester 3

Course Code	Course Name	Credit
IND4902	Industrial Training	6
	Total	6

Year 4, Semester 1

Course Code	Course Name	Credit
IND4949A	Bachelor Project	4
IND3901	Industrial Dialog	3
IND4905	Industrial Design Seminar	3
	Total	10

Year 4, Semester 2

Course Code	Course Name	Credit
IND4949B	Bachelor Project	4
IND3701	Industrial Product Marketing	3
XXX	Elective	3
	Total	10

5.7 Synopsis of Core Courses

IND3000: Design Fundamentals (4 credits)

This course covers basic knowledge on design principles and its elements. Emphasis is on the skills of producing 2 Dimensional visuals and 3 Dimensional artefacts using different media and techniques. The highlight is also given on the understandings on theories, elements and principles of design to create the good presentation drawings.

IND3001: Industrial Design in Communication (3 credits)

This course covers the knowledge on the use of several computer software in producing a design presentation illustration. Emphasis is on the implementation skills of effective illustration techniques that give an impact in presentation. It aso highlights the ability of a student to choose the suitable software in line with the techniques and content requirements of visual presentation.

IND3003: Industrial Design Presentation Technique (3 credits)

This course covers the knowledge on various types of media, tools and their usages in producing an industrial design illustration. Emphasis is on the skills of producing comprehensive design illustrations by applying the drawing and sketching techniques in line with the need and suitability of design presentation. The course also emphasises on the use of verbal illustration presentation techniques, aided by audio visual equipment.

IND3100: Ergonomic Data Studio (3 credits)

This course covers the knowledge on basic ergonomic in developing user-centered product design. The highlight is on the skills to produce design that meets user comfort and safety aspects. Understanding on design ethics to ensure design usability is also emphasised.

IND3101: Creative Design Studio (3 credits)

This course covers the problem-solving design process based on ergonomic and practicality values. The students are exposed on the importance of aesthetic and style through the emotion and user perception concepts during the design development process. It also highlights the processes involved starting from idea development until complete 3-dimensional model fabrication.

IND3102: Creative Design Studio II (3 credits)

This course covers the new product development based on the existing products. It also emphasises on the skills to develop new products based on the appropriate design elements that meet the current needs. The application of knowledge on critical and analytical design elements is also highlighted.

IND3103: Design Technology Studio (3 credits)

This course covers the appropriate technological applications in producing a problem-solving design. Emphasis is on design concept planning with the application of relevant technology. The course also provides the knowledge on capacity of a technology and its suitability to be adopted in a design.

IND3200: Design and Basic Technology (3 credits)

This course covers the identification of issues/problems in design and the functions of existing products. It emphasises the application of basic technology, fabrication process and component structure through the creation of functional model. The solution towards the design problem is achieved through the redesigning process with the application of current technologies.

IND3201: Design and Realisation Laboratory (3 credits)

This course covers the structured design process based on problem/issue of a product. It provides the skills to organise the new product development process and to realise a design, starting from an idea to a physical form. The idea generation activities are conducted through the application of appropriate technology.

IND3202: Design and Realisation Laboratory II (3 credits)

The course covers the product design process that indicates the solutions towards users' issues/problems through the application of technology. It highlights on the process of fabricating physical model of a proposed design by considering the relevant manufacturing technique. Knowledge on the importance of technology and manufacturing process in industrial design is also highlighted.

IND3205: Design and Manufacturing Laboratory (3 credits)

This course covers the process of realising the design idea based on manufacturing tools capabilities and specifications. It emphasises on the fabrication of functional model or prototype in line with users' needs and manufacturing techniques. The design realisation is based on the technical knowledge in manufacturing technology.

IND3300: Design History and Appreciation (3 credits)

The course covers the art history studies and industrial design evolution. It emphasises on the discussions towards the artwork and design produced throughout the art movement. The students will be taught on the topics related to the implication towards industrial sector, social, economy, environment and technology.

IND3400: 2D Computer Aided Design (3 credits)

This course covers the relationship between the skills and experience in using several computer software as an aid to design products. It emphasises on the skills to use diverse 2-dimensional CAID tools and devices. This course gives an exposure on tools and digital design processes.

IND3401: 3D Computer Aided Design (3 credits)

This course covers the specific knowledge on design analysis using computer aided design 3-dimensional software. Emphasis is on the skills of using different computer software as an aid towards producing detailed 3-dimensional designs. This course gives an exposure on the appropriate software in the process of designing an effective 3-dimensional digital data.

IND3402: Advance Computer Aided Design (3 credits)

This course covers the knowledge on model geometry using product design simulation software applications. It emphasises on the skills to evaluate design creation based on suggested materials. This course provides the exposure in identifying the material suitability and fabrication process of a design through the preparation of CAID simulation output, process and materials.

IND3501: Professional Practice (3 credits)

The students are exposed to the professional practices that are often used in industry. The course covers the discussions on responsibilities and code of ethics of a product designer. It also highlights the entrepreneurship and management skills in the field of industrial design.

IND3602: Industrial Design Fabrication Technology (2 credits)

The course covers the basic skills and techniques in fabricating an artefact. Emphasis is on the use of hand tools, machines and different materials in the manufacturing work structure. It also covers the work ethics and safety aspects in laboratory and when handling machines.

IND3604: Industrial Design Model Making Technique (3 credits)

The course covers the knowledge on the production of 3-Dimensional models, current techniques and the use of various advanced materials. It comprises of the skills in adopting advanced technology with the model/ prototype fabrication techniques based on tools and materials suitability. This course also emphasises on the appropriate practice of procedure in the manufacturing laboratory.

IND3701: Industrial Product Marketing (3 credits)

This course covers the discussions on policy, market analysis and production planning of a commercial product. It emphasises on organising new product development and product life cycle. The course also highlights on the knowledge of contemporary issues and entrepreneurship in product marketing strategy.

IND3800: Plan and Completion Technology (3 credits)

This course covers the basic knowledge in producing engineering drawings by using conventional and digital techniques. It emphasises on the skills of creating engineering drawings that follow the functional and detailed standard specifications. The course also concentrates on the skills to convey technical information effectively for the fabrication process.

IND3801: Fundamental of Material and Manufacturing Technology (3 credits)

The course covers the discussions on technology in production and manufacturing processes. Emphasis is on critical understanding on production and manufacturing processes based on different types of materials such as wood, metal, glass, rubber, plastic and composites. It also highlights the understanding on the role of technology, material structure and manufacturing process in the field of industrial design.

IND3802: Advanced Material and Manufacturing Technology (3 credits)

The course covers the in-depth discussions on production and manufacturing processes of plastic and metal-based products. The knowledge on product manufacturing materials which include strengths, weaknesses and limitations is emphasised. It also covers the discussions on diverse use of plastics and metals in product design.

IND3901: Industrial Dialog (3 credits)

The course focuses on the contemporary issues and problems in industrial design. It covers the critical discussions through the presentation on issues and solutions related to industrial design. This course also exposes the students on the skills to organise academic seminar with industrial collaboration.

IND3902: Research Design (3 credits)

This course covers the principal knowledge on research methodology in the field of design. Emphasis is on the skills to critically collect, compile and analyse research data. The course gives an exposure on the importance of well-planned research process, structured report preparation and application of correct research method for design.

IND4700: Sustainable Product Design Development (3 credits)

This course covers the knowledge on sustainable product design development and its planning and management in the new product development life cycle. Emphasis is on methods and processes to produce the good quality consumer products. It also emphasises on financial and cost management for the design development, production and marketing.

IND4800: Advanced Product Design (3 credits)

This course covers the discussions on advanced technological applications in product design in line with the Fourth Industrial Revolution. The exposure on the aspect of advanced technology is an effort to cater the future needs. Emphasis is also given on the technology-driven design that suits the design usability trend.

IND4902: Industrial Training (6 credits)

In this course, students are exposed to real working environment in industries/organisations. The training includes the application of theoretical and practical aspects, besides the practices in workplace. Problem-solving and communication skills are also emphasised.

IND4905: Industrial Design Seminar (3 credits)

The course covers the in-depth knowledge on the efficient research methods in solving the industrial design issues. It consists of preparing a full proposal for analysis, which will finally be discussed in a design seminar. This course also focuses on the critical aspects of research data analysis and the systematic presentation of proposals.

IND4949: Bachelor Project (8 credits)

This course covers the process of producing innovative products from the design, technological applications, users and environmental aspects. It emphasises on the intensive scientific research writing processes as the foundation of the design project. The course also highlights the implementation of theory and design outcome through the organisation of integrated presentation activities.

5.8 Fee Structure

Average cost per student per year: **RM 25,207**

Annual tuition fees: **Approx. RM 4,400**

Government subsidy to student per year: **Approx. RM 20,700**

5.9 Contact Us

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PART 2: MASTER PROGRAMMES BY COURSEWORK

6. Master of Landscape Architecture

6.1 Overview

UPM's Master of Landscape Architecture (MLA) programme was established in 1996 and is one of Malaysia's oldest graduate landscape architectural programmes. The length of study and the minimum credit hours needed to graduate depends on the candidate's Bachelor's qualification. The programme takes minimum 4 semesters to maximum 6 semesters (2 years) or minimum 41 credit hours to graduate for Bachelor of Landscape Architecture candidates, 53 credit hours for Bachelor of Architecture or Interior Architecture, and 62 credit hours for other candidates in related fields. MLA is offered as a full-time programme.

The program is taught by qualified and experienced lecturers from the faculty and certified professionals from well-established landscape architectural firms. UPM provides landscape architecture education that is broad and adaptable to the interests of individual students.

The MLA program facilitates student-defined design and research to develop the unique professional roles of its students, i.e. who can use their design and communication skills to discover, advocate and implement superior landscape solutions. We accept candidates with an accredited Bachelor of Landscape Architecture degree or other non-landscape architecture degrees such as Architecture, Planning, Engineering, Agriculture, Forestry, Environmental Science, etc.

6.2 Programme Recognition

UPM's MLA programme is recognized by the Institute of Landscape Architects Malaysia (ILAM) and is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

Institute of Landscape Architects Malaysia
MALAYSIA (ILAM)

6.3 Career Prospects

The program graduates are eligible to be accepted as Corporate Members of ILAM and be allowed to practice as Landscape Architects in Malaysia.

6.4 Programme Educational Objectives

At the end of the program, the students will get

knowledge in fields related to landscape architecture;

demonstrate technical and ICT expertise in the practice of landscape architecture;

skills to present and critically discuss landscape architecture design ideas towards sustainable development to related individuals and organisations;

demonstrate responsibility and leadership qualities through communication in managing landscape architecture design projects effectively;

relate design knowledge and ideas and be sensitive to societal issues and current developments in the practice of landscape architecture

conduct research with minimal supervision and adhere to legislation and codes of professional ethics;

manage information and engage in lifelong learning and professional development in the field of landscape architecture.

6.5 Admission Requirements

Candidate must have a Bachelor's degree in Landscape Architecture, Architecture and Interior Architecture, or other related backgrounds (such as Urban Planning, Industrial Design, Painting and Design, Graphic Design, Agriculture, Forestry, Civil Engineering, Horticulture, Parks and Recreation Management, Parks and Amenities Management, Environment, Bioindustrial Science) from an Institution recognized by the Malaysian Qualifications Agency (MQA) or its equivalent approved by the UPM Senate;

AND
Graduated with a minimum CGPA of 3.000;

OR
Has a CGPA of 2.750 to 2.999 or equivalent with a minimum of three **(3) years** of working experience in the relevant field of landscape architecture and passed the internal evaluation by the department;

OR
Has a CGPA of 2.5000 to 2.749 or equivalent with a minimum of five **(5) years** of working experience in the relevant field of landscape architecture and passed the internal evaluation by the department.

6.6 Study Scheme

Total Credits to Graduate:

- Bachelor of Landscape Architecture candidates: 41 credit hours
- Bachelor of Architecture or Interior Architecture candidates: 53 credit hours
- Candidates in other related fields: 62 credit hours

Study Duration: 4-6 semesters (2 years)

Year 1, Semester 2

Course Code	Course Name	Credit
LAR5000*	Design Studio	3
LAR5100*	Graphic Communication	3
LAR5200*	History of Landscape Architecture	2
LAR5502*	Landscape Engineering Technology	3
LAR5503*	Material Technology and Landscape Construction	3
	Total	14

Year 1, Semester 3 (Short Semester)

Course Code	Course Name	Credit
LAR5001*	Landscape Design Studio	4
LAR5800*	Landscape Architect Professional Practices	3
	Total	7

Year 1, Semester 1

Course Code	Course Name	Credit
LAR5002	Sustainable Landscape Planning Studio	4
LAR5301	Tropical Plant Diversity	3
LAR5302	Planting Design	3
LAR5401	Tropical Landscape Ecology	3
	Total	13

Year 2, Semester 2

Course Code	Course Name	Credit
LAR5600	Integrated Urban Design Studio	4
LAR5202	Landscape Architecture Theory and Critiques	3
LAR5902	Landscape Architecture Research Method	3
LAR5700	Landscape Management	3
	Total	13

Year 2, Semester 3 (Short Semester)

Course Code	Course Name	Credit
XXX	Electives 1 & 2	6
	Total	6

Year 2, Semester 1

Course Code	Course Name	Credit
LAR5998 or LAR5999	Master Dissertation or Master Project	6
XXX	Elective 3	3
	Total	9

Note: (*) Additional Basic Course

The Basic Course is an additional course for candidates other than holders of a Bachelor of Landscape Architecture. This course is related to basic knowledge and skills in the field of landscape architecture studies in preparation for other core and professional courses. The curriculum of this program stipulates 12 credits of basic courses for candidates holding a Bachelor of Architecture or Interior Architecture and 21 credits for candidates with no design background.

6.7 Synopsis of Core Courses

LAR5002: Sustainable Landscape Planning Studio (4 credits)

This course covers the principles and concepts of resource planning towards sustainable landscape development. Emphasis is given to the landscape planning process which includes resource analysis, idea generation for land use planning, production of landscape planning master plan as well as landscape design details of a site.

LAR5202: Landscape Architecture Theory and Critiques (3 credits)

This course includes topics on the role of design's philosophy and theory in influencing worldviews, design styles as well as contemporary landscape architecture practices. Emphasis is given to the analytical study and critic ethics of a design.

LAR5301: Tropical Plant Diversity (3 credits)

This course encompasses the aspects of taxonomy, morphology, physiology, ecology and sociology of tropical plants. Emphasis is given to the identification methods of plant species and their use in tropical landscapes.

LAR5302: Planting Design (3 credits)

This course covers the study on planting design characteristics and their functions in landscape. Emphasis is given to the planting design process which includes site analysis, production of design plan, plant species selection, planting details and specifications as well as cost estimation for softscape project implementation.

LAR5401: Tropical Landscape Ecology (3 credits)

This course covers the principles of ecology and ecosystem diversity in landscapes. The factors that influence tropical landscape formation and change are focused as a basis for an ecological approach in landscape planning, design and management.

LAR5600: Integrated Urban Design Studio (4 credits)

This course covers urban design theories, methods and approaches as well as their adaptation in planning and designing urban spaces. Emphasis is given to the application of multi-disciplinary urban design process, production of selected urban design proposal and design details of urban space.

LAR5700: Landscape Management (3 credits)

This course covers effective landscape management and maintenance principles and practices as well as current technology in softscape and hardscape management and maintenance. Analitical study on landscape management is conducted.

LAR5902: Landscape Architecture Research Method (3 credits)

This course covers the topic of research philosophy and research types in the landscape architecture field. The quantitative and qualitative methods as well as landscape scientific research design approaches are highlighted.

LAR5998: Master Dissertation (6 credits)

This course covers the preparation of a proposal, implementation and scientific writing of a landscape research project. Scientific approach to generate data systematically through appropriate research design, data collection and analysis as well as presentation of rational results and conclusion are emphasized.)

LAR5999: Master Project (6 credits)

This course covers the aspects of planning and executing landscape design project. These include topic selection, conducting precedent study, elaborating design process and performing work strategy, collecting and analyzing site information, producing design master plan and detail design as well as documenting and presenting project output.

6.8 Fee Structure (Second-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2, 3 & 4)	RM 1,100 x 3	RM 2,150 x 3
Credit Fee (62 credits)	RM 250 x 62	RM 350 x 62
TOTAL (4 semesters)	RM 20,150	RM 30,550

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

6.9 Contact Us

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7. Master of Architecture

7.1 Overview

The Department of Architecture has offered the Master of Architecture programme, Faculty of Design and Architecture, UPM, since February 2016. It is a professional degree programme equivalent to the professional qualification of the Board of Architects Malaysia (LAM) Part II. The program is a continuation of LAM Part I qualification, which is currently being offered as the Bachelor of Science in architecture with Honours programme at UPM. Master of Architecture programme takes 2 years (4 semesters) or 65 credit hours to graduate and is offered as a full-time programme.

7.2 Programme Recognition

This professional program is accredited by the Majlis Akreditasi dan Pendidikan Senibina (MAPS) Malaysia, also known as the Council of Architectural Accreditation and Education Malaysia (CAAEM) under the Board of Architects Malaysia (LAM Part II). The program is also listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

LEMBAGA ARKITEK MALAYSIA
BOARD OF ARCHITECTS MALAYSIA
LEMBAGA ARKITEK MALAYSIA

7.3 Career Prospects

Among the objectives of this program is to lead prospective candidates to career opportunities in design, project management, research, academia, and related construction industries. Most importantly, this programme qualifies graduates as Graduate Architects (LAM Part II), which is the right path towards becoming a Professional Architect (LAM Part III).

7.4 Programme Educational Objectives

The goal of the program is to produce professional architects who are:

- holistic, competent and ethical professionals in the field of architecture at home and abroad.
- innovative, competitive in the field of sustainable architecture, able to face the challenges of liberalization as well contribute to research and development in the field of architecture latest
- capable of management architectural projects professionally by building relationships and contribute to the development of society and the country.

7.5 Admission Requirements

Candidate must have a Bachelor's degree in Architecture or other backgrounds related to the architectural design field with LAM Part I recognition;

AND

Has a minimum CGPA of 2.750, obtained **Grade B** in Architecture Studio course, with a minimum of **six (6)** months of working experience in the related field;

OR

A CGPA of 2.500 to 2.749, **passed the Architecture Studio** course, with a minimum of **three (3)** years of working experience in the related field;

OR

A CGPA below 2.500, **passed the Architecture Studio** course, with a minimum of **five (5)** years of working experience in the related field;

AND

Passed the interview conducted by the Department of Landscape Architecture, Faculty of Design and Architecture, UPM.

7.6 Study Scheme

Total Credits to Graduate: 65 credit hours
Study Duration: 4 semesters

Year 1, Semester 1

Course Code	Course Name	Credit
ARC5001	Advanced Architecture Studio 1	6
ARC5710	Theory of Contemporary Design	3
ARC5501	Advanced Building Technology	3
ARC5630	Sustainable Development Issues	3
ARC5702	Elective 1: Housing and Town Development Planning	3
	Total	18

Year 1, Semester 2

Course Code	Course Name	Credit
ARC5002	Advanced Architecture Studio 2	6
ARC5720	Theory of Urban Design	3
ARC5910	Research Methodology	3
ARC5801	Practice and Architectural Management 1	3
ARC5701	Elective 2: Architectural Innovation and Exploration	3
	Total	18

Year 2, Semester 2

Course Code	Course Name	Credit
ARC5003	Architecture Thesis Studio 1	6
ARC5502	Energy and Architecture	3
ARC5911	Architectural Dissertation 1	3
ARC5802	Practice and Architectural Management 2	3
	Total	15

Year 2, Semester 2

Course Code	Course Name	Credit
ARC5004	Architecture Thesis Studio 2	8
ARC5912	Architectural Dissertation 2	3
ARC5803	Practice and Architectural Management 3	3
	Total	14

7.7 Synopsis of Core Courses

ARC5001: Advanced Architecture Studio 1 (6 credits)

This course covers suburban and city centre development in building design. Sustainable issues, socio-culture, economy and integrated building technology in suburban and urban area will be emphasized.

ARC5002: Advanced Architecture Studio 2 (6 credits)

This course offers a comprehensive insight towards urban development issues. The project and site selections will be based on local context with suitable complexitity of the development. Emphasis will be given on the environment, sosio-cultural, economy, suitable land use and human comfort issues in buildings.

ARC5003: Architecture Thesis Studio 1 (6 credits)

This course is a design thesis proposal based on the current development issues. The selection of project and site are also based on the real development issues. The design thesis proposal should emphasize on the sustainable design aspects.

ARC5004: Architecture Thesis Studio 2 (8 credits)

This course is a continuation of Architecture Thesis Studio 1 which requires the application of regional and global ideas in producing sustainable development that can be nurtured to suit the changing trend of the global market. Selection of project and site (whether in urban or rural context) is by the student, based on the complexity that has been set.

ARC5501: Advanced Building Technology (3 credits)

This course covers concepts and sustainable techniques in advanced building technology that being used for inovative buildings, high rise buildings and spacious internal area. Various topics on engineering systems and building managements will be discussed in detail.

ARC5502: Energy and Architecture (3 credits)

This course emphasizes on the importance of energy efficiency and the need to switch to renewable sources of energy in the context of built environment in general, and architecture in particular. It emphasises on the design strategies (passive and active) of energy efficient buildings, and renewable technologies including photovoltaics, solar thermal, wind power, hydropower, biomass energy, fuel cells and etc.

ARC5630: Sustainable Development Issues (3 credits)

The course focuses on enhancing the awareness on the impacts of built environment on the natural environment, society and local economy. It also gives an overview of the multidimensional concept of sustainable development as well as principles and strategies for achieving sustainable built environment. Various teories, opinions and examples of sustainable architecture are also discussed so they can be applied in studio projects.

ARC5710: Theory of Contemporary Design (3 credits)

This course covers contemporary design theories and interpretation through observation, articulation, and appreciation skills. It provides opportunities to develop understanding and generate critical theory reasoning constructively.

ARC5720: Theory of Urban Design (3 credits)

This course covers critical study on urban design history, theory and idea as well as its physical manifestation in relation to community growth and urban development. The factors that influence urban development and current approach in urban planning and design will be analyzed and discussed.

ARC5801: Practice and Architectural Management 1 (3 credits)

This course covers aspects of role and responsibility of an architect, Code of Ethics in project implementation in accordance to the Architects Act and related laws.

ARC5802: Practice and Architectural Management 2 (3 credits)

This course covers on architect's role in the Contract Administration and Implementation process; the practical applications of project development procedures in every stage (preparation of contract documents, methods of delivery and tender procedures and site management.

ARC5803: Practice and Architectural Management 3 (3 credits)

The course focuses on students understanding of various management styles and theories with other required skills related to the practice of architecture to prepare them to be more competitive in the architectural profession.

ARC5910: Research Methodology (3 credits)

This course covers the approach and theoretical framework to problems and issues related to an architectural design project within the context of sustainable built environment. Students are required to analyse and summarise the information, based on research methods that have been learned.

ARC5911: Architectural Dissertation 1 (3 credits)

This course covers production of preliminary disertation report which relates to Comprehensive Design Studio 1 project. The preliminary disertation report focuses on the proposal, research program strategy and data collection.

ARC5912: Architectural Dissertation 2 (3 credits)

This course covers the preparation of final disertation relates to Architecture Studio Thesis project. Special studies from various selected architecture aspects will be focused and detailed.

7.8 Fee Structure (First-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2, 3 & 4)	RM 1,100 x 3	RM 2,150 x 3
Credit Fee (65 credits)	RM 250 x 65	RM 350 x 65
TOTAL (4 semesters)	RM 20,900	RM 31,600

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

7.9 Contact Us

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8. Master of Tropical Urban Design

8.1 Overview

Urban design is designing and shaping the physical features of cities, towns, and villages and planning to provide municipal services to residents and visitors. It is the collaborative and multidisciplinary process of shaping the physical setting for life, the art of making places. An Urban Designer is a professional responsible for planning, designing and managing urban cities and areas towards sustainable tropical development.

The Master of Tropical Urban Design (MTUD) programme is conducted within three (3) to six (6) semesters with a minimum of 42 credits to graduate for candidates with a Bachelor in Architecture, Landscape Architecture, Planning, or other design backgrounds, and 48 credits for other candidates in related fields.

The curriculum has comprehensively been designed to develop students to be versatile Urban Designers to lead Malaysia's tropical urban design practices. UPM produces Tropical Urban Design graduates capable of improving the community's quality of life by creating prosperous, sustainable cities that are resilient, climate responsive, safe, aesthetically pleasing, that preserve and conserve their natural environment, and are sensitive and innovative towards technological development and advancement.

The MTUD programme aims to produce graduates with the knowledge and professional skills in Tropical Urban Design. Graduates are also taught soft skills and human values. At the end of the program, students are able to present professional, versatile and holistic credibility.

8.2 Programme Recognition

This program is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

8.3 Career Prospects

Graduates of this program have a wide range of career opportunities, especially as certified Urban Designers in both the public and private sectors. Generally, the areas of employment that can be ventured into research and development, monitoring and control, administration and management, education and training, consulting and technical services, and business and entrepreneurship.

In particular, graduates have the opportunity to serve as Directors or Assistant Director of Urban Design in the Town and Country Planning Department, Public Works Department, City Hall, Municipal Council, District Council, Research and Training Institutions and other related agencies, as well as academicians in Local and Private Universities. In the private sector, graduates have the opportunity to serve as Urban Designers, Managers, Project Managers or other related positions in Urban Design, Architectural, Planning and Landscape Architectural consulting firms, real estate developers, and construction contractor companies, as well as other firms involved in the Urban Design industry.

8.4 Programme Educational Objectives

To produce professional urban designers

- with advanced knowledge and technical skills in the field of Tropical Urban Design in line with the requirements of the built environment industry.
- who can communicate effectively and demonstrate leadership qualities in collaborating with experts from various disciplines.
- who are able to solve current urban design problems and issues in a professional and ethical manner, innovative and capable of conducting research in the field of Tropical Urban Design.
- who are able to undertake urban design projects and realize the need for lifelong learning for career development and to benefit the community.

8.5 Admission Requirements

Candidate must have a Bachelor's degree in Architecture, Urban Planning, Landscape Architecture or other backgrounds related to Design and Architecture from an institution recognized by the Malaysian Qualification Agency (MQA) or its equivalent approved by the UPM Senate;

AND

Graduated with a minimum CGPA of 2.750;

OR

Has a CGPA of 2.500 to 2.749 or equivalent with a minimum of three **(3) years** of working experience in relevant areas of the built environment;

OR

Has a CGPA of 2.000 to 2.490 or equivalent with a minimum of **five (5)** years of working experience in relevant areas of the built environment and passed the internal evaluation by the department;

AND

Pursuant to general and specific conditions set by the UPM Senate.

8.6 Study Scheme

Total Credits to Graduate:

- Design background scheme: 42 credit hours
- Non-design background scheme: 48 credit hours

Study Duration: 3 semesters (1 ½ years)

Year 1, Semester 1

Course Code	Course Name	Credit
URB5000	Tropical Urban Design Studio	5
URB5100	Urban Design Theory and Practice	3
URB5501	Tropical Urban Environment Climate Change	3
XXX	Elective 1	3
	Total	14

Year 1, Semester 2

(Non-design background)

Course Code	Course Name	Credit
LAR5000	Design Studio	3
LAR5100	Graphic Communication	3
	Total	6

(Design background)

Course Code	Course Name	Credit
URB5001	Tropical Urban Revitalization Studio	5
URB5900	Urban Design Research Method	3
XXX	Electives 2 & 3	6
	Total	14

Year 2, Semester 1

Course Code	Course Name	Credit
URB5002	Collaborative Urban Design Studio	5
URB5998 or URB5999	Master Dissertation or Master Project	6
XXX	Elective 4	3
	Total	14

8.7 Synopsis of Core Courses

URB5000: Tropical Urban Design Studio (5 credits)

This course covers an analytical study of urban design theory, practice and principles that can be applied in the tropical urban context. It focuses on the urban site and neighbourhood scales, urban analysis and sustainable urban design solutions.

URB5001: Tropical Urban Revitalization Studio (5 credits)

This course covers a comprehensive study on urban redevelopment and revitalization aspects. Emphasis is given to the environment, socio-cultural, economy, land use and human comfort factors.

URB5002: Collaborative Urban Design Studio (5 credits)

This course covers an application of a wide host of ideas, strategies and technical skills based on current thinking on urbanism through collaboration with other related disciplines. It focuses on the district city wide scale and the preparation of a comprehensive master plan.

URB5100: Urban Design Theory and Practice (3 credits)

This course covers urban design theories, principles and the physical aspects of urban development. Emphasis is on urban morphology, urban design process and quality of public realm. The course also addresses transit-oriented development and transport corridor planning aspects.

URB5501: Tropical Urban Environment Climate Change (3 credits)

This course covers the implication of climate change in tropical urban environment. Emphasis is on the impact of climate change on urban infrastructure, land use, spatial planning and place-making.

URB5900: Urban Design Research Methods (3 credits)

The course covers the quantitative and qualitative research methods as well as their applicability in the urban design research and practice. This course emphasizes methods, structures, techniques and analysis in urban design research.

URB5998: Master Dissertation (6 credits)

This course covers the preparation of proposal, implementation and scientific writing of research project. Scientific approach to generate data systematically through appropriate design, data collection and analysis are emphasized.

URB5999: Master Project (6 credits)

This course covers the aspects of planning and executing project. These include title selection, conducting critical review, designing and performing work strategy, collecting and analyzing data, documenting and presenting project output.

LAR5000: Design Studio (3 credits)

This course covers the aspects of design elements, principles and philosophies. Emphasis is given to the design process which includes strategies in generating and developing idea towards formation of rational design concept in producing a particular design.

LAR5100: Graphic Communication (3 credits)

This course covers the aspects of planning and executing landscape design project. These include topic selection, conducting precedent study, elaborating design process and performing work strategy, collecting and analyzing site information, producing design master plan and detail design as well as documenting and presenting project output.

8.8 Fee Structure (First-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2 & 3)	RM 1,100 x 2	RM 2,150 x 2
Credit Fee (42 credits)	RM 250 x 42	RM 350 x 42
TOTAL (3 semesters)	RM 14,050	RM 21,400

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

8.9 Contact Us

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9. Master of Sustainable Landscape Management

9.1 Overview

The Master of Sustainable Landscape Management (MSLM) is cross disciplined in nature, emphasising landscape sustainability, technology and human well-being reflected in current national and international thinking. It aims to equip students with theoretical, technical, and professional skills and knowledge in sustainable landscape management and maintenance, landscape ecology, environmental technology, law, risk management and economy.

The MSLM program is designed to provide opportunities for students to independently acquire knowledge and professional skills pertaining to their future careers. Students are required to complete 40 credits of compulsory coursework either in a full-time (3 semesters or 1 year) or part-time (6 semesters or 2 years) mode.

9.2 Programme Recognition

This program is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

9.3 Career Prospects

Graduates of this program are expected to have career opportunities in both the public and private sectors. Generally, the fields of work that can be undertaken include administration and management, monitoring and control, research and development, education and training, consulting and technical services, and business and entrepreneurship.

In particular, graduates have the opportunity to hold positions as Director or Assistant Director of Landscape in the National Landscape Department, Town and Country Planning Department, Public Works Department, Agriculture Department, City Hall, Municipal Council, District Council, Research and Training Institutions such as MARDI, FRIM and other related agencies.

In the private sector, graduates have the opportunity to hold positions as general managers, landscape managers, project managers or other related positions in landscape architecture consulting firms, real estate developers, park and recreation centres, golf clubs, theme parks, botanical gardens or in landscaping and construction contractor companies and other firms or companies involved in the landscaping industry.

9.4 Programme Educational Objectives

To produce professional landscape managers who

- have advanced technical knowledge and skills in the field of sustainable landscape management in line with current needs;
- able to serve the community and be able to communicate effectively and demonstrate leadership qualities in collaborating with experts from various disciplines;
- able to solve problems and issues of the built environment through research in the field of landscape management towards the country's well-being.

9.5 Admission Requirements

Candidates must have a Bachelor's Degree (with Honours) or a Bachelor's Degree in Landscape Architecture, Horticulture, Agriculture, Agrotechnology, Forestry, Parks and Recreation, Parks and Amenities, Architecture, Urban and Regional Planning, Resource Economics or other related fields with CGPA of at least 3.000;

OR

Has a minimum CGPA of 2.750 or equivalent with a minimum of three **(3) years** of working experience in fields relevant to landscape management;

OR

Has a minimum CGPA of 2.750 or equivalent may be admitted subject to the internal evaluation by the department;

OR

Candidates from Public Universities who are in the final semester of a degree program may be considered for conditional admission using a current CGPA of 3.000 or above or other qualifications equivalent to the program's admission requirements;

OR

Candidates who have an Advanced Diploma (120 credit hours) with a minimum CGPA of 2.750 or equivalent and meet the conditions set out above;

OR

Has a minimum CGPA of 2.500 or equivalent with a minimum of ten **(10) years** of working experience in fields relevant to landscape management.

Special Requirements for International Candidates

For international candidates who graduated from a university whose medium of instruction is not English, must pass the English language qualification level as set by the School of Graduate Studies, UPM, which is a score of **550** for the TOEFL Paper-based Test (Academic version) **OR Band 6.0** for the IELTS (Academic version).

For international candidates who will write a dissertation in Malay, must pass the English qualification level as set by the School of Graduate Studies, UPM, which is a Score of **400** for TOEFL Paper-based Test (Academic version) **OR Band 4.0** for IELTS (Academic version).

Meet the general and specific requirements set by the UPM Senate.

9.6 Study Scheme

Total Credits to Graduate: 40 credit hours
Study Duration: 3 semesters (1 year)

Year 1, Semester 1

Course Code	Course Name	Credit
SLM5000	Landscape and Sustainability	4
SLM5100	Landscape Project Management	3
LAR5401	Tropical Landscape Ecology	3
LAR5801	Landscape Legislation	3
XXX	Elective 1	3
	Total	16

Year 1, Semester 2

Course Code	Course Name	Credit
SLM5001	Greenspace Management and Maintenance	3
SLM5400	Urban Green Environment	3
LAR5902	Landscape Architecture Research Method	3
XXX	Electives 2 & 3	6
	Total	15

Year 1, Semester 3

Course Code	Course Name	Credit
SLM5998 or SLM5999	Master Dissertation or Master Project	6
XXX	Elective 4	3
	Total	9

9.7 Synopsis of Core Courses

SLM5000: Landscape and Sustainability (4 credits)

This course covers the landscape and sustainability aspects which include the policy along with the economy, social and environmental dimensions of sustainable landscape. The issues of sustainable landscape planning, development and management from various situations as well as aspects of urban, rural and natural landscape environments are also discussed.

SLM5001: Greenspace Management and Maintenance (3 credits)

This course covers the identification of greenspaces and sustainable practices in greenspace management and maintenance. Legislation and policies regarding greenspaces, planning and management, implementation and operation as well as monitoring and assessment of greenspace management are emphasized. Aspects of forensics, productivity and standard regarding greenspace management are also discussed.

SLM5100: Landscape Project Management (3 credits)

This course covers the aspects of business and landscape project management practices which include the scope of works, cost and time to produce quality of works. The process and procedure of project risk management as well as site safety are also discussed.

SLM5400: Urban Green Environment (3 credits)

This course includes the green practices and applications of environmental technology in urban green development and management. Emphasis is given to the planning, design and assessment principles of urban greens as well as green infrastructure in solving the current environmental issues in urban and suburban areas.

SLM5998: Master Project (6 credits)

This course covers the aspects of planning and executing projects relating to landscape management. These include topic selection, elaborating methods of project implementation and work strategy, collecting and analysing information, generating solutions as well as documenting and presenting project output.

SLM5999: Master Dissertation (6 credits)

This course covers the preparation of a proposal, implementation and scientific writing of a landscape management research project. Scientific approach to generate data systematically through appropriate research design, data collection and analysis as well as presentation of rational results and conclusion are emphasized.

LAR5401: Tropical Landscape Ecology (3 credits)

This course covers the principles of ecology and ecosystem diversity in landscapes. The factors that influence tropical landscape formation and change are focused as a basis for an ecological approach in landscape planning, design and management.

LAR5801: Landscape Legislation (3 credits)

This course encompasses the Malaysian and related international legislation pertaining to landscape architecture services, land use planning and physical development as well as the environment.

LAR5902: Landscape Architecture Research Method (3 credits)

This course covers the topic of research philosophy and research types in the landscape architecture field. The quantitative and qualitative methods as well as landscape scientific research design approaches are highlighted.

9.8 Fee Structure (First-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2)	RM 1,100	RM 2,150
Credit Fee (40 credits)	RM 400 x 40	RM 650 x 40
TOTAL (3 semesters)	RM 18,450	RM 30,550

Note: Information on feez

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10. Master in Industrial Design Innovation

10.1 Overview

The Master in Industrial Design Innovation (MIDI) programme aims to produce more professional designers with advanced knowledge, critical thinking, creativity and innovation and high research skills, managing and building collaboration networks with experts from various disciplines in handling new product development.

Graduates will be able to make a meaningful contribution to the growth of the country's industrial and socio-economic sectors through the sustainability of the development of new products that can be commercialized and utilized, as well as contribute to universal human progress through the exploration and dissemination of knowledge in design. MIDI is a three-semester or one-year programme. MIDI programme takes 1 year (3 semesters) or 40 credit hours to graduate and is offered as a full-time programme.

10.2 Programme Recognition

This program is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA).

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

10.3 Career Prospects

Graduates of this program are expected to have career opportunities in both the public and private sectors. Generally, the fields of work that can be undertaken include administration and management, monitoring and control, research and development, education and training, consulting and technical services, and business and entrepreneurship.

In particular, graduates have the opportunity to hold positions as Senior Designer or Design Consultant of any related government agencies, ministries, Public Works Department, Product Research and Development Center, Local Council, Design development agency, Research and Training Institutions such as MPOB, FRIM, MRM, CIDB and agencies- other related agencies.

In the private sector, graduates have the opportunity to hold positions as senior designer, design project managers, design researchers or other related positions in any design firms, broadcasters, park and recreation centers, shopping malls, theme parks, and design contractor companies and other firms or companies involved in the design industry.

10.4 Programme Educational Objectives

To produce professional designers who

- have advanced knowledge, critical, creative and innovative thinking in the field of design;
- able to apply design research principles and approaches for the sustainability of new product development and boost the industrial and socio-economic sectors;
- have the ability to manage and build collaboration networks with experts from various disciplines in managing new product development.

10.5 Admission Requirements

Candidates must have a Bachelor's Degree (with Honours) in a design field or other related fields with a CGPA of at least 3.000;

OR

Has a minimum CGPA of 2.750 or equivalent with a minimum of three **(3) years** of working experience in a relevant field;

OR

Has a minimum CGPA of 2.500 or equivalent with a minimum of ten **(10) years** of working experience in a relevant field;

OR

Candidates from Public Universities who are in the final semester of a degree program may be considered for conditional admission using a current CGPA of 3.000 or above or other qualifications equivalent to the program's admission requirements;

AND

Passed the interview conducted by the Department of Industrial Design, Faculty of Design and Architecture, UPM.

10.6 Study Scheme

Total Credits to Graduate: 40 credit hours
Study Duration: 3 semesters (1 year)

Year 1, Semester 1

Course Code	Course Name	Credit
MDS5200 or MDS5201 or MDS5202	Furniture Design Studio or Product Design Studio or Interaction Design Studio	5
MDS5300	Design Philosophy	3
MDS5400	New Digital Media	3
MDS5700	New Product Development	3
MDS5900	Design Research Strategy	3
	Total	17

Year 1, Semester 2

Course Code	Course Name	Credit
MDS5100 or MDS5101 or MDS5102	User Product Trend or Branding and Packaging Design or Sustainable Furniture Design	3
MDS5600	Design Fabrication	5
MDSXXX	Electives 1 & 2	6
	Total	14

Year 1, Semester 3

Course Code	Course Name	Credit
MDS5701	Industrial Design Management	3
MDS5999	Prototype Development Project	6
	Total	9

10.7 Synopsis of Core Courses

MDS5300: Design Philosophy (3 credits)

This course covers knowledge and the role of design's philosophy, principle and element in influencing the user. Emphasis is given on understanding towards the current design issue, factor and its contribution to the development of a new product.

MDS5400: New Digital Media (3 credits)

This course covers knowledge and skills of new media application, and integrated software to produce digital design. Emphasis is given on technology of computer application in design industry.

MDS5100: User Product Trend (3 credits)

This course covers knowledge and understanding in product design and trend. Emphasis is given on the implication towards industrial sectors, users, economy, technology and environment.

MDS5101: Branding and Packaging Design (3 credits)

This course covers knowledge of branding and packaging design. Emphasis is given on study of concept, strategy, material and optimum function.

MDS5102: Sustainable Furniture Design (3 credits)

This course covers knowledge of sustainable furniture design. Emphasis is given on the aspects of design, material application and manufacturing process in producing sustainable furniture design.

MDS5200: Furniture Design Studio (5 credits)

This course covers the production of furniture design. Emphasis is given on concept, style, design composition, structure, sustainability and market trend.

MDS5201: Product Design Studio (5 credits)

This course covers advanced innovation product development. Emphasis is given on the aspect of form, advanced technology application, durability and usability.

MDS5202: Interaction Design Studio (5 credits)

This course covers design process using digital applications that consider human interaction with technology, machine and system. Emphasis is given on user's aspect, production of alternative design and prototype development.

MDS5600: Design Fabrication (5 credits)

This course covers the industrial product design fabrication process. Emphasis is given on manufacturing techniques, use of material, technology application and the production of sustainable design.

MDS5700: New Product Development (3 credits)

This course covers knowledge, methods and process of a new product development through planning and strategy. Emphasis is given on process of identifying the user needs, generating product concepts, product specifications, product engineering, production and product launch.

MDS5701: Industrial Design Management (3 credits)

This course covers the organisation management, strategic thinking, operational practices and ethic, and industrial culture. Emphasis is given on strategic planning in the design development of industrial product.

MDS5900: Design Research Strategy (3 credits)

This course covers skills in data identification, analysis and implementation in design research. Emphasis is given on information and data integration process to produce research report.

MDS5999: Prototype Development Project (6 credits)

This course covers the application of research, design process, durability testing, manufacturing process and commercialization. Emphasis is given on establishment of design skills, producing of sustainable product design and innovation through industry collaboration networking.

10.8 Fee Structure (First-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2)	RM 1,100	RM 2,150
Credit Fee (40 credits)	RM 400 x 40	RM 650 x 40
TOTAL (3 semesters)	RM 18,450	RM 30,550

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

10.9 Contact Us

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11. Master in Construction Technology Management

11.1 Overview

The Master in Construction Technology Management (MCTEM) program is a 12-month coursework master's programme with dissertation that prepares building professionals in agile, integrated project delivery (IPD) environment. IPD covers the entire lifecycle process from pre-construction, construction, post-construction phases involving collocated and non-collocated communication. The program exposes students towards BIM culture and uses Value Management for decision-making and information management.

The MCTEM program is intended for built environment professionals, professional practice managers, design-built professionals, construction company managers, construction project managers, and building and technologies suppliers for the construction industry. Students are required to complete 40 credits of compulsory coursework either in a full-time (3 semesters or 1 year) or part-time (5 semesters or 2 years) mode- only available for local students.

Enrol and join us at the Faculty of Design and Architecture, UPM and become global building professionals in the construction industry.

11.2 Programme Recognition

This programme is listed in the Malaysian Qualification Register (MQR) of the Malaysian Qualification Agency (MQA). It is also recognised by CIDB myBIM Centre Malaysia and the Institute of Value Management Malaysia. The program is in the pipeline for accreditation from the Chartered Institute of Buildings (CIOB) UK.

MQA
Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

myBIM MALAYSIA

IVMM
Institute of Value Management Malaysia
Pertubuhan Pengurusan Nilai Malaysia

11.3 Career Prospects

The MCTEM program supports career development for jobs related to industry needs. Among them are consulting firm managers, construction company managers, design managers, construction project managers, design consultants, integrated project consultants, researchers, construction industry entrepreneurs and others.

11.4 Programme Educational Objectives

To produce Professional Construction Technologists who are

- able to solve sustainable construction problems and are skilled in managing integrated projects in line with the development of the construction industry's needs both domestically and abroad
- competitive and able to cooperate in providing services to the construction industry in the country and abroad;
- able to apply construction informatics management methods to assess risk and make critical decisions in an integrated yet creative manner based on research evidence and new experiences.

11.5 Admission Requirements

Candidates must have a Bachelor's degree in the field of architecture, engineering, construction or built environment recognized by the Malaysian Qualifications Agency (MQA) or equivalent;

AND

Graduated with a minimum CGPA of 2.750;

OR

Have a CGPA value of less than 2.500 or equivalent and have a minimum of two (2) years of work experience in the field related to architecture and subject to internal evaluation by the Faculty;

AND

Meet the general requirements and course requirements set by the UPM Senate.

11.6 Study Scheme (Full-time Mode)

Total Credits to Graduate: 40 credit hours

Study Duration: 3 semesters (1 year)

Year 1, Semester 1

Course Code	Course Name	Credit
CTM5001	Integrated Project	5
CTM5130	Integrated Project Organization	3
CTM5810	Integrated Project Research Methodology	3
CTM5220	Sustainable Building Technologies*	3
CTM5310	Real Estate Development*	3
CTM5410	Inclusive Environment Design Theory*	3
	Total	17

Note: *Students are required to choose two (2) Elective Courses equivalent to six (6) credits.

Elective courses will be added from time to time.

Year 1, Semester 2

Course Code	Course Name	Credit
CTM5002	Advanced Integrated Project	5
CTM5120	Value and Risk Management in Integrated Project	3
CTM5210	Advance Building Material and Systems Integration	3
CTM5110	Construction Informatics Management*	3
CTM5140	Computer Programming Exploration in Design*	3
CTM5810	Special Topics in Integrated Project*	3
	Total	17

Note: *Students are required to choose two (2) Elective Courses equivalent to six (6) credits.

Elective courses will be added from time to time.

Year 1, Semester 3

Course Code	Course Name	Credit
CTM5999	Dissertation	6
	Total	6

11.7 Study Scheme (Part-time Mode- available for local students only)

Total Credits to Graduate: 40 credit hours

Study Duration: 5 semesters (2 years)

Year 1, Semester 1

Course Code	Course Name	Credit
CTM5001	Integrated Project	5
CTM5130	Integrated Project Organization	3
CTM5810	Integrated Project Research Methodology	3
	Total	11

Year 1, Semester 2

Course Code	Course Name	Credit
CTM5110	Construction Informatics Management*	3
CTM5140	Computer Programming Exploration in Design*	3
CTM5810	Special Topics in Integrated Project*	3
	Total	6

Note: *Students are required to choose two (2) Elective Courses equivalent to six (6) credits.

Elective courses will be added from time to time.

Year 2, Semester 1

Course Code	Course Name	Credit
CTM5002	Advanced Integrated Project	5
CTM5120	Value and Risk Management in Integrated Project	3
CTM5210	Advance Building Material and Systems Integration	3
	Total	11

Year 2, Semester 2

Course Code	Course Name	Credit
CTM5110	Construction Informatics Management*	3
CTM5140	Computer Programming Exploration in Design*	3
CTM5810	Special Topics in Integrated Project*	3
	Total	6

Note: *Students are required to choose two (2) Elective Courses equivalent to six (6) credits.

Elective courses will be added from time to time.

Year 2, Semester 3

Course Code	Course Name	Credit
CTM5999	Dissertation	6
	Total	6

11.8 Synopsis of Core Courses

CTM5001: Integrated Project (5 credits)

This course covers methodologies for achieving multi-disciplinary design solutions through the management of design processes guided by technical visit observation and integrated project delivery. Emphasis is given to strengthening skills in collaborative negotiation during the delivery of an integrated project.

CTM5002: Advanced Integrated Project (5 credits)

This course emphasizes advanced multi-disciplinary design solutions during the process of designing a complex integrated project. Emphasis is on strengthening comprehensive problem-solving skills in an integrated project implementation using the latest technology in group setting.

CTM5120: Value and Risk Management in Integrated Project (3 credits)

The course focuses on the practice of value and risk management in an integrated project among multidisciplinary professionals. Systematic Function Analysis in linking complex relationships among multiple integrated project components with optimum costs besides controlled risk management.

CTM5130: Integrated Project Organization (3 credits)

This course covers philosophies, theories, methods and computer-aided project management involving virtual design construction technologies. Covers analysis of IBS project planning, organisational design and scheduling using virtual simulation for mitigating risks during integrated project delivery.

CTM5210: Advance Building Material and System Integration (3 credits)

This course covers methods for selecting building systems and materials in an integrated project, including theories and technologies related to green materials, structural systems, living systems, renewable energy systems, environmentally responsive and human well-being systems.

CTM5900: Integrated Project Research Methodology (3 credits)

This course involves discussions on research methodology and technical requirements regarding selected problems in integrated projects. Provides exposure to the E.A.G.L.E. approach to strategizing the design of an impactful integrated project research proposal.

CTM5999: Dissertation (6 credits)

This course covers the preparation of a proposal, implementation and scientific writing of a research project related to integrated project delivery. Applies a scientific approach to generate data systematically through appropriate data collection design and data analysis are emphasized.

11.9 Fee Structure (First-semester intake only)

Fees	Local Students	International Students
Fee (Semester 1)	RM 1,350	RM 2,400
Fee (Semester 2)	RM 1,100	RM 2,150
Credit Fee (40 credits)	RM 600 x 40	RM 850 x 40
TOTAL (3 semesters)	RM 26,450	RM 38,550

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

11.10 Contact Us

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PART 3: POSTGRADUATE PROGRAMMES BY RESEARCH

12. Master of Science (by Research) and PhD (by Research)

12.1 Overview

Master of Science (By Research)

The Faculty of Design and Architecture offers a Master of Science (by research) programme in several fields of studies, full-time and part-time. The programme takes between 1 to 3 years to graduate. MSc (by research) students will be supervised by a supervisory committee comprising experts in the field of study chosen by students.

MSc students must complete Seminar and a minimum of 6 credits of coursework, including Research Methodology and another course as required by the faculty or supervisory committee. Malay Language is compulsory for international students. MSc graduates have career opportunities in educational institutions such as polytechnics, Government and private colleges, and research institutions. Most MSc graduates continue their studies to the Doctor of Philosophy (PhD) level.

Doctor of Philosophy (By Research)

The Faculty of Design and Architecture offers a Doctor of Philosophy (by research) programme in several fields of studies, full-time and part-time. The programme takes between 2 to 5 years to graduate. PhD students will be supervised by a supervisory committee comprising experts in the field of study chosen by students.

PhD students must complete Seminar and a minimum of 9 credits of coursework, including Research Methodology and other courses, as required by the faculty or supervisory committee. Malay Language is compulsory for international students. PhD graduates get career opportunities at higher learning institutions, other educational institutions, research institutions, and senior positions in government and private departments.

12.2 Accreditation Status

UPM has been a self-accrediting university since 2010 by the Malaysian Qualification Agency (MQA). The status confirms that all academic programs offered by UPM that have been self-accredited due process and approved by UPM's Senate are accredited by the Malaysian Government and other allied accreditation bodies.

The Master of Science and PhD (by research) programmes were accredited with Full Accreditation by the UPM Senate on 12 December 2013 (Minute of the Senate 586.23). This accreditation includes all 44 broad fields of studies and 301 fields of studies of MSc and PhD (by research) programs offered at UPM.

The PhD (by research) program for all fields of studies under the NEC of 'Humanities as a broad programme' was verified in the Malaysian Qualification Register by MQA (MQA/SWA0399). The postgraduate programs offered by UPM are administered under the School of Graduate Studies, and the Center of Quality Assurance monitors compliance with quality requirements and standards.

12.3 Admission Requirements

Master of Science
Candidate must have a Bachelor's degree in a related field;

AND
Graduated with a minimum CGPA of 2.750

OR
Has a CGPA of 2.500 to CGPA 2.749 and a minimum of three **(3) years** working experience;

OR
Has a CGPA below 2.500 and a minimum of five **(5) years** working experience.

All international candidates who have graduated with a Bachelor's degree in which English is not a medium of study must fulfil the English language requirements set by the School of Graduate Studies, UPM.

Doctor of Philosophy

Candidate must have a Master's degree by researcg in a related field;

OR

A Master's degree by coursework in a relevant field with a minimum CGPA of 3.000

OR

An outstanding Bachelor's degree with a minimum CGPA of 3.750 or equivalent to the first degree subject to the internal evaluation by the Faculty.

All international candidates who have graduated with a bachelor's degree in which English is not a medium of study must fulfil the English language requirements set by the School of Graduate Studies, UPM.

12.4 Fields of Studies

Master of Science / Doctor of Philosophy (Landscape Studies)

The field of Landscape Studies covers the theory and application of landscape planning, design and management toward creating a quality, healthy and balanced environment for human needs. Research in this area includes environmental perception, socio-cultural, health and restorative environments, crime prevention, environmental design, outdoor thermal comfort and other related topics to support sustainable landscape development initiatives.

Master of Science / Doctor of Philosophy (Architectural Studies)

The field of Architectural Studies includes the aspects of design application and process management that support functionality and use advanced technology to produce highly aesthetic designs. The study covers skills and knowledge in built environment design, including building design assessment systems, indoor environmental quality, industrial building system, universal design, visualisation, design cognitive, socio-culture, humanity and other related topics to support sustainable development.

Master of Science / Doctor of Philosophy (Urban Planning and Design)

The field of Urban Planning and Design covers principles and processes that support urban sustainability. The research scopes include planning and design qualities for liveable and resilient cities. These include urban planning policies, urban economics, housing, transportation, environmental planning, urban regeneration and redevelopment, public spaces, local image and identity, and community participation in various urban geographies, scales and functions.

Master of Science / Doctor of Philosophy (Industrial Design Studies)

The field of Industrial Design Studies aims to fulfil social and environmental needs through sustainable, functional and high aesthetic artefact design using advanced technology. Studies include theories and design applications of various disciplines using Information Technology (IT) or Information and Communications Technology (ICT), visualisation and design media, Computer-aided Industrial Design (CAID), model making and prototyping, and product design and fabrication, and other related topics to support sustainable product development.

Master of Science / Doctor of Philosophy (Integrated Design Studies)

The field of Integrated Design Studies aims to sustainably use natural resources in all phases of design cycle. Studies cover the theories and applications of collaborative design involving IT/ICT, visualisation and design media, virtual design, Building Information Modeling (BIM), integrated design and green technology to support a sustainable built environment.

12.5 Available Expertise

Department of Landscape Architecture
https://frsb.upm.edu.my/jabatan/jabatan_senibina_landskap/kakitangan_jabatan-2957?L=en

Department of Architecture

https://frsb.upm.edu.my/department/architecture_department/department_staff-69173

Department Of Industrial Design

https://frsb.upm.edu.my/department/industrial_design_department/department_staff-69174

Fee Structure

Master of Science (by research) – for fields of studies under the Social Science Cluster

MASTER (RM)						
	1st semester (Pay during the registration)	2nd – 3rd semesters	4th semester	5th and subsequent semesters	Study cost for max. 2 years	Study cost for max. 3 years
Local students	2,050	1,800	1,300	1,800	6,950	10,550
International students	5,950	4,050	3,550	3,800	17,600	25,200

PhD (by research) – for fields of studies under the Social Science Cluster

PHD (RM)						
	1st semester (Pay during the registration)	2nd – 4rd semesters	4th – 5th semester	7th and subsequent semesters	Study cost for max. 4 years	Study cost for max. 5 years
Local students	2,612.50	2,362.50	1,800	2,800	18,900	24,500
International students	5,962.50	4,212.50	3,650	4,000	33,900	41,900

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

12.7 Contact Us

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PART 4: POSTGRADUATE PROGRAMMES

13. BY INDUSTRY Master of Science (by Industry)

13.1 Overview

Master by Industry offers an alternative route for industry practitioners who wish to pursue a master's degree without leaving their workplace. This programme is developed to encourage knowledge sharing among industry practitioners and academicians in producing highly knowledgeable professionals. This programme aims at inspiring innovation and enhancing competitiveness at the industry via industry-based research through collaboration with UPM.

The focus of the research is based on industrial issues or problems;

- Joint supervision (at least one supervisor will be assigned from UPM and one from industry). The supervisor from industry must possess substantial experience or expertise in the areas related to the research topic. He or she must hold a senior position in the company/industry and must be a PhD or Master's degree holder or a Bachelor's degree holder with minimum working experience of at least 5 years;
- Research is conducted at the industry and candidates do not have to leave their workplace;
- Supervision and monitoring process are similar to those practiced in a conventional Master programme.

The duration of study is 1 to 3 years. MSc students must complete Seminar and a minimum of 6 credits of coursework including Research Methodology and another course as required by the faculty or supervisory committee. Malay Language is compulsory for international students.

13.2 Admission Requirements

- Applications are open to local and international candidates with academic qualifications that fulfil the requirements of normal Master programmes, including specific requirements (if any); and
- International candidates must fulfil the UPM English language requirements as stated at https://sgs.upm.edu.my/content/english_language_requirement-40581
- This programme is open to all nationalities and there are no age restrictions.
- The candidates must be currently employed by a private company and the employment status must remain active until completion of the programme.
- The candidates must obtain a written consent from the employer prior to joining the programme. The employer must also agree to provide sufficient funding to support the research activities conducted by the candidates at the workplace.
- Civil servant, private college/university staff are not eligible to apply.

13.3 Fields of Studies

Similar to postgraduate programmes by research. Refer to section 12.4.

13.4 Fee Structure

MASTER INDUSTRY (RM)						
	1st semester (Pay during the registration)	2nd – 3rd semesters	4th semester	5th and subsequent semesters	Study cost for max. 2 years	Study cost for max. 3 years
Local students	3,750	3,500	3,000	3,400	13,750	21,750
International students	9,150	7,250	6,750	7,000	30,400	44,400

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

14. PhD (by Industry)

14.1 Overview

PhD by Industry offers an alternative route for industry practitioners who wish to pursue a doctorate degree without leaving their workplace. This programme is developed to encourage knowledge sharing among industry practitioners and academicians in producing highly knowledgeable professionals. This programme aims at inspiring innovation and enhancing competitiveness at the industry via industry-based research through collaboration with UPM.

The focus of the research is based on industrial issues or problems;

- Joint supervision (at least one supervisor will be assigned from UPM and one from industry). The supervisor from industry must possess substantial experience or expertise in the areas related to the research topic. He or she must hold a senior position in the company/industry and must be a PhD **or** Master's degree holder with minimum working experience of at least **10 years;**
- Research is conducted at the industry and candidates do not have to leave their work place;
- Supervision and monitoring process are similar to those practiced in a conventional PhD programme.

The duration of study is 2 to 5 years. PhD students must complete Seminar and a minimum of 9 credits of coursework including Research Methodology and another course as required by the faculty or supervisory committee. Malay Language is compulsory for international students.

14.2 Admission Requirements

- Applications are open to local and international candidates with academic qualifications that fulfil the requirements of normal Master programmes, including specific requirements (if any); and
- International candidates must fulfil the UPM English language requirements as stated at https://sgs.upm.edu.my/content/english_language_requirement-40581
- This programme is open to all nationalities and there are no age restrictions.
- The candidates must be currently employed by a private company and the employment status must remain active until completion of the programme.
- The candidates must obtain a written consent from the employer prior to joining the programme. The employer must also agree to provide sufficient funding to support the research activities conducted by the candidates at the workplace.
- Civil servant, private college/university staff are not eligible to apply.

14.3 Fields of Studies

- Similar to postgraduate programmes by research. Refer to section 12.4.

14.4 Fee Structure

PHD INDUSTRY (RM)						
	1st semester (Pay during the registration)	2nd – 4rd semesters	4th – 5th semester	7th and subsequent semesters	Study cost for max. 4 years	Study cost for max. 5 years
Local students	5,650	5,650	5,650	5,650	45,200	56,500
International students	8,200	8,200	8,200	8,200	65,600	82,000

Note: Information on fees might be changed from time to time. For confirmation, please visit https://sgs.upm.edu.my/content/tuition_fees-40583

PART 5: FACILITIES AT THE FACULTY

Libraries


10

Studios

Workshops


STUDIO
XIDA


UTAMAKAN KESELAMATAN
AMALKAN CARA KERJA
SELAMAT DAN SIHAT

Lecture Rooms and Lecture Hall

Laboratories

Postgraduate Lounge


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